COUNTY OF TULARE

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Boulevard
Visalia, CA 93277

HARVEST POWER PROJECT

Final Environmental Impact Report

April 2013

Prepared by

County of Tulare Resource Management Agency
Planning Branch
Environmental Planning Division

Table of Contents

Final Environmental Impact Report
Harvest Power Project

1. RMA Response to Comments

2. Replacement Pages of Environmental Impact Report

3. Attachments

Attachment 1:	OPR 30 Day Review Approval Documentation
Attachment 2:	Hector Guerra e-mail to Troy Ewell
Attachment 3:	Comments from neighboring properties owners
Attachment 4:	Comments from Federal, State, or County Agencies
Attachment 5:	Comments from Legal Counsel for Sundale Vineyards
Attachment 6:	Comments from supporters of the proposed Project
Attachment 7:	Insight Environmental Consultants Response to Comments
Attachment 8:	Resolutions for PSP 92-091 and PSP 99-026 (ZA)
Attachment 9:	Siemer & Associates, Dust Study, November 15, 1999
Attachment 10:	E-mail from Keith Jahnke to Aaron Bock
Attachment 11:	California Energy Commission e-mail to Aaron Bock
Attachment 12:	Memo regarding discussion with neighbor
Attachment 13:	E-mail from Sung Kwon to Andre Amy
Attachment 14:	Draft General Order for Composting

INTRODUCTION

The Draft Environmental Impact Report (Draft EIR or EIR) for the Harvest Power Project was made available for public review and comment for a period of 30 days from March 7 through April 5, 2013. The purpose of this document is to present public comments and responses to comments received on the Harvest Power Project Draft Program Environmental Impact Report (SCH # 2012101010).

Individual responses to each of the comment letters received regarding the Draft EIR are included in this chapter. Comments that do not directly relate to the analysis in this document (i.e., that are outside the scope of this document) will be considered.

In some instances, multiple comments were received with respect to several planning and/or environmental issues raised in the Draft EIR. In order to provide commenters with a complete understanding of the comment raised, the County of Tulare Resource Management Agency (RMA), Planning Branch staff prepared a comprehensive response regarding particular subjects. These comprehensive responses provide some background regarding an issue, identify how the comment was addressed in the Draft EIR, and provide additional explanation/elaboration while responding to a comment. In some instances, these comprehensive responses have also been prepared to address specific land use or planning issues associated with the proposed Project, but unrelated to the EIR or environmental issues associated with the proposed Project.

Comments received that present opinions regarding the Project that are not associated with environmental issues or raise issues that are not directly associated with the substance of the EIR are noted without a detailed response.

REVISIONS OUTLINED IN THE RESPONSE TO COMMENTS

Revisions and clarifications to the EIR made in response to comments and information received on the Draft EIR are indicated by strikeout text (e.g., ~~strikeout~~), indicating deletions, and underline text (e.g., underline), indicating additions. Corrections of typographical errors have been made throughout the document and are not indicated by ~~strikeout~~ or underline text. Revisions and clarifications are included as Errata pages within this document.

PUBLIC REVIEW OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

Consistent with the California Environmental Quality Act (CEQA), the potential environmental effects of the Harvest Power Project SCH # 2012101010 have been analyzed in a Draft Environmental Impact Report (DEIR) dated March 7, 2013. Consistent with Section 15205 of the State CEQA Guidelines, the DEIR for the Harvest Power Project is subject to a public review period. Section 21091(a) of the Public

Resource Code specifies a 30-day public review period; however, if a Draft EIR is submitted to the State Clearinghouse for review, the review period shall be a minimum of 45-days.

The County of Tulare requested a 30-day review period pursuant to Section 21091 of the Public Resource Code (Shortened Review Period). On March 4, 2013, the County forwarded a Shortened Review Period request letter to the Governor's Office of Planning and Research (OPR), pursuant to Public Resources Code Section 21091(e), CEQA Section 15205(d) Criterion 2, Appendix K of the CEQA Guidelines. OPR determined that the request met the aforementioned criteria and granted the 30-day review period. (See **Attachment 1,** OPR Transmittal Letter dated April 7, 2013 and a corrected Transmittal Letter dated April 11, 2013).

Consistent with Appendix K of the CEQA Guidelines, the County received oral concurrence from the State Agencies that were contacted as indicated in the Shortened Review Form (see **Attachment 1**) as follows: Caltrans District 6, California Department of Fish and Wildlife Region 04, the California Energy Commission, CalRecycle, Regional Water Quality Control Board Region 5, and the San Joaquin Valley Unified Air Pollution Control District (see attached Responses and Concurrence from these Agencies).

In addition, the California Energy Commission (CED) was thankful for the 30-day review. In their April 5, 2013 letter, the CEC noted "The Energy Commission would also like to extend our gratitude for the expedited 30-day review period with was needed in order to ensure that the grant funding deadline for both the Anaerobic Digester and Compressed Natural Gas facility grants are met."

The Harvest Power Project DEIR was distributed to the above responsible and trustee agencies, other affected agencies/departments/branches within the RMA, interested parties, and all parties who requested a copy of the Draft EIR, in accordance with Section 21092 of the *California Public Resources Code*. (See **Attachment 1**). The Draft EIR's Notice of Availability (NOA) was also published in the *Visalia Times Delta*, a newspaper of general circulation, on March 7, 2013, as required by CEQA. Per County of Tulare General Plan Policy PFS-5.2 Notification (Solid Waste, Notification), the County provided notice to all 107 properties within one-mile of the Project site.

During the 30-day review period, the DEIR and the technical appendices were also made available at the following locations:

Tulare County Resource Management Agency
5961 South Mooney Boulevard
Visalia, CA 93277
(559) 624-7000

Tulare Public Library
475 North "M" Street
Tulare, CA 93274

In addition, the Harvest Power DEIR was posted on the Tulare County website at:
http://www.tularecounty.ca.gov/rma/index.cfm/documents-and-forms/planning-documents/environmental-planning/environmental-impact-reports/harvest-power/

RELEVANT CEQA SECTIONS

[See Complete Sections in CEQA Guidelines Sections 15088 to 15384, et seq.]

Section 15088. Evaluation of and Response to Comments.

(a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response…

(b) The lead agency shall provide… response to a public agency on comments made … at least 10 days prior to certifying.

(c) The written response shall describe the disposition of significant environmental issues raised. In particular, the major environmental issues raised when the lead agency's position is at variance with recommendations, and objections raised in the comments must be addressed in detail

Section 15088.5. Recirculation of an EIR Prior to Certification.

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification.

(b) Recirculation is not required where the new information merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

(e) A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.

Section 15089. Preparation of Final EIR.

(a) The lead agency shall prepare a final EIR before approving the project. The contents of a final EIR are specified in Section 15132 of these guidelines.

Section 15090. Certification of the Final EIR.

(a) Prior to approving a project the lead agency shall certify that:
   (1) The final EIR has been completed in compliance with CEQA;
   (2) The final EIR was presented to the decision making body… and the decision making body reviewed and considered the information contained in the final EIR prior to approving the project; and
   (3) The final EIR reflects the lead agency's independent judgment and analysis.

Section 15091. Findings.

(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.… (a) shall be supported by substantial evidence in the record.

Section 15092. Approval.

(b) A public agency shall not decide to approve or carry out a project for which an EIR was prepared unless:

(2) The agency… (B) Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

Section 15093. Statement of Overriding Considerations.

Section 15095. Disposition of a Final EIR.

Section 15151. Standards for Adequacy of an EIR.

Section 15364. Feasible. "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, and environmental, legal, social, and technological factors.

Section 15384. Substantial Evidence. "Substantial evidence"… means enough relevant information and reasonable inferences that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence.

COMMENT LETTERS RECEIVED ON THE DRAFT EIR

The County of Tulare received 12 comment letters regarding the Draft EIR during the designated comment period (between May 7 and April 5, 2013). In addition, correspondence or conversations regarding comments from the public are also provided in this document. Each comment letter is also numbered. For example, comment letter "1" is from the Tavioli & Neely, March 30, 2013.

Consistent with Section 15132 of the CEQA Guidelines, the following is a list of persons, organizations, and public agencies that submitted comments regarding the Draft EIR received as of close of the public review period on April 5, 2013, and one public agency comment letter received after the public review period closed.

Oral comments were received from or conversations occurred with the following individuals:

Conversations regarding the project:

In-Person conversation between the Tulare County Resource Management Agency, Hector Guerra, Chief Environmental Planner, and Dana Mettlen, Planner II, with Sundale Vineyards representative on April 3, 2013.

> Environmental Planning Staff has prepared a memo memorializing this conversation. (See **Attachment 12**)

Conversation between Aaron R. Bock. Planner IV, and Darren Nguyen, California Energy Commission (See **Attachment 11**: Attached Emails).

> In a conversation on February 28, 2013, Aaron Bock was informed by Darren Nguyen that in order for this project (the Harvest Power Project) to receive allocated funds in this last grant funding cycle from the California Energy Commission that the Certification of the EIR would have to be completed by May 3rd, 2013 (6 weeks ahead of the CEC Business Board Meeting). In additional emails, Mr. Bock requested other supplemental information including the two attached emails.
>
> Environmental Planning Staff, acknowledges this comment.

Comments from neighboring properties owners:

Comment Letter 1 - Tavioli & Neely, March 30, 2013
Comment Letter 2 - Sun Pacific, April 1, 2013

Comments from Federal, State, or County Agencies:

Comment Letter 3 - California Energy Commission, April 5, 2013
Comment Letter 4 - CalTrans, April, 3, 2013
Comment Letter 5 - CalRecycle, April 4, 2013
Comment Letter 6 - Regional Water Quality Control Board, April 9, 2013
Comment Letter 7 - San Joaquin Valley Air Pollution Control District, April 3, 2013

Comments from adjacent property owner's legal counsel:

Comment Letter 8 - Wanger Jones Helsey Letter, March 28, 2013
Comment Letter 9 - Wanger Jones Helsey Letter, April 5, 2013

Comments from supporters of the proposed Project

Comment Letter 10 - Penny Allen, Ag Science Director at Sundale Union School,

April 15, 2013
Comment Letter 11 - Tim Souza, Tim Souza Cattle Co., April 14, 2013
Comment Letter 12 – Lee Swall, Swall Farms, FLP, April 12, 2013

COMPREHENSIVE LIST OF RESPONSES

Comment Letter 1 - Tavioli & Neely , March 30, 2013

Comment Subject: Traffic

Comment: *"Increased traffic of deliveries to the site. Road 140 and Ave 240 are already busy highways especially with Sundale School at the corner of the nearby intersection." "If the power project is storing gas for refueling will cause additional traffic concerns."*

Response: Traffic is discussed under **Chapter 3.16, and Table 3.16-4,** wherein the Traffic Study conducted for this project was analyzed and included the Existing Conditions of Road 140 and Avenue 240**.** Per Caltrans standards, the Study was conducted using Level of Service (LOS) which ranks the flow of traffic rated between A-F (with A as the highest rating while F represents the lowest rating) and Distribution (how many cars are actually choosing which roadway segments and what intersections to travel on). The measure of whether the Project has the potential to significantly impact the intersections is if the road is impacted to a reduction in an LOS below "D." Currently, all the intersections surrounding the Property are operating between LOS A and B as defined by the County's 2030 General Plan. Per the Traffic Study, the Project will generate an additional 18 peak hour trips and the traffic resulting from the Project will operate above the County's threshold of LOS "D." Caltrans provided attached Comment Letter 4 which agreed with the Study's conclusion that roadways and intersections would be impacted to a less than significant impact to State Route 137, south of Road 140.

The Traffic Study analyzed this intersection at peak morning and evening hours, including when children were present, and concluded that none of the intersections surrounding the Project would be reduced below LOS D with the Project, and all intersections would be impacted by approximately 10 second delays per vehicle. As noted in the DEIR, no significant traffic impacts would result as a result of the proposed Project under Section a) on page 3.16-8. Further, no mitigation measures were required for any of the intersections to reduce the potential impact below a level of significance. Lastly, the compressed natural gas (CNG) component of the facility would provide fuel for CNG trucks delivering composting material and thus would not generate additional traffic beyond what was already analyzed.

Comment Subject: Odor

Comment: *"There is already odor from the composting plant. The increase in processing waste will cause additional odor."*

Response: The nearby resident states that there is existing odor from the compost and that this Project will increase the odor impact due to increases in processing compost material. Staff acknowledges that determining the source of odor(s) and its impact is difficult. For this Project, many variables must be weighed such as existing Harvest Power operations, the adjacent dairy, the dairy lagoon, surrounding dairies, prevailing winds, the day(s) odors were detected, the duration of odor impact, and the location of odor receptors.

Staff utilized guidance in this matter through the State of California, under Title 14, Chapter 3.1, and Section 17863.4. The statute states that odor is subjective, and that the Odor Impact Minimization Plan (OIMP) is the standard for managing odors in composting facilities. (See DEIR page 7-3 - 7-5). In addition, the sight was evaluated for nuisance odors for their impact to "sensitive receptors" through the San Joaquin Valley Air Pollution Control District's (Air District) Guide to Assessing and Mitigating Air Quality Impacts (GAMAQI). The Air District has concluded that odor is subjective and under CEQA can be qualitatively expressed. Moreover, as indicated in the GAMAQI, the Air District identifies sensitive receptors as "a human population (not necessarily an individual) especially, children, seniors, and sick people, and there is an expectation of continuous exposure to "pollutants.[1]"

Insight Environmental Consultants (Insight) in the Air Quality Analysis for the Project concluded that odors are not directly impacting sensitive receptors under any existing Air District air quality standards. On pages 7-3 through 7-5, and **Mitigation Measure 3.8-1, 3.8.2, 3.10-1**, and **3.18-10,** staff concluded that the direct odor impacts are reduced to a level of less than significant by implementation of the OIMP. The OIMP included process requirements that were determined to adequately reduce potential odor impacts to Cal Recycle standards and, through delegation, to the County's Environmental Health Department's standards. The Project is in "Good Standing" with its existing OIMP under its Solid Waste Permit, and there have not been any complaints received by the County's Environmental Health Department which acts as the Law Enforcement Agent (LEA).

[1] SJVAPCD Guide to Assessing and Mitigating Air Quality Impacts, page 50

Moreover, it is difficult to definitively determine whether the odor is from the existing dairy, the dairy lagoon, surrounding dairies, or composting. As noted earlier, it is difficult to definitively determine the source of odors and whether it originates from compost material (manure or green waste) or if it is dairy-related odor. In addition to potential origin of the odor, other factors include which day odor is detected and the location of the receptor when odor occurs. Therefore, staff has concluded that it is too difficult to definitively ascertain direct impacts from existing and increases to composting material. However, it is anticipated that there will be a direct or indirect odor impact to the cumulative impact as a result of increases to material on the Project site in addition to odors emanating from uses surrounding the Project site.

The OIMP is anticipated to effectively reduce the Project's potential overall odor impact to a level that will not substantially impact surrounding properties. The Anaerobic Digester will not emit odor due to its bio-filter. Staff acknowledges that there may be a cumulative increase in odor and that these cumulative odors will substantially affect human beings under the requirements set forth in the *Mandatory Findings of Significance* Chapter. However, despite the odor's impacts to a limited number of persons adjacent and/or near the Project site (including no known sensitive receptors as defined by the Air District), the Project's benefits have been found to outweigh its potential to create odor as added to the surrounding odors. This impact is addressed in page 3.18-10 of the DEIR.

Comment Subject: Water Quality

Comment: *"The increase in waste plus additional waste products will have water discharges. We have concerns on the waste water, its storage and the concerns on the underground water table."*

Response: Concerns about waste water and impacts to underground water table have been addressed in the *DEIR Chapter 9 Hydrology and Water, and Chapter 17, Utilities Section (a)*. In addition, staff discovered that the Project has an existing waiver from waste discharge permits under Resolution 96-031 from the Regional Water Quality Control Board (RWQCB). This conditional waiver has been sunset, and as part of the EIR's **Mitigation Measures 3.9-1 through 3.9-4, and 3.17-1 through 3.17.3**, the Project proponent will be required to complete "Form 200 Report of Waste Discharge" to the Central Valley Water Quality Control Board. (See Response to Comment Letter 6). In addition, as part of the permitting process, the Project proponent will be required to pay an annualized fee to the RWQCB which is noted and provided as

clarifying information in *Chapters 9 and 17* regarding Mitigation Measures.

Comment Letter 2 - Sun Pacific, April 1, 2013

Comment Subject: No Problems

Comment: **"**Since we acquired [the Tulare Packing Facility] in 2005… we have never had any problems or issues whatsoever with the composting operation to the south-east of us, formerly operated by Tulare County Compost and Biomass."

Response: The commenter does not specify or define "problems or issues". The commenter's property is located northwest of the Project site approximately ½ mile northwest of an existing vineyard. Due to prevailing wind direction (generally from the northwest toward the southeast), the Project's potential dust and odor drift may not impact Tulare Packing Facility. As noted earlier, the County Environmental Health Services Division (acting as the LEA) has no documented complaints of odor that is caused by the existing conditions at Harvest Power.

Although increases in vehicle traffic as a result of the Project have the potential to affect Tulare Packing, the Traffic Study determined that Levels of Service would not be adversely affected.

This commented is noted and indicative of staff's findings that there has never been a complaint lodged against the Project to the County or Cal Recycle's LEA with respect to existing facilities/operations at the Project site.

Comment Letter 3 - California Energy Commission, April 5, 2013

Comment Subject: Greenhouse Gases

Comment: **"***The project will provide the following benefits: (1) greenhouse gas emission (GHG) reductions that help meet the objectives for 2020 and 2050 goals compared to the 1990 base year under AB 32; (2) support Tulare County's General Plan and Climate Action Plan policies which include water conservation, soil erosion control, crop disease suppression, and increased crop yields; (3) provide additional renewable energy to Tulare County; (4) expand production of organically certified soil to fill the needs of a niche market; (5) increase business operations within Tulare County which would result in more jobs and tax revenues; and (6) reduce the amount of solid*

green waste that is going to the landfills by recycling them and re-use them as compost. The organic food processing waste will be reduced through digestion and turned into energy or applied as liquid to the compost."

Response: Staff agrees with the California Energy Commission's comment letter that the proposed Project would have an overall environmental benefit. In addition, the Tulare County 2030 General Plan has a number of policies related to Greenhouse Gases. These policies include:

AQ-1.7 Support Statewide Climate Change Solutions
The County shall monitor and support the efforts of Cal/EPA, CARB, and the SJVAPCD, under AB 32 (Health and Safety Code §38501 et seq.), to develop a recommended list of emission reduction strategies. As appropriate, the County will evaluate each new project under the updated General Plan to determine its consistency with the emission reduction strategies.

AQ-1.8 Greenhouse Gas Emissions Reduction Plan/Climate Action Plan
The County will develop a Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions. The Plan will incorporate the requirements adopted by the California Air Resources Board specific to this issue. In addition, the County will work with the Tulare County Association of Governments and other applicable agencies to include the following key items in the regional planning efforts.

1. Inventory all known, or reasonably discoverable, sources of greenhouse gases in the County,
2. Inventory the greenhouse gas emissions in the most current year available, and those projected for year 2020, and
3. Set a target for the reduction of emissions attributable to the County's discretionary land use decisions and its own internal government operations.

AQ-1.9 Support Off-Site Measures to Reduce Greenhouse Gas Emissions
The County will support and encourage the use of off-site measures or the purchase of carbon offsets to reduce greenhouse gas emissions.

AQ-1.10 Alternative Fuel Vehicle Infrastructure
County shall support the development of necessary facilities and infrastructure needed to encourage the use of low or zero-emission vehicles (e.g. electric vehicle charging facilities and conveniently located alternative fueling stations, including CNG filling stations.)

Comment Subject: Odor

Comment: *"As stated in the DEIR, despite the evaluation of alternatives to reduce the odor, including the implementation of mitigation, the findings indicate that the cumulative odor impact will remain significant. Energy Commission staff concurs that all avenues have been exhausted and incorporated in the DEIR. Staff analysis confirms that the best practicable way in managing the odors is by implementing the Best Management Practices as well as the Odor Impact Mitigation Plan along with the Solid Waste Management Plan."*

Response: Staff agrees with the California Energy Commission that all avenues to reduce odors have been exhausted and incorporated into the DEIR through Mitigation Measures (MM) contained in **MM 3.8-1, 3.8-2, 3.10-1, 3.18-10**. Staff agrees that the best practicable way of managing odors consistent with State Law (Title 14 California Code of Regulations, Chapter 3.1 §17863.4; California Integrated Waste Management Board (CWWMB). 2005 and CalRecycle standards is by implementing Best Management Practices, the Odor Impact Mitigation Plan, and a Solid Waste Management Plan.

Comment Letter 4 - CalTrans, April, 3, 2013

Comment Subject: Traffic

Comment: *"…[T]he TIS adequately analyzed the SR 137/Road 140 intersection and no further analysis is required at this time. CalTrans anticipates that the amount of vehicle trips generated by the project will have a less than significant impact to SR 137."*

Response: Staff agrees with CalTrans' assessment that the proposed Project will result in less than significant impacts to SR 137. (See discussion of Traffic in Comment 1 above).

Comment Letter 5 - Cal Recycle, April 4, 2013

Comment Subject: Odor

Comment: *"The Odor Impact Mitigation Plan (OIMP) will address odor concerns."*

Response: As noted in the DEIR and earlier, Harvest Power operates under an OIMP to comply with the CalRecycle Full Composting Facility permit. Staff also appreciates the comment from the Air District and agrees that the OIMP will fully address odor concerns.

Comment Subject: Project Description

Comment: *"What is the expected temperature of the AD process, for both the low solids and high solids processes? The temperature and the time the material is kept at temperature is a factor in effective pathogen reduction. It can also be a determining factor for which type of solid waste facility permit is required."*

Response: The temperature of the Anaerobic Digestion system will be approximately 140º Fahrenheit for 15 days. The digestion process that will be used ranges from 113º - 252º Fahrenheit. Harvest Power will work with the LEA to determine the appropriate permitting mechanism for the facility.

Comment Subject: Hours of Operation

Comment: *"The composting facility is currently permitted to receive waste from 7:00 a.m. to 4:30 p.m. Monday through Friday and 8:00 a.m. to 4:00 p.m. Saturdays, closed on Sundays. Will there be any change in the days and/or operating hours resulting from the project, including public drop off times? What are the anticipated hours of that waste will be received at the AD activity?"*

Response: The current hours of the facility will be maintained for the composting and anaerobic digestion process. In order to respond to emergency or upset situations (such as impacts caused by change in the weather that may not be conducive to site operations), Harvest Power will coordinate with the LEA to extend hours during these occurrences. When Harvest conducts free, community green waste drop-off and compost give away programs, they may occur on Sundays in order to avoid storing composting material during the facility's normal operating hours/days.

Comment Subject: Permitted Boundary

Comment: *"The composting facility is currently permitted to operate on 38.0 acres of an 88 acre parcel. The project description describes constructing the AD on three of there permitted 38.0 acres. Are there anticipated changes to the permitted boundary? How will reduction of 3 acres from the existing compost activity affect the design and operation of the composting activity?"*

Response: There are no proposed area changes in the Project; therefore, the boundary of the facility will remain at its current 38.0 acre site footprint. The proposed anaerobic digester and associated processes will operate on these 38.0 acres. The composting operations will be able to operate on the remaining acreage. New equipment and reconfiguring the material processing area will allow composting operations to operate on less space than currently utilized and still accommodate an increased volume of material without increasing the processing area size.

Comment Subject: Permits

Comment: *"A Solid Waste Facilities Permit (SWFP) revision will be required for this project. The LEA contact for this proposed project is Keith Jahnke; he can be reached at (559) 624-7430 or by e-mail at khahnke@tularehhsa.org). Please contact the LEA to discuss permit requirements for the project."*

Response: The DEIR notes the requirement for the SWFP on page 3.17-12. In addition, **Mitigation Measure 3.17-6** notes a requirement to obtain an updated SWFP.

Comment Letter 6 - Regional Water Quality Control Board (RWQCB), April 9, 2013

Comment Subject: Water Quality

Comment: ***"****The State Water Resources Control Board is currently drafting a general order (General WDRs) for the discharge of wastes at compost management units. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility. Harvest Power California LLC, needs to submit a report of waste discharge (see enclosed Form 200) with a report describing the operation, along with the appropriate fee, to our office. Based on the submitted information, the threat to water quality is tentatively rated 3 and the complexity C, resulting in 'a filing fee of $2,776. The filing fee is the first year's annual fee (e.g., waste discharge permit fee)."*

Response: This comment clarifies the mitigation measures required for meeting the existing water quality standards within the Tulare Kaweah Basin. It should be noted that staff addressed the General Order for composting in the *Harvest Power DEIR Chapter 9: Hydrology and Water* (page 3.9-15); further, staff also noted that the State Water Resource Control Board is drafting General Order, No. DWQ-2012-xxxx (General WDR's) for the discharge of wastes at compost management units.

Therefore, this EIR contains mitigation requiring compliance with this order, once finalized, through **Mitigation Measures 3.9-1 through 3.9-4**. For the record, **Mitigation Measures 3.9-1, 3.9-2, and 3.9-4, as well as 3.17-1, 3.17-2, 3.17-3, and 3.17-5** all require the Project proponent to obtain any and all applicable permits from the CVRWQCB. This includes DWQ-2012-xxxx as well.

Environmental Planning Staff has inserted additional clarification language into **Mitigation Measure 3.9-2** noting potential requirements under the Draft Composting General Order. The Draft Composting General Order is provided under **Attachment 14**. Environmental Planning Staff has not included all the elements of the Draft Composting General Order, as the requirements may change prior to adoption by the State Water Resources Board. This Environmental Impact Report acknowledges the Draft Composting General Order and requires the applicant to comply with the new regulation, if and when the Composting General Order is adopted.

Environmental Planning Staff has inserted additional discussion of Water Code (SB 390 – 1999) Sections 13269 and 1335.00's sunset provisions of existing waivers of waste discharge in the environmental setting and the discussion for the DEIR Chapter 3.9 Section (a), and the mitigation measures in the Final EIR. Further, the County understands that this effectively means that the conditional waiver for waste discharge under Resolution 96-031 has been sunset, and that Form 200 Report of Waste Discharge is required henceforth. Staff interprets this new permit requirement as clarifying the existing **Mitigation Measures**.

Mitigation Measure (MM) 3.9-2 has been augmented to include a discussion of Form 200 and payment of the $2,776 fee. This provides adequate clarification to address the impacts from amendment to Resolution 96-031, under Chapter 9: Hydrology and Water.

Comment Letter 7 - San Joaquin Valley Air Pollution Control District, April 3, 2013

Comment Subject: Air Quality

The County of Tulare acknowledges and recognizes the Air District's authority and expertise regarding the air quality resource and matters. Following is the County of Tulare Resource Management Agency (RMA) responses to the Air District's comments.

Comment: *Based on information provided to the District, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOX, 10 ton/year ROG, and 15*

tons/year PM10. Therefore, the District concluded that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

Response: **Criteria Pollutants**. As noted in your comment, we agree with the Air District's determination that the Project will not exceed the District's thresholds of significant for criteria pollutants; specifically, 10 tons/year NOX, 10 tons/year ROG, or 15 tons/year PM10. Project-related emission estimates for the aforementioned criteria pollutants are summarized in Tables 8-1 and 8-3 of the Air Quality Impact Analysis (AQIA) prepared by Insight Environmental Consultants (Insight) and contained in the DEIR as Appendix "H". As such, the Project will have no significant adverse impact on air quality.

Comment: *On page 3.3-29 of the DEIR it states "the stationary source emissions from the composting facility require permits from the SJVAPCD to operate" and that "SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent". The District concurs the project will require permits and stationary source emissions will be mitigated.*

Response: **Permits.** As noted in your comment, we agree with the Air District's determination that the Project will require permits. The permitting of stationary source equipment and associated emissions will be mitigated through the Air District's permitting process. As noted in the AQIA (pages 20, 21, and 43; respectively) prepared by Insight, the Project shall comply with Air District Rules/Regulations as follows: For Fugitive Dust Emissions: Rules 4102 (Nuisance), 8011 (General Requirements), 8021 construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities, 8041 (Carryout and Trackout), and 8051 (Open Areas); for Fugitive VOC-related Composting Emissions: Rules 4101 (Visible Emissions), 4102 (Nuisance), 4202 (Particulate Matter-Emission Rate), 4565 (Biosolids, Animal Manure, and Poultry Litter Operations), and 4566 (Green Waste Composting and Operations); and Other Mitigation Measures such Rules 4601 (Architectural Coatings) and 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In addition to the above noted Rules/Regulations, the Project will comply with "applicable mitigation measures in the Air Quality Attainment Plan, District Rules, Traffic Control Measures, Regulation VIII (Fugitive PM10 Prohibitions), and Indirect Source Rules for the SJVAPCD."

Comment 3A: *Sources included in the AAQA and HRA are the increases in diesel particulate emissions from truck traffic, truck idling, and equipment*

and ammonia emissions from the composting facility. The analyses do not include emissions from the following sources.

1. *Toxic organic compounds emitted during the composting process;*
2. *Heavy metal content of dust emitted from the composting process;*
3. *Biofilter; and*
4. *Internal combustion engine.*

Response: **Health Risk Assessment (HRA):** The preparer of the HRA, Insight Environmental Consultants, has revised the HRA to include the emissions from toxic organic compounds, heavy metal content, and the internal combustion engine emissions. The HRA has been revised as follows:

"Toxic organic compounds and heavy metal content of dust from the compo sting process have been estimated and included in a revised HRA along with toxic emissions from the biogas-fired internal combustion engine. The revised HRA's results are still below the health risk significance thresholds set by the SJVAPCD. The emissions from the biofilter were not included in the revised HRA. The Project proponent stated in the Project description that "The very nature of anaerobic digestion eliminates the emission of methane gas: the digestion facility is gas-tight in order to capture valuable biogas. However, in the process of upgrading biogas into pure methane, a very small percentage is lost in the waste gas stream. This stream is directed to a biofilter to minimize the release of methane. There have been a number of scientific articles published over the last several years explaining the destruction of methane via methane oxidizing bacteria naturally present in biofilters. Harvest Power will work closely with the San Joaquin Valley Air Pollution Control District to permit the biofilter, as well as the CNG facility." It is our understanding that the toxic emissions from the biofilter will be negligible especially in comparison to the Project's other toxic sources. We do not feel the addition of toxic emissions from the biofilter will cause the Project to exceed any health risk significance thresholds. The results indicate that these emissions are below thresholds of significance (See Attached Insight Response to Comments)."

The revised HRA is incorporated into **Attachment 7**.

Comment 3B: *The cancer risk estimated by the HRA is 7.76 in a million. Unless the risk from the sources not included in this analysis is less than 2.24 in a million, the risk from the project would be significant. Emissions from the internal combustion engine are likely to be the main contributor to additional risk.*

Response: Similar to Response 3.A, the preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants, has revised the HRA to include the emissions from internal combustion engines and have concluded that these emissions are negligible and are below thresholds of significance. The HRA has been revised as follows:

"The SJVPCD did not have the opportunity to review the most up to date version of the AQIA. [This can be furnished to the Air District upon request]. The final AQIA determined the cancer risk from the Project to be 4.19 in a million. A [current] HRA has been completed to include the previously omitted toxic and heavy metal emissions from the composting process and additional toxic emissions from the bio-gas-fired internal combustion engine. The cancer risk result of the revised HRA was 5.12 in a million which is still below the cancer risk threshold of 10 in a million set by the SJVAPCD. (See Attached Insight Response to Comments in **Attachment 7**)."

Comment 3C: *During the past few years, the facility has permitted five diesel engines. The District's estimate of risk from those engines and other recently issued permits will also limit allowable risk from the proposed sources in this project.*

Response: As noted earlier, the preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants, has included all equipment with the potential to emit. The five diesel engines permits receiving permits from the Air District noted in this comment have been accounted for in the HRA. We concur that the five diesel engine permits combined with "…other recently issued [Air District] permits will limit the allowable risk from the proposed sources in this Project." as noted by the Air District's comment. The HRA has been revised as follows:

"The Project proponent is aware that health risks from previously permitted sources will limit the allowable risk from this Project during the permitting process. However, CEQA only requires that the risk from the incremental increase of this Project to be analyzed. This analysis has been completed and this Project is considered less than significant for health risk. (See Attached Insight Response to Comments)."

Comment 3D: *The HRA, and the AAQA for the DEIR do not adequately quantify and assess potential emissions from the digesting process and the associated compressed natural gas and combined heat and power processes. This can be resolved by one of the two following options:*

1) *Quantify toxic and criteria emissions from these processes and include them in the AAQA and HRA.*

2) *Identify that the sources were not addressed sources and commit to including the risks and ambient air quality impacts in this DEIR in the District's permitting process such that any permits issued by the District would not result in the project being significant.*

Response: The preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants, has revised the HRA and Ambient Air Quality Assessment by quantifying toxic and criteria emissions from the digesting, compressed natural gas, and combined heat and power processes. The results indicate that the Project's potential to emit remains below thresholds of significance. The HRA has been revised as follows:

"All previously excluded toxic emissions have been quantified and included in the revised HRA that will be included in the final EIR. The revised HRA determined that the Project is still less than significant. All relevant criteria pollutants were included in the AAQA in the final AQIA. (See Attached Insight Response to Comments)."

Comment 3E: *Additional risk from the emissions of toxic compounds from the increase in composting activity that are not included in this DEIR should be incorporated in the final EIR. This can be accomplished easily by including the emissions of the additional compounds in the Hot Spots Analysis and Reporting (HARP) model.*

Response: The preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants, has revised the HRA and Ambient Air Quality Assessment by assessing emissions of toxic compounds from increases in composting activity by including emissions of the additional compounds in the Hot Spot Analysis and Reporting (HARP) model as suggested by the Air District. The results indicate that the Project's potential to emit remains below thresholds of significance. The HRA has been revised as follows:

"All previously excluded toxic emissions have been quantified and included in the revised HRA that will be included in the Final EIR. The revised HRA determined that the Project is still less than significant. (See Attached Insight Response to Comments)."

Comment 4: *The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for*

Hazardous Air Pollutants). The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about the District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

Response: We recognize that the list of rules provided by the Air District may not be exhaustive nor exclusive. The applicant will be required to comply with all District rules as part of the conditions of approval.

Comment 5: *The District recommends that a copy of the District's comments be provided to the project proponent.*

Response: Comment noted. The County of Tulare provided the Air District's comments to the Project proponent (Applicant) upon receipt of the comments.

Conclusion Insight has made the necessary clarifications, as outlined above, in a Letter Amendment to the AQIA, and it will be provided with the Final EIR. Changes made in the Letter Amendment as a result of these comments do not necessitate a change in the less than significant finding determined in the original AQIA.

<u>Comment Letter 8 - Wanger Jones Helsey Letter, March 28, 2013</u>

Comment Subject: 30 Day Review

Comment: *The letter from Wanger Jones Helsey, dated March 28, 2013, states that the County of Tulare, Resource Management Agency, requested and were granted a shortened review period of 30 days for the submission of written comments on the DEIR. The letter states that "it does not appear that any such grounds were identified or are applicable here." This comment letter also requested an extension of the review period to 45 days for more as is "usually required under CEQA."*

Response: CEQA Section 15205(d) Criterion 2, Appendix K, *Criteria for Shortened Review Period* clearly states that: "Under exceptional circumstances, the… Office of Planning and Research (OPR) may shorten the usual review periods… A shortened review period may be granted when… (2) The public project applicant is under severe time constraints with regard to obtaining financing. No shortened review period shall be granted, unless the lead agency has contacted and obtained prior approval from the applicable state responsible and trustee agencies."

The California Energy Commission (CED) was thankful for the 30-day review. In their April 5, 2013 letter, the CEC noted "The Energy Commission would also like to extend our gratitude for the expedited 30-day review period with was needed in order to ensure that the grant funding deadline for both the Anaerobic Digester and Compressed Natural Gas facility grants are met."

OPR agreed with the rationale for the shortened time frame, and granted the requested 30 day review period. (See **Attachment 1**). The administrative record clearly states the rationale upon which the finding and request for a 30 day review was made by Tulare County RMA, Hector Guerra, Chief, Environmental Planning Division, in the request letter to OPR dated March 4th. Consistent with CEQA Guidelines Appendix K, Section (2), Mr. Guerra clearly stated, and it was made apparent by the Proponent and California Energy Commission, that the deadline for grant financing was imminent (May 3rd), and that the Project would have to be certified by that time frame in order to finalize grant funding. Moreover, Section 15205(d) requires approval by applicable state responsible and trustee agencies. As noted on page 2 of this FEIR, all applicable state responsible agencies agreed to the shortened review. Section 15205 (d) does not stipulate that public approval for a 30-day review period is required, but puts the period at no less than 30 days nor more than 60. As noted earlier, staff obtained agreement for the 30-day review period by the state agencies ***prior*** to requesting the 30-day review period from OPR.

<u>Comment Letter 9 – Wanger Jones Helsey Letter, April 5, 2013</u>

Comment Subject: Recirculation and 45-day review

Comment: *"Several interested parties, including Sundale, requested that the comment period on the DEIR be extended to the normal 45-day review period generally required under CEQA. The County did not respond to those written requests. Rather, counsel for Sundale was required to call staff the day before the public comment period expired to confirm that the request was denied.*

The denial of Sundale's requested extension is unwarranted and improper, as substantial evidence does not exist to support a finding of "unusual circumstances" under Sections 15105 and 15205(d) of the CEQA Guidelines and Appendix "K." No evidence was provided to support the finding that the applicant was allegedly under severe time constraints due to financing, nor has there been any showing that the applicant is under financing constraints any different from similarly situated applicants. Further, given the fact that a review period that is

shortened by only 15-days has little practical impact on the overall timeframe for the processing of the Project, but a significant reduction in time for the public to review the document, the shortened time period is highly prejudicial. To the public, particularly given the nature and location of this Project (enlarging a facility that will compost manure adjacent to agricultural crops and a school). In addition, the deadline to submit comments to the County falls on a day in which the County is closed.

As a result of the foregoing, Sundale requests that the County recirculate the DEIR for public review to provide the public with sufficient time to evaluate the impacts of the Project. If the EIR is not recirculated, the County should expect far more detailed comments on the Project at subsequent phases of the administrative process (i.e., the Planning Commission hearing and the Board of Supervisors hearing), and will be estopped from claiming any such comments are untimely, or that the County need only respond to such comments in generalities."

Response: Although the commenter notes that several interested parties requested a 30-day review, Staff has not received any other oral or written requests for a 45-day review period. This commenter was the only known party to request an extended review period. In addition, the California Energy Commission extended gratitude for the 30-day review period (see **Attachment 4**). As noted earlier, all other relevant consulting agencies agreed to the 30 day review period prior to the County's request to OPR.

Mr. Guerra received a message from Mr. Troy Newell (whom identified himself as an attorney with Wanger Jones Helsey representing Sundale Farms) at 4:12 P.M. on April 4, 2013, requesting verification that the 30-day review/comment period ended on April 5. Mr. Newell's voice-mail message indicated that a return phone call or an e-mail to him would suffice. Mr. Guerra was able to provide an e-mail to Mr. Newell at 5:46 p.m. on April 4, 2013, verifying that the comment period would end on April 5, 2013 (see attached e-mail). Mr. Guerra treated their letter as a Comment Letter that would be incorporated, and responded to, into the Final EIR. Lastly, counsel for Sundale is incorrect in stating that the County would be closed on the day the 30-day review/comment period ended. The review period ended on Friday, April 5, 2013 and Tulare County RMA was open that day. According to the time and date stamp of a facsimile received by the County from Wanger Jones Helsey, the County received the comment letter at 4:33 P.M. on Friday, April 5, 2013.

Section 15205 (d) notes that the State Clearinghouse may approve a 30-day review under "exceptional circumstances" not "unusual circumstances" as alleged by the commenter. The exceptional circumstance in this case was the desire for a shortened review by the California Energy Commission. In addition, the comment letter to extend the deadline was treated as a comment letter and is being responded to as comment letters are treated under CEQA and being treated accordingly. As noted earlier, Tulare County RMA was in fact open on April 5, 2013; however, the RMA closes at 12:00. Mr. Guerra remained in the office until approximately 2:07 P.M. and received neither personal appearance, phone call, e-mail, or facsimile from the commenter. None the less, commentators comments were received on April 5, 2013, and have been responded to herein.

The request to re-circulate is unwarranted because under Section 15088.5 there is substantial evidence in the record that "no new information" has been presented by Michael Brandman Associates (MBA) on behalf of Wanger Jones Helsey. The information presented only clarifies, explains, or is amplified by existing information that is already contained in the record. Even if a request for extended comment time was not granted, that is not grounds for recirculation under CEQA Section 15088.5; Sundale was given ample time to comment, as they did on March 24, March 28, and April 5, 2013. The only late comments received were from the RWQCB. RWQCB also provided clarifying comments and no comments have been received that presents new information as opposed to clarifications. Therefore, staff concludes that sufficient time has been provided to all interested parties who are requesting clarifications rather that presenting new information. In addition, staff has not received any requests to re-circulate the DEIR from any responsible or trustee agencies. In fact, California Fish and Wildlife Services (one of the agencies agreeing to the 30-day review period) did not comment on this EIR. Nor did the San Joaquin Valley Air Pollution Control District suggest recirculation based on the Air Quality Baseline issue discussed below.

Comment Subject: Baseline

Comment: ***"****The DEIR lacks sufficient specificity in describing the current baseline conditions at the Project site. CEQA requires that the public agency include a description of the physical environmental conditions in the vicinity of the Project from both a local and regional perspective. The purpose of describing the environmental setting is to accurately articulate the environmental baseline to evaluate whether the impacts of a project will be significant. (CEQA Guidelines, Section15125.) The failure to gather relevant data concerning the existing conditions renders a negative declaration invalid, as it is the*

public agency's burden to fully investigate the environmental impacts of a given project, such as the impact fee at issue here. (See, e.g., Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 311 ["CEQA places the burden of environmental investigation on government rather than the public," and a lead agency "should not be allowed to hide behind its own failure to gather data."] .)

As explained in the comments prepared by David Mitchell, an air quality specialist with FirstCarbon Solutions, (Exhibit "A"), the Project baseline appears to be based on the permit limits, and not on actual existing conditions, as required under CEQA. As such, the County's air quality analysis should be revised, and the EIR should be recirculated to account for baseline conditions."

Response: The commenter references *Sundstrom v. County of Mendocino 202 Cal.App.3d 296, 311*, *(1988),* a case that applies to negative declarations. For clarification, the subject document is an Environmental Impact Report, not a negative declaration. Under Section 15151, the burden of proof is on the petitioner, not on the lead agency, as in *Sundstrum*. It is noted that the failure to consider an impact may overturn the certification of an EIR. *Bakersfield Citizens for Local Control v. City of Bakersfield* 124 Cal. App. 4th 1184 (2004). However, it would be incumbent upon commenter to make a substantial evidence argument of whether lack of information was "omitted." "The substantial evidence standard is applied to conclusions, findings and determinations. It also applies to challenges to the scope of an EIR's analysis of a topic, the methodology used for studying an impact and the reliability or accuracy of the data upon which the EIR relied because these types of challenges involve factual questions." *Federation of Hillside & Canyon Associations v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1259 (*Hillside*).) In a case regarding an EIR, the standard is not of "perfection, but for adequacy, and disagreement amongst experts does not make an EIR inadequate." See *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal. 3d 553, 564, *(1990)*

The commenter notes an "impact fee at issue here." This comment does not identify which impact fee is of concern, and impact fees are not relevant, as Tulare County does not have impact fees. The commenter argues that the Project baseline appears to be based on permit limits and not actual conditions on the site (i.e., Insight Environmental Consultants analyzed 156,000 tons versus 75,000 tons), and that basis should warrant re-circulation of the EIR.

Insight Environmental Consultants' (Insight) response to this comment is that "the AQIA baseline emissions were originally based on an

actual activity, with the exception of the composting tonnage. The project proponent stipulated that existing composting tonnage reflected that of the permitted condition limits at the facility. As such, the baseline originally established for the project was based on these conditions, which were equal to the permitted conditions, as the Commenter states. Subsequent clarification of current operating conditions revealed that this was not the case; so a subsequent evaluation was completed using the actual operating conditions as required under CEQA. This clarification is included in a Letter Amendment to the AQIA, which will be included in the final EIR. The results of this clarification to the AQIA are that the emissions increases posed from the revised baseline (operational) emissions when compared to operational emissions, at project completion, remain *less than significant* based on established thresholds."

Since the Project's baseline was reviewed at a higher level and found to not be significant, and the lower standard is similarly found to not be significant in relation to the projected amounts of compost, Insight found less than significant impacts to direct, and indirect/cumulative air quality impacts. Therefore, under CEQA Section 15125, even though the permitted baseline is the preferred method, discretion is within the public entity. *Save our Peninsula Committee v. Monterey County 104 Cal.Rptr.2d 326 (2001) 87 Cal.App.4th 99.* Since, as part of this Final EIR, the decision making body will have made their decision on both levels, there has been adequate time to address both the 75,000 tons of compost versus projected impacts, and the 150,000 tons of compost versus the projected compost limits, CEQA is satisfied. Based on this analysis, staff similarly concludes that neither level will create a significant impact, nor there is no fair argument that a significant impact will occur. Thus, there is no basis to re-circulate the EIR, and the County's burden is met whether the information is adequate for the decision making body to make a decision upon.

Comment Subject: Project Description

Comment: **"***Under CEQA, the inclusion in the EIR of a clear and comprehensive description of the proposed project is critical to accurate analysis of impacts and meaningful public review. (County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 193 ("Inyo II'). As explained in Inyo II:*

A curtailed or distorted project description may stultify the objections of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation

measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance.

(Id. at 192-93.) "A curtailed, enigmatic or unstable project description draws a red herring across the path of public input." (Id. at 197-98; see also San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th at 655-57 [invalidating an EIR for misleading project description].)"

Response: The *San Joaquin Raptor* case centers on whether a mine was substantially increasing its operations despite assurance to the contrary, and the project description inconsistently used their operational number to hide this fact. Here, the map and project description accurately reflect the size of parcel and location of the Project, and do not make the project description "enigmatic or unstable" because the parcels in the description accurately reflect those in the site plan.

Comment: **"***In a number of respects, the DEIR's project description falls short of this standard. Sundale has retained David M. Mitchell from First Carbon Solutions/Michael Brandman Associates to review the DEIR. While Mr. Mitchell's review focused on the air quality and greenhouse gas analysis summarized in the DEIR and provided more completely in the Air Quality Impact Analysis Report (the "AQIA") prepared by Insight Environmental Consultants, Mr. Mitchell also made generalized comments to other sections of the DEIR, including the Project Description, that are contained in his Comments on the Harvest Energy EIR Letter dated April 5, 2013."*

Response: The Project Description, as shown in Figure 2-3 and discussed in the Project Description section, states that composting would occur on APNs 150-140-014 and 150-140-016. Figure 2-3 (the Site Plan) shows both of these APN's being 20.0 and 15.0 acres in area (35.0 acres total), 3.0 acres for the digester, and the 53.0 acre parcel being to the north (as an entirely separate parcel). Figure 2-3 clearly delineates the existing easement. Staff agrees that Mr. Mitchell made very generalized comments that we have answered as accurately as possible. Insight also responded to their comments, as contained in **Appendix 7**. Staff was able to clarify several comments accordingly.

Comment: *"The DEIR states in several places that the Sundale Elementary School is located over 1/2 mile from the Project site. Aerial photographs and measurements confirmed on GoogleEarth, however, confirm the boundary of the Project is only 700 feet (0.13 miles) from the boundary of the school property, much closer than the 1/2 mile represented. (See Exhibit "G.") This effects nearby sensitive receptors,*

and requires the revision of several chapters in the EIR, including noise, odor, air quality, and hazardous materials. This close proximity also requires that the County provide all parents or guardians of children enrolled at the school notice of the Project under Section 42301.6 of the Health & Safety Code."

Response: Insight stated that the study radius includes all sensitive receptors within 1 mile. In Table 3.3-22, on page 3.3-36, it shows the sensitive receptors as within 1 mile, being within +/- 0.51 miles from the Project. Although the study was vague on the location of the buildings of the sensitive receptors versus the boundaries, this clarification has been addressed. Insight has clarified the identification of the sensitive receptors on a map (See page 9 of Insight's Air Quality letter amendment). The map shows that the school boundary at 700 feet was analyzed, and per Response to the Air District in **Attachment 7**, the map has been updated to address all HRA constituents.

California Health and Safety Code states in Section 42301.6 (a) states, "Prior to approving an application for a permit to construct or modify a source which emits hazardous air emissions, which source is located within 1,000 feet from the outer boundary of a school site, the air pollution control officer shall prepare a public notice in which the proposed project or modification for which is fully described."

The Air District is the Air Pollution Control Officer for the region. The Air District has commented and received our response to comments, and is aware of the proximity of the School. **Mitigation Measure 3.3-1** contained in the EIR requires the Project Proponent to obtain all applicable permits from the Air District. As such, it is within the Air District's purview to notify all of the children's families per Section 42301.6(a) for any updated Air Quality Permits when applicable.

According to Mr. Andre Amy, Regulatory Assistance Officer at the California Department of Toxic Substances Control, animal manure is not considered hazardous material or hazardous waste. This information was confirmed during a telephone conversion with Environmental Planning Staff on April 15, 2013. This conversation was documented in an April 15, 2013 e-mail by Sung Kwon to Mr. Andre Amy that same day (See **Attachment 13**). Additionally, composting constituents under this HRA have not been found in significant quantities that would result in an adverse impact to air quality.

Comment: *"The Project description lists the APNs for the Project but fails to identify the size of the parcels. (DEIR, pg. 2-1.) This failure prohibits*

the reader of the DEIR from knowing the true size and extent of the composting area unless the reader reviews the technical appendices."

Response: Parcel sizes are provided on page 2-6, Figure 2-3. The Figure shows the parcels and acreages of the parcels and these parcels are identified in the Project Description above.

Comment: *"The EIR refers in several instances to the fact that the Project only includes 38.0 acres. The fourth parcel, however, over which traffic heading to the facility traverses, appears to be 53-acres [see TIS page 3]. It is our understanding that manure used for the Project is generated at this facility. In addition, it appears that the applicant is using the 53-acre parcel for its composting operations, including the storage of manure from outside their calving operations. (Exhibit "B.") This is important not only to accurately characterize the Project, but because water supply assessments are required for industrial projects of over 40-acres. As such, in addition to having an inaccurate project description, a water supply assessment is required."*

Response: We agree that an SB 610 Water Supply Assessment is required when "proposed industrial, manufacturing, <u>or processing plant</u>, or industrial park planned to house more than 1,000 persons, <u>occupying more than 40 acres of land</u> [emphasis added], or having more than 650,000 square feet of floor area." As stated earlier, composting is considered processing under SB 610 case law. However, in Tulare County, composting is allowed as an agriculture use with a Special Use Permit. Therefore, a component of the Project is considered a processing plant, further, the Project is adding compost only on an existing 35.0 acre parcel and the digester will be placed on a 3.0 acre parcel. The agricultural water study conducted for the Project concluded that the Project would be using a lesser amount of water (1 acre foot over the whole property) than another type of agricultural use (3 acre feet over the whole property). Therefore, this Project does not upset the 40.0 acre standard under SB 610, or found under the *Center for Biological Diversity v. County of San Bernardino*.

The 53.0 acre dairy feed lot parcel to the north is not used at all for composting operations, and is totally unassociated with the Project. It is unassociated because although under the same ownership, the Project Site is leased from the property owner for the purpose of composting. The Project area lessee is a separate entity from the ownership of the property. The Project has an easement from the property owner to allow truck traffic across their property, showing a separate interest. The Project has its own separate water supply and usage and does not share usage of water. The Project Site has separate permits and compliance measurements than the neighboring dairy.

The Project applicant is different from the land owner and the Environmental Impact Report is being done for the +/- 38.0.0 acres and not for the entire 53 acres, as a separate Project.

Comment: *"The DEIR apparently depicts the site plan for the Project. (DEIR, pg. 2-6.) However, the area of Project expansion is not clearly delineated and the aerial photo overlay in gray and small font labels make the site plan difficult, if not impossible, to read. It would be helpful if a photo of an example windrow was provided to illustrate the process to a reader of the DEIR."*

Response: Although the site plan could be altered to show windrows on the site plan, this graphic would not change the environmental analysis in DEIR. Staff does not find it necessary to add to/alter the site plan. The reasons supporting why additions or alterations to the site plan are not necessary include: 1) a revised graphic would have no impact on displaying a potential environmental impact, and 2) a photo of existing equipment used for composting would have no impact on displaying a potential environmental impact.

Comment: *The potential future equipment should be more specifically identified to analyze the Project's potential impacts.*

Response: A summary of existing and future equipment is provided on pages 2-5, 2-10, and 2-12 of the Draft EIR. As noted in the AQIA prepared by Insight, **"**All the equipment used to determine the baseline, construction and final operational emissions were included in the AQIA, as part of the emissions modeling and calculation details."

Comment: *The DEIR indicates that truck trips include hauling inbound of feedstock and outbound finished compost. (DEIR, 2-13.) However, the DEIR is not clear if the inbound and outbound trucks are the same trucks or if they are different trucks that arrive or depart empty. The DEIR should include a table with a breakdown of the number of trucks, the purpose of the truck trips, and the percentage that is expected to be CNG fueled.*

Response: In a letter dated March 5, 2013 (see Appendix E) from TPG Consulting, it clearly indicates that the basis for the truck trips is 2 trips per day per truck (that is, 1 inbound and 1 outbound), with 4 additional trucks per day for the existing CNG facility.

Comment: *The DEIR indicates that construction will occur on 3 acres of parcel 150-140-009 (DEIR, pg. 2-23); however, the Air Quality Analysis appears to be based on construction on the entire 38.0 acres. The*

construction air quality analysis and the project description should match."

Response: Commenter is correct that the "all weather surfaces (roadway)" construction will occur on 3.0 acres (as stated on page 2-23), while the overall construction, per the AQIA, will occur on over 38.0 acres of the property. However, the study is being clarified to more accurately reflect the area outside of the project boundaries. Such clarification has no bearing on the results of the technical studies because the 3 additional acres is for the roadways.

Comment Subject: Agriculture

Comment: **"***The DEIR acknowledges that the Project site is surrounded by prime farmland (DEIR, pg. 3.2-9), but does not analyze the impacts that the expansion of the composting facility, and the construction, installation, and operation of an anaerobic digestion facility and a biogas upgrading unit, a compressed natural gas (CNG) fueling station, and a combined heat and power unit for cogeneration power usage (CHP), would have on adjacent and near-by farming activities.*

Many adjacent and nearby agricultural operations, including Sundale, produce table grapes on their properties, which could be required to discontinue operations as a result of the Project. (Exhibit "C.")

Even if the DEIR were supported by expert opinion suggesting that no contamination drift would occur onto nearby agricultural properties, this would make no difference to auditors, such as Primus GFS, who regulate the entry of agricultural commodities into the stream of commerce. For example, Primus GFS is a Global Food Safety Initiative (GFSI) benchmarked and fully recognized audit scheme covering both (1) good agricultural practices (GAP) and (2) good management practices (GMP) scopes, as well as food safety management systems (FSMS). Even the possibility of the existence of manure on the table grapes would ensure that adjacent agricultural users would lose their Primus certification, and would be unable to sell table grapes produced by that grower. Because the Primus certification applies to all properties owned by a specific grower, the loss of certification would affect not only the growers' properties adjacent to the Project, but potentially their entire portfolio of table grape producing properties. Sundale alone owns over 2,000 acres of table grape producing parcels, yet there is no discussion about either the project-level or cumulative impacts associated with loss of agricultural land associated with the Project."

Response: There is no known regulatory approved standard, whether under the Air District or United States Department of Agriculture, that requires the County to review the impact of one agricultural use on another, including under County Agricultural Commission standards. Composting is an accepted farming practice and fuel pumping an accepted practice on agricultural land under the existing Special Use Permit.

Comment: *"The DEIR concludes that "the proposed expansion will not result in the conversion of these adjacent parcels or induce the conversion of these adjacent parcels to a nonagricultural use." (DEIR, pg. 3.2-9.) This conclusion is not supported by any evidence, discussion, or analysis. If the DEIR were to adequately address the issue, it would require a detailed analysis of the impact that the fugitive dust/manure will have on the continued viability of the surrounding prime agricultural lands to produce a marketable crop to market, including the agricultural operators' ability to obtain certification for their crops, and the affect of the loss of such certification on the growers' other properties. The analysis needs to include the possibility of conversion of prime agricultural land to either fallow land, or non-agricultural uses."*

Response: Under CEQA Checklist Agricultural Resources and Forestry Resources at questions a) and b), the question is whether the Project will convert Farmland of "Importance" and/or Williamson Act land. The site is currently located on land that is under a Williamson Act Contract and is compatible with Semi-Agricultural or Rural Commercial as the property is used for both these purposes. The existing use has not resulted in the loss of any surrounding farmland, nor is there any indication that it is a threat to additional farmland loss. Environmental Planning Staff has confirmed that agricultural uses continue within adjacent parcels. Additionally, Sundale continues to operate one roadway's width (approximately 20 feet) away from the road and there has been no indication of impact to any adjacent croplands to date.

Upon field verification the surrounding properties are either rural residential, with existing agricultural production occurring on their properties. There is Sundale Farms and despite their complaints, they are currently operating up to the roadway separating the two farms. The dairy operation to the north of the Project is operating with cattle up to the Project boundary. Upon inspection of County GIS maps from 2002 and recent Google Earth Satellite images, there does not appear to be any significant changes in the surrounding properties.

Comment: *"The DEIR discusses measures that are designed, to reduce the migration of dust/manure from the Project. However, this reduction in migration will not act to save Sundale's Primus certification. Up to 60,000 tons of manure will be composted on the site each year. (DEIR, p. 2-11.) The manure will sit in windrows for two to three months to cure. (DEIR, pg. 2-12.) During this period of time, the manure will be susceptible to drifting from the Project and contaminating the neighboring agricultural uses, including Sundale, and causing significant, irreversible consequences to the economic stability and existence of Sundale. The agriculture section also contains no discussion of feasible mitigation, such as agricultural buffers to protect the farmland."*

Response: The DEIR acknowledges that prime farmland is located adjacent to the subject site. The Project site has an operational OIMP and implements best management practices to mitigate against dust (e.g., watering regimes for vehicle travel areas and for compost piles). It also includes 20 foot high dust fencing and 40 plus foot high closely grown trees along the entire eastern and southern edge of the property. Roadway and windrow watering regimes are also currently being implemented. As noted earlier, according to a records search conducted by Mr. Keith Jahnke, of the County Environmental Health Services Division, there has never been a complaint submitted by Sundale against Harvest to the LEA or the County.

It has been determined that the currently adopted Tulare County Zoning Ordinance (Section 16) allows the proposed Project (through a Special Use Permit) which is located in an agricultural zone. As such, the Project would not substantially impact adjacent agricultural uses. Uses that are not typically allowed in the applicable zoning district which may conflict with other agricultural uses can become compatible through appropriate conditions of approval. In this instance, all mitigations, an updated SWMP, and OIMP will be required and must be approved prior to implementation of the Project.

The commenter did not identify any other vineyards beyond Sundale nor did the commenter indicate that they were authorized to voice any neighbor's opposition against the Project, challenge the contents of this DEIR, nor speak to any potentially adverse impacts to surrounding agricultural uses suggest by the commenter.

Comment Subject: Air Quality

Comment: ***"****Californians experience the worst air quality in the nation, with annual health and economic impacts in at 8,800 deaths (3,000-15,000 probable range) and $71 billion ($36-$136 billion) per year (Cayan*

2006 and Global Warming: Impacts to Public Health and Air Quality (http://www.energy.ca.gov/200Spublications/CEC-SOO-200S-1 97 /CEC-SOO-200S-197-SF.PDF).

Despite the importance of this analysis, both the EIR and the supporting Air Quality Impact Assessment (the "AQIA") are flawed in several respects, as explained in the enclosed report prepared by Mr. Mitchell. (See Exhibit "A.")"

Response: The Project is proposed to be designed for an enclosed digester and a Project that diverts waste from standard waste streams. The principles of the Project are sustainable, clean energy (see the CEC Comment Letter 3) which is consistent with the goal of reducing Greenhouse Gas emissions. The AQIA was conducted under existing Air District approved qualifications (see earlier Air District's comments). The Air District is charged with primarily protecting air quality by regulating criteria pollutants such as ozone and particulate matter, among other pollutants. As such, their comment letter did not identify any deficiencies as suggested by Mr. Mitchell. In addition, the Mitigation Measures for Air Quality and Odor require strict adherence with Air Quality rules/regulations which would effectively mitigate potential adverse impacts by criteria pollutants and Greenhouse Gases (GHG) to a level of less than significant. The commenter appears to be combining health effects from criteria pollutants and GHG as GHG emissions have not been demonstrated to adversely affect human health on a local scale (i.e., within California versus globally). The information provided by the commenter relates to the health and economic impact of criteria pollutants; however, Insight's analysis of the Project and cumulative impacts as a result of the Project conclude that the Project's impact can be mitigated to a level of less than significant thereby resulting in no adverse air quality impact from either criteria pollutants or Greenhouse Gas emissions.

Also, see Insight's Response to Mr. Mitchells AQIA's Comments in **Attachment 7**.

Comment: *In addition, the DEIR utilizes a threshold of significance for ROG in assessing the air quality impacts of the Project based on the San Joaquin Valley Air Pollution Control District ("SJVAPCD") standards. Specifically, SJVAPCD has established a ROG emissions significance threshold of 10 tons per year. (DEIR, 3.3-4.) The total long term incremental increase in ROG emissions generated by the Project is calculated to be 0.77 tons per year, or almost 4 times the significance threshold. Despite the drastic increase in ROG emissions which are almost 4 times the threshold of significance, the DEIR states that the emissions are less than significant "[s]ince the emissions are*

controlled by the SJVAPCD and accounted for in the State Implementation plan." (DEIR, 3.3-29.) The fact that the emissions are controlled by the SJVAPCD and accounted for in the State Implementation Plan does not make the impact of these emissions any less significant, because neither fact will reduce those emissions to below the 10 ton per year threshold, nor does the EIR attempt to explain how any such reductions would supposedly occur."

Response: See the Air District's Comment Letter 7, Comment 1, where the Air District finds the Project will not exceed the ROG emissions threshold of 10 tons per year.

Comment Subject: Fugitive Dust

Comment: *"The County's consultant, Seimer & Associates, has opined that particles of dust would only travel 50 feet from the composting facility. This conclusion is belied by on the ground conditions. Specifically, photographs taken by Sundale demonstrate that dust travels far more than 50 feet from the Project site. (Exhibit "D.")"*

Response: The DEIR for the proposed Project does not include an analysis by Seimer & Associates. However, Seimer and Associates (S.R. Seimer, Ph.D.) provided a study dated on November 15, 1999, which was submitted as part of the approval process for PSP 99-026 (ZA) and will be discussed shortly.

An Air Quality Impact Assessment for this EIR was prepared by Insight Environmental Consultants which determined that adequate dust mitigation is currently being implemented and additional mitigation will be implemented to reduce potential dust emissions from the Project Further, the photographs are of questionable veracity. Dust accumulation on the plastic covering the vines could have been generated by Sundale agricultural activities or drift from other surrounding agricultural sources. A date stamp or any other chronological protocol was not provided by the photographer to identify when the photographs were taken. The photographs are portrayed as capturing images of a dust plume exiting Harvest Power at the property line; however, they do not demonstrate dust settling on the vineyard. The Seimer and Associates report indicates that dust particles originating from the site are too large to drift greater than 50 feet from the point of origin, that Sundale-related agricultural operations result in dust generation, and that the first two rows of one hundred rows inspected by Seimer and Associates southeast of the Project sight have slightly greater dust burden; however, Dr. Seimer suggests that this dust could be generated from road travel caused by Sundale activity. Therefore, coupled with Insight's and Seimer and

Associates studies, it can be concluded that mitigation measures are effective in reducing potential dust drift from the Project site to a level of less than significant.

Comment: *"Harvest Power has installed a screen on certain segments of the property line of the Project in an attempt to shield the dust generated from the Project. However, the effectiveness of the screen in containing the dust is minimal. Dust clouds regularly travel over the screen only to come to rest on the neighboring properties crops. (Exhibits "D" and "E.")"*

Response: It is difficult to ascertain what the commenter is attempting to demonstrate with the images contained in Exhibits "D" and "E" as the images are grainy and staff is uncertain whether they represent dust at over 50 feet away from the site, or if the dust or spray originated from their vineyards. As noted in the Seimer and Associates study, the origins of dust sources could be from Sundale, adjacent agricultural operations, the dairy north of the Project site, or from the entire San Joaquin Valley Air Basin in general.

Comment: *The value of a screen as an effective dust containment mechanism is trivial at best, and is not adequate as mitigation. In fact, pursuant to existing conditions for the Special Use Permit and the Odor Mitigation Management Plan, the Project is supposed to keep the windrows of manure and other composting material at a certain level of moisture to prevent the migration of dust and manure onto neighboring lands. Notwithstanding this fact, Harvest Power has stopped applying water to the windrows of manure and other composting material because they were unable to contain the water runoff on the Harvest Power property. Instead of remedying the inability to contain the water, Harvest Power has stopped the application of water altogether."*

Response: Staff has visually verified that Harvest Power has installed a 20 foot high dust screen and there are 40 feet (plus) tall trees that have grown together, and staff witnessed water being sprayed on roadways and windrows. Staff also witnessed remnant water (puddles) on site as a result of watering for dust control. During a site visit, Environmental Planning Staff did not witness visible water or dust emissions exiting the site. However, Environmental Planning Staff has not documented the effectiveness of the screen during high speed (greater than 10 miles per hour) wind conditions. It should be noted that Hector Guerra, Chief Environmental Planner, was principal staff with the San Joaquin Valley Air Pollution Control District (1993-2005) as a Senior Air Quality Planner and developed the adopted and current version of Regulation VIII (Fugitive PM10 Prohibitions); therefore, he has

expertise and an intimate knowledge of dust control techniques, testing protocols, and dust measuring techniques.

In a conversation with Harvest Power at 8:30 A.M. on Friday, April 12th, we discovered that the Project has its own 2,500 water gallon tank vehicle that waters the Site about 5 times a day. Under existing Air District Permits, the compost is measured for its moisture content by the Air District. Similarly, the Air District tests the dust screen for its efficiency and effectiveness and has not rated it as trivial as ascertained by the commenter.

As noted in the DEIR, PM_{10} fugitive dust emissions would remain less than significant with compliance to SJVAPCD Rules and Regulations, the local zoning codes, and **Mitigation Measure 3.3-1**.

As noted in Decision No. 2380 in regards to PSP 99-026(ZA), Condition 2 notes that all travelways and composting areas shall be watered at least twice a day during the dry season (normally April through October) and as needed during the balance of the year to reduce the generation of dust." The commenter did not note a time frame for the suggestion that the Harvest Power has stopped watering the compost area, therefore staff regards this as an unsubstantiated claim without merit due to the absence of credible documentation or evidence and said claim can be dismissed as hearsay. As noted earlier, no violations regarding such a matter have ever been recorded at or from the Project site.

Comment Subject: Odor

Comment: *"The AQIA also suggests, without citation to evidence, that the "anaerobic digestion facility is designed with a biofilter to ensure that no offensive odor migrates offsite." (AQIA at 24.) The facility, however, presently emits offensive odors, particularly during the warm summer and fall months. As such, this unsupported statement is not supported by substantial evidence, and is not reflective of actual project conditions."*

Response: The drawing for the design currently contains a biofilter (see the Digester Facility Plan Figure 2-5). Insight concluded that no odors would result from the anaerobic digestion facility. Staff has no information that clearly and definitely proves that anaerobic digesters would significantly cause odors.

Comment Subject: Greenhouse Gases

Comment: *"The DEIR's discussion regarding significance for the Project's impact on greenhouse gas emissions is not clear. (DEIR, Chapter 3.7.)*

The DEIR describes several threshold approaches for greenhouse gas emissions. (DEIR, pgs. 3.7-10, II.) The analysis should determine the threshold that will be used and provide the facts to support the conclusion reached for the threshold chosen. The DEIR in one place states that the County lacks the expertise and regulatory authority to develop a CEQA significance threshold for climate change and greenhouse gas emissions requiring use of compliance with AB32 regulations as the indicator of significance. In another place, the DEIR indicates that the threshold that is used is the 25,000 metric ton threshold adopted by the SJVAPCD for stationary sources. The DEIR also indicates that the determination is based on providing a net benefit in greenhouse gas emissions. Discussion of approaches considered may be appropriate, but a clear indication of the approach actually chosen is needed."

Response: The DEIR is very clear that the proposed Project will have a net benefit regarding greenhouse gases. This is consistent with Section 15064.4 of the CEQA Guidelines in that Environmental Planning Staff has made a good-faith effort to estimate Greenhouse Gas impacts. In addition, Insight Environmental Consultants indicated that GHG impacts included:

"As the commenter noted in his detailed comment (excerpted herein), there is no commonly utilized approach within California at this time to ascertain the level at which GHG impacts are considered significant. The AQIA utilized the level tentatively used within the SJVAPCD to evaluate projects within the San Joaquin Valley Air Basin which is 25,000 metric tons. Use of this significance criteria limit is the most appropriate for the project given its location. Further clarification should not be required." (See **Attachment 7).**

Staff similarly evaluated impacts to Greenhouse Gasses in the Cumulative. Greenhouse gas reductions were estimated using the US EPA Waste Reduction Model (WARM) and the Compost Emission Reduction Factor (CERF). These models are considered the industry standard for calculating potential GHG emissions and are accepted by the US EPA, California Air Resources Board, and the San Joaquin Valley Unified Air Pollution Control District as the yardstick to estimate GHG emissions. As such, they are the most accurate estimates that could be utilized to calculate greenhouse gas reductions for the proposed Project.

In terms of thresholds, the proposed Project was estimated to have a net benefit in regards to greenhouse gases. Regardless of specific numbers, it is clear that with a net benefit, no thresholds of significance were exceeded including the SJVAPCD thresholds. In

addition the proposed Project is consistent with the goals of AB 32.

Comment Subject: General Plan Consistency

Comment: *"State planning and zoning law requires that all land-use decisions of general law cities must be consistent with the city's General Plan. (Govt. Code, Section 65860, subd. (a); see also Corona-Norco Unif. Sch. Dist. v. City of Corona (1993) 17 Cal.App.4th 985, 994.) A "project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." (Corona-Norco, supra, 17 Cal.App.4th at 994.) While perfect conformity may not be required, "a project must be compatible with the objectives and policies of the general plan." (Endangered Habitats League, Inc. V. County of Orange (2005) 131 Cal.App.4th 777, 782 [emphasis added] [citing Families Unafraid to Uphold Rural etc. County V. Board of Supers. (1998) 62 Cal.App.4th 1332, 1336].) A project is inconsistent if it conflicts with a general plan policy that is fundamental, mandatory, and clear." (Endangered Habitats, supra, 131 Cal.Al'P.4th at 782 [citing Families Unafraid, supra, 62 Cal.App4th at 1341-42].)*

The Project is inconsistent with the Tulare County General Plan, which states, inter alia, that the "County shall prevent incompatible land uses near properties that produce or store hazardous waste." (Policy HS-4.3.) This Project, however, would place manure and other contaminants adjacent to properties where table grape operations are ongoing, and where a school is located immediately downwind (0 .51 miles to the southeast) from the facility. As such, the Project would be inconsistent with this General Plan policy."

Response: According to Mr. Andre Amy, Regulatory Assistance Officer at the California Department of Toxic Substances Control, animal manure is not considered hazardous material or hazardous waste. This information was confirmed during a telephone conversion with Environmental Planning Staff on April 15, 2013. This conversation was documented in an April 15, 2013 e-mail by Sung Kwon to Mr. Andre Amy that same day (See **Attachment 13**). Additionally, composting constituents under this HRA have not been found in significant quantities that would result in an adverse impact to air quality.

Furthermore, the Air District did not indicate any potential health risks to the nearby school in its comment letter (see **Appendix 4).** The Commenter does not identify other contaminants that would be located

on or originate from the Project site and as such staff cannot provide further comment. Without evidence of hazardous materials located on site, it can be concluded that the proposed Project is consistent with the General Plan.

Comment Subject: Existing Permit Conditions

Comment: *"The Applicant is presently in violation of the permits for the existing facility. This is important because (I) it shows enforcement by the County is insufficient mitigation for the potential impacts of the Project, and (2) mitigation requiring the applicant to comply with the law is insufficient. Failure to comply with the law should also be a separate ground for the denial of the Project. Examples of the Applicant's failure to comply with existing permit conditions include:*

- *Section 3-5 of Application No. PSP 92-091 states: "The applicant proposes to receive and grind wood waste from contractors, selected agricultural wastes, and yard waste (leaves, tree trimmings, and grass) to produce biomass and to combine manure exclusively from the existing on-site feed lot to produce compost." However, pictures recently taken from the existing facility show manure is now being brought to the facility. (See Exhibit "A" [truck dumping manure from off-site]) In fact, it appears that the applicant is using the 53-acre parcel for its operations, including the storage of manure from outside their calving operations. (Exhibit "A.")*
- *Activity areas are not being treated with "acceptable dust retarding treatment so that dust and mud will not create conditions detrimental to the surrounding areas and public roads," in "order to keep dust free from drifting to adjacent properties." (See Resolution No. 7109 at 3.) As seen in Exhibits "D" and "E," dust regularly encroaches upon the Sundale properties where table grapes are grown.*
- *Trucks entering and leaving the facility are not covered, in violation of Decision No. 2380, page 8. (See Exhibit "F.")"*

Response: **Manure**

Under PSP 92-091 (1992), manure and other additives are normally used in soils amendments, was not included in the Use Permit. However, under PSP 99-026 (1999), the Use Permit was amended with the following condition of approval: "Waste acceptance at the site shall be limited to wood, yard, agricultural, and liquid food wastes (not to include grease trap waste) and those additives normally used in soil amendments…" As animal manure is a commonly used as fertilizer, it is considered an acceptable soil amendment additive. Also, see earlier comments regarding the veracity of the photographs.

Response: **Dust Retardant**

The commenter does not provide definitive evidence that Harvest Power does not apply an acceptable dust retardant. The photograph claiming to show dust is only evidence of dust (which may have originated from the vineyard.) This photograph does not document application of dust controls. Also, see earlier comments regarding the veracity of the photographs.

Response: **Covered Trucks**

The Commenter provides a photograph of a truck entering the site. Due to the low quality of the photograph, staff cannot confirm nor refute that the truck was covered. Also, see earlier comments regarding the veracity of the photographs.

Comment Subject: **Potential Taking**

Comment: *"If the Project is allowed to go forward, Sundale will have lost its reasonable investment-backed expectations associated with its development and operation of its property as a table grape vineyard. Because the Project will jeopardize Sundale's Primus certification, Sundale will likely be forced to take its adjacent property out of production so as not to jeopardize the certification for the remainder of its properties. In essence, the County will be inversely condemning Sundale's property, for which Sundale is entitled compensation under the takings clause. (See, e.g., Lucas v. South Carolina Coastal Council (1992) 505 U.S. 1003, 1016.)"*

Response: The commenter has cited to no applicable law in support of its contention that a public agency's approval of a Use Permit for use by a private developer can give rise to an inverse condemnation action. In fact, the courts have concluded to the contrary, holding that an agency approval of private development does not amount to a taking for public use and, therefore, does not give rise to an inverse condemnation claim. (*Yox v. City of Whittier* 1986) 182 Cal.App.3d 347, 35.04 (the city "played no part [in the private development of the upstream property] other than [the] approval of plans and issuance of permits.") The County's role in the Harvest Power project is limited to approval of plans and issuance of permits and, therefore, claims for damages against the County are not actionable. (*Id.* at 35.03, citing *Ellison v. City of Buenaventura* (1976) 60 Cal.App.3d 453, 459.) Moreover, an approval of this use permit would not result in the loss of all economic benefits to the adjacent property and is insufficient to support an inverse condemnation action on that ground as well.

Notwithstanding these claims, the County is not required to respond to this comment as an inverse condemnation claim is not an issue under CEQA.

Tables

Table 1: **Mitigation Monitoring Report and Program Summary**
Table 2: **Checklist Items with Significant Unavoidable Impacts**
Table 3: **Checklist Items with Less than Significant with Mitigation**
Table 2-1: **Tonnage and Truck Traffic**
Table 3.2-1: **2012 Tulare County Lands under Williamson Act or Farmland Security Zone Contracts**
Table 3.3-1: **SJVAB Attainment Status**
Table 3.3-2: **Background Ambient Air Quality Data – Ozone**
Table 3.3-3: **Background Ambient Air Quality Data – Ozone**
Table 3.3-4: **Background Ambient Air Quality Data – PM_{10}**
Table 3.3-5: **Background Ambient Air Quality Data – $PM_{2.5}$[1]**
Table 3.3-6: **Background Ambient Air Quality Data – CO[2]**
Table 3.3-7: **Background Ambient Air Quality Data – NOx[3]**
Table 3.3-8: **Background Ambient Air Quality Data – SOx[4]**
Table 3.3-9: **State & National Criteria Air Pollutant Standards, Effects, and Sources**
Table 3.3-10: **Short-Term Project Emissions**
Table 3.3-11: **Emission Sources**
Table 3.3-12: ~~**Long-Term Incremental Emissions**~~
Total Project Emissions
Table 3.3-13: ~~**2020 Emissions Projections**~~
Long-Term Incremental Emissions
Table 3.3-14: ~~**Cumulative Long-Term Emissions***~~
2020 Emissions Projections
Table 3.3-15: ~~**Measures of Significance – OZONE (ROG and NOx Emissions)**~~
Cumulative Long-Term Emissions*
Table 3.3-16: ~~**Measures Based on Ambient Air Quality Impacts (NOx)**~~
Measures of Significance – OZONE (ROG and NOx Emissions)
Table 3.3-17: ~~**Measures of Significance – CARBON MONOXIDE (CO)**~~
Measures Based on Ambient Air Quality Impacts (NOx)
Table 3.3-18: ~~**Measures of Significance – SULFUR DIOXIDE (SO_2)**~~
Measures of Significance – CARBON MONOXIDE (CO)
Table 3.3-19: ~~**Measures of Significance – RESPIRABLE PARTICULATES (PM_{10})**~~
Measures of Significance – SULFUR DIOXIDE (SO2)
Table 3.3-20: ~~**Measures of Significance – RESPIRABLE PARTICULATES ($PM_{2.5}$)**~~

[1] California Air Resources Board Website Data as of July 2012
[2] Ibid
[3] Ibid
[4] Data not available after 2001 as of July 2012.

	Measures of Significance – RESPIRABLE PARTICULATES (PM10)
Table 3.3-21:	**~~Measures of Significance – TOXIC AIR CONTAMINANTS (TACs)~~**
	~~Measures of Significance – RESPIRABLE PARTICULATES (PM2.5)~~
~~Table 3.3-22:~~	**~~Sensitive Receptors Located ≤ 5 Miles from Project~~**
	Measures of Significance – TOXIC AIR CONTAMINANTS (TACs)
Table 3.3-23:	**~~Potential Maximum Impacts Predicted By HARP~~**
	Predicted Ambient Air Quality Impacts
Table 3.3-24:	**Sensitive Receptors Located < 5 Miles from Project**
Table 3.3-25:	**Potential Maximum Impacts Predicted By HARP**
Table 3.4-1:	**List of Special Status Species that could occur in the Project Vicinity**
Table 3.7-1:	**Emissions by Sector in 2007**
Table 3.7-2:	**Estimated Non-Mitigated Annual Greenhouse Gas Emissions (Tons/Year)**
Table 3.7-3:	**Total Change in GHG**
Table 3.7-4:	**Projected Emissions by Sector in 2030**
Table 3.7-5:	**Select CARB Greenhouse Gas Emission Reduction Strategies**
Table 3.8-1:	**Transport of Hazardous Waste**
Table 3.9-1:	**Tulare Lake Hydrologic water balance for 1998-2005 (thousand acre-feet)**
Table 3.9-2:	**Irrigation Districts in Tulare County**
Table 3.12-1:	**Maximum Acceptable Ambient Noise Exposure for Various Land Uses**
Table 3.12-2:	**Traffic Noise Impacts for Existing Conditions**
Table 3.12-3:	**Traffic Noise Impacts for Future Conditions**
Table 3.13-1:	**Tulare County Population**
Table 3.14-1:	**Recreational Areas in Tulare County**
Table 3.14-2:	**Tulare County Libraries**
Table 3.14-3:	**Fire Staffing and Reponses Time Standards**
Table 3.15-1:	**National Park and Forest Facilities**
Table 3.15-2:	**Recreational Areas in Tulare County**
Table 3.16-1:	**Uninterrupted Traffic Flow Facilities LOS**
Table 3.16-2:	**Interrupted Traffic Flow Facilities LOS**
Table 3.16-3:	**Existing Conditions - Levels Of Service**
Table 3.16-4:	**Existing Conditions PLUS Project - Levels Of Service**
Table 3.16-5:	**2035 Conditions WITH the Harvest-Tulare Project - Levels Of Service**
Table 3.18-1:	**Sensitive Receptors Located ≤ 6 Miles from Project**
Table 4-1:	**Regional Population Projections and Planning Efforts**
Table 4.-2:	**Checklist Items with Significant Unavoidable Impacts**
Table 4-3:	**Checklist Items with Less than Significant Impact with Mitigation**

Table 4-4: **Checklist Items with Less than Significant Impacts**
Table 4-5: **Checklist Items with No Impacts**
Table 5-1: **Alternatives Potential Impact Analysis**
Table 5-2: **Costs of Alternatives**
Table 5-3: **Increased Costs of Alternatives**
Table 5-4: **Alternatives Evaluation**
Table 6-1: **Summary of Economic, Social and Growth Inducing Impacts**
Table 6-2: **Potential Revenue from Recycling and Composting in California**
Table 6-3: **Discussion of Potential Growth Inducing Impacts**

Appendices

Appendix A: Notice of Preparation and Agency Comment Letters

Notice of Preparation

Agency Comment Letters

- Dave Singleton, Program Analyst, Native American Heritage Commission (Oct. 9, 2012)

- Allison Shuklian, Environmental Health Specialist, Tulare County Health & Human Services Agency (Oct. 23, 2012)

- David Deel Associate Transportation Planner, Caltrans District 6 (Oct. 30, 2012 - Ref. No. 2135-IGR/CEQA 6-TUL-137-22.22 +/-)

- Joy Isaacson, Waste Management Specialist, Permitting & Assistance Branch
  Waste Permitting, Compliance & Mitigation Division, CalRecycle (Oct. 30, 2012)

- David Warner, San Joaquin Valley Air Pollution Control District, Central Region,
  (Nov. 1, 2012 - District CEQA Ref. No. 2012 0634)

Appendix B: Biological Assessment Report

Live Oaks Associates, Inc., "Harvest Power Tulare Project Biological Evaluation Tulare County, California" (November 30, 2012)

Appendix C: Cultural Resources Assessment Report

Roper, C. Kristina, "A Cultural Resources Assessment for the Harvest Power Facility Upgrade, 24487 Road 140, Tulare, Tulare County, California" (November 27, 2012)

Appendix D: Geology and Soil Reports

BSK Associates, "Preliminary Soil and Geology Phase 1 Study, Proposed Anaerobic Gas Production Facility, Tulare County, California" (BSK E12-076-01F), (December 5, 2012)

Kleinfelder, "Phase 1 Environmental Site Assessment: APNs 150-130-004, 150-140-016, and a portion of 150-140-014, Tulare County Composting & Biomass, 24478 Road 140, Tulare, California (October 27, 2010)

USDA, NRCS, "Custom Soil Resource Report for Harvest Power, Tulare, CA, Tulare County, Western Part, California," (July 10, 2012)

Appendix E: Transportation and Circulation Report

TPG Consulting, "Traffic Impact Study for the Harvest – Tulare Anaerobic Digester and Compressed Natural Gas Facility," (November 2012)

TPG Consulting, "Traffic Impact Study Update," Memo from Charles Clouse, Principal (March 5, 2013)

Appendix F: Noise

VRPA Technologies, Inc., "Harvest Power, LLC, Noise Study Report" (November 30, 2012)

Appendix G: Water (Groundwater Extraction)

Minney, John, Letter to Linda Novick, Harvest Power, Subject: Groundwater Extraction, Tulare County Compost Facility, 24487 Road 140, Tulare County California (JOB F12021) (February 11, 2013)

Appendix H: Air Quality

Insight Environmental Consultants, "Air Quality Impact Analysis: Tulare County Compost and Biomass Facility (A Collaborative Effort between the County of Tulare and Harvest Power)," (September 2012)

Mitigation Measure #	Mitigation Measure	Timing of Compliance
	other than a dedicated cemetery, the following steps should be taken: 1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until: a. The Tulare County Coroner/Sheriff must be contacted to determine that no investigation of the cause of death is required; and b. If the coroner determines the remains to be Native American: i. The coroner shall contact the Native American Heritage Commission within 24 hours. ii. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American. iii. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or 2. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. a. The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission. b. The descendant fails to make a recommendation; or c. The landowner or his authorized representative rejects the recommendation of the descendent.	subsurface excavation
3.5-3	The property owner shall avoid and minimize impacts to paleontological resources. If a potentially significant paleontological resource is encountered during ground disturbing activities, all construction within a 100-foot radius of the find shall immediately cease until a qualified paleontologist determines whether the resources requires further study. The owner shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.	Prior to issuance of grading permits Ongoing monitoring during subsurface excavation
3.6-1	The project shall incorporate all recommendations contained within the Preliminary Soil and Geology Phase 1 Study <u>during the Project site design, construction, and operations to reduce any potential geotechnical hazards at the Project site</u>. These recommendations shall be stipulated in the	During project site design, construction, and operations,

Mitigation Measure #	Mitigation Measure	Timing of Compliance
	construction contracts and specifications.	to reduce any potential geotechnical hazards at the project site
3.8-1	Hazardous Materials Business Plan from Environmental Health – Under the California Health Chapters 4 & 4.5, the facility is required to submit a business plan to Certified Unified Program Agency (CUPA). Environmental Health as the CUPA for Tulare County, requires a business plan for threshold quantities of: • 55 gallon of a liquid • 500 pounds of solids • 200 cubic yards of compressed gas	Prior to Occupancy
3.8-2	If more than 10,000 pounds of methane is produced in the process, the applicant is required to submit an application for a California Accidental Release Prevention (CalARP)/Risk Management Plan. The applicant shall immediately contact the Certified Unified Program Agency's (CUPA) inspector and notify the CalARP and submit an application.	Prior to Issuance of Building Permits
3.8-3	If the facility has/or proposes an above ground storage capacity over 1,320 gallons of a petroleum based product, the site shall be required to prepare a Spill Prevention Control and Countermeasure (SPCC) plan in accordance with the U.S. Code of Federal Regulations, Title 40, Part 112 (40CFR112) prior to the final inspection of the building permit. The plan shall be submitted to the Tulare County Environmental Health Services Division. The applicant shall contact the TCEHSD's CUPA inspector.	Prior to Issuance of Building Permits
3.9-1	The applicant shall receive all required permits from the RWQCB and the State Water Board prior to the issuance of building permits.	Prior to Issuance of Building Permits
3.9-2	**The proposed Project shall comply with any new regulations brought by the RWQCB and/or the State Water Board. This includes, but is not limited to, regulations pertaining to the General Tentative Composting Order No. Dwq-2012-Xxxx for composting facilities. Regulations under this order could include: limitations on additives, prohibitions of certain types of waste material, design specifications, maintenance requirements, site restoration, and other requirements. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility. Harvest Power California LLC, needs to submit a report of waste discharge (see enclosed Form 200) with a report describing the operation, along with the appropriate fee, to our office. Based on the submitted information, the threat to water quality is tentatively rated 3 and the complexity C, resulting in 'a filing fee of $2,776. The filing fee is the first year's annual fee (e.g., waste discharge permit fee).**	Prior to Issuance of Building Permits
3.9-3	The applicant shall prepare and submit a SWPPP to Tulare County prior to the issuance of a building permit. This SWPPP shall be implemented and retain on site as part of business operations.	Prior to Issuance of Building Permits
3.9-4	That any tanks or basin lining be designed to RWQCB standards and approved by TCEHSD prior to the issuance of a building permit.	Prior to Issuance of Building

Mitigation Measure #	Mitigation Measure	Timing of Compliance
		Permits
3.9-5	That any piping be reviewed and approved by the TCEHSD to verify that the contents will not pollute the groundwater.	Prior to Issuance of Building Permits
3.9-6	The drainage system, including the berms, and the retention pond and drainage swale facilities shall be designed, and the plans stamped by a registered Professional Engineer, of whom must be registered and/or licensed in California, and have professional knowledge and experience in the field of on site drainage and detention facility design. The specifications and engineering data for the drainage system and detention facilities shall be submitted to the Public Works Department and TCEHSD for review and approval prior to the issuance of a building permit.	Prior to Issuance of Building Permits
3.10-1	The composting and anaerobic digester operator shall adhere to all conditions of approval (COA's) noted in the Use Permits for the composting expansion and the anaerobic digester.	Prior to Issuance of Building Permits
3.14-1	Applicant shall provide an all weather access road to the site and any buildings affected by the Special Use Permit.	
3.14-2	Applicant shall submit plans for any new construction, remodeling, alterations, or building additions. All new construction shall meet 2007 Building Code, Fire Code, Mechanical Code, Electric Code and Plumbing Code, as applicable.	Prior to Issuance of Building Permits
3.14-3	If proposed use constitutes a change of occupancy, the existing building(s) affected by the change of occupancy and the Special Use Permit shall comply with 2007 Building and Fire Codes and other adopted standards.	Prior to Issuance of Building Permits
3.14-4	The Tulare County Fire Department shall be notified of the proposed start date of any processing, storage, or special use granted and mitigated prior to initiation of any building operations.	Prior to Occupancy
3.14-5	Violations of any of these conditions will result in Tulare County Fire Department's rescission of approval of the Special Use Permit.	Prior to Occupancy Fire Department Inspection for Violations
3.17-1	The Project shall comply with any conditions required by the RWQCB for wastewater treatment for on-site effluent treatment in lagoons or tanks. RWQCB conditions shall be forwarded to the Tulare County Planning Branch and the Environmental Health and Human Services Agency for appropriate action.	Prior to Occupancy that any RWQCB conditions be forwarded and considered.
3.17-2	The Project shall be required to obtain any applicable permit from the RWQCB as appropriate.	Prior to Issuance of Building Permits
3.17-3	The Project shall include all facilities as specified by the RWQCB and/or the Tulare County Planning Branch and the Environmental Health and Human Services Agency.	Prior to Issuance of Building Permits
3.17-4	The applicant shall prepare a SWPPP prior to construction and keep it on site per the NPDES requirements.	Prior to Issuance of Building

Mitigation Measure #	Mitigation Measure	Timing of Compliance
		Permits
3.17-5	The Project's drainage facilities and grading be designed to RWQCB, Tulare County Public Works, CalRecycle and Tulare County Environmental Health Standards and approved by a certified Professional Engineer. Certification shall indicate that the Project will accommodate 100 year, 24 hour storm events in accordance with the noted Agencies standards.	Prior to Issuance of Building Permits
3.17-6	The applicant shall obtain an updated Solid Waste Facility Permit (SWFP) per CCR, Title 27, Section 21570. A SWFP must be obtained prior to the issuance of building permits, the commencement of the additional composting, and the construction of the anaerobic digestion facility.	Prior to Issuance of Building Permits
3.18-1	Update the Odor Impact Management Plan (OIMP) required by Cal Recycle at the facility to maintain its effectiveness despite the Project's increase in the tonnage processed and differing digestion material.	Prior to Issuance of Building Permits

SUMMARY OF CUMULATIVE IMPACTS

"An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in Section 15065 (a) (3)."[1] Unless specifically, stated otherwise, the Cumulative Impact area for the Project is the County, based on the Tulare County 2030 General Plan Update (see **Figure 1**).

Figure 1
Tulare County Cumulative Analysis Area

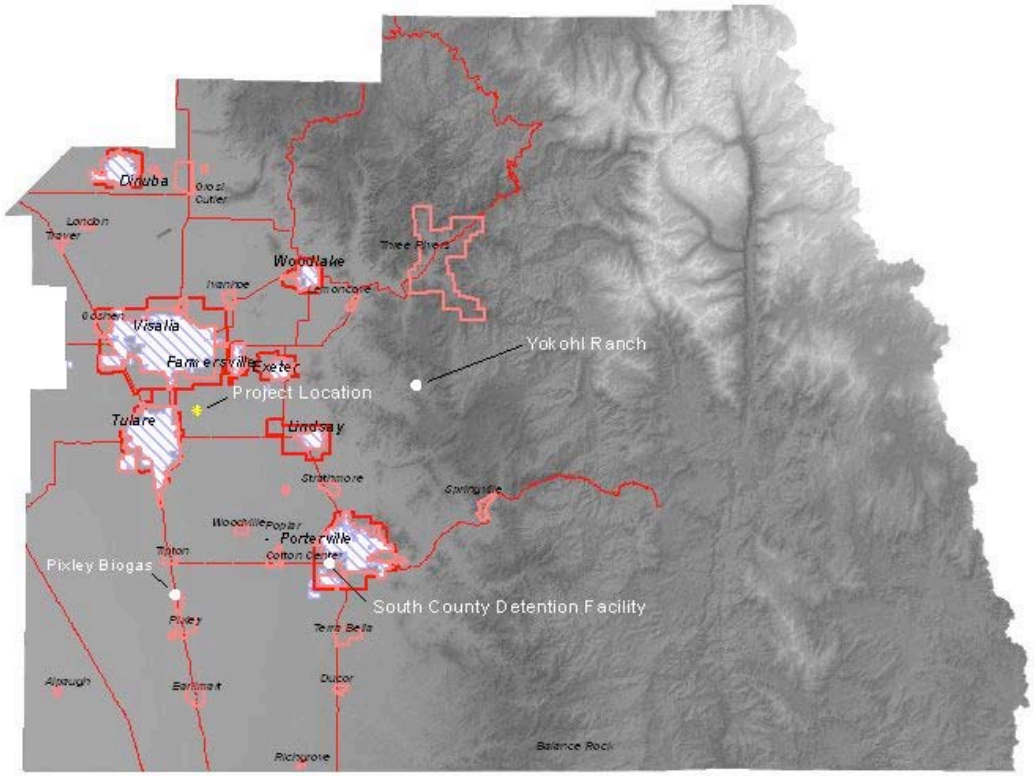


Figure 1: Area of Cumulative Analysis Study. Source: Tulare County Planning Department

The City's within the County that were included for the cumulative impact analysis are:

- City of Dinuba
- City of Woodlake
- City of Visalia
- City of Tulare
- City of Farmersville
- City of Exeter
- City of Lindsay
- City of Porterville
- City of Kingsburg
- City of Delano

Counties outside the County that were included for the impact analysis are:

- County of Fresno
- County of Kern
- County of Kings

Other projects discussed in the 2030 General Plan Update include:

- Goshen
- Yokohl Ranch
- Rancho Sierra
- Earlimart

Other Projects that may generate cumulative impacts include:

- Pena
- Pixeley Biogas
- South County Detention Facility

The basis for other resource specific cumulative impact analysis includes:

- For Air Quality and Green House Gas Emissions it is the San Joaquin Air Basin
- For Biological Resources it is the San Joaquin Valley
- For Hydrology it is the Tulare Lake Basin
- For Agriculture it is the State of California

Cumulative Impacts

There is only one cumulative significant and unavoidable impact and that is under the mandatory finding of significance for substantial adverse effects by indirect odor impacts on human beings though accumulation with other adjacent dairy odors.

Table 2
Checklist Items with Significant Unavoidable Impacts

Impact Section	Checklist Item #	Checklist Criteria
Mandatory	3.18	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Other cumulative impact items that are less than significant with mitigation include:

Table 3
Checklist Items with Less than Significant with Mitigation

Impact Section	Checklist Item #	Checklist Criteria
Aesthetics	3.1 c)	Substantially degrade the existing visual character or quality of the site and its surroundings?
Aesthetics	3.1 d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?
Air Quality	3.3 b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
Air Quality	3.3 c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
Cultural Resources	3.5 a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?
Cultural Resources	3.5 b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
Cultural Resources	3.5 c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
Cultural Resources	3.5 d)	Disturb any human remains, including those interred outside of formal cemeteries?
Hydrology	3.9 a)	Violate any water quality standards or waste discharge requirements?
Utilities	3.17 c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Utilities	3.17 g)	Comply with federal, state, and local statutes and regulations related to solid waste?

SUMMARY OF ALTERNATIVES

In the Alternatives Analysis, this Draft EIR identified and assessed 5 Alternatives to the proposed Project. These Alternatives are listed below:

Alternative 1: No Project
Alternative 2: Digester Only
Alternative 3: Compost Expansion Only
Alternative 4: Project on Adjacent Site
Alternative 5: Alternative Configuration

cogeneration power usage. The anaerobic digester will be situated on approximately three (3.0) acres adjacent to ~~of~~ the approximately 35.0 acre composting facility (on APN 150-140-009). This Project will include a high and/or low solids anaerobic digester which will produce biogas from the decomposition of organic feed stocks. The biogas will be conditioned to compressed natural gas using upgrading technology. An undetermined portion of the biogas maybe used in a combined heat and power unit to generate electricity.

The anaerobic digestion process converts the feedstock into bio-methane, or renewable natural gas. The anaerobic digester will process approximately 60,000 tons per year of organic materials primarily from green waste and food processing facilities, and other commercial enterprises and will include Fats, Oil, and Grease (FOG) from restaurants or food processing facilities. The residual material from the digestion process (digestate) will be in liquid and solid form. It will be applied to the composting material already located on the same property as the digester, or stored in a lined and covered pond if the weather does not allow for direct application of the liquid fraction of the digestate.

The energy produced at the facility will be used to create vehicle fuel through the construction of a CNG facility. The CNG refueling station will be constructed and operated in close proximity to the Harvest Power office. This station includes gas clean-up (which concentrates methane levels in the biogas), storage tanks, and a compression unit.

As part of the proposed Project, Harvest Power is requesting the construction of the following:

1) An above ground anaerobic digester
2) An adjacent effluent storage tank if needed
3) Control Room
4) Truck Ramp
5) Feed Hopper
6) Turbo Separator
7) Mixing Tank
8) Fat, Oil, and Grease (FOG) Tank
9) Biogas Upgrading Unit
10) Compressed Natural Gas (CNG) Compressor and Dryer Unit
11) CNG Storage Vessels
12) CNG Dispensary
13) A Combined Heat and Power Unit (CHP)
14) Emergency Flare
15) A Drainage Swale
16) Biofilter

Aesthetics
Chapter 3.1

SUMMARY OF FINDINGS

Impacts of the proposed Project are determined to be less than significant with mitigation. A detailed review of potential impacts is provided in the analysis as follows.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

CEQA requires that significant impacts on the environment be identified and, where possible, measures be added to minimize or eliminate impacts (CEQA Guidelines Section ~~15325~~ 15041). A "significant effect on the environment" is defined as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project…" (CEQA Guidelines Section 15382). With respect to aesthetics, potentially significant CEQA impacts include visual impacts to scenic highways, the visual character of the site, and impacts from lighting.

This section describes the existing visual environment in the vicinity of the Project area using accepted methodology to evaluate aesthetic/visual landscape quality and light/glare. Aesthetic considerations tend to be subjective. The methodologies used to evaluate aesthetic impacts to visual character are qualitative in nature, and are based on photographic documentation of the site and surrounding area.

The proposed Project site is located in the agricultural (Valley) portion of Tulare County. The Environmental Setting section describes scenic and aesthetic resources in the region, with special emphasis on the proposed Project site and vicinity. The Regulatory setting provides a description of applicable State and local regulatory policies. A description of the potential impacts of the proposed Project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

The analyses of the existing visual setting and potential visual impacts resulting from the proposed Project are based primarily on information provided by the Project applicant.

Thresholds of Significance:
- Impact on a scenic vista
- Impact on a scenic highway
- Impact on visual quality
- Creation of glare or impacts on nighttime views

The proposed Project is not located within a forestland zone or would require the change of a forestland zone. As such no cumulative impacts to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no Project specific or cumulative impacts to this checklist item will occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Project Impact Analysis: ***No Impact***

As noted above, the proposed Project is not located within a forest land zone or will require the change of a forest land zone. As such, no Project specific impacts to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is ~~Tulare County~~ the State of California. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted above, the proposed Project is not located within a forest land zone or will require the change of a forest land zone. As such, no cumulative impacts to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no Project specific or cumulative impacts to this checklist item will occur.

Air Quality
Chapter 3.3

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts to Air Quality, with mitigation. A detailed review of potential impacts is provided in the analysis below.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Air Quality. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in Section 15126.2 a), "[a]n EIR shall identify and focus on the significant environmental effects of the proposed Project. In assessing the impact of a proposed Project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the Project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the Project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision will have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas."[1]

The environmental setting provides a description of the Air Quality in the ~~County~~ Air Basin. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, the Tulare County General Plan Background Report and/or the Tulare County

[1] 2012 CEQA Guidelines, Section 15126.2 (a)

IMPACT EVALUATION

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Project Impact Analysis: ***Less than Significant Impact***

The Project is currently permitted by the Air District for processing 156,000 tons per year (TPY). This Project's tonnage limits are in compliance with the Air District's Rule 4565.

The Project currently operates under Air District permit numbers:

- S-3594-1-1
- S-3594-2-0
- S-3594-4-1
- S-3594-5-1
- S-3594-6-0
- S-3594-7-0
- S-3594-8-0
- S-3594-9-0

The current actual usage is approximately 75,000 TPY, or approximately 80,000 tons per year ~~more~~ less than the current 156,000 TPY limit. Air District Rule 4565 (Green Waste Composting and Operations) requires composting and digestion facilities to comply with VOC from biosolids, and animal manure. The Project has existing permits under this Rule and is seeking Air District permits for the proposed additional amounts of compost and biosolids for digestion. The expansion from 156,000 tons per year to 216,000 tons per year, and the additional 60,000 tons of Fat, Oil and Grease for digestion, will be consistent and compliant with the rules/regulations noted earlier.

The proposed Project does not conflict or obstruct with any of Tulare County's Air Quality Policies, as listed above, or Climate Action Plan Policies. General Plan Policies AQ-1.7 to 1.9 require that new development adhere to AB32's policies, adhere to the Climate Action Plan, and create off sets/off site. The Project is implementing these measures by reducing air emissions that would normally occur at a land fill.

All other necessary air quality permits will be acquired by Harvest Power prior to starting the additional site based on the Air District's Air Basin Plan, rules and/or regulations, and applicable permits. In addition, there are no noted conflicts with the Air District's Control Strategy for PM 2.5. Therefore, the Project will not conflict or obstruct on any applicable air quality policies.

Emissions Source	Pollutant (tons/year)					
	ROG	**NOx**	**CO***	**SOx***	**PM_{10}**	**$PM_{2.5}$***
Mitigated Emissions						
Construction Emissions – 2013	0.70	4.64	3.29	0.01	0.33	0.30
Construction Emissions – 2014	1.56	2.14	9.03	0.00	0.23	0.23
SJVAPCD Annual Threshold	10	10	NA	NA	15	NA
Is Threshold Exceeded After Mitigation?	**No**	**No**	-	-	**No**	-

NOTES:
* The SJVAPCD has not established significance thresholds for CO, SOx or $PM_{2.5}$.

Source: Air Quality Impact Analysis

As calculated, the short-term emissions, for each year of construction, are predicted to be less than SJVAPCD significance threshold levels. Short-term emissions from the project as calculated by CalEEMod, using the default equipment listing, and ramp-up flaring calculations would be less than SJVAPCD significance levels. Project construction emissions are expected to remain below significance threshold levels and are therefore less than significant."[27]

Baseline Emissions

~~"The Harvest Power facility is currently in operation. In order to consider the true impacts to the SJVAB proposed by the project's modifications, this analysis examined baseline site emissions compared to predicted emissions after the project's modifications. Emissions attributable to the existing operation are already incorporated into the air basin's existing emissions inventory through inclusion in the Tulare County General Plan, the San Joaquin Valley Air Pollution Control District Emissions Inventory and the California Air Resources Board Statewide Emissions Inventory. Baseline emissions were calculated using existing equipment and sources at the site along with existing traffic values that occurred at the facility in 2011. The calculated baseline emissions are presented in **Table 3.3-12**."~~ The Tulare County Compost and Biomass, Inc. (TCCB) facility is currently in operation. In order to consider the true impacts to the SJVAB proposed by the project's modifications, this analysis examined baseline site emissions compared to predicted emissions after the project's modifications. Emissions attributable to the existing operation are already incorporated into the air basin's existing emissions inventory through inclusion in the Tulare County General Plan, the San Joaquin Valley Air Pollution Control District Emissions Inventory and the California Air Resources Board Statewide Emissions Inventory. Baseline emissions were calculated using existing equipment, sources, and operations at the site along with existing traffic values that occurred at the facility in 2011. The calculated revised baseline emissions are presented in **Table [3.3-12]** below ..."[28]

Long-Term Emissions

"Long-term emissions are related to the activities that will occur indefinitely because of project operations and are the primary focus of the SJVAPCD and of this analysis. Long-term emissions are caused by operational (mobile) sources and area (heating, cooling and

[27] Air Quality Impact Analysis, pages 19 to 20
[28] Air Quality Letter Amendment, pages 5 and 6

structural) sources. The greatest of these emissions impacts emanate from mobile sources traveling to and from the project area. Long-term emissions will start with the completion of construction on the project site. Long-term emissions will consist of the following components:

Fugitive Dust Emissions

Operation of the project site at full buildout is not expected to present a significant source of fugitive dust (PM_{10}) emissions. The main source of PM_{10} emissions will be from vehicular traffic associated with the project site.
PM_{10} generated as a part of fugitive dust emissions, as noted by the regulatory agencies, pose a potentially serious health hazard, alone or in combination with other pollutants. Control measures required and enforced by the SJVAPCD under Regulation VIII will assist in minimizing these emissions to a less than significant level. The following SJVAPCD Rules and Regulations apply to the control of fugitive dust from the proposed project:

- Rule 4102 - Nuisance
- Rule 8011 - General Requirements
- Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities
- Rule 8041 - Carryout and Trackout
- Rule 8051 - Open Areas

Compliance with applicable SJVAPCD Rules and Regulations, the local zoning codes, and additional mitigation measures required in this analysis will reduce PM_{10} fugitive dust emissions even further to ensure that the project's emissions remain at a "*less than significant*" level.

Fugitive Composting Emissions

Operation of the project site at full buildout is not expected to present a significant source of fugitive VOC emissions. The main source of VOC emissions will be from stockpiles and windrows associated with the project site.

VOC generated as a part of fugitive emissions, as noted by the regulatory agencies, pose a potentially serious health hazard, alone or in combination with other pollutants. Control measures required and enforced by the Air District will assist in minimizing these emissions to a less than significant level. The following Air Distreict Rules and Regulations apply to the control of fugitive composting emissions from the proposed project:

- Rule 4101 - Visible Emissions
- Rule 4102 - Nuisance
- Rule 4202 - Particulate Matter - Emission Rate
- Rule 4565 - Biosolids, Animal Manure, and Poultry Litter Operations
- Rule 4566 - Green Waste Composting and Operations

Compliance with all the applicable SJVAPCD Rules and Regulations and local zoning codes will reduce VOC fugitive composting emissions even further to ensure that the project's emissions remain at a "less than significant" level."[29]

Equipment and Vehicle Exhaust

"Exhaust emissions from this project include emissions produced from delivery trucks and employees traveling to and from the site and operational equipment usage. Emitted pollutants include CO, ROG, NOx, SOx, PM_{10} and $PM_{2.5}$.

Exhaust emissions will vary from day to day. The variables factored into estimating total project emissions include: level of activity, site characteristics, weather conditions, and predicted number of deliveries.

Table 3.3-11
Emission Sources

Emissions Source	Service and Pollutants
Facility Building[1]	Air conditioning and heating system as well as water heater emissions will occur from the manufacturing facility. While most of the facility will operate with electrical power, minor sources of combustion are used for these incidental items. Criteria pollutant emissions will consist of ROG, NOx, CO, SO_2, PM_{10} and $PM_{2.5}$.
Equipment and Vehicles[2]	Delivery and employee vehicles will be used to transport product and employees to and from the facility. Criteria pollutant emissions will consist of ROG, NOx, CO, SO_2, PM_{10} and $PM_{2.5}$.
Stationary Source Emissions[3]	The composting facility is a stationary source which emits fugitive VOC and PM_{10} emissions.

NOTES:
[1] Emissions factors and emissions were based on CalEEMod
[2] Emissions factors and emissions were based on CalEEMod and EMFAC2011
[3] Emissions factors and emissions were based on District Emissions Factors

Source: Air Quality Impact Analysis

The total Project emissions are listed in the Table 3.3-12 below.

Table 3.3-12
Total Project Emissions

Emissions Source	Pollutant (tons/year)					
	ROG	NOx	CO*	SOx*	PM_{10}	$PM_{2.5}$*
Baseline						
Direct Exhaust Emissions	1.37	9.60	6.21	0.01	0.65	0.65
Indirect Exhaust Emissions	0.03	3.51	0.23	0.00	0.04	0.02
Fugitive Dust Emissions	-	-	-	-	0.41	0.04
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	378.93	-	-	-	0.08	-

[29] Air Quality Impact Analysis, pages 20 to 22

Emissions Source	Pollutant (tons/year)					
	ROG	**NOx**	**CO***	**SOx***	**PM_{10}**	**$PM_{2.5}$***
Baseline Total	**380.33**	**13.11**	**6.45**	**0.01**	**1.18**	**0.71**
Project Emissions						
Direct Exhaust Emissions	1.55	11.01	7.02	0.01	0.72	0.72
Indirect Exhaust Emissions	0.05	8.41	0.40	0.00	0.07	0.04
Fugitive Dust Emissions	-	-	-	-	0.98	0.10
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	804.54	0.33	2.23	-	0.17	-
Project Total	**806.15**	**19.75**	**9.65**	**0.01**	**1.95**	**0.86**
Total Incremental Increase Emissions (With Stationary Sources)[2]	425.82	6.64	3.20	0.00	0.77	0.15
Total Incremental Increase Emissions (Without Stationary Source Emissions)[2,3]	**0.20**	**6.31**	**0.97**	**0.00**	**0.68**	**0.15**
SJVAPCD Threshold	10	10	NA	NA	15	NA
Is Threshold Exceeded After Mitigation?	**No**	**No**	-	-	**No**	-

NOTES:
[1] This emissions are under control and enforcement of the SJVAPCD and are fugitive in nature.
[2] Numbers may not add due to rounding by the CalEEMod and EMFAC2011.
[3] The stationary source emissions from the composting facility require permits from the SJVAPCD to operate and SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent. The SJVAPCD states in the Comments Letter to the Project dated April 3, 2013 that "The District concurs the project will require permits and stationary source emissions will be mitigated." Since the emissions are controlled by the SJVAPCD and accounted for in the State Implementation Plan they are considered *less than significant* from a CEQA standpoint and not utilized when comparing the project to annual significant thresholds. Furthermore, the stationary source VOC emissions associated with this project are fugitive emissions and according the SJVAPCD are not counted toward major source or offset thresholds.
* The SJVAPCD has not established significance thresholds for CO, SOx or $PM_{2.5}$.

The emissions from this project were evaluated based on the incremental difference between the current operation of the facility and the post-project operation of the facility. If the proposed project is approved it is expected to have the long-term air quality impacts shown in the **Table [3.3-1~~2~~3]**."[30]

Table 3.3-1~~2~~3
Long-Term Incremental Emissions

Emissions Source	Pollutant (tons/year)					
	ROG	**NOx**	**CO***	**SOx***	**PM_{10}**	**$PM_{2.5}$ ***
Baseline						
Direct Exhaust Emissions	1.37	9.60	6.21	0.01	0.65	0.65
Indirect Exhaust Emissions	0.03	3.51	0.23	0.00	0.04	0.02
Fugitive Dust Emissions	-	-	-	-	0.41	0.04
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	~~768.94~~ 378.93	-	-	-	~~0.16~~ 0.08	-

[30] Air Quality Impact Analysis, page 22

Emissions Source	Pollutant (tons/year)					
	ROG	**NOx**	**CO***	**SOx***	**PM_{10}**	**$PM_{2.5}$ ***
Baseline Total	**~~770.34~~ 380.33**	**13.11**	**6.45**	**0.01**	**~~1.26~~ 1.18**	**0.71**
Project Emissions						
Direct Exhaust Emissions	~~1.53~~ 1.55	~~10.80~~ 11.01	~~6.91~~ 7.02	0.01	0.72	0.72
Indirect Exhaust Emissions	~~0.04~~ 0.05	~~5.96~~ 8.41	~~0.34~~ 0.40	0.00	~~0.08~~ 0.07	~~0.03~~ 0.04
Fugitive Dust Emissions	-	-	-	-	0.70	0.07
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	804.54	- 0.33	~~-~~ 2.23	-	0.17	-
Project Total	**806.1~~2~~5**	**~~16.76~~ 19.75**	**~~7.25~~ 9.65**	**0.01**	**~~1.65~~ 1.95**	**~~0.82~~ 0.86**
Total Incremental Increase Long-Term Emissions (Including Stationary Source Fugitive Emissions)[2]	**~~35.77~~ 425.82**	**~~3.56~~ 6.64**	**~~0.81~~ 3.20**	**0.00**	**~~0.39~~ 0.77**	**~~0.11~~ 0.15**
Total Incremental Increase Long-Term Emissions (Excluding Stationary Source Fugitive Emissions)[2]	**~~0.17~~ 0.20**	**~~3.56~~ 6.31**	**~~0.81~~ 0.97**	**0.00**	**~~0.38~~ 0.68**	**~~0.11~~ 0.15**
SJVAPCD Threshold	10	10	NA	NA	15	NA
Is Threshold Exceeded After Mitigation?	**No**	**No**	-	-	**No**	-

NOTES:
[1] This emissions are under control and enforcement of the SJVAPCD and are fugitive in nature
[2] Numbers may not add due to rounding by the CalEEMod and EMFAC2011
* The SJVAPCD has not established significance thresholds for CO, SOx or $PM_{2.5}$

Source: Air Quality Impact Analysis

The Stationary Source emissions from the composting facility require permits to operate from the SJVAPCD. SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent. Since the emissions are controlled by the SJVAPCD and accounted for in the State Implementation plan they are considered *less than significant* from a CEQA standpoint. Furthermore, the stationary source VOC emissions associated with this project are fugitive emissions and according the SJVAPCD are not counted toward major source or offset thresholds.

~~As calculated, the long-term operational and area source emissions associated with the proposed project would be less than SJVAPCD threshold levels when calculated without the fugitive stationary source emissions and would, therefore, not pose a significant impact.~~"[31]

"As calculated,… the revised long-term operational and area source emissions associated with the proposed project would be *less than* SJVAPCD threshold levels when calculated

[31] Air Quality Impact Analysis, page 23

without the fugitive stationary source emissions and would, therefore*, continue to not pose a significant impact."*[32]

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Impact Assessment.

"A review of the City of Tulare and the Tulare County Resource Management Agency's files indicates that there are zero (0) Tentative Tracts or other planned developments within a one-mile radius of the proposed project site. Projects that are planned but have not been submitted for review or approved by the county are not included in this analysis as there is no way to know or ascertain what they might consist of. The SJVAPCD requires use of a one-mile radius to identify HAP emissions as well as for most odor sources[33]. A one-mile limit is recommended by the SJVAPCD for HAPs pollutants as such emissions primarily impact individuals that reside or work within the immediate vicinity (one-mile) of the emissions source.

Table 3.3-1~~3~~4
2020 Emissions Projections

	ROG	NO_X	PM_{10}
Proposed Project	35.77[1]	3.56	0.39
Tulare County	46,683	12,410	24,637
San Joaquin Valley Air Basin	211,663	119,063	125,888
Proposed Project Percent of Tulare County	0.08	0.03	0.002
Proposed Project Percent of SJVAB	0.02	0.003	0.0003
Tulare County Percent of SJVAB	22.05	10.42	19.57

Notes: The emission estimates for Tulare County and the SJVAB are based on 2020 projections. The Proposed Project emission estimates are for the proposed incremental emissions increase that is not already included in the San Joaquin Valley Air Basin Emissions Inventory. The Project's emissions are expected to decline as cleaner, less polluting vehicles replace vehicles with higher emissions.
[1] All but 0.17 tons of these emissions are fugitive emissions which are permitted, controlled and accounted for within the SIP by the /SJVAPCD.

Source: California Air Resources Board (www.arb.ca.gov/app/emsinv/emssumcat.php)

"As shown above, the proposed project will pose an extremely minute impact on regional ozone and PM_{10} formation. When mitigation measures and compliance with applicable rules, such as SJVAPCD's Rule 9510 (Indirect Source Rule) is considered, the regional contribution to these cumulative impacts will be almost negligible. It is reasonable to conclude that *the project is not cumulatively significant with regard to regional impacts*.

The listing provided below in **Table [3.3-~~14~~15]** is only a geographical reference to demonstrate the construction activity in the project vicinity. The number or size of these projects is of no particular significance since no "cumulative" emissions thresholds have been established by the SJVAPCD or the Tulare County Resource Management Agency. In accordance with SJVAPCD guidance, fireplaces were not considered since they are seasonal

[32] Air Quality Letter Amendment, page 7
[33] SJVAPCD GAMAQI, page 53

in nature and because residential developments are prohibited from installing wood burning fireplaces[34]."

Table 3.3-~~14~~15
Cumulative Long-Term Emissions*

Scheduled Developments**	Pollutant (tons/year)					
	ROG	NOx	CO	Sox	PM_{10}	$PM_{2.5}$
This Project* **	**35.77**	**3.56**	**0.81**	**0.00**	**0.39**	**0.11**
None	-	-	-	-	-	-

NOTES:
* The SJVAPCD has not established significance thresholds for cumulative emissions.
** These emissions (other than the proposed project) are overestimated, as they are discretionary projects that are subject to various mitigation measures that have not yet been determined nor their impacts reduced herein.
*** Emissions presented are "mitigated" emissions for the proposed project only. All but 0.17 tons of ROG emissions are fugitive emissions which are permitted, controlled and accounted for within the SIP by the /SJVAPCD.

Source: Air Quality Impact Analysis

"As details regarding the proposed emissions from the various projects listed above were not readily available through the Tulare County Resource Management Agency, no emissions estimates were modeled using the CalEEMod computer model to predict cumulative impacts ([see Attachment E] under Appendix H for output results). Additionally, no cumulative significance thresholds are shown since no cumulative thresholds have been established by the SJVAPCD, CARB or other regulatory authority. Since no projects are either currently under construction or, at a minimum, approved by the City of Tulare Planning Division for consistency with applicable regulation and the project alone does not exceed any significant thresholds, for the purposes of this analysis, it is assumed that they are in conformance with the regional AQAP and will not pose a significant contribution to the cumulative impacts to air quality in the SJVAB."[35]

"The most recent, certified San Joaquin Valley Air Basin Emission Inventory data available from the California Air Resources Board (CARB) is based on data gathered for the 2008 annual inventory.[36] This data will be used to assist the SJVAPCD in demonstrating attainment of Federal 1-hour Ozone Standards and contained 220,642 tons/year VOC (ROG) and 210,495 tons/year NOx[37] from all sources. On a regional basis, the proposed project represents approximately 0.02% of the ROG and 0.002% of the NOx emissions in the air basin. The incremental increase posed by the project upon the air basin appears to be insignificant since basin emissions would be essentially the same regardless of whether or not the project is built."[38]

Since the direct impacts are not significant, and the baseline is currently under any of the quantified SJVAPCD thresholds, the emissions from the Project would not add significantly

[34] SJVAPCD Rule 4901, Amended July 17, 2003
[35] California Air Resources Board (CARB) Emissions Inventory Database
[36] Ibid.
[37] San Joaquin Valley Air Basin Emissions Inventory to Demonstrating Attainment of Federal 1-hour Ozone Standards, San Joaquin Valley Air Pollution Control District, February 2007
[38] California Air Resources Board (CARB) Emissions Inventory Database

to surrounding cumulative impacts to air quality, so long as they attain all required permits from the Air District."[39]

Mitigation Measures:

3.3-1 The applicant shall obtain all required permits from the Air District prior to implementing any elements of the proposed Project.

Conclusion: ***Less than Significant Impact with Mitigation***

"The Stationary Source emissions from the composting facility require permits to operate from the SJVAPCD. SJVAPCD controls and quantifies the emissions from these sources, and they are assumed to be mitigated to the greatest feasible extent. Since the emissions are controlled by the SJVAPCD and accounted for in the State Implementation plan they are considered less than significant [with the added mitigation of attaining all the required Air District permits]."[40]

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Project Impact Analysis: ***Less than Significant Impact***

Measures Used in Areas with Severe Air Quality Issues

"Several special interest groups have suggested what has come to be known as the "one-molecule theory". This theory supposes that the addition of even one molecule of a criteria pollutant in a non-attainment air basin would constitute a significant increase. While these groups have attempted to enforce this theory in various jurisdictions, the Court of Appeals has held that CEQA does not require this approach. One court has stated, "the 'one [additional] molecule rule' is not the law" (*Communities for a Better Environment v California Resources Agency* 2002, 103 Cal.App.4th 98, 119). Therefore, the Measures of Significance included in the following tables were applied to the subject project to determine the project's level of significance."[41]

Table 3.3-~~15~~16
Measures of Significance – OZONE (ROG and NOx Emissions)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	10 tons/yr NOx	SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts, August 20, 1998 (Revised January 10, 2002)
	10 tons/yr ROG	

[39] Air Quality Impact Analysis, pages 30 to 33
[40] Ibid.
[41] Air Quality Impact Analysis, pages 16 - 17

SJVAPCD	Not Significant	If Construction Emissions do not exceed CEQA Guide for Ozone Precursors During Operation, then Construction Impacts are Assumed to be Less Than Significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Tables 6-3 and 6-4 are implemented as appropriate.

Source: Air Quality Impact Analysis

Table 3.3-~~16~~17
Measures Based on Ambient Air Quality Impacts (NOx)

Agency	Level	Description
CARB	338 µg/m3	California One-Hour AAQS for NO_2
CARB	57 µg/m3	California annual AAQS for NO_2
USEPA	188 µg/m3	National One-Hour AAQS for NO_2
USEPA	100 µg/m3	National annual AAQS for NO_2
USEPA	1.0 µg/m3	Class II significant impact level for PSD
USEPA	25 µg/m3	Class II increment for PSD

Source: Air Quality Impact Analysis

Table 3.3-~~17~~18
Measures of Significance – CARBON MONOXIDE (CO)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	9 ppm, 8-hr avg	SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts, August 20, 1998 (Revised January 10, 2002)
	20 ppm, 1-hr avg	
SJVAPCD	Not Significant	If Construction Emissions do not exceed CEQA Guide for Ozone Precursors During Operation, then Construction Impacts are Assumed to be Less Than Significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Table 6-4 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	23,000 µg/m3	California 1-hour AAQS for CO
	10,000 µg/m3	National and California 8-hour AAQS for CO

Source: Air Quality Impact Analysis

Table 3.3-~~18~~19
Measures of Significance – SULFUR DIOXIDE (SO_2)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If Construction Emissions do not exceed CEQA Guide for Ozone Precursors During Operation, then Construction Impacts are Assumed to be Less Than Significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Table 6-4 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	655 µg/m3	California 1-hour AAQS for SO_2
	105 µg/m3	California 24-hour AAQS for SO_2
USEPA	196 µg/m3	National 1-hr AAQS for SO_2
	1,300 µg/m3	National 3-hr AAQS for SO_2
	80 µg/m3	National annual AAQS for SO_2
	25 µg/m3	3-hr Class II significant impact level for PSD
	5 µg/m3	24 hr Class II significant impact level for PSD

	1.0 µg/m3	Annual Class II significant impact level for PSD
	512 µg/m3	3-hr Class II increment for PSD
	91 µg/m3	24 hr Class II increment for PSD
	50 µg/m3	Annual Class II increment for PSD

Source: Air Quality Impact Analysis

Table 3.3-~~19~~20
Measures of Significance – RESPIRABLE PARTICULATES (PM_{10})

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If Construction Emissions do not exceed CEQA Guide for Ozone Precursors During Operation, then Construction Impacts are Assumed to be Less Than Significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Tables 6-2 and 6-3 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	50 µg/m3	California 24 hour AAQS for PM_{10}
	20 µg/m3	California Annual AAQS for PM_{10}
USEPA	5 µg/m3	24 hr Class II significant impact level for PSD
	1 µg/m3	Annual Class II significant impact level for PSD
	30 µg/m3	24 hr Class II increment for PSD
	17 µg/m3	Annual Class II increment for PSD

Source: Air Quality Impact Analysis

Table 3.3-~~20~~21
Measures of Significance – RESPIRABLE PARTICULATES ($PM_{2.5}$)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If Construction Emissions do not exceed CEQA Guide for Ozone Precursors During Operation, then Construction Impacts are Assumed to be Less Than Significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Tables 6-2 and 6-3 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	12 µg/m3	California Annual AAQS for $PM_{2.5}$
USEPA	35 µg/m3	National 24 hr AAQS for $PM_{2.5}$

Source: Air Quality Impact Analysis

Table 3.3-~~21~~22
Measures of Significance – TOXIC AIR CONTAMINANTS (TACs)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If Construction Emissions do not exceed CEQA Guide for Ozone Precursors during operation, then construction impacts are assumed to be *less than significant* when compliance with Regulation VIII is achieved and the control measures of CEQA Appendix G Tables 6-3 and 6-4 are implemented as appropriate.
	10 in one million	Carcinogenic Risk Limit for Maximally Exposed Individual

	Hazard Index >1	Chronic and Acute Hazard Index Risk for Maximally Exposed Individual.[42]"

Source: Air Quality Impact Analysis

The above tables in relation to **Tables 3.3-~~12~~13** and **3.3-~~12~~14** indicate that the Project will not have a significant impact to the non-attainment of the criteria pollutants, within the San Joaquin Valley Air Basin, under the SJVAB Plan, and the Project will not emit ozone in excess of quantitative thresholds for ozone precursors.

Table 3.3-23
Predicted Ambient Air Quality Impacts

Pollutant	Averaging Period	Background ($\mu g/m^3$)	Project ($\mu g/m^3$)	Project + Background ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	CAAQS ($\mu g/m^3$)	PSD SIL ($\mu g/m^3$)
NO_2	1-hour	115.72	52.51	168.23	188.68	470	0
	Annual	18.45	1.06	19.51	100	---	1
SO_2	1-hour	19.2	0.021	19.2	196	655	0
	3-hour	19.2	0.014	19.2	1300	--	25
	24-hour	88.70	0.001	88.70			
CO	1-hour	3092	130.93	3222	40,000	23,000	2000
	8-hour	2290	25.17	2315	10,000	10,000	500
PM_{10}	24-hour	71.00	7.03	78.03	150	50	10.4*
	Annual	47.80	0.78	48.58	---	20	2.08*
$PM_{2.5}$	24-hour	54.00	0.80	54.80	35	---	2.5*
	Annual	54.00	0.09	54.09	15	12	0.63*

* District recommended significant impact level in lieu of PSD levels for fugitive emissions.

"Pre-project concentrations of PM_{10} and $PM_{2.5}$ exceed their respective ambient air quality standards. PM_{10} and $PM_{2.5}$ are evaluated in accordance with the SJVAPCD recommended significant impact level (SIL) for fugitive PM_{10} and $PM_{2.5}$. It is the District's policy to use significant impact levels to determine whether a proposed new or modified source will cause or contribute significantly to an AAQS or PSD increment violation. If a project's maximum impacts are below the District or PSD SIL, the project is judged to not cause or contribute significantly to an AAQS or PSD increment violation. A comparison of the proposed impact from the project to the District and PSD SIL values is provided in **Table [3.3-23].** The modeled PM_{10} and $PM_{2.5}$ impacts directly attributable to the project are below the District's significance levels."[43]

[42] Air Quality Impact Analysis, page 18
[43] Air Quality Letter Amendment, page 12

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Impact Assessment.

Since the project will have to mitigate their emissions through permitting the Project to Air District standards, the project will have a less than a significant impact with mitigation.

Mitigation Measures:

See mitigation measure 3.3-1.

Conclusion: ***Less than Significant Impact with Mitigation***

The proposed Project will not emit ozone in excess of quantitative thresholds for ozone precursors. Since the project will have to mitigate their emissions through permitting the Project to Air District standards, the project will have a less than a significant impact with mitigation.

d) Expose sensitive receptors to substantial pollutant concentrations?

Project Impact Analysis: ***Less than Significant Impact***

Sensitive Receptors

"Based on the emissions impacts expected, the proposed project is not expected to affect sensitive receptors. Sensitive receptors are defined as areas where young children, chronically ill individuals, the elderly or people who are more sensitive than the general population reside. Schools, hospitals, nursing homes and daycare centers are locations where sensitive receptors would likely reside. Sensitive receptors within less than one-mile from the project site are listed in **Table [3.3-~~22~~24]**.

Additionally, Harvest Power currently operates under an Odor Impact Mitigation Plan (OIMP) to comply with the CalRecycle Full Composting Facility permit. The OIMP focuses on processes to prevent odor from migrating off site during the feedstock delivery, composting and curing phases and the protocol to deal with odor issues if they do arise. The processes include mixing any food materials with green materials immediately upon arrival at the site, and incorporating them into the compost windrows as soon as possible, within a maximum of 36 hours. Watering and turning regimes increase the temperature and speed of the breakdown of the material in the windrows, diminishing odor. A specific protocol for neighbor notification and response to neighbor issues is also included. The anaerobic digestion facility is designed with a bio-filter to ensure that no offensive odor migrates off site.

Therefore, based on the predicted emissions from the project and the OIMP, the project is not anticipated to have significant impacts on any known sensitive receptors."[44]

Table 3.3-~~22~~24
Sensitive Receptors Located < 5 Miles from Project

Receptor	Type of Facility	Distance from Project (miles)	Direction from Project
Sundale Elementary School	Public K-8	0.51	SE
Sundale Preschool	Preschool	0.51	SE

Source: Air Quality Impact Analysis

Health Risks

"The proposed facility will result in emissions of [hazardous air pollutant] HAPs and will be located near existing residences, schools and businesses; therefore, an assessment of the potential risk to the population attributable to emissions of hazardous air pollutants from the proposed project is required. Ambient air concentrations were predicted with dispersion modeling to arrive at a conservative estimate of increased individual carcinogenic risk that might occur as a result of continuous exposure over a 70-year lifetime. Similarly, predicted concentrations were used to calculate non-cancer chronic hazard indices (HIs), which are the ratio of expected exposure to acceptable exposure. Individuals at businesses are not subject to a continuous exposure over a 70-year lifetime; therefore worker exposure duration for cancer risk may be adjusted to [Hotspots Analysis and Reporting Program] HARP default worker exposure assumptions."[45]

"The carcinogenic risk and the health hazard index (HI) for chronic and acute non-cancer risk at all of the modeled receptors do not exceed the significance levels of less than ten in one million (10×10^{-6}) and 1, respectively. Therefore, the application of HARP default worker exposure assumptions to reduce continuous exposure to less than a 70-year lifetime was not necessary for the business receptors. The risk predicted by HARP for the potential maximum impacts, as identified by receptor number, type, risk and location, are provided in **Table [3.3-~~23~~25]**."[46]

Table 3.3-~~23~~25
Potential Maximum Impacts Predicted By HARP

	Receptor	Value	UTM East	UTM North	Pathway
Excess Cancer Risk[a]	5	~~7.76E-06~~ 5.12E-06	~~296645~~ 296641	~~4011905~~ 4011910	Inhalation
Chronic Hazard Index	5	~~3.76E-02~~ 1.51E-01	~~296645~~ 296641	~~4011905~~ 4011910	Respiratory System
Acute Hazard Index	6	~~3.98E-01~~ 5.01E-01	296122	4011444	Respiratory System

[a] Based on continuous, 70-year residential exposure for all receptors.

Source: Air Quality Impact Analysis

[44] Air Quality Impact Analysis, page 24
[45] Ibid., page 25
[46] ~~Air Quality Impact Analysis, page 27~~Air Quality Letter Amendment, page 10

"As shown above in **Table [3.3-23]**, the maximum predicted cancer risk for the facility is ~~7.76E-06~~5.12E-06. The maximum chronic and acute non-cancer hazard indexes are ~~3.76E-02~~1.51E-01 and ~~3.98E-01~~5.01E-01 respectively. Cancer risk and chronic and acute non-cancer risk are attributable to emissions of diesel exhaust particulate matter from the on-site use of heavy-duty vehicles and equipment and compost operation emissions.

In accordance with the GAMAQI, the potential health risk attributable to the proposed project is determined to be *less than significant* based on the following conclusions:

1) Potential chronic carcinogenic risk from the proposed project is *below* the significance level of ten in a million at each of the modeled receptors; and
2) The hazard index for the potential chronic non-cancer risk from the proposed project is *below* the significance level of one at each of the modeled receptors."[47]

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Impact Assessment.

There are sensitive receptors at the school that are within one mile, but since the Project currently has an OIMP, therefore based on the above analysis and predicted emissions from the Project and the odor control measures; the impacts to the school site are less than significant.

As the potential chronic carcinogenic risk is below the significance level and the hazard index for the potential chronic non-cancer risk from the proposed project is below the significance level, less than significant cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***Less than Significant Impact***

As noted above, the project is not anticipated to have significant project specific or cumulative impacts on any known sensitive receptors.

[47] ~~Air Quality Impact Analysis, page 2~~Air Quality Letter Amendment, pages 10 and 11

e) Create objectionable odors affecting a substantial number of people?

Project Impact Analysis: ***Less than Significant Impact***

"Harvest Power currently operates under an Odor Impact Mitigation Plan (OIMP) to comply with the CalRecycle Full Composting Facility permit. The OIMP focuses on processes to prevent odor from migrating off site during the feedstock delivery, composting and curing phases and the protocol to deal with odor issues if they do arise. The processes include mixing any food materials with green materials immediately upon arrival at the site, and incorporating them into the compost windrows as soon as possible, within a maximum of 36 hours. Watering and turning regimes increase the temperature and speed of the breakdown of the material in the windrows, diminishing odor. A specific protocol for neighbor notification and response to neighbor issues is also included. The anaerobic digestion facility is designed with a biofilter to ensure that no offensive odor migrates off site.

Therefore, based on the predicted emissions from the project and the OIMP, the project is not anticipated to have significant impacts on any known sensitive receptors."[48]

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is San Joaquin Air Basin. This cumulative analysis is based on the information provided in the Air Quality Impact Assessment.

There are rural residential units, within the vicinity of the project, that are affected by the dairy odor on the adjacent property that the Project's odor impact in the cumulative. Although the Project and the adjacent diary have a cumulatively objectionable odor, there are not substantial amounts of people in the vicinity.

Mitigation Measures:

None Required.

Conclusion: ***Less than Significant Impact***

Because the Project has an existing OIMP, that reduces the odor and the amount of surrounding rural residence, and users of the site are not substantial, the Project's impacts from odor to a substantial amount of people are less than significant. In the cumulative, the adjacent dairies and the project's odors create an objectionable odor, but it is a less than significant impact to a significant amount of people.

[48] Air Quality Impact Analysis, page 24

DEFINITIONS/ACRONYMS

Definitions

Ambient Air Quality Standards
These standards measure outdoor air quality. They identify the maximum acceptable average concentrations of air pollutants during a specified period of time. These standards have been adopted at a State and Federal level.

Best Available Control Measures (BACM)
A set of programs that identify and implement potentially best available control measures affecting local air quality issues.

Beat Available Control Technologies (BACT)
The most stringent emission limitation or control technique of the following: 1.) Achieved in practice for such category and class of source 2.) Contained in any State Implementation Plan approved by the Environmental Protection Agency for such category and class of source. A specific limitation or control technique shall not apply if the owner of the proposed emissions unit demonstrates to the satisfaction of the APCO that such a limitation or control technique is not presently achievable 3.) Contained in an applicable federal New Source Performance Standard or 4.) Any other emission limitation or control technique, including process and equipment changes of basic or control equipment, found by the APCO to be cost effective and technologically feasible for such class or category of sources or for a specific source.

Carbon Dioxide (CO_2)
A naturally occurring gas, and also a by-product of burning fossil fuels and biomass, as well as land-use changes and other industrial processes. It is the principal anthropogenic greenhouse gas that affects the Earth's radiative balance. It is the reference gas against which other greenhouse gases are measured and therefore has a Global Warming Potential of 1.

Carbon Monoxide (CO)
Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air (unlike ozone).

Climate Change
Climate change refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use.

Global Warming
Global warming is an average increase in the temperature of the atmosphere near the Earth's surface and in the troposphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human induced. In common

usage, "global warming" often refers to the warming that can occur as a result of increased emissions of greenhouse gases from human activities.

Greenhouse Effect
Trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. Some of the heat flowing back toward space from the Earth's surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then reradiated back toward the Earth's surface. If the atmospheric concentrations of these greenhouse gases rise, the average temperature of the lower atmosphere will gradually increase.

Greenhouse Gas
Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrochlorofluorocarbons (HCFCs), ozone (O_3), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Hydrogen Sulfide (H_2S)
Hydrogen sulfide is a highly toxic flammable gas. Because it is heavier than air, it tends to accumulate at the bottom of poorly ventilated spaces.

Lead (Pb)
Lead is the only substance which is currently listed as both a criteria air pollutant and a toxic air contaminant. Smelters and battery plants are the major sources of the pollutant "lead" in the air. The highest concentrations of lead are found in the vicinity of nonferrous smelters and other stationary sources of lead emissions. The EPA's health-based national air quality standard for lead is 1.5 micrograms per cubic meter (æg/m_3) [measured as a quarterly average].

Metropolitan Planning Organization (MPO)
Tulare County Association of Governments (TCAG) is the MPO for Tulare County. MPO's are responsible for developing reasonably available control measures (RACM) and best available control measures (BACM) for use in air quality attainment plans and for addressing Transportation Conformity requirements of the federal Clean Air Act.

Mobile Source
A mobile emission source is a moving object, such as on-road and off-road vehicles, boats, airplanes, lawn equipment, and small utility engines.

Nitrogen Oxides (Oxides of Nitrogen, NO_x)
NO_x are compounds of nitric oxide (NO) and nitrogen dioxide (NO_2). NO_x are primarily created from the combustion process and are a major contributor to ozone smog and acid rain formation. NOx also forms ammonium nitrate particulate in chemical reactions that occur when NOx forms nitric acid and combines with ammonia. Ammonium nitrate particulate is an important contributor to PM10 and PM2.5.

Ozone (O_3)
Ozone is a pungent, colorless, toxic gas created in the atmosphere rather than emitted directly into the air. O_3 is produced in complex atmospheric reactions involving oxides of nitrogen, reactive organic gases (ROG), and ultraviolet energy from the sun in a photochemical reaction. Motor vehicles are the major sources of O_3 precursors.

Ozone Precursors
Chemicals such as non-methane hydrocarbons, also referred to as ROG, and oxides of nitrogen, occurring either naturally or as a result of human activities, which contribute to the formation of ozone. A major component of smog.

Photochemical
Some air pollutants are direct emissions, such as the CO produced by an automobile's engine. Other pollutants, primarily O_3, are formed when two or more chemicals react (using energy from the sun) in the atmosphere to form a new chemical. This is a photochemical reaction.

Particulate Matter 2.5 Micrometers (PM2.5)
The federal government has recently added standards for smaller dust particulates. PM2.5 refers to dust/particulates/aerosols that are 2.5 microns in diameter or smaller. Particles of this size can be inhaled more deeply in the lungs and the chemical composition of some particles is toxic and have serious health impacts.

Particulate Matter 10 Micrometers (PM10)
Dust and other particulates exhibit a range of particle sizes. Federal and State air quality regulations reflect the fact that smaller particles are easier to inhale and can be more damaging to health. PM10 refers to dust/particulates that are 10 microns in diameter or smaller. The fraction of PM between PM2.5 and PM10 is comprised primarily of fugitive dust. The particles between PM10 and PM2.5 are primarily combustion products and secondary particles formed by chemical reactions in the atmosphere.

Reactive Organic Gas (ROG)
A photo chemically reactive chemical gas, composed of non-methane hydrocarbons that may contribute to the formation of smog. Also sometimes referred to as Volatile Organic Compounds (VOCs).

Reasonable Available Control Measures (RACM)
A broadly defined term referring to technologies and other measures that can be used to control pollution. They include Reasonably Available Control Technology and other measures. In the case of PM10, RACM refers to approaches for controlling small or dispersed source categories such as road dust, woodstoves, and open burning. Regional Transportation Planning Agencies are required to implement RACM for transportation sources as part of the federal ozone attainment plan process in partnership with the AIR DISTRICT.

Biological Resources
Chapter 3.4

SUMMARY OF FINDINGS

A biological evaluation of the Project site was conducted by Live Oaks Associates, Inc. in November, 2012. The report concluded that the commercial site had been heavily altered by human activities and no longer provides suitable habitat for locally occurring special status species. Because such species would not occur on the Project site, they will not be impacted by the proposed Project. Therefore, it is determined that no impacts ~~on~~ related to biological resources ~~due to the proposed Project are less than significant without mitigation~~ would result.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) for the Project meets CEQA requirements by addressing potential impacts to biological resources on the proposed Project site, which is located in a portion of the San Joaquin Valley in Tulare County. The "Environmental Setting" section provides a description of biological resources in the region, with special emphasis on the proposed Project site and vicinity. The "Regulatory Setting" provides a description of applicable State and Local regulatory policies. A description of the potential impacts of the proposed Project is also provided and includes the identification of feasible mitigation to avoid or lessen the impacts.

Thresholds of Significance

The geographical area may be either statewide or nationwide, depending on the sensitive status of the species. Standards for listing as federal endangered species are determined by the Federal Endangered Species Act, administered by U.S. Department of Fish and Wildlife. Standards for listing of California special status species (Endangered, Threatened, Candidate Endangered, Candidate Threatened, and Sensitive Species) are administered by the California Department of Fish and Wildlife (DFW). These requirements are described in further detail in the "Regulatory" section of this document.

The Live Oak Associates report concluded that potentially significant impacts to biological resources due to the proposed Project are absent, because the current level of site disturbance has rendered the site unsuitable for all but the most disturbance-tolerant plant and animal species. Specifically, there are:

- No impacts on special status plant species, since the current Project site does not provide habitat that would allow these species to survive on site. No mitigation measures are warranted.[33]

- No impacts due to disturbance to migratory bird nests, since native bird species are not expected to nest on site and are not expected to be adversely impacted by the proposed Project. No mitigation measures are warranted.[34]

- No impacts due to loss of habitat or direct impact to special status animal species categorized as "absent" or "unlikely" to occur on the Project site. No mitigation measures are warranted.[35]

- No impacts due to loss of breeding, nesting, roosting, or denning habitat for special status animals, since the current project site lacks required habitats for special status species. No mitigation measures are warranted.[36]

- Limited impacts due to loss of foraging habitat for the four Special Status Animals that may occur onsite as occasional or regular foragers. The project site does not provide regionally important foraging habitat for these species, and much more suitable habitats are abundant throughout the region. Therefore, the proposed Project would not significantly reduce the amount or quality of foraging habitat currently available on the site. The loss of foraging habitat for special status animals is considered a less than significant impact. In addition, the proposed Project will not result in direct harm to individuals of these species. Therefore, no mitigation measures are warranted.[37]

Cumulative Impact Analysis: ***~~Less than Significant~~ No Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley. While the study area is limited to Tulare County, sensitive species with similar habitat requirements may exist in other portions of the San Joaquin Valley, and therefore cumulative impacts would extend beyond Tulare County political boundaries.

The Live Oak Associates methodology used to analyze potential impacts on sensitive species in the project area included a reconnaissance-level field survey and several database and literature searches providing site-specific information related to existing biological resources.

[33] Ibid., page 19
[34] Ibid.
[35] Ibid., page 20
[36] Ibid.
[37] Ibid., pages 20 and 21

Based on the disturbed site condition, reasonable inferences were made that it was unlikely that sensitive species would occur onsite. The report included a summary of all state and federal natural resource protection laws that might be relevant to biological impacts of the proposed Project, within the context of CEQA.

The proposed Project will only contribute to cumulative impacts related to this checklist item if project specific impacts were to occur. As the proposed Project does not result in loss of habitat or direct impact to these special status species, no project-related or cumulative impacts will occur.

Mitigation Measures:

None Required.

Conclusion: ***~~No~~ Less than Significant Impact***

No loss of habitat or direct impact to these special status animals will occur; therefore, no mitigations are warranted.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Project Impact Analysis: ***No Impact***

The Live Oak Associates site evaluation determined that no riparian or other sensitive habitats occur on or adjacent to the proposed Harvest-Tulare Project site.

The USFWS Recovery Plan for Upland Species of the San Joaquin Valley (1998) includes several sensitive species that may occur in Tulare County.[38] A few of these are also listed in **Table 3.4-1** list of sensitive species that could occur in the vicinity of the project site. These include two sensitive plant species (California Jewel Flower, Lesser Saltscale) and three animal species (San Joaquin Kit Fox, Tipton Kangaroo Rat, and Blunt-Nosed Leopard Lizard). **Table 3.4-1** notes that while these species could potentially exist in the project vicinity, "historic and current commercial use of the site has rendered it unsuitable for these species."[39]

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the San Joaquin Valley. While the study area is limited to Tulare County, sensitive species with similar habitat requirements may exist

[38] USFWS Recovery Plan, pages. 27, 54, 106, 113, and 122
[39] Live Oak Associates, Biological Report, pages 10 and 11

iv) Landslides?

Landslides are not a significant threat as the topography in the Project area is relatively flat. The site is not currently located in the Seismic Hazard Zone (Landslide) specified by State of California or Tulare County.[18]

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

According to the Geotechnical Report, the existing site in not located within a published Earthquake Fault Zone and the potential for ground rupture is low. As earthquakes are possible throughout the State of California, the Project will have to comply with all Environmental Health and CalRecycle requirements for the construction of tanks and equipment, including the CNG/CHU tanks. In addition, the existing site is not located in a Liquefaction Hazard Zone. As the site is relatively flat, there is no potential for landslides. Less than significant Project-specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project will not increase geotechnical related impacts off-site. No cumulative impacts related to this checklist item will occur.

Mitigation Measures:

3.6-1 The Project shall incorporate all recommendations contained within the Preliminary Soil and Geology Phase 1 Study~~. D~~ during the Project site design, construction, and operations to reduce any potential geotechnical hazards at the Project site. These recommendations will be stipulated in the construction contracts and specifications.

Conclusion: ***Less than Significant Impact with Mitigation***

With implementation of the aforementioned mitigation measures, potential Project-specific and cumulative impacts related to this checklist item will be reduced level considered less than significant.

[18] Ibid., page 6

IMPACT EVALUATION

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

The proposed Project will add composting manure, which is from the dairy adjacent to the facility and from off site sources, and the green waste from off site sources. None of this waste is considered hazardous. In addition, the proposed Project includes the installation of an anaerobic bio-digester to create synthetic natural gas. This fuel will be dispensed on site as the proposed CNG station. No gas will be transported off-site. Tulare County Environmental Health has reviewed the proposed Project and is prepared to approve the project concurrent with the EIR and Special Use Permit. Potential impacts related to this checklist item will be considered less than significant.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project includes an anaerobic biodigester for methane production. The digestate material will be dispensed on-site and will not have any off-site impacts. As such, no cumulative impacts related to this checklist item will occur.

Mitigation Measures:

3.8-1 **Business Plan from Environmental Health: Hazardous Materials Business Plan from Environmental Health – Under the California Health Chapters 4 & 4.5, the facility is required to submit a business plan to Certified Unified Program Agency (CUPA). Environmental Health as the CUPA for Tulare County, requires a business plan for threshold quantities of:**

- **55 gallon of a liquid**
- **500 pounds of solids**
- **200 cubic yards of compressed gas**

See mitigation measure 3.17-6.

Conclusion: ***Less than Significant Impact with Mitigation***

Potential Project specific impacts related to this checklist item will be considered less than significant. No cumulative impacts related to this checklist item will occur.

3.8-3 **If the facility has/or proposes an above ground storage capacity over 1,320 gallons of a petroleum based product, the site shall be required to prepare a Spill Prevention Control and Countermeasure (SPCC) plan in accordance with the U.S. Code of Federal Regulations, Title 40, Part 112 (40CFR112) prior to the final inspection of the building permit. The plan shall be submitted to the Tulare County Environmental Health Services Division. The applicant shall contact the TCEHSD's CUPA inspector.**

3.8-4 **The applicant shall conduct additional soils testing prior to construction of the digester and/or the expansion of the composing activities, as recommended by the Klienfelder, Phase 1 report.**

Conclusion: ***Less than Significant Impact with Mitigation***

With implementation of the above mentioned mitigation measures, potential Project specific impacts related to this checklist item will be reduced level considered less than significant. Less than significant cumulative impacts related to this checklist item will occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Project Impact Analysis: ***No Impact***

The Project site is not located within 0.25 mile of an existing or proposed school. As such, no project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

There is one hazardous material site located at Sundale Vineyard School (site 54010018) which is less than one mile to the southeast of the proposed site. However, since the Project site is not located within 0.25 mile of an existing or proposed school. As such, no Project cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

"The primary duty of the Regional Board is to protect the quality of the waters within the Region for all beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific ground or surface water basins and by prescribing and enforcing requirements on all agricultural, domestic and industrial waste discharges. Specific responsibilities and procedures of the Regional Boards and the State Water Resources Control Board are contained in the Porter-Cologne Water Quality Control Act."[37]

"Under Water Code Section 13269, the Central Valley Water Board formerly regulated green waste composting facilities under Resolution No. 96-031 *Conditional Waiver of Waste Discharge Requirements for Composting Operations.* In 1999, passage of Senate Bill 390 modified Water Code Sections 13269 and 13350 to sunset all existing waivers of waste discharge requirements as of 1 January 2003. Therefore, the Harvest Power California LLC, composting facility no longer operates under a conditional waiver of waste discharge requirements for green waste composting pursuant to Central Valley Water Board Resolution 96-031. The State Water Resources Control Board is currently drafting a general order, *General Waste Discharge Requirements for the Discharge* of *Wastes at Compost Management Units, Order No. DWQ-2012-TENT* (General WDRs), for the discharge of wastes at compost management units. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility."[38]

California Department of Water Resources[39]

This Department's primary mission is to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments. Other goals include:
Goal 1 - Develop and assess strategies for managing the State's water resources, including development of the California Water Plan Update.
Goal 2 - Plan, design, construct, operate, and maintain the State Water Project to achieve maximum flexibility, safety, and reliability.
Goal 3 - Protect and improve the water resources and dependent ecosystems of statewide significance, including the Sacramento-San Joaquin Bay-Delta Estuary.
Goal 4 - Protect lives and infrastructure as they relate to dams, floods, droughts, watersheds impacted by fire and disasters, and assist in other emergencies.
Goal 5 - Provide policy direction and legislative guidance on water and energy issues and educate the public on the importance, hazards, and efficient use of water.
Goal 6 - Support local planning and integrated regional water management through technical and financial assistance.
Goal 7 - Perform efficiently all statutory, legal, and fiduciary responsibilities regarding management of State long-term power contracts and servicing of power revenue bonds.
Goal 8 - Provide professional, cost-effective, and timely services in support of DWR's programs, consistent with governmental regulatory and policy requirements.

[37] Central Valley Water Quality Control Board, http://www.swrcb.ca.gov/centralvalley/about_us/
[38] RWQCB Review of Draft EIR, memo from Scott Moore to Daneil Carlson, April 9, 2013
[39] California Department of Water Resources website, http://www.water.ca.gov/about/mission.cfm

Local Policy & Regulations

Tulare County Environmental Health Services

"The Environmental Health Services Division regulates retail food sales and hazardous waste storage and disposal; inspects contaminated sites and monitors public water systems, which protects and reduces the degradation of groundwater. The Division regulates the production and shipping of milk for Tulare and Kings Counties and also serves as staff to the Tulare County Water Commission appointed by the Board of Supervisors. The goal of HHSA's Environmental Health division is to protect Tulare County's residents and visitors by ensuring that our environment is kept clean and healthy."[40] This division requires water quality testing of public water systems.

Any project that involves septic tanks and water wells within Tulare County is subject to approval by this agency. All recommendations provided by this division will be added as mitigation measures to ensure reduction of environmental impacts.

Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed below.

AG-1.17 Agricultural Water Resources
The County shall seek to protect and enhance surface water and groundwater resources critical to agriculture.

HS-4.4 Contamination Prevention
The County shall review new development proposals to protect soils, air quality, surface water, and groundwater from hazardous materials contamination.

HS-5.2 Development in Floodplain Zones
The County shall regulate development in the 100-year floodplain zones as designated on maps prepared by FEMA in accordance with the following:

1. Critical facilities (those facilities which should be open and accessible during emergencies) shall not be permitted.
2. Passive recreational activities (those requiring non-intensive development, such as hiking, horseback riding, picnicking) are permissible.
3. New development and divisions of land, especially residential subdivisions, shall be developed to minimize flood risk to structures, infrastructure, and ensure safe access and evacuation during flood conditions.

HS-5.4 Multi-Purpose Flood Control Measures
The County shall encourage multipurpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat, and scenic values of the County's

[40] Tulare County Environmental Health Division, http://www.tularehhsa.org/index.cfm/public-health/environmental-health/

streams, creeks, and lakes. Where appropriate, the County shall also encourage the use of flood and/or stormwater retention facilities for use as groundwater recharge facilities.

HS-5.9 Floodplain Development Restrictions
The County shall ensure that riparian areas and drainage areas within 100-year floodplains are free from development that may adversely impact floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas.

HS-5.11 Natural Design
The County shall encourage flood control designs that respect natural curves and vegetation of natural waterways while retaining dynamic flow and functional integrity.

WR-1.1 Groundwater Withdrawal
The County shall cooperate with water agencies and management agencies during land development processes to help promote an adequate, safe, and economically viable groundwater supply for existing and future development within the County. These actions shall be intended to help the County mitigate the potential impact on ground water resources identified during planning and approval processes.

WR-1.5 Expand Use of Reclaimed Wastewater
To augment groundwater supplies and to conserve potable water for domestic purposes, the County shall seek opportunities to expand groundwater recharge efforts

WR-1.6 Expand Use of Reclaimed Water
The County shall encourage the use of tertiary treated wastewater and household gray water for irrigation of agricultural lands, recreation and open space areas, and large landscaped areas as a means of reducing demand for groundwater resources.

WR-2.1 Protect Water Quality
All major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. The County shall confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site.

WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement
The County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board.

WR-2.3 Best Management Practices (BMPs)
The County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board.

WR-2.4 Construction Site Sediment Control
The County shall continue to enforce provisions to control erosion and sediment from construction sites.

WR-2.5 Major Drainage Management
The County shall continue to promote protection of each individual drainage basin within the County based on the basins unique hydrologic and use characteristics.

WR-2.6 Degraded Water Resources
The County shall encourage and support the identification of degraded surface water and groundwater resources and promote restoration where appropriate.

WR-2.8 Point Source Control
The County shall work with the Regional Water Quality Control Board to ensure that all point source pollutants are adequately mitigated (as part of the California Environmental Quality Act review and project approval process) and monitored to ensure long-term compliance.

WR-3.3 Adequate Water Availability
The County shall review new development proposals to ensure the intensity and timing of growth will be consistent with the availability of adequate water supplies. Projects must submit a Will-Serve letter as part of the application process, and provide evidence of adequate and sustainable water availability prior to approval of the tentative map or other urban development entitlement.

WR-3.5 Use of Native and Drought Tolerant Landscaping
The County shall encourage the use of low water consuming, drought-tolerant and native landscaping and emphasize the importance of utilizing water conserving techniques, such as night watering, mulching, and drip irrigation.

WR-3.6 Water Use Efficiency
The County shall support educational programs targeted at reducing water consumption and enhancing groundwater recharge.

WR-3.10 Diversion of Surface Water
Diversions of surface water or runoff from precipitation should be prevented where such diversions may cause a reduction in water available for groundwater recharge.

The proposed Project will maintain all storm water on site. Therefore, the stormwater will not include any discharges. However, the Central Valley Regional Water Quality Control Board (RWQCB) will be consulted ~~and require the appropriate water quality permit for this project, if a RWD is required~~the project will be required to comply with stormwater permits for construction and industrial use, as well as individual waste discharge requirements (WDRs) or the Statewide Order for Composting Facilities, once adopted. A letter from the RWQCB to the County indicating the Project has obtained all required water quality permits will be required for the project to begin receive building permits and begin construction.

The facility will continue to comply with any regulations or procedures required by the state or regional water quality control board. The drainage ponds will continue to be maintained to manage weed growth and prevent fly and mosquito breeding.

As described earlier in the document, all liquid digestate from the facility will either be applied directly to the compost piles, substituting for water that will have been needed for the composting process. It will also be incorporated into the composted material. In periods of heavy rain, this digestate will be stored either in a lined and covered lagoon, or storage tank and then applied to the compost piles during drier periods.

If storage tanks are chosen, they will be liquid-tight. In addition, they will be equipped with a leak detection system. A matt wicking material and a High Density Polyethylene (HDPE) liner with welded seams will be laid underneath the foundation, secured to the tank walls and connected to a visual monitoring well so that any leakage can be observed and contained. In the unlikely event of a leak, the inspection well also acts as an access to vacuum the leaking fluid and pump back into the tanks. This design has been implemented and approved by the Central Valley Regional Water Quality Control Board for similar anaerobic digester projects in the Central Valley.

The material receiving device consists of a fully containerized unit. The organic separator will be liquid tight, as well. As a precautionary measure, food waste or leaking material will be further contained by mounting the equipment on concrete foundations with elevated lip seals as to prevent any contamination from reaching the ground.

As part of the National Pollutant Discharge Elimination System (NPDES), the applicant will be required to comply with the NPDES requirements for the discharge of stormwater, including the General Permit for Construction Stormwater Discharges and the General Permit for Industrial Discharges. Currently, this is accomplished by the berm and pond design of the site, and not allowing water to enter or exit the site. ~~If the new site design required it,~~ Harvest Power will be required to comply with ~~prepare~~ a Storm Water Pollution Prevention Plan (SWPPP) and Storm Water Monitoring Plan (SWMP). ~~Within this SWPP/SWMP, it is noted that the proposed Project will comply with the General Permit for Industrial Dischargers.~~ As part of this compliance the applicant will 1) demonstrate compliance with permit requirements, 2) evaluate changing conditions and practices at the site to control pollutants in stormwater discharges, 3) implement the SWPPP, and 4) measure effectiveness of BMPs. In addition, the General Permit requires annual testing and reporting of results to the RWQCB.

General Tentative Composting Order No. Dwq-2012-Xxxx

Upon the Composting Order becoming final, Harvest Power will have to update their facilities to comply with the General Composting Order. They will also have to make all changes to the detention facilities to make sure that the water in the facility is being kept to RWQCB standards. In addition, they will have to comply with all compost storage requirements and monitoring requirements of the RWQCB.

With mitigation, *less than significant* project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is the Tulare Lake Basin. This cumulative analysis is based on information provided in the Water Quality Control Plan for the Tulare Lake Basin and the requirements of Tulare County Environmental Health.

The proposed Project (as mitigated), will be required to comply with the all requirements of the Central Valley Water Board and Tulare County Health Services Division (TCEHSD). In addition, the drainage and pond plans will be reviewed and approved by the Central Valley Regional Water Quality Control Board and may require a Report of Waste Discharge (RWD) National Pollution Discharge and Elimination System (NPDES) permit, if one is required. The on site drainage will also be reviewed by Tulare County Environmental Health and the Public Works Department to verify that the site does in fact contain the 100 year / 24 hour event per Regional Water Quality Control Board standards. Moreover, the concrete under the Truck Ramp, Feed Hopper, and Turbo Separator CTSR tank/ Control Room / Effluent Storage Area, will be contained through lining the concrete under these facilities and water proofing their surfaces Therefore, the proposed Project will not create any significant cumulative impacts related to this checklist item.

Mitigation Measures:

3.9-1 The applicant shall receive all required permits from the RWQCB and the State Water Board prior to the issuance of building permits.

3.9-2 The proposed Project shall comply with any new regulations brought by the RWQCB and/or the State Water Board. This includes, but is not limited to, regulations pertaining to the General Tentative Composting Order No. Dwq-2012-Xxxx for composting facilities. Regulations under this order could include: limitations on additives, prohibitions of certain types of waste material, design specifications, maintenance requirements, site restoration, and other requirements. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility. Harvest Power California LLC, needs to submit a report of waste discharge (see enclosed Form 200) with a report describing the operation, along with

the appropriate fee, to our office. Based on the submitted information, the threat to water quality is tentatively rated 3 and the complexity C, resulting in 'a filing fee of $2,776. The filing fee is the first year's annual fee (e.g., waste discharge permit fee).

3.9-3 The applicant shall prepare and submit a SWPPP to Tulare County prior to the issuance of a building permit. This SWPPP shall be implemented and retain on site as part of business operations.

3.9-4 That any tanks or basin lining be designed to RWQCB standards and approved by TCEHSD prior to the issuance of a building permit.

3.9-5 That any piping be reviewed and approved by the TCEHSD to verify that the contents will not pollute the groundwater.

3.9-6 The drainage system, including the berms, and the retention pond and drainage swale facilities shall be designed, and the plans stamped by a registered Professional Engineer, of whom must be registered and/or licensed in California, and have professional knowledge and experience in the field of on site drainage and detention facility design. The specifications and engineering data for the drainage system and detention facilities shall be submitted to the Public Works Department and TCEHSD for review and approval prior to the issuance of a building permit.

Conclusion: ***Less than Significant Impact with Mitigation***

As noted above, no significant impacts related to this checklist item will occur.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?

Project Impact Analysis: ***Less than Significant Impact***

As noted in the water usage analysis, agricultural activities typically use 3 feet of water per year. The proposed Project will use 14,985,000 gallons of water per year. This amounts to 46 acre feet of water per year. Crops in the area use 3 acre-feet per acre of water per year, while the Project's water usage amounts to 1.3 acre-feet per acre per year. [41] As the proposed water use will be lower than the water use of a permitted agricultural activity, less than significant project specific impacts will result.

[41] Ground Water Extraction Letter, John Minney

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is the Tulare Lake Basin. This cumulative analysis is based on information provided in the Water Quality Control Plan for the Tulare Lake Basin and the requirements of Tulare County Environmental Health.

As noted in the California Water Plan 2009, Regional Report 3, Tulare Lake, it is estimated the future water demand will be reduced by 550,000 acre-feet in future conditions. The proposed expansion will create a need for a small increase in the amount of water usage; however, this usage is less than the water usage of a typical agricultural activity. As noted in the 2009 Water plan, part of the water demand reduction if the conversion of agricultural uses to more urban uses. The proposed Project is one of many projects that is part of an overall reduction of water use by agricultural activities. Therefore, even with a slightly more intensive use, water supply will not be impacted on a cumulative level.

Mitigation Measures:

None Required.

Conclusion: ***Less than Significant Impact***

As noted above, less than significant project specific and cumulative impacts related to this checklist item will occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on- or off-site?

Project Impact Analysis: ***No Impact***

The project site is not located along a natural water feature such as a lake, river or stream.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. Alteration of a stream or river will be subject to the regulations of the U.S. Army Corps of Engineers and the California Department of Fish and Game.

The proposed Project will not affect the drainage pattern of any off-site parcels, no cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on- or off-site?

Project Impact Analysis: ***No Impact***

The project site is not located along a natural water feature such as a lake, river or stream. There is an adjacent irrigation ditch adjacent to the site, however, the changes to the drainage pattern will not impact the irrigation ditch. As such, no project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. Alteration of a stream or river will be subject to the regulations of the U.S. Army Corps of Engineers and the California Department of Fish and Game.

The proposed Project will not affect the drainage pattern of any off-site parcels, no cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Project Impact Analysis: ***No Impact***

The extent of erosion on a site will typically vary depending non-slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. The proposed Project site is currently receives an average of nine inches of rain/year. The site will continue to have a flat topography after proposed Project construction, but continue to have 2 foot berms around

the edges. As such, construction activities will minimally disturb the ground surface. Drainage patterns will be minimally changed as a result of proposed Project. All internal runoff created by the facility operations and precipitation up to a 100-year, 24 hour storm is currently, and will continue to be, contained on site, as discussed, above. A SWPPP will be in place during construction, as also described above. There are no rivers or streams within a five (5) radius of the site. As such, no project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board.

As noted in the discussion of potential impacts to water quality ~~SWPPP~~, storm water will be retained on site.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

f) Otherwise substantially degrade water quality?

Project Impact Analysis: ***No Impact***

The proposed Project does not include elements that could degrade water quality beyond what was discussed in 3.9 a). No project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the requirements of the Central Valley Regional Water Quality Control Board.

As noted above, the proposed Project does not include elements that could degrade water quality beyond what was discussed in 3.9 a). No cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Project Impact Analysis: ***No Impact***

The proposed Project does not include the construction of any housing units. No project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project does not include any housing units. Therefore, no cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

h) Place within a 100-year flood hazard area structures which will impede or redirect flood flows?

Project Impact Analysis: ***No Impact***

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) Flood Insurance Rate Map (FIRM) for Community Number

06107C0970E dated June 16, 2009; the Project site is located in Zone A. Zone A areas are not in the 100 year flood hazard area with undefined baselines. Construction within Zone A requires no specific flood mitigation measures. The construction of housing is not a part of the proposed Project. There will be no impact with regard to flood related events.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project will not have off site impacts related to flooding. In addition, the proposed Project will not induce additional flooding hazards. No cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Project Impact Analysis: ***No Impact***

"Two major dams could cause substantial flooding in Tulare County in the event of a failure: Terminus Dam and Success Dam. In addition, there are many smaller dams throughout the county that will cause localized flooding in the event of their failing."[42]

The proposed Project site is inside the inundation areas for Terminus Dam, which is approximately 18 miles from the site. However the proposed Project does not include any residential structures and therefore will not be placing people or structures to the risk of flooding from potential failure of a levee or dam. In addition, the proposed Project does not involve significant water storage or changing the alignment of an established watercourse. No project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

[42] General Plan Background Report, page 8-17

As noted above, the proposed Project is not located near a major levee or dam. The proposed Project will not have any impacts related to this checklist item on other off-site parcels. Therefore, no cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

j) Inundation by seiche, tsunami, or mudflow?

Project Impact Analysis: ***No Impact***

The nearest large body of water is Kaweah Lake, which is located approximately 19 miles northeast of the proposed Project site. Due to the distance between the reservoir and the proposed Project site, there will be no potential for seiche or tsunami to occur. There will be no impact.

The project is site is relatively flat and is not located near a large body of water, the coast or hillsides. As such, the proposed Project is not subject to inundation by seiche, tsunami, or mudflow. No project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted above, the proposed Project is not located near a large body of water, the coast or hillsides. The proposed Project will not have any impacts related to this checklist item on other off-site parcels. No Cumulative Impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no project specific or cumulative impacts related to this checklist item will occur.

REFERENCES

Water Quality Control Plan for the Tulare Lake Basin, California Regional Water Quality Control Board Central Valley Region, August 17, 2005

California Water Plan Update 2009, Volume 3 Tulare Lake, California Department of Water Resources

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan Background Report, February 2010

EPA summary of the Safe Drinking Water Act:
http://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm

EPA summary of the Clean Water Act:
http://www.epa.gov/lawsregs/laws/cwa.html

Flood Insurance Program Summary:
http://www.floodsmart.gov/floodsmart/pages/about/nfip_overview.jsp

California Department of Water Resources, http://www.water.ca.gov/

FEMA Flood Zone Designations:
https://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=floodZones&title=FEMA%2520Flood%2520Zone%2520Designations

2012 CEQA Guidelines

Army Corps of Engineers,
http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx

Porter-Cologne Water Quality Control Act Summary,
http://ceres.ca.gov/wetlands/permitting/Porter_summary.html

State Water Board Website,
http://www.waterboards.ca.gov/about_us/water_boards_structure/mission.shtml

State Water Resources Control Board Water Quality Order No. Dwq-2012-Xxxx

Ground Water Extraction Letter, John Minney, February 11, 2013

Central Valley Water Quality Control Board, http://www.swrcb.ca.gov/centralvalley/about_us/

California Department of Water Resources website, http://www.water.ca.gov/about/mission.cfm

Tulare County Environmental Health Division, http://www.tularehhsa.org/index.cfm/public-health/environmental-health/

- authorizes establishment of cooperative agreements and grants-in-aid to States that establish and maintain active and adequate programs for endangered and threatened wildlife and plants;
- authorizes the assessment of civil and criminal penalties for violating the Act or regulations;
- authorizes the payment of rewards to anyone furnishing information leading to arrest and conviction for any violation of the Act or any regulation issued there under."[4]

State Agencies & Regulations

California Department of Fish and ~~Game~~ Wildlife

~~"The Department of Fish and Game maintains native fish, wildlife, plant species and natural communities for their intrinsic and ecological value and their benefits to people. This includes habitat protection and maintenance in a sufficient amount and quality to ensure the survival of all species and natural communities. The department is also responsible for the diversified use of fish and wildlife including recreational, commercial, scientific and educational uses."~~"The California Department of Fish and Wildlife (formerly "Department of Fish and Game") maintains native fish, wildlife, plant species and natural communities for their intrinsic and ecological value and their benefits to people. This includes habitat protection and maintenance in a sufficient amount and quality to ensure the survival of all species and natural communities. The department is also responsible for the diversified use of fish and wildlife including recreational, commercial, scientific and educational uses."[5]

California Endangered Species Act

"The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The Department will work with all interested persons, agencies and organizations to protect and preserve such sensitive resources and their habitats."[6]

Local Policy & Regulations

Tulare County Association of Governments (TCAG)

"The Tulare County Association of Governments (TCAG) is responsible for overseeing and planning projects with the county and each of its cities, helping to bring tax money back home to fund bus service, road improvements, projects that will improve our air quality, and more."[7] TCAG's 2009 Regional Blueprint includes a goal of a 25% increase in land use densities facilitated with urban growth and expansion of transportation facilities.

[4] Federal Endangered Species Act, http://www.fws.gov/laws/lawsdigest/esact.html
[5] California Department of Fish and ~~Game~~Wildlife website, http://www.dfg.ca.gov/about/
[6] California Endangered Species Act, http://www.dfg.ca.gov/habcon/cesa/
[7] Tulare County Council of Governments (TCAG) Website, http://www.tularecog.org/

Existing County Land Uses

The proposed Project site is located in the northwestern portion of Tulare County. The Tulare County is located in the San Joaquin Valley portion of the Great Central Valley of California that lies south of the Sacramento-San Joaquin Delta, and is comprised of 4,863 square miles. The County is bordered by Fresno County to the north, Kings County to the west, Kern County to the south, and Inyo County to the east. The valley portion of land totals approximately 3,930 square miles or approximately 81 percent of Tulare County. Open space, which includes wilderness, national forests, monuments and parks, and county parks, encompass approximately 1,230 square miles, or approximately 25 percent of the County. Agricultural uses total approximately 2,150 square miles or approximately 44 percent of the entire County. Incorporated cities in the Tulare County account for less than three percent of the entire County area.

IMPACT EVALUATION
Would the project:

a) Physically divide an established community?

Project Impact Analysis: ***No Impact***

The proposed Project does not include the construction of a major highway or railroad track. Further, the proposed Project does not require any off-site construction. The proposed Project does not include a general plan amendment or zone change. As such, no project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The project is located in an agricultural area in west-northwestern Tulare County, approximately four (4) miles northeast of the City of Tulare, and five (5) miles south of the City of Visalia. The proposed Project site does not have any residential uses on-site and the nearest residential uses are large lot rural residential uses located within a one mile vicinity. Surrounding uses are primarily agricultural uses such as orchards and vineyard. Therefore, the proposed Project will not physically divide any established community. The proposed Project is not part of a new transportation facility that could divide a community. No cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no Project specific or cumulative impacts related to this checklist item will occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

The proposed Project site is located within Tulare County. The Updated County of Tulare General Plan, 2030, designates the site for agricultural land uses and is included in the Rural Valley Lands Plan (RVLP). The zoning for the site is Exclusive Agriculture - 40 acre minimum) AE-40 (See **Figure 3.10-1**). The existing Project is consistent with the existing land use and zoning under PSP 99-026 (ZA). Changes to the PSP 99-026 (ZA) Conditions of Approval (COA) include an increase in tonnages and the type of material recycled at this facility. The Project will require approval of Special Use Permits PSP 09-075 and PSP 12-039. As described earlier, the proposed Project is consistent with the underlying General Plan land use and zoning with the approval of the special use permits. Moreover, the proposed Project is expanding the operations of an existing composting facility. The impact will be less than significant.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed expansion outlined in the use permit request, does not include any variances and would not result in significant impact related to a conflict with a policy or plan. Less than significant cumulative impacts related to this checklist item would occur.

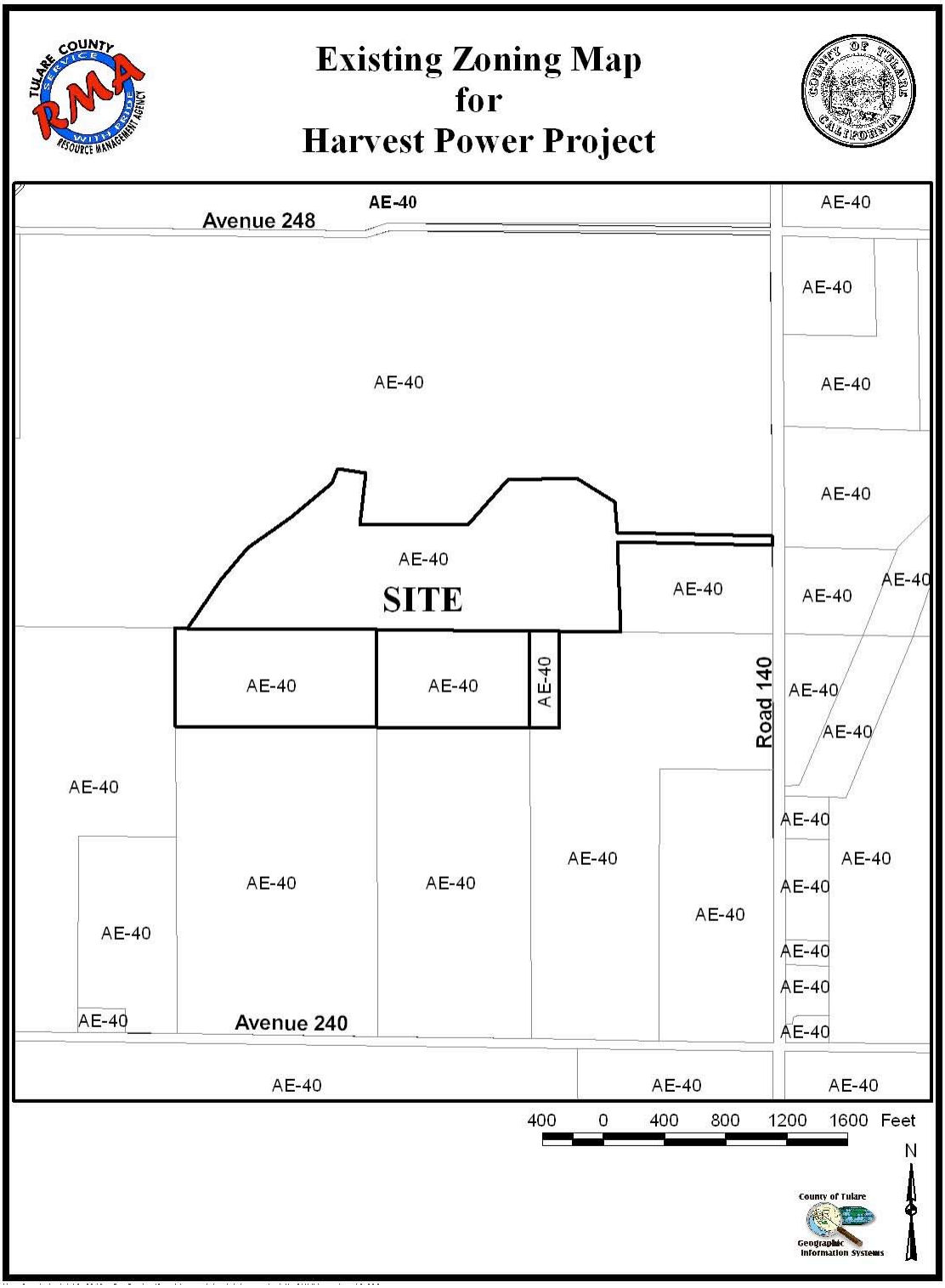
Mitigation Measures:

3.10-1 **The composting and anaerobic digester operator shall adhere to all conditions of approval noted in the Use Permits for the composting expansion and the anaerobic digester.**

Conclusion: ***Less than Significant Impact with Mitigation***

As noted earlier, the Project will have a less than significant impact to land use and zoning regulations upon adoption of the changes to the conditions of approval for the use permit(s) for the proposed Project.

Figure 3.10-1
Existing Zoning



c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Project Impact Analysis: ***Less than Significant Impact***

As noted in Chapter 3.4, there are two habitat conservation plans that apply in Tulare County. The Kern Water Habitat Conservation Plan only applies to an area in Allensworth and the project site is not subject to this plan. The Recovery Plan for Upland Species in the San Joaquin Valley outlines a number of species that are important to the San Joaquin Valley. None of these species were identified on the project site. As such, no project specific impacts related to this checklist item would occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

There are no impacts related to habitat conservation plans, and therefore there are no cumulative impacts that would conflict with local policies or ordinances.

Mitigation Measures:

None Required.

Conclusion: ***Less than Significant Impact***

As noted above, less than significant project specific or cumulative impacts related to this checklist item would occur.

REFERENCES

2011 Regional Transportation Plan, Tulare County Association of Governments (TCAG), July 11, 2012

Tulare County 2030 General Plan, August 2012

Tulare County Council of Governments (TCAG) Website, http://www.tularecog.org/

2012 CEQA Guidelines

transient, random, or continuous. The proposed Project will consist of composting, and anaerobic digester, and a natural gas station. None of these elements will create significant vibration during operations. Although some vibration may occur during construction, any construction vibration will be temporary, short-term, and will not be perceptible by receptors outside the project site. Less than significant ~~impacts~~ Project specific impacts will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

Operations of the proposed Project will not result in any long-term vibration impacts. As such, cumulative impacts related to this checklist item will not occur.

Mitigation Measures:

None Required.

Conclusion: ***Less than Significant Impact***

As noted above, less than significant Project specific impacts related to this checklist item will occur and no cumulative impacts related to this checklist item will occur.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Project Impact Analysis: ***Less than Significant Impact***

The proposed Project site is set in a rural area, east of the City of Tulare. The site is predominately surrounded by agriculture, including row crops and a dairy. There are three residences near the Project site that will be located approximately 700 feet from the anaerobic digester. The Sundale Preschool and Elementary School is less than one (1) mile from the proposed site. The ambient noise environment in the vicinity of the proposed Project site is dominated by agricultural-related uses.

As noted above in the response to 3.12 a), the proposed Project will increase ambient noise levels; however, the increase in noise levels will not exceed Tulare County's Maximum Acceptable Ambient Noise Exposure for Various Land Uses. Therefore, less than significant Project specific impacts related to this checklist item will occur.

Public Services
Chapter 3.14

SUMMARY OF FINDINGS

The proposed Project will result in less than significant impacts related to Public Services with mitigation. A detailed review of potential impacts is provided in the analysis below.

INTRODUCTION

California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to ~~Land Use and Recreation~~ Public Services. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

The environmental setting provides a description of the Public Services in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, the Tulare County General Plan Background Report and/or the Tulare County General Plan Revised DEIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The thresholds of significance for this section are established by the CEQA checklist item questions. The following are potential thresholds for significance.

- Impact Fire Services
- Impact Police Services
- Impact Schools
- Impact Parks
- Impact Other Public Facilities

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Project Impact Analysis: ***Less than Significant Impact***

"The Harvest-Tulare Anaerobic Digester and Compressed Natural Gas Facility as proposed will add a high solids anaerobic digestion facility and Compressed Natural Gas (CNG) refueling station to Harvest-Power California, LLC's existing Harvest-Tulare composting operations. The facility has been operational since 1996 and currently holds all operational permits to compost green material, food, and dairy manure. The proposed Project will include a dry anaerobic digestion facility on the same footprint as the existing composting facility and a CNG fueling station to produce and dispense CNG for sale on an adjacent parcel controlled by Harvest Power. The proposed Project site plan is shown in Figure 2. The trip generation and trip distribution data used in the various Project analyses are described and quantified below.

The facility would utilize approximately ~~two (2)~~ 3 acres of the 3~~5~~8 acre footprint in the southern portion of the facility. The process converts the feedstock through high solids anaerobic digestion into biomethane, or renewable natural gas. The project will increase the total annual tonnage processed at the site from 86,000 tons per year to 216,000 tons per year. This increase includes both the proposed anaerobic digester and upgrading tonnages at the composting facility."[14]

The Existing intersection lane configurations and peak hour traffic volumes were analyzed for existing levels of service. **Table 3.16-3** shows the existing levels of service for the study intersections respectively. The signalized intersection levels of service shown in **Table 3.16-3** are representative of the whole intersection, individual intersection movements are shown for the 2-way stop controlled locations.

Table 3.16-3
Existing Conditions - Levels Of Service

	AM Peak Hour		PM Peak Hour	
Intersection	**LOS**	**Delay[1]**	**LOS**	**Delay[1]**
Lovers Lane at SR 137	A	8.5	A	8.6
Lovers Lane at Road 240				
Northbound Approach	A	7.8	A	7.8
Southbound Approach	A	7.6	A	7.7
Westbound Approach	B	11.7	B	12.1
Eastbound Approach	B	11.3	B	12.5
Lovers Lane at Project Driveway				
Northbound Approach	A	7.8	A	7.7
Southbound Approach	A	7.6	A	7.8

[14] Traffic Impact Study, TPG Consulting, page 11

to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Project Impact Analysis: ***Less than Significant Impact***

As noted in the response to Checklist item 3.16 a), no significant impacts to levels of service will occur. The proposed Project will not impact any other congestion management standard. As such, no Project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***Less than Significant Impact***

The geographic area of this cumulative analysis is the intersections outlined in the traffic report. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, Tulare County 2030 General Plan EIR, and the traffic report.

As noted in the response to 3.16 a), the proposed Project will not impact level of service in future conditions. Less than significant cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***Less than Significant Impact ~~with Mitigation~~***

As noted earlier, less than significant Project specific and cumulative impacts related to this checklist item will occur.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

Project Impact Analysis: ***No Impact***

The Visalia Municipal Airport is located approximately nine (9) miles northwest of the proposed Project site. Mefford Field (in theCity of Tulare) is located approximately six (6) miles southwest of the proposed Project site. In addition, the proposed Project will not affect air traffic patterns. No Project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

e) Result in inadequate emergency access?

Project Impact Analysis: ***No Impact***

The Project site is currently has access and egress via the main entrance off Road 148, and has a second emergency point of access off of Road 248 along the Tulare Colony Ditch. As a result of the number and size of access to the Project site, the Proposed Project will not create any impacts related to this checklist item.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the intersections outlined in the traffic report. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, Tulare County 2030 General Plan EIR, and the traffic report.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted above, no Project specific or cumulative impacts related to this checklist item will occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Project Impact Analysis: ***No Impact***

The proposed Project does not involve changes to public transit, bicycle facilities or pedestrian facilities. The Project site is accessible from Avenue 240 and Road 140. There are no existing or proposed bike lanes along either of these streets. The proposed Project is located more than a mile from the nearest bus route (Tulare County, Route 40), which travels along State Route 137. As such no Project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is the intersections outlined in the traffic report. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, Tulare County 2030 General Plan EIR, and the traffic report.

Conclusion: ~~***No Impact***~~ ***Less than Significant Impact with Mitigation***

As noted above, no Project specific or cumulative impacts related to this checklist item will occur.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Project Impact Analysis: ***Less than Significant Impact with Mitigation***

The proposed Project will result in a new or an expansion of a local public storm water drainage facility. Storm water on the Project site is currently directed to one of two drainage detention basins. The digester design proposes the design and construction of a drainage swale. Sprinkler Irrigated Digestate effluent usage on the site will consist of using the liquid digestate on the compost piles during the dry months and will create insignificant runoff. Runoff from storm events will drain into a separate detention basin and not affect the manure detention pond. The runoff from the site will either evaporate or percolate in the basin; other on site runoff will be designed to percolate through the ground surface, and not be added to the manure waste water detention facility. All internal runoff created by facility operations will be contained on site and drainage patterns on the site will not be significantly altered during development. A retention ponding basin will be designed to collect runoff water from the proposed Project site. The existing topography on project site will also be modified to ensure that proposed Project water runoff is contained on site. Further, in order to prevent water and wind erosion during the construction period, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the proposed Project as required for all projects which disturb more than one acre in area. As part of the SWPPP, the applicant will be required to provide erosion control measures to protect the topsoil. Any stockpiled soils will be watered and/or covered to prevent loss due to wind erosion as part of the SWPPP during construction. As a result of these efforts, loss of topsoil and substantial soil erosion during the construction period are not anticipated. No new storm drainage facilities will be needed. The proposed and existing storm water facilities will require the approval of the public works department and environmental health in order to show that the Project's storm drainage facilities are sufficient to meet the storm water needs of the proposed Project.

Cumulative Impact Analysis: ***Less than Significant Impact with Mitigation***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project will retain storm water on site. There are two foot berms designed around the perimeter of this facility and a new drainage swale is proposed. Currently, no storm drainage water currently leaves the site nor is it anticipated that design features of the

Mitigation Measures:

None Required.

Conclusion: ***Less than Significant Impact with Mitigation***

As noted earlier, less than significant Project specific and cumulative impacts related to this checklist item will occur.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Project Impact Analysis: ***No Impact***

The proposed Project includes a new septic system. No connections to a wastewater treatment provider are proposed. No Project specific impacts related to this checklist item will occur.

Cumulative Impact Analysis: ***No Impact***

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

The proposed Project includes a new septic system. No connections to a wastewater treatment provider are proposed. No cumulative impacts related to this checklist item will occur.

Mitigation Measures:

None Required.

Conclusion: ***No Impact***

As noted earlier, no Project specific or cumulative impacts related to this checklist item will occur.

~~Biological~~	~~3.4 a)~~	~~Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?~~
Geology	3.6 c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
Greenhouse Gases	3.7 a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
Hazards	3.8 b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
Hydrology	3.9 b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
Noise	3.12 c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
Noise	3.12 d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
Public Services	3.14 a)	Fire protection?
Recreation	3.15 a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
Traffic	3.16 a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
Traffic	3.16 b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
Utilities	3.17 a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
Utilities	3.17 d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
Land Use	3.10 c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impacts

Table 4-5
Checklist Items with No Impacts

Impact Section	Checklist Item #	Checklist Criteria
Aesthetics	3.1 a)	Have a substantial adverse effect on a scenic vista?
Aesthetics	3.1 b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic

		highway?
Agricultural & Forestry	3.2 b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?
Agricultural & Forestry	3.2 c)	Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code § 12220(q), timberland (as defined by Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?
Agricultural & Forestry	3.2 d)	Result in the loss of forest land or conversion of forest land to non-forest use?
Agricultural & Forestry	3.2 e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of agricultural use or conversion of forest land to non-forest use?
Biological	3.4 a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
Biological	3.4 b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
Biological	3.4 c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
Biological	3.4 d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
Biological	3.4 e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
Biological	3.4 f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
Geology	3.6 a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction?
Geology	3.6 b)	Result in substantial soil erosion or the loss of topsoil?
Geology	3.6 d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
Geology	3.6 e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
Greenhouse Gases	3.7 b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?
Hazards	3.8 a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Hazards	3.8 c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
Hazards	3.8 d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
Hazards	3.8 e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
Hazards	3.8 f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
Hazards	3.8 g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
Hazards	3.8 h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
Hydrology	3.9 c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
Hydrology	3.9 d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
Hydrology	3.9 e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
Hydrology	3.9 f)	Otherwise substantially degrade water quality?
Hydrology	3.9 g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
Hydrology	3.9 h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
Hydrology	3.9 i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
Hydrology	3.9 j)	Inundation by seiche, tsunami, or mudflow?
Land Use	3.10 a)	Physically divide an established community?
Land Use	3.10 b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
Mineral Resources	3.11 a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
Mineral Resources	3.11 b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
Noise	3.12 a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or

		applicable standards of other agencies?
Noise	3.12 b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
Noise	3.12 e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
Noise	3.12 f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?
Population & Housing	3.13 a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
Population & Housing	3.13 b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
Population & Housing	3.13 c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?
Public Services	3.14 a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
Public Services	3.14 a)	Police protection?
Public Services	3.14 a)	Schools?
Public Services	3.14 a)	Parks?
Public Services	3.14 a)	Other public facilities?
Recreation	3.15 b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?
Traffic	3.16 c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
Traffic	3.16 d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
Traffic	3.16 e)	Result in inadequate emergency access?
Traffic	3.16 f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?
Utilities	3.17 b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Utilities	3.17 e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
Utilities	3.17 f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Alternatives 1, 2, and 3 would result in higher greenhouse gases (GHGs) on a cumulative level, as these alternatives do not include the all the proposed Project elements that would have full environmental benefit related to GHGs. Although, these three alternatives could reduce other impacts, the GHG benefits of the proposed Project would not occur in these three alternatives.

The Project remains the Environmentally Superior Alternative. Among the non-project alternatives, Alternative 2 is the environmentally superior alternative as it would have lesser impacts than the project in the most impact areas. (See Table 5-1.) As noted, however, Alternative 2 does not meet the project objectives and, therefore, is not a viable alternative.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative would have more Greenhouse Gas Impacts, as the proposed Project would result in a benefit to Greenhouse Gases. As discussed in Chapter 3.7, the amount of greenhouse gases diverted from the implementation of the proposed Project has been estimated to be 73,487 $MTCO_2E$.

As noted in the mandatory findings of the significance section, odor on a cumulative basis is the only significant and unavoidable impact. Alternatives 1 and 3 could potentially reduce this odor, although the amount of reduction is hard to quantify. The other alternatives would have similar impacts as the proposed Project in regards to odor. When evaluating impacts of alternatives 1 and 3, the choice is between cumulative odor impacts and cumulative greenhouse gas benefits. As greenhouse gas reduction benefits has been fully quantified and odor impacts are difficult to measure, the argument for greenhouse gas reduction is stronger than odor reduction.

In addition, the No Project Alternative would not meet the project elements or the project objectives. Furthermore, each of the alternatives analyzed will have at least one evaluation criteria that would result in higher impacts than the proposed Project. As such, the proposed Project is Environmentally Superior Alternative.

FINANCIAL ANALYSIS OF ALTERNATIVES

As part of the feasibility analysis of the alternatives, a financial analysis has been conducted. To allow this business to maintain it competitive edge in their niche market, no dollar amounts are used. Instead, scales of financial impact are provided for each potential cost/expense item. See tables below.

Mitigation Monitoring and Reporting Program
Chapter 8

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in compliance with State law and the Environmental Impact Report (EIR) (State Clearinghouse No.) prepared for the project by the County of Tulare.

The California Environmental Quality Act (CEQA) Section 21081.6 requires adoption of a reporting or monitoring program for those measures placed on a project to mitigate or avoid adverse effects on the environment.[1] The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation. The Mitigation Monitoring and Reporting Program contains the following elements:

• **Action and Procedure.** The mitigation measures are recorded with the action and procedure necessary to ensure compliance. In some instances, one action may be used to verify implementation of several mitigation measures.

• **Compliance and Verification.** A procedure for compliance and verification has been outlined for each action necessary. This procedure designates who will take action, what action will be taken and when, and to whom and when compliance will be reported.

• **Flexibility.** The program has been designed to be flexible. As monitoring progresses, changes to compliance procedures may be necessary based upon recommendations by those responsible for the Mitigation Monitoring and Reporting Program. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program.

[1] Public Resource Code §21081.6

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	clause in every construction contract to inform contractors of this requirement. The paleontologist shall notify the Tulare County Resource Management Agency and the project proponent of the procedures that must be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the Tulare County Resource Management Agency determines avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with applicable standards. The plan shall be submitted to the Tulare County Resource Management Agency for review and approval. Upon approval, the plan shall be incorporated into the project.						
Geology & Soils							
3.6-1	The project shall incorporate all recommendations contained within the Preliminary Soil and Geology Phase 1 Study–during the Project	During project site design, construction, and operations,	Incorporation of all recommendations contained within	County of Tulare Planning and Public			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	site design, construction, and operations to reduce any potential geotechnical hazards at the Project site. These recommendations shall be stipulated in the construction contracts and specifications.	to reduce any potential geotechnical hazards at the project site	the Preliminary Soil and Geology Phase 1 Study	Works Department			
Hazards and Hazardous Materials							
3.8-1	Hazardous Materials Business Plan from Environmental Health – Under the California Health Chapters 4 & 4.5, the facility is required to submit a business plan to Certified Unified Program Agency (CUPA). Environmental Health as the CUPA for Tulare County, requires a business plan for threshold quantities of: • 55 gallon of a liquid • 500 pounds of solids • 200 cubic yards of compressed gas	Prior to Occupancy	Submittal and verification of Hazardous Materials Business Plan, if required.	County of Tulare Planning and Public Works Department and TCEHSD(CUPA)			
3.8-2	If more than 10,000 pounds of methane is produced in the process, the applicant is required to submit an application for a California Accidental Release Prevention (CalARP)/Risk	Prior to Issuance of Building Permits	If necessary, submit an application for a California Accidental Release	County of Tulare Planning Works Department and			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	Management Plan. The applicant shall immediately contact the Certified Unified Program Agency's (CUPA) inspector and notify the CalARP and submit an application.		Prevention (CalARP)/Risk Management Plan	TCEHSD (CUPA)			
3.8-3	If the facility has/or proposes an above ground storage capacity over 1,320 gallons of a petroleum based product, the site shall be required to prepare a Spill Prevention Control and Countermeasure (SPCC) plan in accordance with the U.S. Code of Federal Regulations, Title 40, Part 112 (40CFR112) prior to the final inspection of the building permit. The plan shall be submitted to the Tulare County Environmental Health Services Division. The applicant shall contact the TCEHSD's CUPA inspector.	Prior to Issuance of Building Permits	If necessary, submit prepare a Spill Prevention Control and Countermeasure (SPCC)	County of Tulare Planning and Public Works Department and TCEHSD (CUPA)			
3.8-4	The applicant shall conduct additional soils testing prior to construction of the digester and/or the expansion of the composing activities, as recommended by the Klienfelder, Phase 1 report.	Prior to Issuance of Building Permits	Additional soil testing.	County of Tulare Building Inspection			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
Hydrology & Water Quality							
3.9-1	The applicant shall receive all required permits from the RWQCB and the State Water Board prior to the issuance of building permits.	Prior to Issuance of Building Permits	Verification of receipt (either letter or email) that the appropriate permit or lack of need for a Report of Waste Discharge permit has been acknowledged by the Central Valley RWQCB.	County of Tulare Planning and Public Works Department and TCEHSD			
3.9-2	**The proposed Project shall comply with any new regulations brought by the RWQCB and/or the State Water Board. This includes, but is not limited to, regulations pertaining to the General Tentative Composting Order No. Dwq-2012-Xxxx for composting facilities. Regulations under this order could include: limitations on additives, prohibitions of certain types of waste material, design specifications, maintenance**	Prior to Issuance of Building Permits	Verification of receipt (either letter or email) that the appropriate permit or lack of need for a Report of Waste Discharge permit has been acknowledged by the Central Valley RWQCB.	County of Tulare Planning and Public Works Department and TCEHSD			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	requirements, site restoration, and other requirements. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility. Harvest Power California LLC, needs to submit a report of waste discharge (see enclosed Form 200) with a report describing the operation, along with the appropriate fee, to our office. Based on the submitted information, the threat to water quality is tentatively rated 3 and the complexity C, resulting in 'a filing fee of $2,776. The filing fee is the first year's annual fee (e.g., waste discharge permit fee).						
3.9-3	The applicant shall prepare and submit a SWPPP to Tulare County prior to the issuance of a building permit. This SWPPP shall be implemented and retain on site as part of business operations.	Prior to Issuance of Building Permits	Approval of SWPPP by Public Works.	County of Tulare Planning and Public Works Department,			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
				Public Works Department, and TCEHSD			
3.9-4	That any tanks or basin lining be designed to RWQCB standards and approved by TCEHSD prior to the issuance of a building permit.	Prior to Issuance of Building Permits	Approval of Piping plan by TCEHSD	County of Tulare Planning and Public Works Department, Public Works Department, and TCEHSD			
3.9-5	That any piping be reviewed and approved by the TCEHSD to verify that the contents will not pollute the groundwater.	Prior to Issuance of Building Permits	Approval of Piping plan by TCEHSD	County of Tulare Planning Works Department, Public Works Department, and TCEHSD			
3.9-6	The drainage system, including the	Prior to	Verification of	County of			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	berms, and the retention pond and drainage swale facilities shall be designed, and the plans stamped by a registered Professional Engineer, of whom must be registered and/or licensed in California, and have professional knowledge and experience in the field of on site drainage and detention facility design. The specifications and engineering data for the drainage system and detention facilities shall be submitted to the Public Works Department and TCEHSD for review and approval prior to the issuance of a building permit.	Issuance of Building Permits	receipt (either letter or email) that the appropriate permit or lack of need for a Report of Waste Discharge permit has been acknowledged by the Central Valley RWQCB.	Tulare Planning, Pubic Works Department, and TCEHSD			
Land Use and Planning							
3.10-1	The composting and anaerobic digester operator shall adhere to all conditions of approval (COA's) noted in the Use Permits for the composting expansion and the anaerobic digester.	Prior to Issuance of Building Permits	Letter of Compliance with all COA from both Special Use Permits for this Project.	County of Tulare Planning Department			
Public Services							
3.14-1	Applicant shall provide an all weather access road to the site and						

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	any buildings affected by the Special Use Permit.						
3.14-2	Applicant shall submit plans for any new construction, remodeling, alterations, or building additions. All new construction shall meet 2007 Building Code, Fire Code, Mechanical Code, Electric Code and Plumbing Code, as applicable.	Prior to Issuance of Building Permits	Submittal and Approval of 100% construction plans.	County of Tulare Pubic Works Department			
3.14-3	If proposed use constitutes a change of occupancy, the existing building(s) affected by the change of occupancy and the Special Use Permit shall comply with 2007 Building and Fire Codes and other adopted standards.	Prior to Issuance of Building Permits	Submittal and Approval of 100% construction plans.	County of Tulare Fire Department			
3.14-4	The Tulare County Fire Department shall be notified of the proposed start date of any processing, storage, or special use granted and mitigated prior to initiation of any building operations.	Prior to Occupancy	Notification to the Fire Department of processing, storing or special use granted or mitigated.	County of Tulare Fire Department			
3.14-5	Violations of any of these conditions will result in Tulare County Fire Department's rescission of approval of the	Prior to Occupancy Fire Department Inspection for	Inspection by Fire Department at plan check, building code	County of Tulare Fire Department			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	Special Use Permit.	Violations	approval, and prior to occupation.				
Utilities and Services							
3.17-1	The Project shall comply with any conditions required by the RWQCB for wastewater treatment for on-site effluent treatment in lagoons or tanks. RWQCB conditions shall be forwarded to the Tulare County Planning Branch and the Environmental Health and Human Services Agency for appropriate action.	Prior to Occupancy that any RWQCB conditions be forwarded and considered.	Notification and a consideration of RWQCB conditions.	Tulare County Planning Department and TCEHSD			
3.17-2	The Project shall be required to obtain any applicable permit from the RWQCB as appropriate.	Prior to Issuance of Building Permits	Verification of receipt (either letter or email) that the appropriate permit or lack of need for a Report of Waste Discharge permit has been acknowledged by the Central Valley RWQCB.	County of Tulare Planning and Public Works Department and TCEHSD			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
3.17-3	The Project shall include all facilities as specified by the RWQCB and/or the Tulare County Planning Branch and the Environmental Health and Human Services Agency.	Prior to Issuance of Building Permits	Verification of receipt (either letter or email) that the appropriate permit or lack of need for a Report of Waste Discharge permit has been acknowledged by the Central Valley RWQCB.	County of Tulare Planning and Public Works Department and TCEHSD			
3.17-4	The applicant shall prepare a SWPPP prior to construction and keep it on site per the NPDES requirements.	Prior to Issuance of Building Permits	Approval of SWPPP by Public Works.	County of Tulare Planning and Public Works Department, Public Works Department, and TCEHSD			
3.17-5	The Project's drainage facilities and grading be designed to RWQCB, Tulare County Public Works, CalRecycle and Tulare	Prior to Issuance of Building Permits	Approval of drainage plan	County of Tulare Planning and Public			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	County Environmental Health Standards and approved by a certified Professional Engineer. Certification shall indicate that the Project will accommodate 100 year, 24 hour storm events in accordance with the noted Agencies standards.			Works Department, Public Works Department, and TCEHSD			
3.17-6	The applicant shall obtain an updated Solid Waste Facility Permit (SWFP) per CCR, Title 27, Section 21570. A SWFP must be obtained prior to the issuance of building permits, the commencement of the additional composting, and the construction of the anaerobic digestion facility.	Prior to Issuance of Building Permits	Applicant shall submit a copy of the Solid Waste Facility Permit (SWFP)	County of Tulare Planning and Public Works Department and Cal Recycle local LEA: Keith Janke (559) 624-7430			
Mandatory Findings of Significance							
3.18-1	Update the Odor Impact Management Plan (OIMP) required by Cal Recycle at the facility to maintain its effectiveness despite the Project's increase in the tonnage processed	Prior to Issuance of Building Permits	Applicant shall submit a copy OIMP	County of Tulare Planning and Public Works Department			

Mitigation Monitoring Reporting Program							
Mitigation Measure		**Monitoring Timing/ Frequency**	**Action Indicating Compliance**	**Monitoring Agency**	**Verification of Compliance**		
					Initials	**Date**	**Remarks**
	and differing digestion material.			and Cal Recycle local LEA: Keith Janke (559) 624-7430			

List of Attachments

<u>Attachment 1</u>: OPR 30 Day Review Approval Documentation

- RMA Request for Shortened Review Period, March 5, 2013
- OPR Transmittal Letter, April 7, 2013
- OPR corrected Transmittal Letter dated April 11, 2013.

<u>Attachment 2</u>: Hector Guerra email to Troy Ewell

<u>Attachment 3</u>: Comments from neighboring properties owners

- Comment Letter 1 - Tavioli & Neely, March 30, 2013
- Comment Letter 2 - Sun Pacific, April 1, 2013

<u>Attachment 4</u>: Comments from Federal, State, or County Agencies

- Comment Letter 3 - California Energy Commission, April 5, 2013
- Comment Letter 4 - CalTrans, April, 3, 2013
- Comment Letter 5 - CalRecycle, April 4, 2013
- Comment Letter 6 - Regional Water Quality Control Board, April 9, 2013
- Comment Letter 7 San Joaquin Valley Air Pollution Control District, April 3, 2013
- RMA Response Letters to Agency Comment Letters

<u>Attachment 5</u>: Comments from Legal Counsel for Sundale Vineyards

- Comment Letter 8 - Wanger Jones Helsey Letter, March 28, 2013
- Comment Letter 9 - Wanger Jones Helsey Letter, April 5, 2013

<u>Attachment 6</u>: Comments from Supporters of the Proposed Project

- Comment Letter 10 - Penny Allen, Ag Science Director at Sundale Union School, April 15, 2013
- Comment Letter 11 - Tim Souza, Tim Souza Cattle Co., April 14, 2013
- Comment Letter 12 – Lee Swall, Swall Farms, FLP, April 12, 2013

<u>Attachment 7</u>: Insight Environmental Consultants Response to Comments

<u>Attachment 8</u>: Resolutions for PSP 92-091 and PSP 99-026 (ZA)

<u>Attachment 9</u>: Siemer & Associates, Dust Study, November 15, 1999

<u>Attachment 10</u>: E-mail from Keith Jahnke to Aaron Bock.

<u>Attachment 11</u>: California Energy Commission e-mail to Aaron Bock

<u>Attachment12</u>: Memo regarding discussion with neighbor

<u>Attachment 13</u>: E-mail from Sung Kwon to Andre Amy

<u>Attachment 14</u>: Draft General Order for Composting

Attachment 1:

OPR 30 Day Review Approval Documentation

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- OPR corrected Transmittal Letter dated April 11, 2013

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Blvd
Visalia, CA 93277
Phone (559) 624-7000
Fax (559) 730-2653

Michael C. Spata, Planning
Britt L. Fussel, Public Works
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

March 5, 2013

State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Re: Shortened Review Period for Draft Environmental Impact Report (DEIR) SCH# 2012101010

To Whom It May Concern,

Attached is a Shortened ReviewRequest Form regarding SCH# 2012101010 Harvest – Tulare Anaerobic Digester and Compressed Natural Gas Facility. We are requesting a 30-day review period of the DEIR commencing March 7, 2013 and ending on April 6, 2013, consistent with. Public Resources Code Section 21091(e), CEQA Section 15205(d) Criterion 2, of Appendix K, to wit:

"The public project applicant is under severe time constraints with regard to obtaining financing or exercising options which cannot be met without shortening the review period."

The Applicant for this project received a California Energy Commission Grant award which will be finalized upon completion of the CEQA process. However, CEQA must be completed prior to July 1, 2013. The shortened review period will allow the project to continue through the draft review, public noticing, final review, and public hearing/action process before the County of Tulare Planning Commission.

We have received concurrence from the agencies/contacts as shown in the Shortened Review Request Form. In summary, they are: Caltrans District 06, California Department of Fish and Wildlife Region 04, Calfornia Energy Commission, CalRecycle, Regional Water Quality Control Board Region 05, and the San Joaquin Valley Unified Air Pollution Control District.

If you have any question please contact Mr. Hector Guerra, Chief Environmental Planner at (559) 624-7121, hguerra@co.tulare.ca.us, or via FAX at (559) 730-2653.

Respectfully Submitted,

Hector Guerra 3/4/13
Hector Guerra Date
Chief Environmental Planner
Tulare County Resource Management Agency
Planning Branch, Enivronmental Planning Division

Michael C. Spata 3/4/13
Michael C. Spata Date
Planning Director
Environmental Assessment Officer
Tulare County Resource Management Agency

Shortened Review Request Form

(To be filled out and signed by the Lead Agency and submitted with DEIR or Negative Declaration to SCH)

To: State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

From: Tulare County Resource Management Agency
Lead Agency
5961 S. Mooney Blvd.
Address
Visalia, CA 93277
Phone #: (559) 624-7121

SCH # 2012101010

Contact: Hector Guerra, Chief Environmental Planner

Project Title: Harvest Power LLC: Harvest Power Project (Draft Environmental Impact Report)

Project Location: 24487 Road 140, Tulare, CA 93274 (City) Tulare County (County)

Explain "exceptional circumstances" (CEQA, Section 15205(d)) for requesting a shortened review. Identify which of the 5 criteria in Appendix K are met for this project.

We are requesting a 30-day review period of the DEIR commencing March 7, 2013 and ending on April 5, 2013, consistent with Public Resources Code Section 21091(e), CEQA Section 15205(d) Criterion 2, of Appendix K, to wit:

"The public project applicant is under severe time constraints with regard to obtaining financing or exercising options which cannot be met without shortening the review period."

The Applicant for this project received a California Energy Commission Grant award which will be finalized upon completion of the CEQA process. However, CEQA must be completed prior to July 1, 2013. The shortened review period will allow the project to continue through the draft review, public noticing, final review, and public hearing/action process before the County of Tulare Planning Commission.

List responsible and trustee state agencies with contact person, phone number and date of consent for the shortened review, as well as any agencies that have commented on the project (attach additional pages, if necessary):

David Deel, Caltrans District 06 (559) 488-7396; Virginia Rosales, CalRecycle, (916) 341-6329;

Patia Siong, SJVUAPCD (559) 230-5930; Steve Hulbert, CA Dept. of Fish and Wildlife (559) 243-4014 ext. 289;

Scott Moore, RWQCBoard (559) 445-5170; Daren Ng, California Energy Commission (916) 654-5144

As designated representative for the lead agency, I verify, in their behalf, that there is no "statewide, regional, or areawide significance" to this project.

Length of review being requested: 30 days

03/04/2013 — Today's Date

Hector Guerra — Print Name

Signature

Revised 2006

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

RECEIVED
MAR 13
RESOURCE MANAGEMENT AGENCY

Memorandum

Date: March 11, 2013

To: All Reviewing Agencies

From: Scott Morgan, Director

Re: SCH # 2012101010

Harvest - Tulare Anaerobic Digester and Compressed Natural Gas Facility Project

---

The State Clearinghouse forwarded the above-mentioned project to your agency for review on March 7, 2013 with incorrect review dates. Please make note of the following information for your files:

Review period ends: **April 5, 2013 (Shortened Review)**

We apologize for any inconvenience this may have caused. All other project information remains the same.

cc: Hector Guerra
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277-9394

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916)445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH# 2012101010

Project Title: The Harvest Power LLC: Harvest Power Project

Lead Agency: Tulare County Resource Management Agency
Contact Person: Hector Guerra, Chief Envir. Planner
Mailing Address: 5961 S. Mooney Blvd.
Phone: 559-624-7121
City: Visalia
Zip: 93277-9394
County: Tulare County

Project Location: County: Tulare
City/Nearest Community: City of Tulare
Cross Streets: Road 140 and Avenue 240
Zip Code: 93274
Lat./Long: 36 ° 13 ' 56.58 " N/ 119 ° 16 ' 10.54 " W
Total Acres: 67.6
Assessor's Parcel No: 150-130-004, 150-140-009, -014, -016
Section: 33, Township 19S, Range 25E, M.D.B.& M
Within 2 Miles: State Hwy: SR 137, SR 63
Waterways:
Airports:
Railways: None
Schools: Sundale Elem. & Sundale Preschool

RECEIVED
MAR 07 2013
STATE CLEARING HOUSE

CEQA:
- [ ] NOP
- [ ] Early Cons
- [ ] Neg Dec
- [ ] Mit Neg Dec
- [x] Draft EIR
- [ ] Supplement/Subsequent EIR
- [ ] Draft EIS
- Other:

NEPA:
- [ ] NOI
- [ ] EA
- [ ] Other
- [ ] FONSI

Other:
- [ ] Joint Document
- [ ] Final Document

Local Action Type:
- [ ] General Plan Update
- [ ] General Plan Amendment
- [ ] General Plan Element
- [ ] Community Plan
- [ ] Specific Plan
- [ ] Master Plan
- [ ] Planned Unit Dev.
- [ ] Site Plan
- [ ] Rezone
- [ ] Prezone
- [x] Use Permit
- [ ] Land Division (Sub.)
- [ ] Annexation
- [ ] Redevelopment
- [ ] Coastal Permit
- [ ] Other

Development Type:
- [ ] Residential: Units _ Acres _
- [ ] Office: Sq. ft. __ Acres __ Employees __
- [ ] Commercial: Sq. ft. __ Acres __ Employees __
- [x] Industrial: Sq. ft. __ Acres 87.6 Employees 12
- [ ] Educational:
- [ ] Recreational:
- [ ] Water Facilities: Type ____ MGD ____
- [ ] Transportation: Type
- [ ] Mining: Mineral
- [ ] Power: Type ____ MW ____
- [x] Waste Treatment: Type ____ MGD ____
- [ ] Hazardous Waste: Type
- [ ] Other:

Project Issues Discussed in Document:
- [x] Aesthetic/Visual
- [x] Agricultural Land
- [x] Air Quality
- [x] Archaeological/Historical
- [x] Biological Resources
- [ ] Coastal Zone
- [x] Drainage/Absorption
- [x] Economic/Jobs
- [ ] Fiscal
- [x] Flood Plain/Flooding
- [x] Forest Land/Fire Hazard
- [x] Geologic/Seismic
- [x] Minerals
- [x] Noise
- [x] Population/Housing Balance
- [ ] Public Services/Facilities
- [x] Recreation/Parks
- [x] Schools/Universities
- [x] Septic Systems
- [ ] Sewer Capacity
- [x] Soil Erosion/Compaction/Grading
- [x] Solid Waste
- [x] Toxic/Hazardous
- [x] Traffic/Circulation
- [x] Vegetation
- [x] Water Quality
- [x] Water Supply/Groundwater
- [ ] Wetland/Riparian
- [x] Wildlife
- [x] Growth Inducing
- [x] Land Use
- [x] Cumulative Effects
- [ ] Other:

Present Land Use/Zoning/General Plan Designation:
Existing composting facility (green material, food, and dairy manure) zoned AE-40 (Exclusive Agriculture, 40 acre minimum)

Project Description:
The Harvest-Tulare composting facility currently holds operating permits to compost green material, food, and dairy manure. The proposed Project will increase and shift types of materials and quantities accepted at the facility. Harvest Power California LLC is proposing to add an anaerobic digester to the existing Harvest-Tulare composting operations to process organic materials into fuel and digestate that will contribute to soil amendment production. Both a high solids digester (processing food and green material) and a low solids digester (processing primarily food material) alternatives will be evaluated in the environmental document.

State Clearinghouse Contact: DR
(916) 445-0613
State Review Began: 3 . 7 . 2013
SCH COMPLIANCE 4 ~~16~~ 5 2013
Note: Shortened review

Please note State Clearinghouse Number (SCH#) on all Comments

SCH#: 2012101010
Please forward late comments directly to the Lead Agency

AQMD/APCD 37
(Resources: 3, 9)

Project Sent to the following State Agencies

- X Resources
- ___ Boating & Waterways
- ___ Coastal Comm
- ___ Colorado Rvr Bd
- X Conservation
- X CDFW # 4
- ___ Delta Protection Comm
- ___ Cal Fire
- X Historic Preservation
- X Parks & Rec
- ___ Central Valley Flood Prot.
- ___ Bay Cons & Dev Comm.
- X DWR
- ___ Cal EMA
- X Resources, Recycling and Recovery

Bus Transp Hous
- ___ Aeronautics
- X CHP
- X Caltrans # 6
- ___ Trans Planning
- ___ Housing & Com Dev
- ___ Food & Agriculture
- ___ Public Health

State/Consumer Svcs
- ___ General Services

Cal EPA
- ___ ARB: Airport/Energy Projects
- ___ ARB: Transportation Projects
- ___ ARB: Major Industrial Projects
- ___ SWRCB: Div. Financial Assist.
- ___ SWRCB: Wtr Quality
- ___ SWRCB: Wtr Rights
- X Reg. WQCB # 5F
- X Toxic Sub Ctrl-CTC

Yth/Adlt Corrections
- ___ Corrections

Indepeodent Comm
- X Energy Commission
- X NAHC
- X Public Utilities Comm
- X State Lands Comm
- ___ Tahoe Reg Plan Agency
- ___ ___ Conservancy

___ Other: ___

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

March 7, 2013

MAR 2013
RECEIVED
RESOURCE MANAGEMENT AGENCY

Hector Guerra
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA, 93277

RE: Harvest Power Project, (EIR) SCH# 2012101010

Dear Mr. Guerra:

We have reviewed your shortened review request and have determined that it is consistent with the criteria set forth in the written guidelines of the Office of Planning and Research for shortened reviews, and Section 21091 of the Public Resources Code.

The shortened review period for an EIR shall not be less than 30 days. The review process for the referenced project will start on March 7, 2013 and end on April 6, 2013.

If you have any questions, please contact Ben Rubin at (916) 445-0613.

Sincerely,

Scott Morgan
Director

cc: file

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Attachment 2:

Hector Guerra email to Troy Ewell

From: Troy Ewell <tewell@wjhattorneys.com>
To: 'Hector Guerra' <HGuerra@co.tulare.ca.us>
Date: 04/04/2013 5:47 PM
Subject: RE: Harvest Power public review period

Thank you.

Troy T. Ewell
Attorney
WANGER JONES HELSLEY PC
265 E. River Park Circle, Suite 310
Fresno, California 93720
Phone: (559) 233-4800 Ext. 110
Fax: (559) 233-9330
Website: www.wjhattorneys.com

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To ensure compliance with requirements imposed by the IRS, we inform you that any U.S. federal tax advice contained in this communication (including any attachments) is not intended or written

----Original Message----
From: Hector Guerra [mailto:HGuerra@co.tulare.ca.us]
Sent: Thursday, April 04, 2013 5:46 PM
To: Troy Ewell
Subject: Harvest Power public review period

Good Evening Mr. Ewell,

You are correct; the public review period for the Harvest Power DEIR ends tomorrow, April 5, 2013.

Best Regards,

Hector Guerra

Attachment 3:

Comments from Neighboring Properties Owners

- Comment Letter 1 - Tavioli & Neely, March 30, 2013
- Comment Letter 2 - Sun Pacific, April 1, 2013

SUN PACIFIC®

• GROWERS AND SHIPPERS OF QUALITY FRUITS & VEGETABLES •

April 1, 2013

Tulare County Planning Commission
Tulare, CA

Dear Sirs:

We have owned and operated our Tulare Packing Facility on the south side of Avenue 248 since we acquired it in 2005. Since that time, we have never had any problems or issues whatsoever with the composting operation to the south-east of us, formerly operated by Tulare County Compost and Biomass.

Should you wish to speak to a representative of our company, please contact me at our Exeter office at 592-5168.

Sincerely,

R.W. Reniers
General Partner

SALES (559) 592-7121 • FARMING (559) 592-3280 • PACKING (559) 592-5168
POST OFFICE BOX 217, EXETER, CALIFORNIA 93221

March 30, 2013

Hector Guerra
Chief Environmental Planner
Tulare County Resource Management Agency
5961 South Mooney Blvd
Visalia, CA. 93277

RE: Harvest Power Project

Dear Mr. Guerra:

We are writing to voice our concerns on the proposed Harvest Power Project located northeast from Tulare. This project will soon come soon before the Tulare County Planning Commission.

We were notified of the Draft Environmental Impact Report and possible hearing soon after the April 5th date. For the past twenty three years, have enjoyed living at our home.

We are concerned with the development of the anaerobic digester and the requested 40% increase in product delivered to the facility plus its processing on the existing site. Our apprehensions are as follows:

1) Increased traffic of deliveries to the site. Road 140 and Ave 240 are already busy highways especially with Sundale School at the corner of the nearby intersection.

2) If the power project is storing gas for refueling will cause additional traffic concerns.

3) There is already odor from the composting plant. The increase in processed waste will cause additional odors.

4) The increase in waste plus additional waste products will have water discharges. We have concerns on the waste water, its storage and the concerns on the underground water table.

We feel at the proposed location this will not be a benefit to the environment and the community.

Sincerely,

Lynn Travioli James Neeley

Lynn Travioli

Lynn Travioli & James Neeley
13192 Ave 240
Tulare, CA. 93274

Attachment 4:

Comments from Federal, State, or County Agencies

- Comment Letter 3 - California Energy Commission, April 5, 2013
- Comment Letter 4 - CalTrans, April, 3, 2013
- Comment Letter 5 - CalRecycle, April 4, 2013
- Comment Letter 6 - Regional Water Quality Control Board, April 9, 2013
- Comment Letter 7 San Joaquin Valley Air Pollution Control District, April 3, 2013
- RMA Response Letters to Agency Comment Letters

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

April 3, 2013

Hector Guerra
County of Tulare
Planning Department
5961 South Mooney Boulevard
Visalia, CA 93277

Project: DEIR – Harvest Power Project
District CEQA Reference No: 20130218

Dear Mr. Guerra:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of allowing the maximum total tonnage from an existing composting facility to increase from 156,000 tons per year to a potential 216,000 tons per year, located west of Road 140 between Avenues 240 and 248, east of the City of Tulare, CA. The District offers the following comments:

1. Based on information provided to the District, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOX, 10 ton/year ROG, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

2. On page 3.3-29 of the DEIR it states "the stationary source emissions from the composting facility require permits from the SJVAPCD to operate" and that "SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent". The District concurs the project will require permits and stationary source emissions will be mitigated.

3. The following are comments on the Ambient Air Quality Analysis (AAQA) and Health Risk Assessment (HRA)

   A. Sources included in the AAQA and HRA are the increases in diesel particulate emissions from truck traffic, truck idling, and equipment and ammonia emissions from the composting facility. The analyses do not include emissions from the following sources:

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

Printed on recycled paper.

1) Toxic organic compounds emitted during the composting process – The District has emission factors for such compounds as MEK, methylene chloride, toluene, etc.

2) Heavy metal content of dust emitted from the composting process – The District has emission factors posted on its website.

3) Biofilter – These emissions would be a small fraction of those compounds emitted from the digesting process.

4) Internal combustion engine.

B. The cancer risk estimated by the HRA is 7.76 in a million. Unless the risk from the sources not included in this analysis are less than 2.24 in a million, the risk from the project would be significant. Emissions from the internal combustion engine are likely to be the main contributor to additional risk.

C. During the past few years, the facility has permitted five diesel engines. The District's estimate of risk from those engines and other recently issued permits will also limit allowable risk from the proposed sources in this project.

D. The HRA, and the AAQA for the DEIR do not adequately quantify and assess potential emissions from the digesting process and the associated compressed natural gas and combined heat and power processes. This can be resolved by one of the two following options:

1) Quantify toxic and criteria emissions from these processes and include them in the AAQA and HRA.

2) Identify that the sources were not addressed sources and commit to including the risks and ambient air quality impacts in this DEIR in the District's permitting process such that any permits issued by the District would not result in the project being significant.

E. Additional risk from the emission of toxic compounds from the increase in composting activity that are not included in this DEIR should be incorporated in the final EIR. This can be accomplished easily by including emissions of the additional compounds in the Hot Spots Analysis and Reporting (HARP) model.

4. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above

list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

5. The District recommends that a copy of the District's comments be provided to the project proponent.

If you have any questions or require further information, please call David McDonough, at (559) 230-5920.

Sincerely,

David Warner
Director of Permit Services

For, Arnaud Marjollet
Permit Services Manager

DW: dm

Cc: File

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

TO: DANIEL L. CARLSON
Senior Engineering Geologist
PG No. 5379, CEG No. 1695, CHG No. 488

FROM: V. SCOTT MOORE
Engineering Geologist
P.G. 6176

DATE: 9 April 2013

SUBJECT: REVIEW OF A DRAFT ENVIRONMENTAL IMPACT REPORT, HARVEST POWER CALIFORNIA LLC, SCH# 2012101010, TULARE COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff (Staff) received the subject Draft Environmental Impact Report (DEIR) on 7 March 2013. The DEIR was prepared and submitted by the Tulare County Resource Management Agency Planning Branch, the lead agency, to request comments regarding operational modifications to the Harvest Power California LLC, composting facility (formerly Tulare County Composting & Biomass, Inc.). My comments on the DEIR, that are germane to water quality, are presented below.

PROJECT PROPOSAL

The project proposes to:

- Increase the amount of composting material (combined green waste, food materials, and manure) from 156,000 tons per year to a maximum of 216,000 tons per year;
- Construct a low to high solids anaerobic digestion facility that handles 60,000 tons of materials per year; and
- Construct a compressed natural gas fueling station.

COMMENTS

Under Water Code Section 13269, the Central Valley Water Board formerly regulated green waste composting facilities under Resolution No. 96-031 *Conditional Waiver of Waste Discharge Requirements for Composting Operations*. In 1999, passage of Senate Bill 390 modified Water Code Sections 13269 and 13350 to sunset all existing waivers of waste discharge requirements as of 1 January 2003. Therefore, the Harvest Power California LLC, composting facility no longer operates under a conditional waiver of waste discharge requirements for green waste composting pursuant to Central Valley Water Board Resolution 96-031. The State Water Resources Control Board is currently drafting a general order, *General Waste Discharge Requirements for the Discharge of Wastes at Compost Management Units, Order No. DWQ-2012-TENT* (General WDRs), for the discharge of wastes at compost management units. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility. Harvest Power California LLC, needs to submit a report of waste discharge (see enclosed Form 200) with a report describing the operation, along with the appropriate fee, to our office. Based on the submitted information, the threat to water quality is tentatively rated 3 and the complexity C, resulting in a filing fee of $2,776. The filing fee is the first year's annual fee (e.g., waste discharge permit fee). There are no additional comments at this time.

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

9 April 2013

Hector Guerra
Chief Environmental Planner
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277-9394

REVIEW OF A DRAFT ENVIRONMENTAL IMPACT REPORT, HARVEST POWER CALIFORNIA LLC, SCH# 2012101010, TULARE COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff (Staff) received the subject Draft Environmental Impact Report (DEIR) on 7 March 2013. The DEIR was prepared and submitted by the Tulare County Resource Management Agency Planning Branch, the lead agency, to request comments regarding operational modifications to the Harvest Power California LLC, composting facility. Staff's comments on the revised proposal are presented in the enclosed memorandum.

The State Water Resources Control Board is currently drafting a general order (General WDRs) for the discharge of wastes at compost management units. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility. Harvest Power California LLC, needs to submit a report of waste discharge (see enclosed Form 200) with a report describing the operation, along with the appropriate fee, to our office. Based on the submitted information, the threat to water quality is tentatively rated 3 and the complexity C, resulting in a filing fee of $2,776. The filing fee is the first year's annual fee (e.g., waste discharge permit fee).

If you have any questions regarding this review, please contact Scott Moore at (559) 445-5170 or by email at vmoore@waterboards.ca.gov.

DANIEL L. CARLSON
Senior Engineering Geologist
PG No. 5379, CEG No. 1695, CHG No. 488

Enclosures: Staff Memorandum
Form 200

cc: Patrick Snider, California Department of Resources Recycling and Recovery, Sacramento
Ken Bowers, Tulare County Health Department, Visalia

CalRecycle

DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

1001 I STREET, SACRAMENTO, CALIFORNIA 95814 • WWW.CALRECYCLE.CA.GOV • (916) 322-4027
P.O. BOX 4025, SACRAMENTO, CALIFORNIA 95812

RECEIVED
APR 3 2013
STATE CLEARING HOUSE

April 4, 2013

Hector Guerra
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277

Subject: SCH No. 2012101010 - Draft Environmental Impact Report for Harvest Power Project - Anaerobic Digestion (AD) and Compressed Natural Gas (CNG) at Tulare County Compost and Biomass, Facility No. 54-AA-0026

Dear Mr. Guerra:

Thank you for allowing the Department of Resources Recycling and Recovery (CalRecycle) staff to provide comments on the Draft Environmental Impact Report (EIR) for this proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

Project Description

The proposed project is located at 24487 Road 140 in Tulare County. The proposed project would: expand the current composting operation at Tulare County Compost and Biomass (Facility No. 54-AA-0026) from 86,000 tons per year to 216,000 tons per year; allow the addition of an anaerobic digester; allow the processing of organic material into fuel and digestate; and allow the addition of a compressed natural gas (CNG) fueling station and combined heat and cooling unit (CHP). The facility will be either a high solids digester (food and green waste) or a low solids digester (primarily food). Both feedstock options are evaluated in the Draft EIR.

Composting feedstocks would include food material, yard material or green waste, and dairy manure. The composting facility is currently permitted to receive 500 tons per day (tpd), and would increase to 1,000 tpd. Incoming material would be screened, ground, and placed into windrows and monitored to meet pathogen reduction. Traffic to the composting facility would not exceed 85 vehicle trips. Community drop off days would be incorporated into the permitted hours of operation. The Odor Impact Mitigation Plan (OIMP) will address odor concerns.

AD feedstocks would include green material and food waste [scraps from local restaurants and cafeterias, food processing residuals, and restaurant fats, oils, and grease (FOG)]. The AD is expected to process 192 tpd six days a week. Liquid materials would be directly pumped into a sealed reception tank. Food waste would be off-loaded into a sealed container. Organics would

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be separated from non-organics and the organic fraction pulverized and pumped into the digester. Digestate would be added to the windrow composting process. Liquid waste would be stored in lined and covered ponds. Traffic would not exceed 25 truck trips at the AD operation for a total of 110 truck trips combined for composting and AD operations. The OIMP would address odor concerns as well as the use of a biofilter. The AD would be built on three acres of the 35 acre composting operation.

Comments

The Tulare County Department of Health Services, Division of Environmental Health (as the Local Enforcement Agency (LEA) for Tulare County) and CalRecycle are responsible for providing regulatory oversight of solid waste handling activities such as compost and anaerobic digestion facilities. The permitting and regulatory requirements for compost and AD facilities are contained in Title 14 and Title 27 of the California Code of Regulations (14 or 27 CCR).

Project Description
What is the expected temperature of the AD process, for both the low solids and high solids processes? The temperature and the time the material is kept at temperature is a factor in effective pathogen reduction. It can also be a determining factor for which type of solid waste facility permit is required.

Hours of Operation
The composting facility is currently permitted to receive waste from 7:00 a.m. to 4:30 p.m. Monday through Friday and 8:00 a.m. to 4:00 p.m. Saturdays, closed on Sundays. Will there be any change in days and/or operating hours resulting from the project, including public drop off times? What are the anticipated hours of that waste will be received at the AD activity?

Permitted Boundary
The composting facility is currently permitted to operate on 35 acres of an 88 acre parcel. The project description describes constructing the AD on three of the permitted 35 acres. Are there anticipated changes to the permitted boundary? How will the reduction of 3 acres from the existing compost activity affect the design and operation of the composting activity?

Permits
A Solid Waste Facilities Permit (SWFP) revision will be required for this project. The LEA contact for this proposed project is Keith Jahnke; he can be reached at (559) 624-7430 or by e-mail at kjahnke@tularehhsa.org). Please contact the LEA to discuss permit requirements for the project.

Conclusions

CalRecycle staff thanks the Lead Agency for the opportunity to review and requests any subsequent environmental documents, copies of public notices and any Notices of Determination for this project.

If you have any questions regarding these comments, please contact me at (916) 341-6772 or by e-mail at jov.isaacson@calrecycle.ca.gov.

Sincerely,

Joy Isaacson, Waste Management Specialist
Permitting & Assistance Branch
Waste Permitting, Compliance & Mitigation Division
CalRecycle

cc: Ken Decio, CalRecycle
Virginia Rosales, CalRecycle

Keith Jahnke, LEA
Tulare County Department of Health Services
kjahnke@tularehhsa.org

DEPARTMENT OF TRANSPORTATION
DISTRICT 6
1352 WEST OLIVE AVENUE
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FAX (559) 488-4088
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April 3, 2013

RESOURCE MANAGEMENT AGENCY
APR 2013
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2135-IGR/CEQA
6-TUL-137-22.22 +/-
DEIR & TIS
HARVEST POWER COMPOSTING FACILITY
SCH # 2012101010

Mr. Hector Guerra
Chief Environmental Planner
County of Tulare - Resource Management Agency
5961 S. Mooney Boulevard
Visalia, CA 93277

Dear Mr. Guerra:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) and included Traffic Impact Study (TIS) for the Harvest Power, Inc. composting facility expansion project. The project is located at 24487 Road 140 at the Avenue 245 intersection, approximately 1.6 miles north of the State Route (SR) 137/Road 140 intersection. The project is proposing to:

a) Increase the amount of composting material from the current maximum of 156,000 tons per year (tpy) to a maximum of 216,000 tpy (consisting of 156,000 tpy of green and food material and 60,000 tpy of manure);
b) Construct a low to high solids anaerobic digestion facility to handle 60,000 tpy;
c) Construct a Biogas unit, a Compressed Natural Gas fueling station and a Combined Heat and Power unit for cogeneration power usage.

Caltrans has the following comments:

Based on the information provided, the TIS adequately analyzed the SR 137/Road 140 intersection and no further analysis is required at this time. Caltrans anticipates that the amount of vehicle trips generated by the project will have a less than significant impact to SR 137.

Please send a response to our comments and subsequently a copy of the resolution related to the proposed project. If you have any questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
District 6

copy via email: Caltrans Traffic Operations

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

April 5, 2013

Hector Guerra
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277

Subject: Draft Environmental Impact Report (DEIR) for Harvest Power LLC: Harvest Power Project (State Clearinghouse #2012101010)

Dear Mr. Guerra:

As a Responsible Agency, the California Energy Commission (Energy Commission) staff is pleased to submit this letter in support of the Harvest Power Project. The project will allow a maximum total tonnage for composting to increase from 156,000 tons per year to 216,000 tons per year and an additional 60,000 tons will be allowed at the anaerobic digester facility. The facility will produce transportation fuel through a compressed natural gas refueling station.

The project will provide the following benefits: (1) greenhouse gas emission (GHG) reductions that help meet the objectives for 2020 and 2050 goals compared to the 1990 base year under AB 32; (2) support Tulare County's General Plan and Climate Action Plan policies which include water conservation, soil erosion control, crop disease suppression, and increased crop yields; (3) provide additional renewable energy to Tulare County; (4) expand production of organically certified soil to fill the needs of a niche market; (5) increase business operations within Tulare County which would result in more jobs and tax revenues; and (6) reduce the amount of solid green waste that is going to the landfills by recycling them and re-use them as compost. The organic food processing waste will be reduced through digestion and turned into energy or applied as liquid to the compost.

Responsible Agency Comments:

Odor

As stated in the DEIR, despite the evaluation of alternatives to reduce the odor, including the implementation of mitigation, the findings indicate that the cumulative odor impact will remain significant. Energy Commission staff concurs that all avenues have been exhausted and incorporated in the DEIR. Staff analysis confirms that the best practicable way in managing the odors is by implementing the Best Management Practices as well as the Odor Impact Mitigation Plan along with the Solid Waste Management Plan.

Remaining Environmental Impacts

Staff has analyzed the remaining environmental impacts in the DEIR and agrees that these impacts can be reduced to less than significant with the mitigation measures recommended.

Thank you for allowing the California Energy Commission staff to provide comments for the proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

The Energy Commission staff would also like to extend our gratitude for the expedited 30-day review period which was needed in order to ensure that the grant funding deadline for both the Anaerobic Digester and the Compressed Natural Gas facility grants are met.

Sincerely,

Darren Nguyen, Energy Analyst
Emerging Fuels and Technologies Office
Fuels and Transportation Division
California Energy Commission

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
VISALIA, CA 93277.
PHONE (559) 624-7000
FAX (559) 730-2653

Michael C. Spata, Planning
Britt L.Fussel, Public Works
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

April 12, 2013

Mr. V. Scott Moore,
Engineering Geologist, PG 6176
1685 "E" Street
Fresno, CA 93706

RE: Central Valley Regional Water Quality Control (CVRWQCB) Response to Comments to the Harvest Power Project Draft EIR (DEIR) SCH# 2012101010

Dear Mr. Moore,

Thank you for providing the Central Valley Regional Water Quality Control (CVRWQCB or RWQCB) written comments (attached) regarding DEIR Harvest Power (Project), SCH No. 2012101010. We sincerely appreciate your timely response. The County of Tulare acknowledges and recognizes the RWQCB's authority and expertise regarding the water quality resource and matters. Following is the County of Tulare Resource Management Agency (RMA) responses to the RWQCB's comments:

We would like to inform you that your clarifying comment is noted and will be incorporated into the Final Environmental Impact Report. It is noted that similar to your comment, under *Harvest Power DEIR Chapter 9: Hydrology and Water,* that we also noted that the State Water Resource Control Board is drafting General Order, No. DWQ-2012-TENT (General WDR's) for the discharge of wastes at compost management units. We are requiring compliance with this order, once finalized, under **Mitigation Measure 3.9-1 through 3.9-4**. For the record, **Mitigation Measures 3.9-1, 2, and 4, as well as 3.17-1, 2, and 3 and 3.17-5** all state that the Project will obtain any and all applicable permits from the CVRWQCB. This includes DWQ-2012-TENT.

We will include discussion of this minor change as highlighting the permits required under **Mitigation Measure (MM) 3.9-1 through 3.9-4**. The discussion will include discussion of Form 200 under **MM 3.9-2**, and Form 200 will be attached as an appendix. Included in the discussion and mitigation will be the payment of the $2,776 fee, as a requirement under **MM 3.9-2**. Staff believes this to be adequate clarification to cover the impacts from changes to Resolution 96-031, under *Chapter 9: Hydrology and Water*.

In closing, we appreciate the RWQCB supporting the shortened review period of 30 days and further commend your staff for their professionalism and expertise regarding water resources in particular and as applied to this Project. Your comments have been very insightful and useful toward insuring that the

proposed Project complies with RWQCB rules and regulations and with the California Environmental Quality Act.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Sincerely,

Hector Guerra, Chief
Environmental Planning Division

Attachment (1) Central Valley Regional Water Quality Control Board Letter Dated: April 9, 2013.

cc: Harvest Power, Inc. (Ms. Linda Novick, Project Manager)
Timothy M. Taylor, Esq., for Harvest Power, Inc.

California Water Boards

Edmund G. Brown Jr.
Governor

Matthew Rodriguez
Secretary for Environmental Protection

Central Valley Regional Water Quality Control Board

9 April 2013

Hector Guerra
Chief Environmental Planner
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277-9394

REVIEW OF A DRAFT ENVIRONMENTAL IMPACT REPORT, HARVEST POWER CALIFORNIA LLC, SCH# 2012101010, TULARE COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff (Staff) received the subject Draft Environmental Impact Report (DEIR) on 7 March 2013. The DEIR was prepared and submitted by the Tulare County Resource Management Agency Planning Branch, the lead agency, to request comments regarding operational modifications to the Harvest Power California LLC, composting facility. Staff's comments on the revised proposal are presented in the enclosed memorandum.

The State Water Resources Control Board is currently drafting a general order (General WDRs) for the discharge of wastes at compost management units. Upon adoption of the General WDRs, Harvest Power California LLC, may either enroll under the General WDRs or apply for individual waste discharge requirements for its composting facility. Harvest Power California LLC, needs to submit a report of waste discharge (see enclosed Form 200) with a report describing the operation, along with the appropriate fee, to our office. Based on the submitted information, the threat to water quality is tentatively rated 3 and the complexity C, resulting in a filing fee of $2,776. The filing fee is the first year's annual fee (e.g., waste discharge permit fee).

If you have any questions regarding this review, please contact Scott Moore at (559) 445-5170 or by email at vmoore@waterboards.ca.gov.

DANIEL L. CARLSON
Senior Engineering Geologist
PG No. 5379, CEG No. 1695, CHG No. 488

Enclosures: Staff Memorandum
Form 200

cc: Patrick Snider, California Department of Resources Recycling and Recovery, Sacramento
Ken Bowers, Tulare County Health Department, Visalia

RESOURCE MANAGEMENT AGENCY

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VISALIA, CA 93277.
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FAX (559) 730-2653

Michael C. Spata, Planning
Britt L. Fussel, Public Works
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

April 12, 2013

Darren Nguyen
Energy Analyst
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Response to Comments to the Harvest Power Project Draft EIR (DEIR) SCH# 2012101010

Dear Mr. Nguyen,

Thank you for providing the California Energy Commission (CEC) written comments (attached) regarding DEIR Harvest Power (Project), SCH No. 2012101010. We sincerely appreciate your timely response. The County of Tulare acknowledges and recognizes the authority and expertise regarding the energy resource and matters. Following is the County of Tulare Resource Management Agency (RMA) responses to the CEC's comments:

Your comments were received on Friday April 5th, 2013. Your comments were noted and have been incorporated into the Harvest Power Final EIR. The County of Tulare acknowledges and recognizes the CEC's authority and expertise regarding waste to energy processes and the advantages of recycling and reusing in initiating sustainable energy grants as applied to the Project. Staff agrees with the CEC's description of the project benefits you highlighted in your letter. The County of Tulare acknowledges and supports the benefits identified by the CEC which include:

- Implementation of AB 32
- Implementation of the Tulare County General Plan Climate Action Plan
- Create and Use Renewable Energy
- Expand production of organically certified soil
- Efficient Business Operations

We are appreciative of the fact that CEC staff took the time to research and find that despite an Odor Impact Minimization Plan (OIMP) and Composting Best Management Practices; odor will remain a significant and unavoidable impact to human beings under the CEQA Checklist Section's *Mandatory Findings of Significance*. Your comments support our conclusion that the Project's benefits outweigh the potential cumulative odor impact that may result from the Project. We also understand the CEC's concerns over the timing of the Project,

and appreciate your support in requesting a 30 day review. We are moving forward as expeditiously as possible to meet the deadlines established by the CEC.

In closing, we appreciate the CEC supporting the shortened review period of 30 days and further commend your staff for their professionalism. Your comments have been very insightful and useful toward insuring that the proposed Project complies with CEC rules and regulations and with the California Environmental Quality Act.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Sincerely,

Hector Guerra, Chief
Environmental Planning Division

Attachment (1) California Energy Commission Comment Letter dated April 9, 2013.

cc: Harvest Power, Inc. (Ms. Linda Novick, Project Manager)
Timothy M. Taylor, Esq., for Harvest Power, Inc.

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

April 5, 2013

Hector Guerra
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277

Subject: Draft Environmental Impact Report (DEIR) for Harvest Power LLC: Harvest Power Project (State Clearinghouse #2012101010)

Dear Mr. Guerra:

As a Responsible Agency, the California Energy Commission (Energy Commission) staff is pleased to submit this letter in support of the Harvest Power Project. The project will allow a maximum total tonnage for composting to increase from 156,000 tons per year to 216,000 tons per year and an additional 60,000 tons will be allowed at the anaerobic digester facility. The facility will produce transportation fuel through a compressed natural gas refueling station.

The project will provide the following benefits: (1) greenhouse gas emission (GHG) reductions that help meet the objectives for 2020 and 2050 goals compared to the 1990 base year under AB 32; (2) support Tulare County's General Plan and Climate Action Plan policies which include water conservation, soil erosion control, crop disease suppression, and increased crop yields; (3) provide additional renewable energy to Tulare County; (4) expand production of organically certified soil to fill the needs of a niche market; (5) increase business operations within Tulare County which would result in more jobs and tax revenues; and (6) reduce the amount of solid green waste that is going to the landfills by recycling them and re-use them as compost. The organic food processing waste will be reduced through digestion and turned into energy or applied as liquid to the compost.

Responsible Agency Comments:

Odor
As stated in the DEIR, despite the evaluation of alternatives to reduce the odor, including the implementation of mitigation, the findings indicate that the cumulative odor impact will remain significant. Energy Commission staff concurs that all avenues have been exhausted and incorporated in the DEIR. Staff analysis confirms that the best practicable way in managing the odors is by implementing the Best Management Practices as well as the Odor Impact Mitigation Plan along with the Solid Waste Management Plan.

Remaining Environmental Impacts
Staff has analyzed the remaining environmental impacts in the DEIR and agrees that these impacts can be reduced to less than significant with the mitigation measures recommended.

Thank you for allowing the California Energy Commission staff to provide comments for the proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

The Energy Commission staff would also like to extend our gratitude for the expedited 30-day review period which was needed in order to ensure that the grant funding deadline for both the Anaerobic Digester and the Compressed Natural Gas facility grants are met.

Sincerely,

Darren Nguyen, Energy Analyst
Emerging Fuels and Technologies Office
Fuels and Transportation Division
California Energy Commission

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Blvd
Visalia, CA 93277.
Phone (559) 624-7000
Fax (559) 730-2653

Michael C. Spata, Planning
Britt L.Fussel, Public Works
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

April 12, 2013

Mr. David Deel
Associate Transportation Planner
State of California, Department of Transportation
District 6
1352 West Olive Avenue
P.O. Box 12616
Fresno, CA 93778-2616

RE: Caltrans District 6 Response to Comments to the Harvest Power Project Draft EIR (DEIR) SCH# 2012101010

Dear Mr. Deel,

Thank you for providing the Caltrans District 6 written comments (attached) regarding DEIR Harvest Power (Project), SCH No. 2012101010. We sincerely appreciate your timely response. The County of Tulare acknowledges and recognizes Caltrans' authority and expertise regarding the traffic/transportation resource and matters. Following is the County of Tulare Resource Management Agency (RMA) responses to the Caltrans' comments:

Your comments were noted and have been incorporated into the Harvest Power Final EIR. We would like to inform you to know that your comment is noted and will be incorporated into the Final Environmental Impact Report.

Per your comment, to our Notice to Proceed on the DEIR, we used Caltrans Modeling requirements for both distribution and level of service. Staff agrees with Caltrans' assessment that the proposed Project would result in a less than significant impact to SR 137.

The Project's other potential impacts to the other surrounding roadways and the surrounding intersections were analyzed and the impacts were also found to be less than significant.

As such, we concluded that Project-related and cumulative traffic-related impacts were not significant.

In closing, we would also like to express our appreciation to Caltrans for supporting the shortened review period of 30 days and further commend you for your professionalism.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Sincerely,

Hector Guerra, Chief
Environmental Planning Division

Attachment (1) Caltrans District 6-CEQA Reference No. 2135 IGR/CEQA comment letter dated April 3, 2013.

cc: Harvest Power, Inc. (Ms. Linda Novick, Project Manager)
Timothy M. Taylor, Esq., for Harvest Power, Inc.

DEPARTMENT OF TRANSPORTATION
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1352 WEST OLIVE AVENUE
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April 3, 2013

2135-IGR/CEQA
6-TUL-137-22.22 +/-
DEIR & TIS
HARVEST POWER COMPOSTING FACILITY
SCH # 2012101010

Mr. Hector Guerra
Chief Environmental Planner
County of Tulare - Resource Management Agency
5961 S. Mooney Boulevard
Visalia, CA 93277

Dear Mr. Guerra:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) and included Traffic Impact Study (TIS) for the Harvest Power, Inc. composting facility expansion project. The project is located at 24487 Road 140 at the Avenue 245 intersection, approximately 1.6 miles north of the State Route (SR) 137/Road 140 intersection. The project is proposing to:

a) Increase the amount of composting material from the current maximum of 156,000 tons per year (tpy) to a maximum of 216,000 tpy (consisting of 156,000 tpy of green and food material and 60,000 tpy of manure);
b) Construct a low to high solids anaerobic digestion facility to handle 60,000 tpy;
c) Construct a Biogas unit, a Compressed Natural Gas fueling station and a Combined Heat and Power unit for cogeneration power usage.

Caltrans has the following comments:

Based on the information provided, the TIS adequately analyzed the SR 137/Road 140 intersection and no further analysis is required at this time. Caltrans anticipates that the amount of vehicle trips generated by the project will have a less than significant impact to SR 137.

Please send a response to our comments and subsequently a copy of the resolution related to the proposed project. If you have any questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
District 6

copy via email: Caltrans Traffic Operations

RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD
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Michael C. Spata, Planning
Britt L.Fussel, Public Works
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

April 12, 2013

Joy Isaacson, Waste Management Specialist
Permitting & Assistance Branch
Waste Permitting, Compliance & Mitigation Division
CalRecycle
1001 I Street,
Sacramento, CA 95812

RE: CalRecycle Response to Comments to the Harvest Power Project Draft EIR (DEIR) SCH# 2012101010

Dear Mr. Nguyen,
Dear Ms. Isaacson,

Per your letter dated, April 4th, 2013, (attached) please see our responses to your Harvest Power DEIR comments. Your comments will be incorporated into the Project Description through the Final EIR. You have noted, and staff is aware, that Mr. Keith Jahnke, County of Tulare Health and Human Services Agency, Environmental Health Division, is the Law Enforcement Agent (LEA) for CalRecycle on this Project. We have collaborated with Mr. Jahnke regarding solid waste aspects of the Project and during preparation of the DEIR. We have verified through Mr. Jahnke that there have been no odor or dust complaints either filed or processed through the LEA against the Project to date (see attached e-mail correspondence dated April 11, 2013).

It is also noted that Cal Recycle's comments reflect certain aspects of the Project, under *Chapter 2: Project Description* in the DEIR. The aspects of the project include up to 216,000 tons per year, and that liquid waste will be stored in covered ponds. Food waste will be offloaded in sealed containers, and the digestate added to windrows. As you stated, odors will be addressed by the OIMP, and the biofilter on the Anaroebic Digester facility.

Our Response to your comments relates to the *Chapter 2: Project Description*. In regards to your comments, you have provided clarifying points; however, your Agency's comments will not have any impact to the levels of significance or require additional study or mitigation. Our determination is based on the Project proponent's obligation to comply with any and all of CalRecycle's Permitting requirements under **Mitigation Measure 3-17.5, and 3.17-6**. This includes, as you note, an updated Solid Waste Facility Permit from Cal Recycle (including updated approval of BMP measures) and an updated OIMP will be required for this Project.

The suggested changes to the Project Description Overall based on the below clarifications are as follows:

Project Description [Temperatures of Anaerobic Digester]:

The temperature of the Anaerobic Digester (AD) System will be approximately 140 degrees for approximately 15 days. The ranges will be between 113° through 252° Fahrenheit. The Project proponent will work with the LEA to determine the appropriate permitting mechanism based on the duration of certain temperatures for the AD facility.

Hours of Operation:

The current hours of the facility will be maintained for the composting and anaerobic digestion process. In order to handle any emergency situations, such as weather, Harvest Power will work with the LEA to extend hours in these circumstances. When Harvest Power has free community greenwaste drop off and compost give away programs, they may occur on Sundays in order to avoid holding them while the facility is operating.

Permitted Boundary:

The boundary of the facility will remain at 35.0 acres. The anaerobic digester and associated processes will operate on these 35.0 acres. The composting operations will be able to operate on the remaining acreage. New equipment and reconfiguring the material processing area to make it more efficient, will allow for the composting operations to operate on less space with an increased volume of material.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Sincerely,

Hector Guerra, Chief
Environmental Planning Division

Attachments (2) CalRecycle Comment Letter dated April 5, 2013
E-mail correspondence from Keith Jahnke, April 11, 2013

cc: Harvest Power, Inc. (Ms. Linda Novick, Project Manager)
Timothy M. Taylor, Esq., for Harvest Power, Inc.

CalRecycle

DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

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P.O. BOX 4025, SACRAMENTO, CALIFORNIA 95812

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April 4, 2013

Hector Guerra
Tulare County Resource Management Agency
5961 S. Mooney Blvd.
Visalia, CA 93277

Subject: SCH No. 2012101010 - Draft Environmental Impact Report for Harvest Power Project - Anaerobic Digestion (AD) and Compressed Natural Gas (CNG) at Tulare County Compost and Biomass, Facility No. 54-AA-0026

Dear Mr. Guerra:

Thank you for allowing the Department of Resources Recycling and Recovery (CalRecycle) staff to provide comments on the Draft Environmental Impact Report (EIR) for this proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

Project Description

The proposed project is located at 24487 Road 140 in Tulare County. The proposed project would: expand the current composting operation at Tulare County Compost and Biomass (Facility No. 54-AA-0026) from 86,000 tons per year to 216,000 tons per year; allow the addition of an anaerobic digester; allow the processing of organic material into fuel and digestate; and allow the addition of a compressed natural gas (CNG) fueling station and combined heat and cooling unit (CHP). The facility will be either a high solids digester (food and green waste) or a low solids digester (primarily food). Both feedstock options are evaluated in the Draft EIR.

Composting feedstocks would include food material, yard material or green waste, and dairy manure. The composting facility is currently permitted to receive 500 tons per day (tpd), and would increase to 1,000 tpd. Incoming material would be screened, ground, and placed into windrows and monitored to meet pathogen reduction. Traffic to the composting facility would not exceed 85 vehicle trips. Community drop off days would be incorporated into the permitted hours of operation. The Odor Impact Mitigation Plan (OIMP) will address odor concerns.

AD feedstocks would include green material and food waste [scraps from local restaurants and cafeterias, food processing residuals, and restaurant fats, oils, and grease (FOG)]. The AD is expected to process 192 tpd six days a week. Liquid materials would be directly pumped into a sealed reception tank. Food waste would be off-loaded into a sealed container. Organics would

be separated from non-organics and the organic fraction pulverized and pumped into the digester. Digestate would be added to the windrow composting process. Liquid waste would be stored in lined and covered ponds. Traffic would not exceed 25 truck trips at the AD operation for a total of 110 truck trips combined for composting and AD operations. The OIMP would address odor concerns as well as the use of a biofilter. The AD would be built on three acres of the 35 acre composting operation.

Comments

The Tulare County Department of Health Services, Division of Environmental Health (as the Local Enforcement Agency (LEA) for Tulare County) and CalRecycle are responsible for providing regulatory oversight of solid waste handling activities such as compost and anaerobic digestion facilities. The permitting and regulatory requirements for compost and AD facilities are contained in Title 14 and Title 27 of the California Code of Regulations (14 or 27 CCR).

Project Description
What is the expected temperature of the AD process, for both the low solids and high solids processes? The temperature and the time the material is kept at temperature is a factor in effective pathogen reduction. It can also be a determining factor for which type of solid waste facility permit is required.

Hours of Operation
The composting facility is currently permitted to receive waste from 7:00 a.m. to 4:30 p.m. Monday through Friday and 8:00 a.m. to 4:00 p.m. Saturdays, closed on Sundays. Will there be any change in days and/or operating hours resulting from the project, including public drop off times? What are the anticipated hours of that waste will be received at the AD activity?

Permitted Boundary
The composting facility is currently permitted to operate on 35 acres of an 88 acre parcel. The project description describes constructing the AD on three of the permitted 35 acres. Are there anticipated changes to the permitted boundary? How will the reduction of 3 acres from the existing compost activity affect the design and operation of the composting activity?

Permits
A Solid Waste Facilities Permit (SWFP) revision will be required for this project. The LEA contact for this proposed project is Keith Jahnke; he can be reached at (559) 624-7430 or by e-mail at kjahnke@tularehhsa.org). Please contact the LEA to discuss permit requirements for the project.

Conclusions

CalRecycle staff thanks the Lead Agency for the opportunity to review and requests any subsequent environmental documents, copies of public notices and any Notices of Determination for this project.

If you have any questions regarding these comments, please contact me at (916) 341-6772 or by e-mail at joy.isaacson@calrecycle.ca.gov.

Sincerely,

Joy Isaacson, Waste Management Specialist
Permitting & Assistance Branch
Waste Permitting, Compliance & Mitigation Division
CalRecycle

cc: Ken Decio, CalRecycle
Virginia Rosales, CalRecycle

Keith Jahnke, LEA
Tulare County Department of Health Services
kjahnke@tularehhsa.org

From: Keith Jahnke
To: Aaron Bock
CC: Hector Guerra; Ken Bowers
Date: 04/11/2013 2:25 PM
Subject: Fwd: Re: Response to CalRecycle Harvest Power DEIR 04 04 13.pdf comments- Adobe Reader

Aaron. I have reviewed the inspection reports dating back to 1994. No Violations of dust or odor have been observed during the Tulare County Local Enforcement Agency Inspections. Also, no complaints have been received during this time period. Site inspections include a determination if objectionable odors are observed offsite. The only dust related issue was that the operator held off improving drainage bye land leveling and deepening of the ponding basin until grapes were harvested because of the potential of creating dust.

Let me know if you have any further questions regarding this site.

Keith Jahnke
Tulare County
Health & Human Services Agency
Environmental Health Services Division
5957 S. Mooney Blvd.
Visalia, Ca 93277
(559) 624-7430

>>> Aaron Bock 4/11/2013 1:29 PM >>>
Keith,

Can you please forward a statement showing that Harvest Power has not had any odor or dust violations or complaints since its been in operation.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP
Planner IV
Tulare County Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
559-624-7050 - Direct
559-730-2653 - Fax

RESOURCE MANAGEMENT AGENCY

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Michael C. Spata, Planning
Britt L.Fussel, Public Works
Roger Hunt, Administration

JAKE RAPER JR., AICP, DIRECTOR

April 12, 2013

David Warner, Director of Permit Services
San Joaquin Valley Unified Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno, CA 93726-6061

Subject: Response to Comments, DEIR Harvest Power, SCH No. 2012101010;
District CEQA Reference No. 20130218

Dear Mr. Warner,

Thank you for providing the San Joaquin Valley Unified Air Pollution Control District's (Air District or District) written comments (attached) regarding DEIR Harvest Power (Project), SCH No. 2012101010. The County of Tulare acknowledges and recognizes the Air District's authority and expertise regarding the air quality resource and matters. Following is the County of Tulare Resource Management Agency (RMA) responses to the Air District's comments:

Response to Comment 1.

Criteria Pollutants: As noted in your comment, we concur with the Air District's determination that the Project will not exceed the District's thresholds of significant for criteria pollutants; specifically, 10 tons/year NOX, 10 tons/year ROG, or 15 tons/year PM10. Project-related emission estimates for the aforementioned criteria pollutants are summarized in Tables 8-1 and 8-3 of the Air Quality Impact Analysis (AQIA) prepared by Insight Environmental Consultants (Insight) and contained in the DEIR as Appendix "H". As such, the Project will have no significant adverse impact on air quality.

Response to Comment 2.

Permits: As noted in your comment, we concur with the Air District's determination that the Project will require permits. The permitting of stationary source equipment and associated emissions will be mitigated through the Air District's permitting process. As noted in the AQIA (pages 20, 21, and 43; respectively) prepared by Insight, the Project shall comply with Air District Rules/Regulations as follows: For Fugitive Dust Emissions: Rules 4102 (Nuisance), 8011 (General Requirements), 8021 construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities, 8041 (Carryout and Trackout), and 8051 (Open Areas); for Fugitive VOC-related Composting Emissions: Rules 4101 (Visible Emissions), 4102 (Nuisance), 4202 (Particulate Matter-Emission Rate), 4565 (Biosolids, Animal Manure, and Poultry Litter Operations), and 4566 (Green Waste Composting and Operations); and Other Mitigation Measures such Rules 4601 (Architectural Coatings) and 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In addition to the above noted Rules/Regulations, the Project will comply with "applicable mitigation measures in the Air Quality Attainment Plan, District Rules, Traffic Control Measures, Regulation VIII (Fugitive PM10 Prohibitions), and Indirect Source Rules for the SJVAPCD."

After due consideration of the sum and substance of the Air District's rules/regulations applicable to the Project, there is substantial regulation to insure that effective mitigation of potential impacts from the criteria pollutants would occur.

Response to Comment 3. A.

Health Risk Assessment (HRA): The preparer of the HRA, Insight Environmental Consultants (Insight), has revised the HRA to include the emissions from toxic organic compounds, heavy metal content, and the internal combustion engine emissions. Following is Insight's response to Air District Comment 3.A. (see attached letter from Insight dated April 10, 2013 beginning at page 1):

> "Toxic organic compounds and heavy metal content of dust from the composting process have been estimated and included in a revised HRA along with toxic emissions from the biogas-fired internal combustion engine. The revised HRA's results are still below the health risk significance thresholds set by the SJVAPCD. The emissions from the biofilter were not included in the revised HRA. The Project proponent stated in the Project description that "The very nature of anaerobic digestion eliminates the emission of methane gas: the digestion facility is gas-tight in order to capture valuable biogas. However, in the process of upgrading biogas into pure methane, a very small percentage is lost in the waste gas stream. This stream is directed to a biofilter to minimize the release of methane. There have been a number of scientific articles published over the last several years explaining the destruction of methane via methane oxidizing bacteria naturally present in biofilters. Harvest Power will work closely with the San Joaquin Valley Air Pollution Control District to permit the biofilter, as well as the CNG facility." It is our understanding that the toxic emissions from the biofilter will be negligible especially in comparison to the Project's other toxic sources. We do not feel the addition of toxic emissions from the biofilter will cause the Project to exceed any health risk significance thresholds. The results indicate that these emissions are below thresholds of significance."

Response to Comment 3. B.

Similar to Response 3.A, the preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants, has revised the HRA to include the emissions from internal combustion engines and have concluded that these emissions are negligible and are below thresholds of significance. Following is Insight's response to Air District Comment 3. B. (see attached letter from Insight dated April 10, 2013, at page 2):

> "The SJVPCD did not have the opportunity to review the most up to date version of the AQIA. [This can be furbished to the Air District upon request]. The final AQIA determined the cancer risk from the Project to be 4.19 in a million. A [more up to date] HRA has been completed to include the previously omitted toxic and heavy metal emissions from the compo-sting process and additional toxic emissions from the bio-gas-fired internal combustion engine. The

> cancer risk result of the revised HRA was 5.12 in a million which is still below the cancer risk threshold of 10 in a million set by the SJVAPCD."

Response to Comment 3. C.

As noted earlier, the preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants (Insight), has included all equipment with the potential to emit. The five diesel engines permits receiving permits from the Air District noted in this comment have been accounted for in the HRA. We concur that the five diesel engine permits combined with "...other recently issued [Air District] permits will limit the allowable risk from the proposed sources in this Project." as noted by the Air District's comment. Following is Insight's response to Air District Comment 3.C. (see attached letter from Insight dated April 10, 2013, beginning at page 3):

> "The Project proponent is aware that health risks from previously permitted sources will limit the allowable risk from this Project during the permitting process. However, CEQA only requires that the risk from the incremental increase of this Project to be analyzed. This analysis has been completed and this Project is considered less than significant for health risk. (See Attached Insight Response to Comments)."

Response to Comment 3. D.

The preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants (Insight), has revised the HRA and Ambient Air Quality Assessment (AAQA) by quantifying toxic and criteria emissions from the digesting, compressed natural gas, and combined heat and power processes. The results indicate that the Project's potential to emit remains below thresholds of significance. Following is Insight's response to Air District Comment 3.D. The results indicate that the Project's potential to emit remains below thresholds of significance:

> "All previously excluded toxic emissions have been quantified and included in the revised HRA that will be included in the final EIR. The revised HRA determined that the Project is still less than significant. All relevant criteria pollutants were included in the AAQA in the final AQIA."

Response to Comment 3. E.

The preparer of the Health Risk Assessment (HRA), Insight Environmental Consultants (Insight), has revised the HRA and Ambient Air Quality Assessment by assessing emissions of toxic compounds from increases in composting activity by including emissions of the additional compounds in the Hot Spot Analysis and Reporting (HARP) model as suggested by the Air District. The results indicate that the Project's potential to emit remains below thresholds of significance. (see attached letter from Insight dated April 10, 2013 at page 3):

> "All previously excluded toxic emissions have been quantified and included in the revised HRA that will be included in the final EIR. The revised HRA determined that the Project is still less than significant. (See Attached Insight Response to Comments)."

Based upon the expert analysis by Insight Environmental Consultants in regards to preparing a Health Risk Assessment, Ambient Air Quality Assessment, and modeling results from the Hot Spot Analysis and Reporting model, it can be concluded that the Project's potential to emit toxic emissions remains below thresholds of significance.

Response to Comment 4.	We recognize that the list of rules provided by the Air District may not be exhaustive nor exclusive. The applicant will be required to comply with all District rules as part of the conditions of approval.
Response to Comment 5.	Comment noted. We provided the Air District's comments to the Project proponent (Applicant) upon receipt of the comments.

In closing, we appreciate the Air District supporting the shortened review period of 30 days and further commend your staff for their professionalism and expertise regarding air resource in particular and as applied to this Project. Your comments have been very insightful and useful toward insuring that the proposed Project complies with Air District rules and regulations and with the California Environmental Quality Act.

If you have any questions regarding the above, please contact me at (559) 624-7121.

Sincerely,

Hector Guerra, Chief
Environmental Planning Division

Attachment (1) Air District comment letter dated April 3, 2013; District CEQA Reference No. 20130218

cc: Harvest Power, Inc. (Ms. Linda Novick, Project Manager)
Timothy M. Taylor, Esq., for Harvest Power, Inc.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

April 3, 2013

Hector Guerra
County of Tulare
Planning Department
5961 South Mooney Boulevard
Visalia, CA 93277

Project: DEIR – Harvest Power Project
District CEQA Reference No: 20130218

Dear Mr. Guerra:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of allowing the maximum total tonnage from an existing composting facility to increase from 156,000 tons per year to a potential 216,000 tons per year, located west of Road 140 between Avenues 240 and 248, east of the City of Tulare, CA. The District offers the following comments:

1. Based on information provided to the District, project specific emissions of criteria pollutants are not expected to exceed District significance thresholds of 10 tons/year NOX, 10 ton/year ROG, and 15 tons/year PM10. Therefore, the District concludes that project specific criteria pollutant emissions would have no significant adverse impact on air quality.

2. On page 3.3-29 of the DEIR it states "the stationary source emissions from the composting facility require permits from the SJVAPCD to operate" and that "SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent". The District concurs the project will require permits and stationary source emissions will be mitigated.

3. The following are comments on the Ambient Air Quality Analysis (AAQA) and Health Risk Assessment (HRA)

   A. Sources included in the AAQA and HRA are the increases in diesel particulate emissions from truck traffic, truck idling, and equipment and ammonia emissions from the composting facility. The analyses do not include emissions from the following sources:

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Executive Director/Air Pollution Control Officer

Northern Region
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Modesto, CA 95356-8718
Tel: (209) 557-8400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93728-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

Printed on recycled paper.

1) Toxic organic compounds emitted during the composting process – The District has emission factors for such compounds as MEK, methylene chloride, toluene, etc.

2) Heavy metal content of dust emitted from the composting process – The District has emission factors posted on its website.

3) Biofilter – These emissions would be a small fraction of those compounds emitted from the digesting process.

4) Internal combustion engine.

B. The cancer risk estimated by the HRA is 7.76 in a million. Unless the risk from the sources not included in this analysis are less than 2.24 in a million, the risk from the project would be significant. Emissions from the internal combustion engine are likely to be the main contributor to additional risk.

C. During the past few years, the facility has permitted five diesel engines. The District's estimate of risk from those engines and other recently issued permits will also limit allowable risk from the proposed sources in this project.

D. The HRA, and the AAQA for the DEIR do not adequately quantify and assess potential emissions from the digesting process and the associated compressed natural gas and combined heat and power processes. This can be resolved by one of the two following options:

1) Quantify toxic and criteria emissions from these processes and include them in the AAQA and HRA.

2) Identify that the sources were not addressed sources and commit to including the risks and ambient air quality impacts in this DEIR in the District's permitting process such that any permits issued by the District would not result in the project being significant.

E. Additional risk from the emission of toxic compounds from the increase in composting activity that are not included in this DEIR should be incorporated in the final EIR. This can be accomplished easily by including emissions of the additional compounds in the Hot Spots Analysis and Reporting (HARP) model.

4. The proposed project may be subject to District Rules and Regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). The above

list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

5. The District recommends that a copy of the District's comments be provided to the project proponent.

If you have any questions or require further information, please call David McDonough, at (559) 230-5920.

Sincerely,

David Warner
Director of Permit Services

For, Arnaud Marjollet
Permit Services Manager

DW: dm

Cc: File

Attachment 5:

Comments from Legal Counsel for Sundale Vineyards

- Comment Letter 8 - Wanger Jones Helsey Letter, March 28, 2013
- Comment Letter 9 - Wanger Jones Helsey Letter, April 5, 2013

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April 5, 2013

VIA E-MAIL, FACSIMILE (559) 730-2653 & U.S. MAIL

Hector Guerra
Chief Environmental Planner
TULARE COUNTY RESOURCE MANAGEMENT AGENCY
5961 South Mooney Boulevard
Visalia, CA 93277

Re: Comments on Draft Environmental Impact Report – Harvest Power LLC: State Clearinghouse #2012101010

Dear Mr. Guerra:

This office represents Sundale Vineyards ("Sundale") with respect to the above-referenced application for the expansion of an existing composting facility known as the Harvest Power Project (the "Project") and Draft Environmental Impact Report ("DEIR"). This large scale expansion of Harvest Power composting capacity (which will include combined green, food materials, and manure) will have significant impacts to agriculture, air quality, the community (including nearby school children), and the health, safety and environment of the entire area surrounding the Project. While the DEIR acknowledges some of those impacts, many of those impacts are inadequately analyzed, understated or ignored, and the mitigation measures designed to reduce significant impacts are inadequate. At bottom, the DEIR falls short of compliance with the California Environmental Quality Act, Pub. Resources Code, § 21000, *et seq.* ("CEQA").

Among other things, the DEIR inadequately describes the Project, inadequately analyzes the impacts of the expansion of the composting facility, omits or inadequately specifies feasible mitigation measures for those impacts, and fails to evaluate a reasonable range of feasible alternatives that would reduce the severity of impacts. The DEIR's analysis of impacts to agriculture surrounding the Project is likewise inadequate.

CEQA requires that "[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." (Pub. Res. Code § 21002.1(b).) This requirement is the "core of an EIR." (*Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County* (1990) 52 Cal.3d 553, 564-565.)

Mitigation measures proposed in an EIR must be "fully enforceable" through permit conditions, agreements or other legally binding instruments. (Pub. Res. Code § 21081.6(b) and CEQA Guidelines § 15126.4(a)(2)), and adoption of feasible, enforceable measures may not be deferred. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670.) Here, the mitigation measures are frequently vaguely drafted as to be unenforceable and defer development of the mitigation measures to later discretionary action.

In short, the fundamental flaws in the environmental review of the Project require that the EIR be substantially modified and recirculated for review and comment by the public and public agencies prior to the county's consideration of the Project.

A. The DEIR Should Be Recirculated to Provide the Public With Additional Time to Review the Project

Several interested parties, including Sundale, requested that the comment period on the DEIR be extended to the normal 45-day review period generally required under CEQA. The County did not respond to those written requests. Rather, counsel for Sundale was required to call staff the day before the public comment period expired to confirm that the request was denied.

The denial of Sundale's requested extension is unwarranted and improper, as substantial evidence does not exist to support a finding of "unusual circumstances" under Sections 15105 and 15205(d) of the CEQA Guidelines and Appendix "K." No evidence was provided to support the finding that the applicant was allegedly under severe time constraints due to financing, nor has there been any showing that the applicant is under financing constraints any different from similarly situated applicants. Further, given the fact that a review period that is shortened by only 15-days has little practical impact on the overall timeframe for the processing of the Project, but a significant reduction in time for the public to review the document, the shortened time period is highly prejudicial to the public, particularly given the nature and location of this Project (enlarging a facility that will compost manure adjacent to agricultural crops and a school). In addition, the deadline to submit comments to the County falls on a day in which the County is closed.

As a result of the foregoing, Sundale requests that the County recirculate the DEIR for public review to provide the public with sufficient time to evaluate the impacts of the Project. If the EIR is not recirculated, the County should expect far more detailed comments on the Project at subsequent phases of the administrative process (*i.e.*, the Planning Commission

hearing and the Board of Supervisors hearing), and will be estopped from claiming any such comments are untimely, or that the County need only respond to such comments in generalities.

B. The DEIR Uses an Improper Baseline to Analyze the Project's Impacts

The DEIR lacks sufficient specificity in describing the current baseline conditions at the Project site. CEQA requires that the public agency include a description of the physical environmental conditions in the vicinity of the Project from both a local and regional perspective. The purpose of describing the environmental setting is to accurately articulate the environmental baseline to evaluate whether the impacts of a project will be significant. (CEQA Guidelines, § 15125.) The failure to gather relevant data concerning the existing conditions renders a negative declaration invalid, as it is the *public agency's burden* to fully investigate the environmental impacts of a given project, such as the impact fee at issue here. (See, e.g., *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311 ["CEQA places the burden of environmental investigation on government rather than the public," and a lead agency "should not be allowed to hide behind its own failure to gather data."].)

As explained in the comments prepared by David Mitchell, an air quality specialist with FirstCarbon Solutions, (Exhibit "A"), the Project baseline appears to be based on the permit limits, and not on actual existing conditions, as required under CEQA. As such, the County's air quality analysis should be revised, and the EIR should be recirculated to account for baseline conditions.

C. The Project Description is Inadequate

Under CEQA, the inclusion in the EIR of a clear and comprehensive description of the proposed project is critical to accurate analysis of impacts and meaningful public review. (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193 ("*Inyo II*"). As explained in *Inyo II*:

> A curtailed or distorted project description may stultify the objections of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (*i.e.*, the "no project" alternative) and weigh other alternatives in the balance.

(*Id.* at 192-93.) "A curtailed, enigmatic or unstable project description draws a red herring across the path of public input." (*Id.* at 197-98; see also *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th at 655-57 [invalidating an EIR for misleading project description].)

In a number of respects, the DEIR's project description falls short of this standard. Sundale has retained David M. Mitchell from First Carbon Solutions | Michael Brandman Associates to review the DEIR. While Mr. Mitchell's review focused on the air quality and greenhouse gas analysis summarized in the DEIR and provided more completely in the Air Quality Impact Analysis Report (the "AQIA") prepared by Insight Environmental Consultants, Mr. Mitchell also made generalized comments to other sections of the DEIR, including the Project Description, that are contained in his Comments on the Harvest Energy EIR Letter dated April 5, 2013. The County's failure to accurately describe the Project includes:

- The DEIR states in several places that the Sundale Elementary School is located over 1/2 mile from the Project site. Aerial photographs and measurements confirmed on GoogleEarth, however, confirm the boundary of the Project is only 700 feet (0.13 miles) from the boundary of the school property, much closer than the 1/2 mile represented. (See Exhibit "G.") This effects nearby sensitive receptors, and requires the revision of several chapters in the EIR, including noise, odor, air quality, and hazardous materials. This close proximity also requires that the County provide all parents or guardians of children enrolled at the school notice of the Project under Section 42301.6 of the Health & Safety Code.

- The Project description lists the APNs for the Project but fails to identify the size of the parcels. (DEIR, pg. 2-1.) This failure prohibits the reader of the DEIR from knowing the true size and extent of the composting area unless the reader reviews the technical appendices.

- The EIR refers in several instances to the fact that the Project only includes 35 acres. The fourth parcel, however, over which traffic heading to the facility traverses, appears to be 53-acres [see TIS page 3]. It is our understanding that manure used for the Project is generated at this facility. In addition, it appears that the applicant is using the 53-acre parcel for its composting operations, including the storage of manure from outside their calving operations. (Exhibit "B.") This is important not only to accurately characterize the Project, but because water supply assessments are required for industrial projects of over 40-acres. As such, in addition to having an inaccurate project description, a water supply assessment is required.

- The DEIR apparently depicts the site plan for the Project. (DEIR, pg. 2-6.) However, the area of Project expansion is not clearly delineated and the aerial photo overlay in gray and small font labels make the site plan difficult, if not impossible, to read. It would be helpful if a photo of an example windrow was provided to illustrate the process to a reader of the DEIR.

- The potential future equipment should be more specifically identified to analyze the Project's potential impacts.

- The DEIR indicates that truck trips include hauling inbound of feedstock *and* outbound finished compost. (DEIR, 2-13.) However, the DEIR is not clear if the inbound and outbound trucks are the same trucks or if they are different trucks that arrive or depart empty.

The DEIR should include a table with a breakdown of the number of trucks, the purpose of the truck trips, and the percentage that is expected to be CNG fueled.

- The DEIR indicates that construction will occur on 3 acres of parcel 150-140-009 (DEIR, pg. 2-23); however, the Air Quality Analysis appears to be based on construction on the entire 35 acres. The construction air quality analysis and the project description should match.

D. <u>The Discussion of Impacts on Agriculture is Flawed</u>

The DEIR acknowledges that the Project site is surrounded by prime farmland (DEIR, pg. 3.2-9), but does not analyze the impacts that the expansion of the composting facility, and the construction, installation, and operation of an anaerobic digestion facility and a biogas upgrading unit, a compressed natural gas (CNG) fueling station, and a combined heat and power unit for cogeneration power usage (CHP), would have on adjacent and near-by farming activities.

Many adjacent and nearby agricultural operations, including Sundale, produce table grapes on their properties, which could be required to discontinue operations as a result of the Project. (Exhibit "C.")

Even if the DEIR were supported by expert opinion suggesting that no contamination drift would occur onto nearby agricultural properties, this would make ***no*** difference to auditors, such as PrimusGFS, who regulate the entry of agricultural commodities into the stream of commerce. For example, PrimusGFS is a Global Food Safety Initiative (GFSI) benchmarked and fully recognized audit scheme covering both (1) good agricultural practices (GAP) and (2) good management practices (GMP) scopes, as well as food safety management systems (FSMS). Even the possibility of the existence of manure on the table grapes would ensure that adjacent agricultural users would lose their Primus certification, and would be unable to sell table grapes produced by that grower. Because the Primus certification applies to ***all*** properties owned by a specific grower, the loss of certification would affect not only the growers' properties adjacent to the Project, but potentially their ***entire*** portfolio of table grape producing properties. Sundale alone owns over 2,000 acres of table grape producing parcels, yet there is no discussion about either the project-level or cumulative impacts associated with loss of agricultural land associated with the Project.

The DEIR concludes that "the proposed expansion will not result in the conversion of these adjacent parcels or induce the conversion of these adjacent parcels to a non-agricultural use." (DEIR, pg. 3.2-9.) This conclusion is not supported by any evidence, discussion, or analysis. If the DEIR were to adequately address the issue, it would require a detailed analysis of the impact that the fugitive dust/manure will have on the continued viability of the surrounding prime agricultural lands to produce a marketable crop to market, including the agricultural operators' ability to obtain certification for their crops, and the affect of the loss of

such certification on the growers' other properties. The analysis needs to include the possibility of conversion of prime agricultural land to either fallow land, or non-agricultural uses.

The DEIR discusses measures that are designed to reduce the migration of dust/manure from the Project. However, this reduction in migration will not act to save Sundale's Primus certification. Up to 60,000 tons of manure will be composted on the site each year. (DEIR, p. 2-11.) The manure will sit in windrows for two to three months to cure. (DEIR, pg. 2-12.) During this period of time, the manure will be susceptible to drifting from the Project and contaminating the neighboring agricultural uses, including Sundale, and causing significant, irreversible consequences to the economic stability and existence of Sundale.

The agriculture section also contains no discussion of feasible mitigation, such as agricultural buffers to protect the farmland.

E. Air Quality Impacts

Californians experience the worst air quality in the nation, with annual health and economic impacts in at 8,800 deaths (3,000-15,000 probable range) and $71 billion ($36-$136 billion) per year (Cayan 2006 and *Global Warming: Impacts to Public Health and Air Quality* (http://www.energy.ca.gov/2005publications/CEC-500-2005-197/CEC-500-2005-197-SF.PDF).

Despite the importance of this analysis, both the EIR and the supporting Air Quality Impact Assessment (the "AQIA") are flawed in several respects, as explained in the enclosed report prepared by Mr. Mitchell. (See Exhibit "A.")

In addition, the DEIR utilizes a threshold of significance for ROG in assessing the air quality impacts of the Project based on the San Joaquin Valley Air Pollution Control District ("SJVAPCD") standards. Specifically, SJVAPCD has established a ROG emissions significance threshold of 10 tons per year. (DEIR, 3.3-4.) The total long term incremental increase in ROG emissions generated by the Project is calculated to be 35.77 tons per year, or almost 4 times the significance threshold. Despite the drastic increase in ROG emissions which are almost 4 times the threshold of significance, the DEIR states that the emissions are less than significant "[s]ince the emissions are controlled by the SJVAPCD and accounted for in the State Implementation plan." (DEIR, 3.3-29.) The fact that the emissions are controlled by the SJVAPCD and accounted for in the State Implementation Plan does not make the impact of these emissions any less significant, because neither fact will reduce those emissions to below the 10 ton per year threshold, nor does the EIR attempt to explain how any such reductions would supposedly occur.

F. The Existing Facility Creates a Significant Amount of Fugitive Dust, and On-Site Conditions Refute the Alleged Findings By the County's Consultants

The County's consultant, Seimer & Associates, has opined that particles of dust would only travel 50 feet from the composting facility. This conclusion is belied by on the

ground conditions. Specifically, photographs taken by Sundale demonstrate that dust travels far more than 50 feet from the Project site. (Exhibit "D.")

Harvest Power has installed a screen on certain segments of the property line of the Project in an attempt to shield the dust generated from the Project. However, the effectiveness of the screen in containing the dust is minimal. Dust clouds regularly travel over the screen only to come to rest on the neighboring properties crops. (Exhibits "D" and "E.") The value of a screen as an effective dust containment mechanism is trivial at best, and is not adequate as mitigation.

In fact, pursuant to existing conditions for the Special Use Permit and the Odor Mitigation Management Plan, the Project is supposed to keep the windrows of manure and other composting material at a certain level of moisture to prevent the migration of dust and manure onto neighboring lands. Notwithstanding this fact, Harvest Power has stopped applying water to the windrows of manure and other composting material because they were unable to contain the water runoff on the Harvest Power property. Instead of remedying the inability to contain the water, Harvest Power has stopped the application of water altogether.

The AQIA also suggests, without citation to evidence, that the "anaerobic digestion facility is designed with a biofilter to ensure that no offensive odor migrates offsite." (AQIA at 24.) The facility, however, *presently* emits offensive odors, particularly during the warm summer and fall months. As such, this unsupported statement is not supported by substantial evidence, and is not reflective of actual project conditions.

G. The EIR Fails to Adequately Examine Potential Climate Change Impacts

The DEIR's discussion regarding significance for the Project's impact on greenhouse gas emissions is not clear. (DEIR, Chapter 3.7.) The DEIR describes several threshold approaches for greenhouse gas emissions. (DEIR, pgs. 3.7-10, 11.) The analysis should determine the threshold that will be used and provide the facts to support the conclusion reached for the threshold chosen. The DEIR in one place states that the County lacks the expertise and regulatory authority to develop a CEQA significance threshold for climate change and greenhouse gas emissions requiring use of compliance with AB32 regulations as the indicator of significance. In another place, the DEIR indicates that the threshold that is used is the 25,000 metric ton threshold adopted by the SJVAPCD for stationary sources. The DEIR also indicates that the determination is based on providing a net benefit in greenhouse gas emissions. Discussion of approaches considered may be appropriate, but a clear indication of the approach actually chosen is needed.

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H. The Project Is Inconsistent with the Tulare County General Plan

State planning and zoning law requires that all land-use decisions of general law cities must be consistent with the city's General Plan. (Govt. Code, § 65860, subd. (a); see also *Corona-Norco Unif. Sch. Dist. v. City of Corona* (1993) 17 Cal.App.4th 985, 994.) A "project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." (*Corona-Norco, supra*, 17 Cal.App.4th at 994.) While perfect conformity may not be required, "a project ***must*** be compatible with the objectives and policies of the general plan." (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 782 [emphasis added] [citing *Families Unafraid to Uphold Rural etc. County v. Board of Supers.* (1998) 62 Cal.App.4th 1332, 1336].) "A project is inconsistent if it conflicts with a general plan policy that is fundamental, mandatory, and clear." (*Endangered Habitats, supra*, 131 Cal.App.4th at 782 [citing *Families Unafraid, supra*, 62 Cal.App.4th at 1341-42].)

The Project is inconsistent with the Tulare County General Plan, which states, *inter alia*, that the "County shall prevent incompatible land uses near properties that produce or store hazardous waste." (Policy HS-4.3.) This Project, however, would place manure and other contaminants *adjacent to* properties where table grape operations are ongoing, and where a school is located immediately downwind (0.51 miles to the southeast) from the facility. As such, the Project would be inconsistent with this General Plan policy.

I. The Applicant Is in Violation of Existing Permits

The Applicant is presently in violation of the permits for the existing facility. This is important because (1) it shows enforcement by the County is insufficient mitigation for the potential impacts of the Project, and (2) mitigation requiring the applicant to comply with the law is insufficient. Failure to comply with the law should also be a separate ground for the denial of the Project. Examples of the Applicant's failure to comply with existing permit conditions include:

- Section 3-5 of Application No. PSP 92-091 states: "The applicant proposes to receive and grind wood waste from contractors, selected agricultural wastes, and yard waste (leaves, tree trimmings, and grass) to produce biomass and to combine manure ***exclusively from the existing on-site feed lot to produce compost***." However, pictures recently taken from the existing facility show manure is now being brought to the facility. (See Exhibit "A" [truck dumping manure from off-site]) In fact, it appears that the applicant is using the 53-acre parcel for its operations, including the storage of manure from outside their calving operations. (Exhibit "A.")

- Activity areas are not being treated with "acceptable dust retarding treatment so that dust and mud will not create conditions detrimental to the surrounding areas and public roads," in "order to keep dust free from drifting to adjacent properties." (See Resolution No.

7109 at 3.) As seen in Exhibits "D" and "E," dust regularly encroaches upon the Sundale properties where table grapes are grown.

- Trucks entering and leaving the facility are not covered, in violation of Decision No. 2380, page 8. (See Exhibit "F.")

J. <u>The Approval of the Project Would Constitute a Taking of Sundale's Property</u>

If the Project is allowed to go forward, Sundale will have lost its reasonable investment-backed expectations associated with its development and operation of its property as a table grape vineyard. Because the Project will jeopardize Sundale's Primus certification, Sundale will likely be forced to take its adjacent property out of production so as not to jeopardize the certification for the remainder of its properties. In essence, the County will be inversely condemning Sundale's property, for which Sundale is entitled compensation under the takings clause. (See, e.g., *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003, 1016.)

Very truly yours,

Timothy Jones

Enclosures

EXHIBIT “A”

FirstCarbon® SOLUTIONS
MICHAEL BRANDMAN ASSOCIATES

April 5, 2013

John Kinsey
Wanger Jones Helsey, PC
265 E. River Park Circle, Suite 310
Fresno, CA 93720

Re: Comments on the Harvest Energy EIR

Dear Mr. Kinsey:

FirstCarbon Solutions | Michael Brandman Associates (FCS|MBA) has reviewed the Draft Environmental Impact Report (EIR) for the Harvest Energy Project and identified the issues and concerns with the analysis described below. Our review focused on the air quality and greenhouse gas analysis summarized in the Draft EIR and provided more completely in the Air Quality Impact Analysis Report prepared by Insight Environmental Consultants.

Project Description, Setting and Objectives – Chapter 2

The EIR project description and setting provides limited details regarding the existing operation and the proposed expansion for certain project components. For example, on page 2-1 the project description lists the Assessors Parcel Numbers (APN) for the expansion but fails to identify the size of the parcels which prohibits the reader from knowing the extent of the new composting area. The EIR should point the reader to Figure 2-3 that shows the APNs and composting location.

Page 2-6 Site Plan. The area devoted to existing and new composting is not clearly delineated on the site plan. The air photo overlay in gray and small font labels make the plan difficult to read. A photo of an example windrow should be provided to illustrate the process.

Page 2-12 Equipment. The EIR indicates that they will initially use the same equipment but does not provide an estimate of equipment that will be used at full operation. Later at Page 2-22, the EIR states that the anaerobic digester will require two additional front end loaders. A table should be provided listing the equipment, its intended use, and estimated hours of operation.

Page 2-13 Truck Traffic. The EIR indicates that truck trips include hauling inbound of feedstock and outbound finished compost, but isn't clear if these are the same trucks or if they are different trucks that arrive or depart empty. The EIR should include a table with a breakdown of the number of trucks, the purpose of the truck trips and the percentage that is expected to be CNG fueled.

Page 2-23 Construction. The EIR indicates that construction will occur on 3 acres of parcel 150-140-009; however, the Air Quality Analysis appears to be based on construction on the entire 35 acres. The construction air quality analysis and the project description should match. Are site preparation activities required on the areas required to accommodate the expanded composting operation?

EXHIBIT A

Air Quality – Chapter 3.3

Page 3.3-2 Carbon monoxide (CO) threshold. The statement that the Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) has not established a CO threshold is incorrect. The GAMAQI threshold is based on the potential for the project to result in an exceedance of the California Ambient Air Quality Standard for CO. It has not established an emission based threshold in tons per year like it has for other criteria pollutants because CO is a localized pollutant where the impact of concern is creating a hotspot or area of elevated concentration.

Page 3.3.5 Attainment plan status. The discussion of SJVAPCD attainment plans appears to be out of date and doesn't reflect the latest approval actions by United States Environmental Protection Agency (EPA) for ozone and PM2.5.

Page 3.3-13 Table 3.3-9 Pollutant Standards. The national standard for N02 is out of date. The current federal standard for hourly NO_2 is 100 ppb.

Page 3.3-16 Rule 9510 – Indirect Source Review. The EIR discussion of ISR is incorrect because the rule is inapplicable to projects whose primary function is subject to SJVAPCD permit. Composting and digesters are exempt from this rule.

Page 3.3-22 Toxic Air Contaminants. The EIR states that this programmatic assessment of TAC's is conducted at the qualitative level. This is incorrect. The EIR includes a quantitative analysis of TAC emissions described elsewhere in the EIR.

Page 3.3-23 Permit limits. The EIR states that the current usage of 75,000 tons per year is 80,000 tons per year more than the current 156,000 TPY limit. It should say "less than" the current limit.

Page 3.3-25 Short Term Emissions. The project used the CalEEMod default construction fleet and hours of operation. CalEEMod construction fleet information is from surveys of development projects constructing homes and commercial structures that would be expected to have different construction parameters than a digester facility. A reasonable estimate of the types of construction equipment that would be needed for the digester structures can and should be prepared. The EIR states that the equipment was assumed to operate at full power. Power is reflected in the load factors used in the analysis. It appears that the analysis used default load factors of 40-60 percent and not full load which would be defined as 100 percent load.

Page 3.3-27 Fugitive Composting Emissions. The discussion indicates that the fugitive VOC emissions from stockpiles would potentially serious health hazard, alone or in combination with other pollutants. The EIR then claims that the rules listed would reduce VOC fugitive emissions to less than significant. The EIR should identify the emission reductions that the SJVAPCD anticipates from implementing the rules to show that emissions will be substantially reduced compared to the uncontrolled condition.

Page 3.3-30 Rule 9510. The EIR states that compliance with applicable rules such as SJVAPCD Rule 9510 will reduce cumulative impacts. The project is not subject to Rule 9510, so this statement is incorrect. Project air quality impacts will not be mitigated by the rule.

Page 3.3-30 Cumulative Thresholds. The discussion indicates that the SJVAPCD has not established a cumulative threshold. The SJVAPCD considers projects that exceed project level quantitative thresholds to also be significant cumulatively. The SJVAPCD excludes stationary source emissions subject to District permitting requirements.

Page 3.3-36 Health Risks. The health risk discussion and presentation of results in Table 3.3-23 do not describe the location of the operation in relation to the impacted receptors. The table presents receptor location by UTM coordinates, which is not useful to reviewers and the public. The EIR should provide a description of the locations and a map or diagram that identifies the sources and receptors. The same information and description is provided in the Air Quality Impact Assessment. The section and associated technical study do not provide sufficient information to determine if the modeling assumptions are valid.

Page 3.3-37 Odor Impacts. The EIR does not indicate if there is any history of odor complaints and compliance issues with the Odor Impact Mitigation Plan (OIMP). The discussion should disclose any complaint history per SJVAPCD guidance provided in the GAMAQI.

Greenhouse Gas Emissions – Chapter 3.7

Page 3.7-10-11 Greenhouse Gas Emissions. The EIR discussion regarding significance for this impact is not clear. The document describes several threshold approaches for greenhouse gas emissions. The analysis should determine the threshold that will be used and provide the facts to support the conclusion reached for the threshold chosen. The EIR in one place states that the County lacks the expertise and regulatory authority to develop a CEQA significance threshold for climate change and greenhouse gas emissions requiring use of compliance with AB32 regulations as the indicator of significance. In another place the EIR indicates that the threshold that is used is the 25,000 metric ton threshold adopted by the SJVAPCD for stationary sources. The EIR also indicates that the determination is based on providing a net benefit in greenhouse gas emissions. Discussion of approaches considered may be appropriate, but a clear indication of the approach actually chosen is needed.

Air Quality Impact Assessment – prepared by Insight Environmental Consultants, September 2012

Section 7 Significance Criteria

Page 16, Table 7-1, Table 7-3 to Table 7-7, the tables incorrectly identify the threshold for construction. Under the SJVAPCD agency row, the word "Operation" should be changed to "Construction". Projects that exceed the SJVAPCD annual operational threshold during construction are considered to have a significant impact. The construction emissions counted toward the threshold do not include fugitive dust emissions.

Section 8 Project Related Emissions

General comment. The emissions analysis does not adequately disclose the modeling assumptions used in some portions of the document. The modeling output provided as appendices to the assessment also do not provide the detail needed for someone to repeat the analysis and confirm the results for some impacts. Specific examples are described below.

Page 18, "The SJVAPCD generally assumes that implementation of any construction-related mitigation measures will result in construction emissions impacts that are *less than significant*" is generally true for mitigating fugitive dust but does not automatically apply to construction exhaust emissions from construction equipment,

Page 20. The assessment does not include a list of project equipment used in the operation. To provide a proper context for the emission estimation, a listing of the baseline and project equipment and change in hours of equipment operation would greatly assist the reader in establishing the reasonableness of the emission calculations.

Page 21. A listing of the local zoning and codes that would reduce fugitive dust emissions should be provided in addition to the description of SJVAPCD Regulation VIII fugitive dust controls.

Page 21. There is no estimate or discussion of the effectiveness of the listed rules in ensuring that the fugitive VOC emissions remain "less than significant".

Page 21. The project will be processing up to 60,000 tons of dairy manure each year. There is no discussion or analysis regarding the potential for fugitive dust containing manure particles to be transported to adjacent food crops. Trucks hauling manure have the potential to track out manure onto local roads from the facility. If not properly contained, manure composting piles could result in runoff that could be entrained by vehicles or tracked beyond the project boundary. What measures are proposed to ensure that food crops would not be contaminated with manure?

Page 23. Table 8-3. The total annual incremental emissions appear to understate project emissions. The project increases permitted volume of material handled by the facility from 156,000 to 216,000 tons per year, allowing a 38.4 percent increase. The analysis of post-project onsite equipment and employee emissions provided in Appendix E estimated that NOx emissions would increase to 10.31 tons/year from 9.32 ton/year for an increase of 0.99 tons or 10.6 percent. Logic would dictate that processing 38.4 percent more material would require a commensurate amount of equipment use and emissions compared to the amount required for the existing operation. Even if no new equipment were used, the existing equipment would need to be used on more hours per day and would generate more emissions. No increase in efficiency that would explain this discrepancy is provided.

The project baseline appears to be based on the permit limits and not on actual existing conditions as required by CEQA. The project description at page 2-4 of the DEIR states that the facility currently processes 75,000 tons per year. This is the appropriate baseline for CEQA analysis. In Communities for a Better Environment v. South Coast Air Quality Management District, the Court of Appeals ruled that the impacts of the proposed project are ordinarily to be compared to the actual environmental conditions at the time of CEQA analysis, rather than to allow conditions defined by a plan or regulatory framework. This means that the analysis should have assessed an increase from 75,000 ton to 216,000 tons/year or a 188 percent increase in volume as opposed to a 38.4 percent increase. This results in the potential for the project to exceed the operational thresholds and potentially significant impact. The analysis should be revised to reflect the actual baseline conditions.

Page 24. The justification for the conclusion: "Therefore, based on the predicted emissions from the project and the OIMP, the project is *not anticipated to have significant impacts on any known sensitive receptors*" seems weak. No discussion regarding complaint history and inspection results from the LEA were provided. Although not considered a sensitive receptor, potential impacts to nearby food crops should be discussed here or elsewhere in the assessment.

Page 26, paragraph 3. The assessment mentions that a total of 21 discrete receptors were modeled to assess impact to the nearest receptors. A map showing the receptor locations should be provided to allow the reader to visualize the impact area.

Page 27, Table 8-5. Is the increase in risk based on the permitted baseline compared to the proposed project or is it the actual baseline compared to the proposed project? A lower baseline would have the potential to result in a significant health risk.

Page 29, Table 8-6. Were the ambient air quality impacts based on the increase from permitted levels or from actual levels? The choice of baselines may affect the significance determinations.

Page 40. Feasible and Reasonable Mitigation Relative to Global Warming. The Assessment states that the SJVAPCD's Non-Residential On-Site Mitigation Checklist was used. There is no indication of which if any measures from the checklist will be implemented for the project. Merely stating the measures as a possibility does not result in application of the measures and reductions in greenhouse gases.

Page 40, paragraph 3. The discussion of cumulative greenhouse gas emissions is unclear. The discussion states that it is not possible to assess with certainty whether the project's contribution will be cumulatively considerable. Then the discussion states more severe impacts have lower thresholds for cumulative contribution. It then concludes that because of AB 32 the project's contribution may be considered cumulatively considerable, but then states that the determination is based on lack of clear scientific evidence or other criteria. What is the ultimate conclusion? Is it cumulatively considerable or not?

Page 40, paragraph 4. The discussion states that until ARB publishes a list of reduction strategies, emission reduction strategies to meet the Governor's Executive Order S-3-05 should be considered. ARB adopted the State's strategy to achieve AB 32 targets in the 2008 Scoping Plan. The statement in the Assessment is incorrect and should provide the current status of state programs.

Page 41 after Table 10-2. The assessment states that given the uncertainties in identifying, let alone quantifying the impact of any single project on global warming and climate changes, the efforts made to reduce emissions of greenhouse gases from the project through design will be accomplished through ARB regulations. This statement conflicts with other portions of the document where the assessment quantifies greenhouse gases and compares them to SJVAPCD thresholds for stationary sources. The project has not committed to all possible long-term GHG emissions strategies. It will just comply with ARB regulations.

Section 12.0 Mitigation Measures Page 41. The report states that the measures either have been applied to the project through CalEEMod and will be incorporated into the project by design or will be implemented in conjunction with SJVAPCD rules. This statement is disingenuous. The CalEEMod runs provided to support the analysis show no emission reductions from mitigation measures selected for the project. Mitigation measures should identify the equipment that will actually require mitigation or identify a performance standard for the amount of reduction that will be required. Otherwise, the list of potential mitigation measures provided makes it appear that the project will reduce emissions when in all likelihood they will not be required of the project.

Page 41 Planned PM10 Mitigation Measures. Compliance with Regulation VIII should be considered prior to making a significance determination. If the project is less than significant with only compliance with regulation, no mitigation measures are required. If after application of regulations the impact is potentially significant, mitigation measures over and above the regulations must be implemented to reduce the significant impact to the extent possible. In this case, there are quantitative analysis techniques and thresholds that can be used to determine if PM10 impacts are significant prior to mitigation. The assessment should use that approach to provide assurance that impacts are less than significant.

Page 42. Measures to Reduce Equipment Exhaust. The assessment states that the bullet list of measures should be required to ensure the proposed project emissions are not exceeded. This statement does not coincide with the analysis. Mitigation measures are required if emission thresholds adopted for the project are exceeded. The bullet list of measures gives the impression that the project will be required to implement all the measures. If they are required, the measures should be included in the EIR or included in the project description as a required project component. They are not currently addressed in the EIR.

Page 43. Other Mitigation Measures. This section provides a list of regulations that reduce emissions and refers to them as mitigation measures but they are not mitigation measures and have not been required of the project. The assessment incorrectly identifies that the project will comply with applicable provisions of Rule 9510 Indirect Source Review; however, the project is not subject to the rule. This creates the incorrect impression that additional reductions will be required when this is not the case.

Appendix E: It is unclear whether the truck running emissions are based on increase of 35 trucks/day or 35 truck trips/day or whether the distance traveled was based on 14.6 miles per truck or 14.6 miles per truck trip. Depending on the information used, the running emissions could be underestimated by a factor of 2 (if trucks/day or miles/truck were used to estimate running emissions).

Appendix E. The source(s) for the emission factors for the food and green waste composting emissions from stockpiles and windrows, and manure composting emissions from windrows operations should be identified.

If you have any questions, please call me at 559.246.3732, or via email at dmitchell@brandman.com.

Sincerely,

David M. Mitchell

David M. Mitchell, Air Quality Services Manager
FirstCarbon Solutions | Michael Brandman Associates
1234 "O" Street
Fresno, CA 93721

EXHIBIT “B”

EXHIBIT "B"

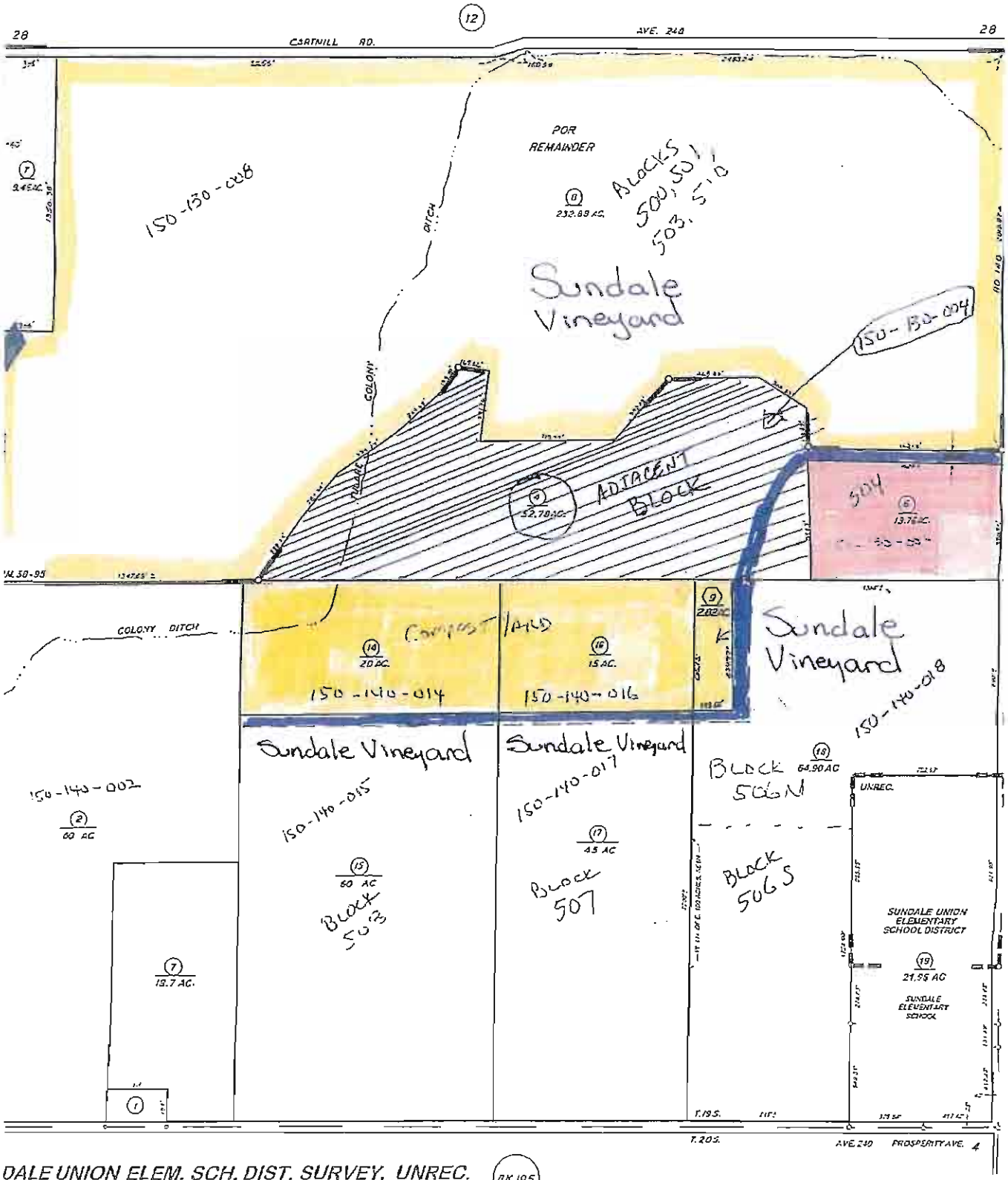
Trucks Dumping and Picking Up Manure on 53-acre Parcel For Transport to Harvest Power Composting Facility

EXHIBIT “C”

Exhibit "C"

N½ SEC. 33, T.19S., R.25E., M.D.B. & M.

TAX CODE AREA 150-
145-003



DALE UNION ELEM. SCH. DIST. SURVEY, UNREC. (BK.195)

ROAD

ASSESSOR'S MAPS BK. 150, PG.
COUNTY OF TULARE, CALIF.

NOTE—ASSESSOR'S BLOCK NUMBERS SHOWN IN ELLIPSES
ASSESSOR'S PARCEL NUMBERS SHOWN IN CIRCLES

EXHIBIT C

EXHIBIT “D”

EXHIBIT "D"

DUST CLOUDS EMANATING FROM HARVEST POWER COMPOSTING FACILITY DISPERSING EAST ONTO SUNDALE'S VINEYARDS

EXHIBIT “E”

EXHIBIT "E"

DUST FROM THE HARVEST POWER COMPOSTING FACILITY COMING TO REST ON SUNDALE'S VINEYARDS

EXHIBIT “F”

EXHIBIT "F"

TRUCK ENTERING THE HARVEST POWER FACILITY
FILLED WITH MANURE AND UNCOVERED

EXHIBIT “G”

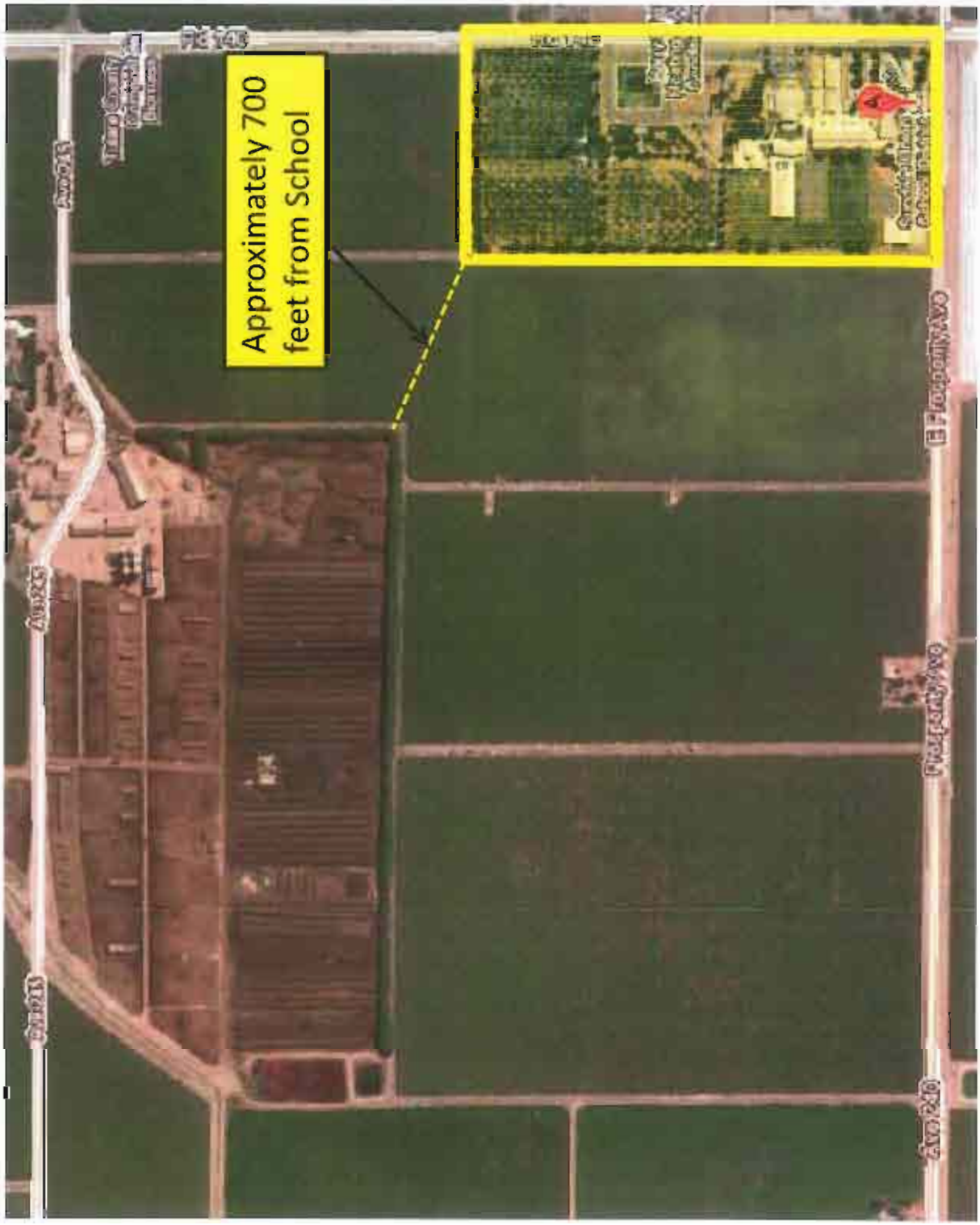


EXHIBIT G

WANGER JONES HELSLEY PC
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March 28, 2013

VIA FACSIMILE (559) 730-2653 & U.S. MAIL

Hector Guerra
Chief Environmental Planner
TULARE COUNTY RESOURCE MANAGEMENT AGENCY
5961 South Mooney Boulevard
Visalia, CA 93277

APR 2013
RECEIVED
RESOURCE MANAGEMENT AGENCY

Re: Draft Environmental Impact Report – Harvest Power LLC
Harvest Power Project - State Clearinghouse #2012101010

Dear Mr. Guerra:

We are writing to you regarding the above-referenced project that proposes to allow an additional 60,000 tons of composting materials at a proposed anaerobic digester facility, which will produce transportation fuel through a compressed natural gas refueling station. This firm represents Sundale Vineyards, an adjoining landowner, who will be fundamentally impacted and damaged by the Project.

Pursuant to the Notice of Availability, you have requested from, and been granted by, the State of California, Office of Planning and Research, a shortened review period of 30 days for the submission of written comments on the DEIR. We have reviewed the grounds upon which such a request may be granted under CEQA, and it does not appear that any such grounds were identified or are applicable here. Based thereon, we are formally requesting that the County extend the review on the EIR to 45 or more days as is usually required under CEQA.

I look forward to your response. Please free to contact me any time if you have any questions regarding the foregoing.

Very truly yours,

John P. Kinsey

{6062/012/00402812.DOC}

Attachment 6:

Comments from Supporters of the Proposed Project

- Comment Letter 10 - Penny Allen, Ag Science Director at Sundale Union School, April 15, 2013
- Comment Letter 11 - Tim Souza, Tim Souza Cattle Co., April 14, 2013
- Comment Letter 12 – Lee Swall, Swall Farms, FLP, April 12, 2013

APR 2013
RECEIVED
RESOURCE
MANAGEMENT
AGENCY

4/12/13

To: Tulare County Planning Commission or Whoever It May Concern

From: Lee Swall, Swall Farms FLP

This letter is in regards to the proposed changes/additions to the Harvest-Tulare Composting facility known as Harvest Power California LLC. As a neighboring farmer/property owner located within a half mile, we state that we have no concerns or issues with the project going forward.

Lee Swall
Swall Farms, FLP
13518 Avenue 248
Tulare CA 93274

APR 2013
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RESOURCE
MANAGEMENT
AGENCY

Tim Souza
Tim Souza Cattle Co
1830 W. Manor Ave
Visalia, CA 93291
(559) 738-3717

April 14. 2013

To Whom It May Concern:

This letter is in response to changes and additions requested by Harvest Power.

I have been a tenant at this feedlot, which borders the north side of this property, for seven years. Harvest has operated here for 2.5 years. I find them to be good & courteous neighbors. I have never had any problems with them as neighbors. I support this endeavor 100%.

Thank You,

Tim Souza

Tim Souza
Tim Souza Cattle Co.

APR 2013
RECEIVED
RESOURCE
MANAGEMENT
AGENCY

To whom it may concern;

My name is Penny Allen and I am an Ag Science teacher at Sundale Union School. I am writing this letter to let you know how much we appreciate and love our neighbor "Harvest Power". They are a huge support to our program here at Sundale. Not only do they allow us to have field trips for our students, they keep us supplied in their wonderful compost. If you have not visited their facility you must! It is so well maintained. It is a very positive addition to our farming community. We whole heartily support their new addition.

Sincerely,

Penny Allen

Penny Allen.

Ag Science Director

Attachment 7:

Insight Environmental Consultants Response to Comments

Insight
Environmental Consultants

5500 Ming Avenue
Suite 360
Bakersfield, CA 93309-4693

Tel (661) 282-2200
Fax (661) 282-2204
insight@insenv.com

April 15, 2013

Mr. Aaron R. Bock
Tulare County Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277

Subject: **LETTER AMENDMENT – Tulare County Compost and Biomass Facility Air Quality Impact Analysis**
(Published Sept. 2012 / Revised Feb. 2013)

Dear Mr. Bock:

Pursuant to comments by the First Carbon Solutions|Michael Brandman Associates (MBA) through the law firm Wanger Jones Helsey, PC and the San Joaquin Valley Air Pollution Control District (SJVAPCD), Insight Environmental Consultants, Inc. (IEC) provides the following Amendment to the subject project's Air Quality Impact Analysis (AQIA) which was completed in September 2012 and revised in February 2013 and incorporated into the Environmental Impact Report (EIR) being prepared by Tulare County Resource Management Agency. The purpose of this Amendment is to address revised baseline impacts, Health Risk Assessment (HRA), and Ambient Air Quality Analysis (AAQA).

Baseline impacts were originally calculated on actual operating conditions from 2011. After the analysis was completed further information was revealed that determined part of the baseline emissions were estimated based on permitted conditions rather than actual conditions. These baseline conditions have been revised and impacts have been recalculated. Additionally, The original HRA omitted some toxic contaminants from the composting process. These contaminants have been calculated and added to the revised HRA. Lastly, clarification was requested for the Significance Tables from the AQIA which have been amended here.
The following AQIA Sections are hereby amended.

EXECUTIVE SUMMARY

Insight Environmental Consultants has completed an Air Quality Impact Analysis (AQIA) for the modification and expansion of the Tulare County Compost and Biomass, Inc. facility located on Road 140 in Tulare County, California. Modifications to the facility will consist of addition of a dry anaerobic digestion facility, compressed natural gas fueling facility, a CHP system and an increase in the allowable tonnages of materials to be held on-site for processing.

April 15, 2013

Mr. Aaron R. Bock
Tulare County Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277

Subject: **LETTER AMENDMENT – Tulare County Compost and Biomass Facility Air Quality Impact Analysis**
(Published Sept. 2012 / Revised Feb. 2013)

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This AQIA was prepared pursuant to the San Joaquin Valley Unified Air Pollution Control District's (SJVAPCD) *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI), *January 10, 2002 Revision* and the California Environmental Quality Act (CEQA). Based on our evaluation, the proposed project would not result in *a significant impact* to the San Joaquin Valley Air Basin.

TOTAL PROJECT EMISSIONS

Emissions Source	**Pollutant (tons/year)**					
	ROG	**NOx**	**CO***	**SOx***	**PM_{10}**	**$PM_{2.5}$***
Baseline						
Direct Exhaust Emissions	1.37	9.60	6.21	0.01	0.65	0.65
Indirect Exhaust Emissions	0.03	3.51	0.23	0.00	0.04	0.02
Fugitive Dust Emissions					0.41	0.04
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	378.93				0.08	
Baseline Total	**380.33**	**13.11**	**6.45**	**0.01**	**1.18**	**0.71**
Project Emissions						
Direct Exhaust Emissions	1.55	11.01	7.02	0.01	0.72	0.72
Indirect Exhaust Emissions	0.05	8.41	0.40	0.00	0.07	0.04
Fugitive Dust Emissions	-	-	-	-	0.98	0.10
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	804.54	0.33	2.23	-	0.17	-
Project Total	**806.15**	**19.75**	**9.65**	**0.01**	**1.95**	**0.86**
Total Incremental Increase Emissions (With Stationary Sources)[2]	425.82	6.64	3.20	0.00	0.77	0.15
Total Incremental Increase Emissions (Without Stationary Source Emissions)[2,3]	**0.20**	**6.31**	**0.97**	**0.00**	**0.68**	**0.15**
SJVAPCD Threshold	10	10	NA	NA	15	NA
Is Threshold Exceeded After Mitigation?	**No**	**No**	-	-	**No**	-

NOTES:

[1] This emissions are under control and enforcement of the SJVAPCD and are fugitive in nature.

[2] Numbers may not add due to rounding by the CalEEMod and EMFAC2011.

[3] The stationary source emissions from the composting facility require permits from the SJVAPCD to operate and SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent. The SJVAPCD states in the Comments Letter to the Project dated April 3, 2013 that "The District concurs the project will require permits and stationary source emissions will be mitigated." Since the emissions are controlled by the SJVAPCD and accounted for in the State Implementation Plan they are considered *less than significant* from a CEQA standpoint and not utilized when comparing the project to annual significant thresholds. Furthermore, the stationary source VOC emissions associated with this project are fugitive emissions and according the SJVAPCD are not counted toward major source or offset thresholds.

* The SJVAPCD has not established significance thresholds for CO, SOx or $PM_{2.5}$.

TOTAL CONSTRUCTION EMISSIONS

Emissions Source	Pollutant (tons/year)					
	ROG	NOx	CO*	SOx*	PM_{10}	$PM_{2.5}$*
Unmitigated Emissions						
Construction Emissions – 2013	0.70	4.64	3.29	0.01	0.34	0.31
Construction Emissions – 2014	1.56	2.14	9.03	0.00	0.23	0.23
SJVAPCD Annual Threshold	10	10	NA	NA	15	NA
Is Threshold Exceeded Before Mitigation?	**No**	**No**	-	-	**No**	-
Mitigated Emissions						
Construction Emissions – 2013	0.70	4.64	3.29	0.01	0.33	0.30
Construction Emissions – 2014	1.56	2.14	9.03	0.00	0.23	0.23
SJVAPCD Annual Threshold	10	10	NA	NA	15	NA
Is Threshold Exceeded After Mitigation?	**No**	**No**	-	-	**No**	-

NOTES:
* The SJVAPCD has not established significance thresholds for CO, SOx or $PM_{2.5}$.

7.0 SIGNIFICANCE CRITERIA

Table 7-1 Measures of Significance – OZONE (ROG and NOx Emissions)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	10 tons/yr NOx 10 tons/yr ROG	SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts, August 20, 1998 (Revised January 10, 2002)
SJVAPCD	Not Significant	If construction emissions do not exceed operational thresholds established in the CEQA Guide for Ozone Precursors, then construction impacts are assumed to be less than significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Table 6-4 are implemented as appropriate.

Table 7-2 Measures Based on Ambient Air Quality Impacts (NOx)

Agency	Level	Description
CARB	338 µg/m3	California One-Hour AAQS for NO_2
USEPA	188.68 µg/m3	National One-Hour AAQS for NO_2
USEPA	100 µg/m3	National annual AAQS for NO_2
USEPA	1.0 µg/m3	Class II significant impact level for PSD
USEPA	25 µg/m3	Class II increment for PSD

Table 7-3 Measures of Significance – CARBON MONOXIDE (CO)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	9 ppm, 8-hr avg	SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts, August 20, 1998 (Revised January 10, 2002)
	20 ppm, 1-hr avg	
SJVAPCD	Not Significant	If construction emissions do not exceed operational thresholds established in the CEQA Guide for Ozone Precursors, then construction impacts are assumed to be less than significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Table 6-4 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	23,000 µg/m3	California 1-hour AAQS for CO
	10,000 µg/m3	National and California 8-hour AAQS for CO

Table 7-4 Measures of Significance – SULFUR DIOXIDE (SO_2)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If construction emissions do not exceed operational thresholds established in the CEQA Guide for Ozone Precursors, then construction impacts are assumed to be less than significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Table 6-4 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	655 µg/m3	California 1-hour AAQS for SO_2
	105 µg/m3	California 24-hour AAQS for SO_2
USEPA	1,300 µg/m3	National 3-hr AAQS for SO_2
	365 µg/m3	National 24-hr AAQS for SO_2
	0.075 ppm	National 1-hr AAQS for SO_2
	80 µg/m3	National annual AAQS for SO_2
	25 µg/m3	3-hr Class II significant impact level for PSD
	5 µg/m3	24 hr Class II significant impact level for PSD
	1.0 µg/m3	Annual Class II significant impact level for PSD
	512 µg/m3	3-hr Class II increment for PSD
	91 µg/m3	24 hr Class II increment for PSD
	50 µg/m3	Annual Class II increment for PSD

Table 7-5 Measures of Significance – RESPIRABLE PARTICULATES (PM_{10})

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If construction emissions do not exceed operational thresholds established in the CEQA Guide for Ozone Precursors, then construction impacts are assumed to be less than significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Tables 6-2 and 6-3 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	50 µg/m3	California 24 hour AAQS for PM_{10}
	20 µg/m3	California Annual AAQS for PM_{10}
USEPA	5 µg/m3	24 hr Class II significant impact level for PSD
	1 µg/m3	Annual Class II significant impact level for PSD
	30 µg/m3	24 hr Class II increment for PSD
	17 µg/m3	Annual Class II increment for PSD

Table 7-6 Measures of Significance – RESPIRABLE PARTICULATES ($PM_{2.5}$)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If construction emissions do not exceed operational thresholds established in the CEQA Guide for Ozone Precursors, then construction impacts are assumed to be less than significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Tables 6-2 and 6-3 are implemented as appropriate.
Measures Based on Ambient Air Quality Impacts		
CARB	12 µg/m3	California Annual AAQS for $PM_{2.5}$
USEPA	35 µg/m3	National 24 hr AAQS for $PM_{2.5}$
	15 µg/m3	National Annual AAQS for $PM_{2.5}$

Table 7-7 Measures of Significance – TOXIC AIR CONTAMINANTS (TACs)

Agency	Level	Description
Measures Adopted for the Evaluation of Impacts Under CEQA		
SJVAPCD	Not Significant	If construction emissions do not exceed operational thresholds established in the CEQA Guide for Ozone Precursors, then construction impacts are assumed to be less than significant when compliance with Regulation VIII is achieved and the control measures of GAMAQI Tables 6-2 through 6-4 are implemented as appropriate.
	10 in one million	Carcinogenic Risk Limit for Maximally Exposed Individual
	Hazard Index >1	Chronic and Acute Hazard Index Risk for Maximally Exposed Individual.

8.0 PROJECT-RELATED EMISSIONS

Baseline Emissions

The Tulare County Compost and Biomass, Inc. (TCCB) facility is currently in operation. In order to consider the true impacts to the SJVAB proposed by the project's modifications, this

analysis examined baseline site emissions compared to predicted emissions after the project's modifications. Emissions attributable to the existing operation are already incorporated into the air basin's existing emissions inventory through inclusion in the Tulare County General Plan, the San Joaquin Valley Air Pollution Control District Emissions Inventory and the California Air Resources Board Statewide Emissions Inventory. Baseline emissions were calculated using existing equipment, sources, and operations at the site along with existing traffic values that occurred at the facility in 2011. The calculated revised baseline emissions are presented in **Table 8-3** below and details are included in **Attachment 1** to this Letter Amendment.

Table 8-3 – Long-Term Incremental Emissions

Emissions Source	**Pollutant (tons/year)**					
	ROG	**NOx**	**CO***	**SOx***	**PM_{10}**	**$PM_{2.5}$***
Baseline						
Direct Exhaust Emissions	1.37	9.60	6.21	0.01	0.65	0.65
Indirect Exhaust Emissions	0.03	3.51	0.23	0.00	0.04	0.02
Fugitive Dust Emissions					0.41	0.04
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	378.93				0.08	
Baseline Total	**380.33**	**13.11**	**6.45**	**0.01**	**1.18**	**0.71**
Project Emissions						
Direct Exhaust Emissions	1.55	11.01	7.02	0.01	0.72	0.72
Indirect Exhaust Emissions	0.05	8.41	0.40	0.00	0.07	0.04
Fugitive Dust Emissions	-	-	-	-	0.98	0.10
Area Source Emission	0.01	0.00	0.00	0.00	0.00	0.00
Stationary Source Emission[1]	804.54	0.33	2.23	-	0.17	-
Project Total	**806.15**	**19.75**	**9.65**	**0.01**	**1.95**	**0.86**
Total Incremental Increase Emissions (With Stationary Sources)[2]	425.82	6.64	3.20	0.00	0.77	0.15
Total Incremental Increase Emissions (Without Stationary Source Emissions)[2,3]	**0.20**	**6.31**	**0.97**	**0.00**	**0.68**	**0.15**
SJVAPCD Threshold	10	10	NA	NA	15	NA
Is Threshold Exceeded After Mitigation?	**No**	**No**	-	-	**No**	-

NOTES:
[1] This emissions are under control and enforcement of the SJVAPCD and are fugitive in nature.
[2] Numbers may not add due to rounding by the CalEEMod and EMFAC2011.
[3] The stationary source emissions from the composting facility require permits from the SJVAPCD to operate and SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent. The SJVAPCD states in the Comments Letter to the Project dated April 3, 2013 that "The District concurs the project will require permits and stationary source emissions will be mitigated." Since the emissions are controlled by the SJVAPCD and accounted for in the State Implementation Plan they are considered *less than significant* from a CEQA standpoint and not utilized when comparing the project to annual significant thresholds. Furthermore, the stationary source VOC emissions associated with this project are fugitive emissions and according the SJVAPCD are not counted toward major source or offset thresholds.
* The SJVAPCD has not established significance thresholds for CO, SOx or $PM_{2.5}$.

The Stationary Source emissions from the composting facility require permits to operate from the SJVAPCD. SJVAPCD controls and quantifies the emissions from these sources and they are assumed to be mitigated to the greatest feasible extent. Since the emissions are controlled by the SJVAPCD and accounted for in the State Implementation plan they are considered *less than significant* from a CEQA standpoint. Furthermore, the stationary source VOC emissions associated with this project are fugitive emissions and according the SJVAPCD are not counted toward major source or offset thresholds.

As calculated (see **Attachment 1**), the revised long-term operational and area source emissions associated with the proposed project would be *less than* SJVAPCD threshold levels when calculated without the fugitive stationary source emissions and would, therefore, *continue to not pose a significant impact.*

Predicted Health Risk Impacts

The GAMAQI recommends that Lead Agencies also consider the situations wherein a new or modified source of hazardous air pollutants (HAPs) is proposed for a location near an existing residential area or other sensitive receptor when evaluating potential impacts related to HAPs. The proposed facility will result in emissions of HAPs and will be located near existing residences, schools and businesses; therefore, an assessment of the potential risk to the population attributable to emissions of hazardous air pollutants from the proposed project is required.

Ambient air concentrations were predicted with dispersion modeling to arrive at a conservative estimate of increased individual carcinogenic risk that might occur as a result of continuous exposure over a 70-year lifetime. Similarly, predicted concentrations were used to calculate non-cancer chronic hazard indices (HIs), which are the ratio of expected exposure to acceptable exposure. Individuals at businesses are not subject to a continuous exposure over a 70-year lifetime; therefore worker exposure duration for cancer risk may be adjusted to HARP default worker exposure assumptions.

The basis for evaluating potential health risk is the identification of sources of hazardous air pollutants. Diesel exhaust particulate matter has been identified as a hazardous air pollutant with the potential to produce carcinogenic and non-cancer chronic health impacts. Composting operations and biogas-fired engine exhaust toxic emissions have been identified as hazardous air pollutants with the potential to cause cancer and non-cancer chronic and acute health impacts. Therefore, diesel exhaust particulate matter emissions from the on-site travel of heavy-duty diesel vehicles, on-site diesel equipment, and toxic emissions from the composting and biogas-fired engine operations were evaluated.

The project proponent stated in the project description that "The very nature of anaerobic digestion eliminates the emission of methane gas: the digestion facility is gas-tight in order to capture valuable biogas. However, in the process of upgrading biogas into pure methane, a very small percentage is lost in the waste gas stream. This stream is directed to a biofilter to

minimize the release of methane. There have been a number of scientific articles published over the last several years explaining the destruction of methane via methane oxidizing bacteria naturally present in biofilters. TCCBI will work closely with the San Joaquin Valley Air Pollution Control District to permit the biofilter, as well as the CNG facility." It is our understanding that the toxic emissions from the biofilter will be negligible especially in comparison to the Project's other toxic sources. We do not feel the addition of toxic emissions from the biofilter will cause the project to exceed any health risk significance thresholds and have therefore been omitted from this revised HRA.

Health risk is determined using the Hotspots Analysis and Reporting Program (HARP) software distributed by the California Air Resources Board, which requires annual-averaged emission rates for each modeling source to estimate carcinogenic and non-cancer chronic and acute health impacts. The modeled emission rates were based on the estimated number of vehicles, the on-site distance of travel, fifteen minutes of idling per vehicle, hours of equipment and engine usage, composting operations and SJVAPCD-approved emission factors[1].

The most recent version of EPA's AMS/EPA Regulatory Model - AERMOD (recompiled for the Lakes ISC-AERMOD View interface) was used to predict the dispersion of emissions from the proposed project. All of the regulatory default AERMOD model keyword parameters were employed. Elevated terrain options were not employed due to the lack of complexity of the project area terrain in the specified model domain. Structure-induced downwash was included in the air dispersion modeling. AERMOD was used to generate ambient concentrations for the 1-hour, 4-hour, 6-hour, monthly and annual periods. Diesel combustion emissions from the diesel trucks traveling were modeled as a line source with point sources representing the location where idling emissions and biogas-fired engine exhaust may occur and a combined point source was used to represent the onsite equipment and an area source was used to represent the composting operations. SJVAPCD-approved[2] release parameters were employed. Unit emission rates of 1 g/sec for the area and point sources were input to AERMOD. A total of 21 discrete receptors were modeled in order to assess risk to the nearest receptors. An SJVAPCD AERMET-processed meteorological data set for the Visalia area (2006-2009) was input to the AERMOD model. Rural dispersion parameters were used because the operation and the majority of the land surrounding the facility is considered "rural" under the Auer land use classification method.[3] **Figure 8-1** below shows an aerial photo depicting the location of the sources and receptors.

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[1] SJVAPCD Guidance for Air Dispersion Modeling, August 2006 (Revision1.2), page 75.
[2] Ibid.
[3] Auer, Jr., A.H., Correlation of Land Use and Cover with Meteorological Anomalies. *Journal of Applied Meteorology*, 17(5): 636-643, 1978.

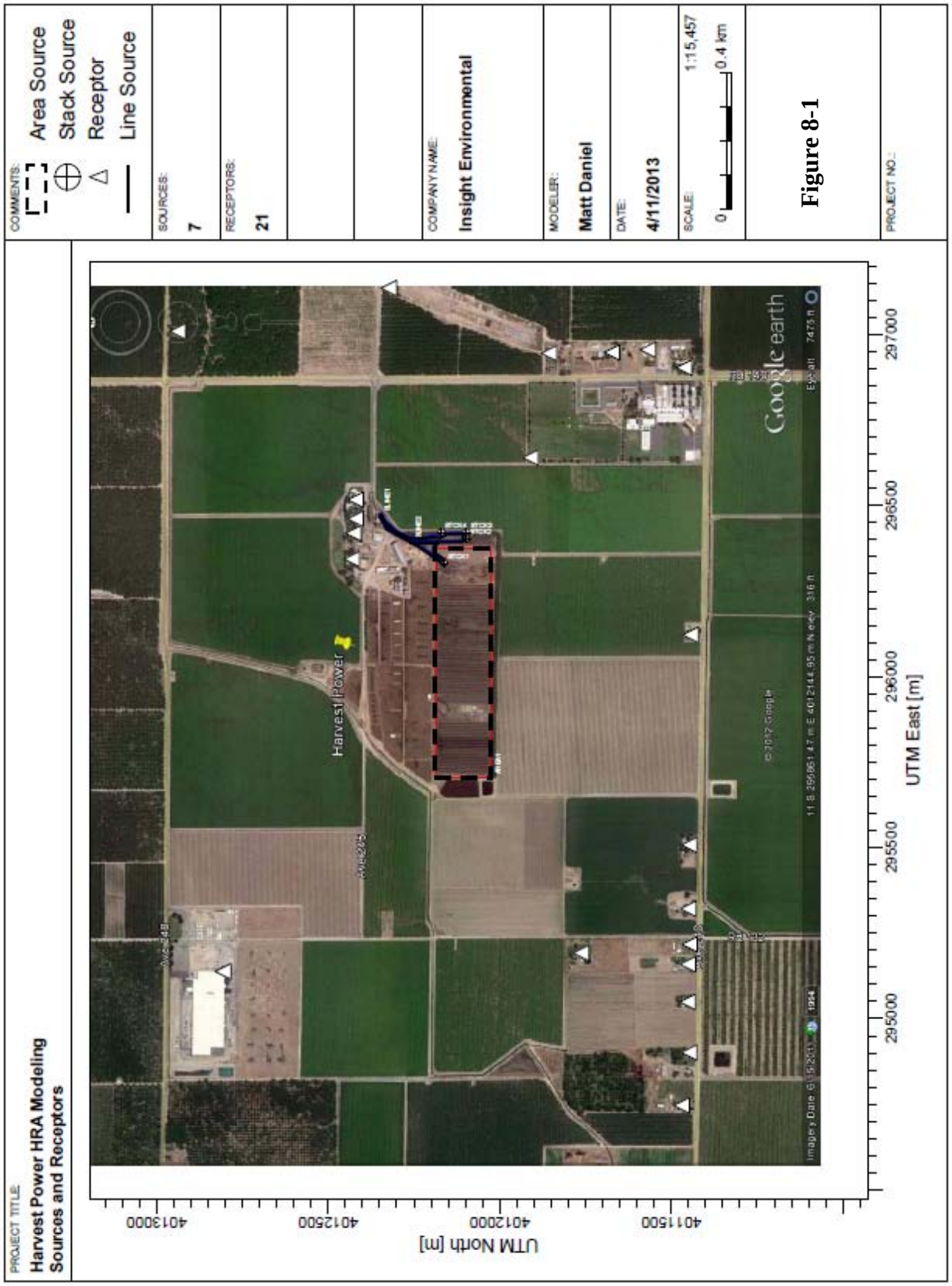
PROJECT TITLE:
Harvest Power HRA Modeling
Sources and Receptors
COMMENTS:
Area Source
Stack Source
Receptor
Line Source
SOURCES:
7
RECEPTORS:
21
COMPANY NAME:
Insight Environmental
MODELER:
Matt Daniel
DATE:
4/11/2013
SCALE:
1:15,457
0
0.4 km
PROJECT NO.:
Harvest Power
Google earth
UTM North [m]
4011500
4012000
4012500
4013000
UTM East [m]
295000
295500
296000
296500
297000

Figure 8-1

Plot files generated by AERMOD were imported to HARP ONRAMP software wherein pollutant-specific emission rates were assigned to adjust the AERMOD-predicted air concentrations calculated with unit emission rates. HARP ONRAMP was used to generate source, X/Q and emission import files for HARP.

HARP post-processing was used to assess the potential for excess cancer risk and chronic non-cancer effects using the most recent health effects data from the California EPA Office of Environmental Health Hazard Assessment (OEHHA) are used in the HRA. Risk reports were generated using the derived OEHHA analysis method for carcinogenic risk and non-carcinogenic chronic risk. Site parameters are included in the HARP output files. Total cancer risk was predicted for inhalation and non-inhalation pathways at each receptor. A hazard index was computed for chronic and acute non-cancer health effects for each applicable endpoint and each receptor. SJVAPCD has set the level of significance for carcinogenic risk to ten in one million, which is understood as the possibility of causing ten additional cancer cases in a population of one million people. The level of significance for chronic and acute non-cancer risk is a hazard index of 1.

The carcinogenic risk and the health hazard index (HI) for chronic and acute non-cancer risk at all of the modeled receptors do not exceed the significance levels of less than ten in one million (10×10^{-6}) and 1, respectively. Therefore, the application of HARP default worker exposure assumptions to reduce continuous exposure to less than a 70-year lifetime was not necessary for the business receptors. The risk predicted by HARP for the potential maximum impacts, as identified by receptor number, type, risk and location, are provided in **Table 8-5**. The HARP output files are provided in **Attachment 2** to this Letter Amendment.

Table 8-5 - Potential Maximum Impacts Predicted By HARP

	Receptor	Value	UTM East	UTM North	Pathway
Excess Cancer Risk[a]	5	5.12E-06	296641	4011910	Inhalation
Chronic Hazard Index	5	1.51E-01	296641	4011910	Respiratory System
Acute Hazard Index	6	5.01E-01	296122	4011444	Respiratory System

[a] Based on continuous, 70-year residential exposure for all receptors.

As shown above in **Table 8-5**, the maximum predicted cancer risk for the facility is 5.12E-06. The maximum chronic and acute non-cancer hazard indexes are 1.51E-01 and 5.01E-01 respectively. Cancer risk and chronic and acute non-cancer risk are attributable to emissions of diesel exhaust particulate matter from the on-site use of heavy-duty vehicles and equipment, a biogas-fired engine and compost operation emissions.

In accordance with the GAMAQI, the potential health risk attributable to the proposed project is determined to be *less than significant* based on the following conclusions:

1) Potential chronic carcinogenic risk from the proposed project is *below* the significance level of ten in a million at each of the modeled receptors; and

2) The hazard index for the potential chronic non-cancer risk from the proposed project is *below* the significance level of one at each of the modeled receptors.

It should be noted that the health risk results presented herein were produced by following extremely conservative analysis methods that most likely represent an overestimate of potential health impacts.

Impacts to the Ambient Air Quality

A revised ambient air quality analysis was performed to determine if the proposed project has the potential to impact ambient air quality through a violation of the ambient air quality standards or a substantial contribution to an existing or projected air quality standard. The basis for the analysis is dispersion modeling, the project's specifications described in the original AQIA and the project's long-term air quality impacts shown in the **Table 8-3**.

The maximum off-site ground level concentration of each pollutant for the 1-hour, 3-hour, 8-hour, 24-hour and annual periods was predicted using the most recent version of EPA's AMS/EPA Regulatory Model (AERMOD) dispersion software under the Lakes Environmental ISC-AERMOD View interface. An approved pre-processed AERMET meteorological data set for the Visalia area (2006-2009) was supplied by the SJVAPCD for input to the AERMOD model. All of the regulatory default AERMOD model keyword parameters were employed. Rural dispersion parameters were used for this project, which differs from the urban setting used in the CalEEMod model. The CalEEMod selection criteria is based on trip distances to the project site and the AERMOD selection criteria is based on the majority of the land use surrounding the facility. The majority of the land surrounding the project site is considered "rural" under the Auer land use classification method.

Emissions were evaluated for each pollutant on a short-term (correlating to pollutant averaging period) and long-term (annual) basis, with the exception of CO that was evaluated only for short-term exposures. Diesel combustion emissions from the diesel trucks traveling were modeled as a line source with a point source representing the location where idling and biogas-fired engine exhaust emissions may occur and a combined point source was used to represent the onsite equipment and an area source was used to represent the composting operations.

A fenceline coordinate grid of receptor points was constructed. The grid consisted of a 25-meter fenceline spacing and 25-meter tier spacing extending a distance of 100 meters with initial receptors starting 25-meters from the facility boundary. Elevated terrain options were not employed due to the lack of complex terrain in the project area.

The results of the air dispersion modeling, presented in **Table 8-6**, demonstrate that the maximum impacts attributable to the project, when considered in addition to the existing background concentrations, are below the applicable ambient air quality standard for NO_x, SO_x and CO. The revised AAQA summary file is provided in **Attachment 3** to this Letter Amendment.

Table 8-6 - Predicted Ambient Air Quality Impacts

Pollutant	Averaging Period	Background ($\mu g/m^3$)	Project ($\mu g/m^3$)	Project + Background ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	CAAQS ($\mu g/m^3$)	PSD SIL ($\mu g/m^3$)
NO_2	1-hour	115.72	52.51	168.23	188.68	470	0
	Annual	18.45	1.06	19.51	100	---	1
SO_2	1-hour	19.2	0.021	19.2	196	655	0
	3-hour	19.2	0.014	19.2	1300	--	25
	24-hour	88.70	0.001	88.70			
CO	1-hour	3092	130.93	3222	40,000	23,000	2000
	8-hour	2290	25.17	2315	10,000	10,000	500
PM_{10}	24-hour	71.00	7.03	78.03	150	50	10.4*
	Annual	47.80	0.78	48.58	---	20	2.08*
$PM_{2.5}$	24-hour	54.00	0.80	54.80	35	---	2.5*
	Annual	54.00	0.09	54.09	15	12	0.63*

* District recommended significant impact level in lieu of PSD levels for fugitive emissions.

Pre-project concentrations of PM_{10} and $PM_{2.5}$ exceed their respective ambient air quality standards. PM_{10} and $PM_{2.5}$ are evaluated in accordance with the SJVAPCD recommended significant impact level (SIL) for fugitive PM_{10} and $PM_{2.5}$. It is the District's policy to use significant impact levels to determine whether a proposed new or modified source will cause or contribute significantly to an AAQS or PSD increment violation. If a project's maximum impacts are below the District or PSD SIL, the project is judged to not cause or contribute significantly to an AAQS or PSD increment violation. A comparison of the proposed impact from the project to the District and PSD SIL values is provided in **Table 8-6.** The modeled PM_{10} and $PM_{2.5}$ impacts directly attributable to the project are *below the District's significance levels.*

Conclusion

This Letter Amendment represents changes made to the revised AQIA as requested by the comments by the First Carbon Solutions|Michael Brandman Associates (MBA) through the law firm Wanger Jones Helsey, PC and the San Joaquin Valley Air Pollution Control District (SJVAPCD). The findings of the AQIA remain accurate after the requested changes have been made in this Letter Amendment. This Project is still considered *less than significant* for all applicable significance thresholds. Please address any questions regarding this Letter Amendment to either Matt Daniel or Ron Hunter at IEC. Either may be reached at 661-282-2200.

Sincerely,

Ronald W. Hunter
Vice President / Principal

ATTACHMENT 1

Project Emissions

Project Increased On-Site Equipment and Employee Emissions - CalEEMod v2011.1.1

Based on:

New Employees: 4

New Equipment: Crane and 2 loaders

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4	N2O	CO2e
On-Site Tons/year	0.14	0.99	0.60	0.00	0.07	0.07	98.24	0.01	0.00	98.48
Off-Site Tons/year	0.00	0.00	0.04	0.00	0.01	0.00	4.91	0.00	0.00	4.92
Tons/year	**0.15**	**0.99**	**0.64**	**0.00**	**0.08**	**0.07**	**103.15**	**0.01**	**0.00**	**103.40**

Project Increased Truck Emissions - EMFAC2011

Based on:

VehiclesTrips/year:	21910	VehiclesTrips/day:	70
Round Trip Miles/Trip:	14.6	Round Trip Miles/Trip:	14.6
Total miles travelled/year:	319,886	Total miles travelled/day:	1,022
Diesel Fuel Usage (4miles/gal):	79,972	Diesel Fuel Usage (4miles/gal):	256

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Em. Factor (grams/mile, kg/gal*)	0.07	13.90	0.37	0.00	0.07	0.07	1631.53	1.40E-03	1.00E-04	
Lbs/Mile	1.50E-04	3.07E-02	8.09E-04	0.00E+00	1.58E-04	1.45E-04	3.60E+00			
Lbs/day	0.15	31.33	0.83	0.00	0.16	0.15	3676.04			
Lbs/Year	47.96	9805.56	258.86	0.00	50.50	46.46	1150600.81			
Tons/year	**0.02**	**4.90**	**0.13**	**0.00**	**0.03**	**0.02**	**575.30**	**0.11**	**0.01**	**580.13**

Project Increased On-Site Truck Idle Emissions - EMFAC2011

Based on:

Vehicles/year:	21910	Vehicles/day:	70
Minutes/Truck:	15	Minutes/Truck:	15
Total Hours/year:	5,478	Total Hours/day:	18

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Em. Factor (grams/hour)	6.29	69.15	33.35	0.07	0.33	0.31	7033.53			
Lbs/hour	1.39E-02	1.52E-01	7.35E-02	1.48E-04	7.31E-04	6.73E-04	1.55E+01			
Lbs/day	0.24	2.67	1.29	0.00	0.01	0.01	271.36			
Lbs/Year	75.91	835.05	402.76	0.81	4.01	3.69	84935.65			
Tons/year	**0.04**	**0.42**	**0.20**	**0.00**	**0.00**	**0.00**	**42.47**	**0.00**	**0.00**	**42.47**

Project Increased CHP Emissions

Based on:

HP:	340
Total Hours/year:	8,760

	NOx	CO
Em. Factor (grams/bhp-hour)	0.10	0.68
Lbs/bhp-hour	2.20E-04	1.50E-03
Lbs/year	656.62	4465.05
Tons/year	**0.33**	**2.23**

Project Increased Unpaved Road Travel Fugitive Dust from Trucks Emissions

AP 42 Chapter 13, Section 13.2.2 Equation 1a and 2

Assumptions:
Surface Material Silt Content: 8.5% (From AP-42 Table 13.2.2-1)
Mean Vehicle Weight: 10 tons
Days with an average precipitation greater than 0.01 inches: 233 (From WRCC for Visalia)
Based on:

VehiclesTrips/year:	21910	VehiclesTrips/day:	70
Round Trip Miles/Trip:	0.35	Round Trip Miles/Trip:	0.35
Total miles travelled/year:	7,669	Total miles travelled/day:	25

	PM10	PM2.5
Em. Factor (lbs/VMT)	6.84E-01	6.84E-02
Lbs/day	3.66E+00	3.66E-01
Lbs/Year	1145.10	114.51
Tons/year	**0.57**	**0.06**

*61% Control for water surpression 3 times daily
*44% Control for reducing speed to less than 15 mph

Project Increased Food and Green Waste Composting Emissions from Stockpiles

Based on:
Increased Yearly Tonage: 81000
Number of Drop Points: 4

	VOC	NH3	PM10
Em. Factor (lbs/ton)*	5.36	0.06	3.30E-04
Lbs/Year	434160	4860	107
Tons/year	**217.08**	**2.43**	**0.05**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Project Increased Food and Green Waste Composting Emissions from Windrows

Based on:
Increased Yearly Tonage: 81000
Number of Drop Points: 2

	VOC	NH3	PM10
Em. Factor (lbs/ton)*	4.27	1.44	3.30E-04
Lbs/Year	345870	116640	53
Tons/year	**172.94**	**58.32**	**0.03**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Project Increased Manure Composting Emissions from Windrows

Based on:
Increased Yearly Tonage: 40000
Number of Drop Points: 2

	VOC	NH3	PM10
Em. Factor (lbs/ton)*	1.78	2.93	3.30E-04
Lbs/Year	71200	117200	26
Tons/year	**35.60**	**58.60**	**0.01**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Harvest Power - Project Increased Operational Emissions

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Onsite (tons/year)	0.18	1.41	0.80	0.00	0.07	0.07	140.71	0.01	0.00	140.95
Indirect (tons/year)	0.02	4.90	0.17	0.00	0.04	0.02	580.21	0.11	0.01	585.05
Fugitive Dust (tons/year)					0.57	0.06				
Stationary Source (tons/year)	425.62	0.33	2.23		0.09					
Total (tons/year)	**425.82**	**6.64**	**3.20**	**0.00**	**0.77**	**0.15**	**720.92**	**0.12**	**0.01**	**726.00**
Total (tons/day)	**1.36**	**0.02**	**0.01**	**0.00**	**0.00**	**0.00**	**2.30**	**0.00**	**0.00**	**2.32**
Total (tons/week)	**8.16**	**0.13**	**0.06**	**0.00**	**0.01**	**0.00**	**13.82**	**0.00**	**0.00**	**13.92**

Baseline On-Site Equipment and Employee Emissions - CalEEMod v2011.1.1

Based on:

Employees: 12

Equipment: 4 loaders, grinder, 2 power screens, windrow turner, windsifter, and tractor

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4	N2O	CO2e
On-Site Tons/year	1.34	9.30	6.07	0.01	0.65	0.65	866.61	0.11	0.00	868.90
Off-Site Tons/year	0.01	0.01	0.14	0.00	0.02	0.00	15.07	0.00	0.00	15.09
Tons/year	**1.36**	**9.32**	**6.20**	**0.01**	**0.67**	**0.65**	**881.67**	**0.11**	**0.00**	**883.99**

Baseline Truck Emissions - EMFAC2011

Based on:

VehiclesTrips/year:	15650	VehiclesTrips/day:	50
Round Trip Miles/Trip:	14.6	Round Trip Miles/Trip:	14.6
Total miles travelled/year:	228,490	Total miles travelled/day:	730
Diesel Fuel Usage (4miles/gal):	57,123	Diesel Fuel Usage (4miles/gal):	183

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Em. Factor (grams/mile)	0.07	13.90	0.37	0.00	0.07	0.07	1631.53	1.40E-03	1.00E-04	
Lbs/Mile	1.50E-04	3.07E-02	8.09E-04	0.00E+00	1.58E-04	1.45E-04	3.60E+00			
Lbs/day	0.11	22.38	0.59	0.00	0.12	0.11	2625.74			
Lbs/Year	34.26	7003.97	184.90	0.00	36.07	33.19	821857.72			
Tons/year	**0.02**	**3.50**	**0.09**	**0.00**	**0.02**	**0.02**	**410.93**	**0.08**	**0.01**	**414.38**

Baseline On-Site Truck Idle Emissions - EMFAC2011

Based on:

Vehicles/year:	15650	Vehicles/day:	50
Minutes/Truck:	15	Minutes/Truck:	15
Total Hours/year:	3,913	Total Hours/day:	13

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Em. Factor (grams/hour)	6.29	69.15	33.35	0.07	0.33	0.31	7033.53			
Lbs/hour	1.39E-02	1.52E-01	7.35E-02	1.48E-04	7.31E-04	6.73E-04	1.55E+01			
Lbs/day	0.17	1.91	0.92	0.00	0.01	0.01	193.83			
Lbs/Year	54.22	596.46	287.68	0.58	2.86	2.63	60668.32			
Tons/year	**0.03**	**0.30**	**0.14**	**0.00**	**0.00**	**0.00**	**30.33**	**0.00**	**0.00**	**30.33**

Baseline Unpaved Road Travel Fugitive Dust from Trucks Emissions

AP 42 Chapter 13, Section 13.2.2 Equation 1a and 2

Assumptions:
Surface Material Silt Content: 8.5% (From AP-42 Table 13.2.2-1)
Mean Vehicle Weight: 10 tons
Days with an average precipitation greater than 0.01 inches: 233 (From WRCC for Visalia)
Based on:

VehiclesTrips/year:	15650	VehiclesTrips/day:	50
Round Trip Miles/Trip:	0.35	Round Trip Miles/Trip:	0.35
Total miles travelled/year:	5,478	Total miles travelled/day:	18

	PM10	PM2.5
Em. Factor (lbs/VMT)	6.84E-01	6.84E-02
Lbs/day	2.61E+00	2.61E-01
Lbs/Year	817.93	81.79
Tons/year	**0.41**	**0.04**

*61% Control for water surpression 3 times daily
*44% Control for reducing speed to less than 15 mph

Baseline Food and Green Waste Composting Emissions from Stockpiles

Based on:

Increased Yearly Tonage:	75000
Number of Drop Points:	4

	VOC	NH3	PM10
Em. Factor (lbs/ton)	5.36	0.06	3.30E-04
Lbs/Year	402000	4500	99
Tons/year	**201.00**	**2.25**	**0.05**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Baseline Food and Green Waste Composting Emissions from Windrows

Based on:
Increased Yearly Tonage: 75000
Number of Drop Points: 2

	VOC	NH3	PM10
Em. Factor (lbs/ton)	4.27	1.44	3.30E-04
Lbs/Year	320250	108000	50
Tons/year	**160.13**	**54.00**	**0.02**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Baseline Manure Composting Emissions from Windrows

Based on:
Increased Yearly Tonage: 20000
Number of Drop Points: 2

	VOC	NH3	PM10
Em. Factor (lbs/ton)	1.78	2.93	3.30E-04
Lbs/Year	35600	58600	13
Tons/year	**17.80**	**29.30**	**0.01**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Baseline Office Area Source Emissions - CalEEMod v2011.1.1

Based on:
Office Size (sq. Feet) 1200

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Tons/year	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.74**	**0.02**	**0.00**	**6.24**

Harvest Power - Baseline Emissions

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Onsite (tons/year)	1.37	9.60	6.21	0.01	0.65	0.65	896.94	0.13	0.00	905.47
Indirect (tons/year)	0.03	3.51	0.23	0.00	0.04	0.02	426.00	0.08	0.01	429.47
Fugitive Dust (tons/year)					0.41	0.04				
Area Source (tons/year)	0.01	0.00	0.00	0.00	0.00	0.00	5.74			
Stationary Source (tons/year)	378.93				0.08					
Total (tons/year)	**380.33**	**13.11**	**6.45**	**0.01**	**1.18**	**0.71**	**1328.68**	**0.21**	**0.01**	**1334.94**
Total (tons/day)	**1.22**	**0.04**	**0.02**	**0.00**	**0.00**	**0.00**	**4.24**	**0.00**	**0.00**	**4.26**
Total (tons/week)	**7.29**	**0.25**	**0.12**	**0.00**	**0.02**	**0.01**	**25.47**	**0.00**	**0.00**	**25.59**

Pose-Project On-Site Equipment and Employee Emissions - CalEEMod v2011.1.1

Based on:

Employees: 16

Equipment: 6 loaders, grinder, 2 power screens, windrow turner, windsifter, tractor, and crane

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4	N2O	CO2e
On-Site Tons/year	1.48	10.29	6.67	0.01	0.72	0.72	964.85	0.12	0.00	967.38
Off-Site Tons/year	0.01	0.01	0.18	0.00	0.03	0.00	19.98	0.00	0.00	20.01
Tons/year	**1.51**	**10.31**	**6.84**	**0.01**	**0.75**	**0.72**	**984.82**	**0.12**	**0.00**	**987.39**

Post-Project Truck Emissions - EMFAC2011

Based on:

VehiclesTrips/year:	37560	VehiclesTrips/day:	120
Round Trip Miles/Trip:	14.6	Round Trip Miles/Trip:	14.6
Total miles travelled/year:	548,376	Total miles travelled/day:	1,752
Diesel Fuel Usage (4miles/gal):	137,094	Diesel Fuel Usage (4miles/gal):	438

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Em. Factor (grams/mile)	0.07	13.90	0.37	0.00	0.07	0.07	1631.53	1.40E-03	1.00E-04	
Lbs/Mile	1.50E-04	3.07E-02	8.09E-04	0.00E+00	1.58E-04	1.45E-04	3.60E+00			
Lbs/day	0.26	53.70	1.42	0.00	0.28	0.25	6301.78			
Lbs/Year	82.22	16809.53	443.76	0.00	86.57	79.64	1972458.54			
Tons/year	**0.04**	**8.40**	**0.22**	**0.00**	**0.04**	**0.04**	**986.23**	**0.19**	**0.01**	**994.51**

Post-Project On-Site Truck Idle Emissions - EMFAC2011

Based on:

Vehicles/year:	37560	Vehicles/day:	120
Minutes/Truck:	15	Minutes/Truck:	15
Total Hours/year:	9,390	Total Hours/day:	30

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Em. Factor (grams/hour)	6.29	69.15	33.35	0.07	0.33	0.31	7033.53			
Lbs/hour	1.39E-02	1.52E-01	7.35E-02	1.48E-04	7.31E-04	6.73E-04	1.55E+01			
Lbs/day	0.42	4.57	2.21	0.00	0.02	0.02	465.19			
Lbs/Year	130.13	1431.51	690.44	1.39	6.87	6.32	145603.97			
Tons/year	**0.07**	**0.72**	**0.35**	**0.00**	**0.00**	**0.00**	**72.80**	**0.00**	**0.00**	**72.80**

Project Increased CHP Emissions

Based on:

HP:	340
Total Hours/year:	8,760

	NOx	CO
Em. Factor (grams/bhp-hour)	0.10	0.68
Lbs/bhp-hour	2.20E-04	1.50E-03
Lbs/year	656.62	4465.05
Tons/year	**0.33**	**2.23**

Post-Project Unpaved Road Travel Fugitive Dust from Trucks Emissions

AP 42 Chapter 13, Section 13.2.2 Equation 1a and 2

Assumptions:
Surface Material Silt Content: 8.5% (From AP-42 Table 13.2.2-1)
Mean Vehicle Weight: 10 tons
Days with an average precipitation greater than 0.01 inches: 233 (From WRCC for Visalia)
Based on:

VehiclesTrips/year:	37560	VehiclesTrips/day:	120
Round Trip Miles/Trip:	0.35	Round Trip Miles/Trip:	0.35
Total miles travelled/year:	13,146	Total miles travelled/day:	42

	PM10	PM2.5
Em. Factor (lbs/VMT)	6.84E-01	6.84E-02
Lbs/day	6.27E+00	6.27E-01
Lbs/Year	1963.03	196.30
Tons/year	**0.98**	**0.10**

*61% Control for water surpression 3 times daily
*44% Control for reducing speed to less than 15 mph

Post-Project Food and Green Waste Composting Emissions from Stockpiles

Based on:

Increased Yearly Tonage:	156000
Number of Drop Points:	4

	VOC	NH3	PM10
Em. Factor (lbs/ton)	5.36	0.06	3.30E-04
Lbs/Year	836160	9360	206
Tons/year	**418.08**	**4.68**	**0.10**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Post-Project Food and Green Waste Composting Emissions from Windrows

Based on:
Increased Yearly Tonage: 156000
Number of Drop Points: 2

	VOC	NH3	PM10
Em. Factor (lbs/ton)	4.27	1.44	3.30E-04
Lbs/Year	666120	224640	103
Tons/year	**333.06**	**112.32**	**0.05**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Post-Project Manure Composting Emissions from Windrows

Based on:
Increased Yearly Tonage: 60000
Number of Drop Points: 2

	VOC	NH3	PM10
Em. Factor (lbs/ton)	1.78	2.93	3.30E-04
Lbs/Year	106800	175800	40
Tons/year	**53.40**	**87.90**	**0.02**

* Emissions factors were obtained from the SJVAPCD and are included in SJVAPCD Policy SSP-2050 dated 09-09-2009

Post-Project Office Area Source Emissions - CalEEMod v2011.1.1

Based on:
Office Size (sq. Feet) 1200

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Tons/year	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.74**	**0.02**	**0.00**	**6.24**

Harvest Power - Post-Project Operational Emissions

	ROG	NOx	CO	SOX	PM10	PM2.5	CO2	CH4*	N2O*	CO2e
Onsite (tons/year)	1.55	11.01	7.02	0.01	0.72	0.72	1037.65	0.14	0.00	1046.42
Indirect (tons/year)	0.05	8.41	0.40	0.00	0.07	0.04	1006.21	0.19	0.01	1014.52
Fugitive Dust (tons/year)					0.98	0.10				
Area Source (tons/year)	0.01	0.00	0.00	0.00	0.00	0.00	5.74			
Stationary Source (tons/year)	804.54	0.33	2.23		0.17					
Total (tons/year)	**806.15**	**19.75**	**9.65**	**0.01**	**1.95**	**0.86**	**2049.60**	**0.33**	**0.01**	**2060.94**
Total (tons/day)	**2.58**	**0.06**	**0.03**	**0.00**	**0.01**	**0.00**	**6.55**	**0.00**	**0.00**	**6.58**
Total (tons/week)	**15.45**	**0.38**	**0.18**	**0.00**	**0.04**	**0.02**	**39.29**	**0.01**	**0.00**	**39.51**

ATTACHMENT 2

Health Risk Assessment Output Files
-HARP

FILE: c:\HARP\projects\demo\Rep_PMI.txt

EXCEPTION REPORT
(there have been no changes or exceptions)

RECEPTORS WITH HIGHEST CANCER RISK

REC	TYPE	CANCER	CHRONIC	ACUTE	UTME	UTMN	ZONE
5	GRID	5.12E-06	1.51E-01	4.06E-01	296641	4011910	11
4	GRID	1.75E-06	5.93E-02	2.32E-01	296344	4012431	11
3	GRID	1.67E-06	4.91E-02	2.37E-01	296419	4012427	11
2	GRID	1.62E-06	4.41E-02	2.42E-01	296462	4012420	11
20	GRID	1.61E-06	6.02E-02	3.26E-01	296945	4011856	11
19	GRID	1.41E-06	6.47E-02	2.11E-01	296948	4011673	11
1	GRID	1.38E-06	3.65E-02	2.52E-01	296517	4012420	11
18	GRID	1.16E-06	6.31E-02	1.74E-01	296955	4011568	11
17	GRID	9.37E-07	6.15E-02	1.49E-01	296903	4011463	11
15	GRID	6.34E-07	4.29E-02	1.25E-01	295138	4012806	11
21	GRID	3.34E-07	1.31E-02	3.09E-01	297136	4012323	11
6	GRID	3.02E-07	3.85E-02	5.01E-01	296122	4011444	11
16	GRID	2.16E-07	7.64E-03	1.21E-01	297009	4012939	11
12	GRID	1.42E-07	1.25E-02	2.10E-01	295192	4011763	11
7	GRID	1.34E-07	1.08E-02	3.61E-01	295508	4011447	11
8	GRID	1.14E-07	8.85E-03	1.29E-01	295321	4011450	11
9	GRID	1.03E-07	8.12E-03	1.25E-01	295217	4011447	11
10	GRID	9.61E-08	7.67E-03	1.20E-01	295159	4011452	11
11	GRID	8.42E-08	7.05E-03	1.22E-01	295049	4011453	11
13	GRID	7.18E-08	6.24E-03	1.23E-01	294901	4011448	11
14	GRID	6.50E-08	5.52E-03	1.30E-01	294746	4011470	11

RECEPTORS WITH HIGHEST CHRONIC HI

REC	TYPE	CANCER	CHRONIC	ACUTE	UTME	UTMN	ZONE
5	GRID	5.12E-06	1.51E-01	4.06E-01	296641	4011910	11
19	GRID	1.41E-06	6.47E-02	2.11E-01	296948	4011673	11
18	GRID	1.16E-06	6.31E-02	1.74E-01	296955	4011568	11
17	GRID	9.37E-07	6.15E-02	1.49E-01	296903	4011463	11
20	GRID	1.61E-06	6.02E-02	3.26E-01	296945	4011856	11
4	GRID	1.75E-06	5.93E-02	2.32E-01	296344	4012431	11
3	GRID	1.67E-06	4.91E-02	2.37E-01	296419	4012427	11
2	GRID	1.62E-06	4.41E-02	2.42E-01	296462	4012420	11
15	GRID	6.34E-07	4.29E-02	1.25E-01	295138	4012806	11
6	GRID	3.02E-07	3.85E-02	5.01E-01	296122	4011444	11
1	GRID	1.38E-06	3.65E-02	2.52E-01	296517	4012420	11
21	GRID	3.34E-07	1.31E-02	3.09E-01	297136	4012323	11
12	GRID	1.42E-07	1.25E-02	2.10E-01	295192	4011763	11
7	GRID	1.34E-07	1.08E-02	3.61E-01	295508	4011447	11
8	GRID	1.14E-07	8.85E-03	1.29E-01	295321	4011450	11
9	GRID	1.03E-07	8.12E-03	1.25E-01	295217	4011447	11
10	GRID	9.61E-08	7.67E-03	1.20E-01	295159	4011452	11
16	GRID	2.16E-07	7.64E-03	1.21E-01	297009	4012939	11
11	GRID	8.42E-08	7.05E-03	1.22E-01	295049	4011453	11
13	GRID	7.18E-08	6.24E-03	1.23E-01	294901	4011448	11
14	GRID	6.50E-08	5.52E-03	1.30E-01	294746	4011470	11

RECEPTORS WITH HIGHEST ACUTE HI

REC	TYPE	CANCER	CHRONIC	ACUTE	UTME	UTMN	ZONE
6	GRID	3.02E-07	3.85E-02	5.01E-01	296122	4011444	11
5	GRID	5.12E-06	1.51E-01	4.06E-01	296641	4011910	11
7	GRID	1.34E-07	1.08E-02	3.61E-01	295508	4011447	11
20	GRID	1.61E-06	6.02E-02	3.26E-01	296945	4011856	11
21	GRID	3.34E-07	1.31E-02	3.09E-01	297136	4012323	11
1	GRID	1.38E-06	3.65E-02	2.52E-01	296517	4012420	11
2	GRID	1.62E-06	4.41E-02	2.42E-01	296462	4012420	11

				Rep_PMI			
3	GRID	1.67E-06	4.91E-02	2.37E-01	296419	4012427	11
4	GRID	1.75E-06	5.93E-02	2.32E-01	296344	4012431	11
19	GRID	1.41E-06	6.47E-02	2.11E-01	296948	4011673	11
12	GRID	1.42E-07	1.25E-02	2.10E-01	295192	4011763	11
18	GRID	1.16E-06	6.31E-02	1.74E-01	296955	4011568	11
17	GRID	9.37E-07	6.15E-02	1.49E-01	296903	4011463	11
14	GRID	6.50E-08	5.52E-03	1.30E-01	294746	4011470	11
8	GRID	1.14E-07	8.85E-03	1.29E-01	295321	4011450	11
9	GRID	1.03E-07	8.12E-03	1.25E-01	295217	4011447	11
15	GRID	6.34E-07	4.29E-02	1.25E-01	295138	4012806	11
13	GRID	7.18E-08	6.24E-03	1.23E-01	294901	4011448	11
11	GRID	8.42E-08	7.05E-03	1.22E-01	295049	4011453	11
16	GRID	2.16E-07	7.64E-03	1.21E-01	297009	4012939	11
10	GRID	9.61E-08	7.67E-03	1.20E-01	295159	4011452	11

This file:
c:\HARP\projects\demo\Rep_Can_70yr_DerOEH_AllRec_AllSrc_AllCh_ByRec_Site.txt

Created by HARP Version 1.4e Build 23.10.01
Uses ISC Version 99155
Uses BPIP (Dated: 04112)
Creation date: 4/9/2013 2:55:23 PM

EXCEPTION REPORT
   (there have been no changes or exceptions)

INPUT FILES:
   Source-Receptor file: C:\Lakes\Harvest\HRA6.src
   Averaging period adjustment factors file: not applicable
   Emission rates file: HRA6.ems
   Site parameters file: C:\HARP\PROJECTS\DEMO\project.sit

Screening mode is OFF

Exposure duration: 70 year (adult resident)
Analysis method: Derived (OEHHA) Method
Health effect: Cancer Risk
Receptor(s):   All
Sources(s):   All
Chemicals(s):   All

SITE PARAMETERS

DEPOSITION

   Deposition rate (m/s)   0.05

DRINKING WATER

*** Pathway disabled ***

FISH

*** Pathway disabled ***

PASTURE

*** Pathway disabled ***

HOME GROWN PRODUCE

   HUMAN INGESTION
   Fraction of ingested leafy vegetable
     from home grown source   0.15
   Fraction of ingested exposed vegetable
     from home grown source   0.15
   Fraction of ingested protected vegetable
     from home grown source   0.15
   Fraction of ingested root vegetable
     from home grown source   0.15

PIGS, CHICKENS AND EGGS

*** Pathway disabled ***

DERMAL ABSORPTION

*** Pathway enabled ***

SOIL INGESTION

*** Pathway enabled ***

MOTHER'S MILK

*** Pathway enabled ***

CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m^3)
0001	9901	DieselExhPM	Diesel engine exhaust, particulate matter (Diesel PM)	0.000E+00
0002	50000	Formaldehyde	Formaldehyde	0.000E+00
0003	56235	CCl4	Carbon tetrachloride	0.000E+00
0004	67663	Chloroform	Chloroform	0.000E+00
0005	71432	Benzene	Benzene	0.000E+00
0006	71556	1,1,1-TCA	Methyl chloroform {1,1,1-Trichloroethane}	0.000E+00
0007	75014	Vinyl Chloride	Vinyl chloride	0.000E+00
0008	75070	Acetaldehyde	Acetaldehyde	0.000E+00
0009	75092	Methylene Chlor	Methylene chloride {Dichloromethane}	0.000E+00
0010	75150	CS2	Carbon disulfide	0.000E+00
0011	75354	Vinylid Chlorid	Vinylidene chloride	0.000E+00
0012	78933	MEK	Methyl ethyl ketone {2-Butanone}	0.000E+00
0013	79016	TCE	Trichloroethylene	0.000E+00
0014	100425	Styrene	Styrene	0.000E+00
0015	106467	p-DiClBenzene	p-Dichlorobenzene	0.000E+00
0016	106934	EDB	Ethylene dibromide {EDB}	0.000E+00
0017	106990	1,3-Butadiene	1,3-Butadiene	0.000E+00
0018	107028	Acrolein	Acrolein	0.000E+00
0019	107062	EDC	Ethylene dichloride {EDC}	0.000E+00
0020	108054	Vinyl Acetate	Vinyl acetate	0.000E+00
0021	108883	Toluene	Toluene	0.000E+00
0022	123911	1,4-Dioxane	1,4-Dioxane	0.000E+00
0023	127184	Perc	Perchloroethylene {Tetrachloroethene}	0.000E+00
0024	1330207	Xylenes	Xylenes (mixed)	

			0.000E+00	
0025	7429905	Aluminum	Aluminum	
			0.000E+00	
0026	7439921	Lead	Lead	
			0.000E+00	
0027	7439965	Manganese	Manganese	
			0.000E+00	
0028	7439976	Mercury	Mercury	
			0.000E+00	
0029	7440020	Nickel	Nickel	
			0.000E+00	
0030	7440382	Arsenic	Arsenic	
			0.000E+00	
0031	7440439	Cadmium	Cadmium	
			0.000E+00	
0032	7440473	Chromium	Chromium	
			0.000E+00	
0033	7440484	Cobalt	Cobalt	
			0.000E+00	
0034	7440508	Copper	Copper	
			0.000E+00	
0035	7440666	Zinc	Zinc	
			0.000E+00	
0036	7664417	NH3	Ammonia	
			0.000E+00	
0037	7782492	Selenium	Selenium	
			0.000E+00	
0038	7783064	H2S	Hydrogen sulfide	
			0.000E+00	
0039	18540299	Cr(VI)	Chromium, hexavalent (& compounds)	
			0.000E+00	

CHEMICAL HEALTH VALUES

CHEM	CAS	ABBREVIATION	CancerPF(Inh)	CancerPF(Oral)	ChronicREL(Inh)	ChronicREL(Oral)	AcuteREL
			(mg/kg-d)^-1	(mg/kg-d)^-1	ug/m^3	mg/kg-d	ug/m^3
0001	9901	DieselExhPM	1.10E+00	*	5.00E+00	*	*
0002	50000	Formaldehyde	2.10E-02	*	9.00E+00	*	5.50E+01
0003	56235	CCl4	1.50E-01	*	4.00E+01	*	1.90E+03
0004	67663	Chloroform	1.90E-02	*	3.00E+02	*	1.50E+02
0005	71432	Benzene	1.00E-01	*	6.00E+01	*	1.30E+03
0006	71556	1,1,1-TCA	*	*	1.00E+03	*	6.80E+04
0007	75014	Vinyl Chloride	2.70E-01	*	*	*	1.80E+05
0008	75070	Acetaldehyde	1.00E-02	*	1.40E+02	*	4.70E+02
0009	75092	Methylene Chlor	3.50E-03	*	4.00E+02	*	1.40E+04
0010	75150	CS2	*	*	8.00E+02	*	6.20E+03
0011	75354	Vinylid Chlorid	*	*	7.00E+01	*	*
0012	78933	MEK	*	*	*	*	1.30E+04
0013	79016	TCE	7.00E-03	*	6.00E+02		

```
       *                   *
0014  100425     Styrene         *                   *                   9.00E+02
       *                   2.10E+04
0015  106467     p-DiClBenzene   4.00E-02            *                   8.00E+02
       *                   *
0016  106934     EDB             2.50E-01            *                   8.00E-01
       *                   *
0017  106990     1,3-Butadiene   6.00E-01            *                   2.00E+01
       *                   *
0018  107028     Acrolein        *                   *                   3.50E-01
       *                   2.50E+00
0019  107062     EDC             7.20E-02            *                   4.00E+02
       *                   *
0020  108054     Vinyl Acetate   *                   *                   2.00E+02
       *                   *
0021  108883     Toluene         *                   *                   3.00E+02
       *                   3.70E+04
0022  123911     1,4-Dioxane     2.70E-02            *                   3.00E+03
       *                   3.00E+03
0023  127184     Perc            2.10E-02            *                   3.50E+01
       *                   2.00E+04
0024  1330207    Xylenes         *                   *                   7.00E+02
       *                   2.20E+04
0025  7429905    Aluminum        *                   *                   *
       *                   *
0026  7439921    Lead            4.20E-02            8.50E-03            *
       *                   *
0027  7439965    Manganese       *                   *                   9.00E-02
       *                   *
0028  7439976    Mercury         *                   *                   3.00E-02
       1.60E-04            6.00E-01
0029  7440020    Nickel          9.10E-01            *                   5.00E-02
       5.00E-02            6.00E+00
0030  7440382    Arsenic         1.20E+01            1.50E+00            1.50E-02
       3.50E-06            2.00E-01
0031  7440439    Cadmium         1.50E+01            *                   2.00E-02
       5.00E-04            *
0032  7440473    Chromium        *                   *                   *
       *                   *
0033  7440484    Cobalt          *                   *                   *
       *                   *
0034  7440508    Copper          *                   *                   *
       *                   1.00E+02
0035  7440666    Zinc            *                   *                   *
       *                   *
0036  7664417    NH3             *                   *                   2.00E+02
       *                   3.20E+03
0037  7782492    Selenium        *                   *                   2.00E+01
       *                   *
0038  7783064    H2S             *                   *                   1.00E+01
       *                   4.20E+01
0039  18540299   Cr(VI)          5.10E+02            *                   2.00E-01
       2.00E-02            *

EMISSIONS DATA SOURCE: Emission rates loaded from file: C:\Lakes\Harvest\HRA6.ems
CHEMICALS ADDED OR DELETED: none

EMISSIONS FOR FACILITY FAC=1   DEV=*   PRO=*   STK=AREA1   NAME=Harvest AREA1  EMS
(lbs/yr)
SOURCE MULTIPLIER=1
CAS             ABBREV                MULTIPLIER     BG (ug/m^3)   AVRG (lbs/yr)
MAX (lbs/hr)
9901            DieselExhPM                    1                        0.00E+00
```

50000	Formaldehyde	1	0.00E+00	0.00E+00
56235	CCl4	1	0.00E+00	0.00E+00
67663	Chloroform	1	0.00E+00	0.00E+00
71432	Benzene	1	1.68E-03	2.24E-07
71556	1,1,1-TCA	1	2.78E-03	3.70E-07
75014	Vinyl Chloride	1	0.00E+00	0.00E+00
75070	Acetaldehyde	1	0.00E+00	0.00E+00
75092	Methylene Chlor	1	3.37E-03	4.48E-07
75150	CS2	1	4.13E-02	5.50E-06
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00
78933	MEK	1	2.11E-01	2.80E-05
79016	TCE	1	8.76E-03	1.17E-06
100425	Styrene	1	6.57E-03	8.74E-07
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	1.68E-03	2.24E-07
108883	Toluene	1	3.96E-03	5.27E-07
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	7.58E-03	1.01E-06
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	2.40E+00	3.20E-04
7439921	Lead	1	5.54E-02	7.38E-06
7439965	Manganese	1	8.13E-02	1.08E-05
7439976	Mercury	1	3.14E-03	4.18E-07
7440020	Nickel	1	7.76E-02	1.03E-05
7440382	Arsenic	1	7.58E-03	1.01E-06
7440439	Cadmium	1	7.21E-03	9.59E-07
7440473	Chromium	1	2.22E-01	2.95E-05

7440484	Cobalt	1	1.63E-03	2.16E-07
7440508	Copper	1	2.77E-01	3.69E-05
7440666	Zinc	1	5.17E-01	6.89E-05
7664417	Ammonia	1	1.17E+05	1.34E+01
7782492	Selenium	1	1.85E-02	2.46E-06
7783064	H2S	1	2.71E-01	3.61E-05
18540299	Cr(VI)	1	1.11E-02	1.48E-06

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=SLINE1 NAME=Harvest SLINE1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.23E+00	0.00E+00
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	0.00E+00
71556	1,1,1-TCA	1		0.00E+00	0.00E+00
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		0.00E+00	0.00E+00
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00
78933	MEK	1		0.00E+00	0.00E+00
79016	TCE	1		0.00E+00	0.00E+00
100425	Styrene	1		0.00E+00	0.00E+00
106467	p-DiClBenzene	1		0.00E+00	0.00E+00
106934	EDB	1		0.00E+00	0.00E+00
106990	1,3-Butadiene	1		0.00E+00	0.00E+00
107028	Acrolein	1		0.00E+00	0.00E+00
107062	EDC	1		0.00E+00	0.00E+00
108054	Vinyl Acetate	1		0.00E+00	0.00E+00
108883	Toluene	1		0.00E+00	0.00E+00
123911	1,4-Dioxane	1		0.00E+00	

127184	Perc	1	0.00E+00	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK1 NAME=Harvest STCK1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	1.00E+00	4.00E-04	
50000	Formaldehyde	1	0.00E+00	0.00E+00	
56235	CCl4	1	0.00E+00	0.00E+00	
67663	Chloroform	1	0.00E+00	0.00E+00	
71432	Benzene	1	0.00E+00	0.00E+00	
71556	1,1,1-TCA	1	0.00E+00	0.00E+00	
75014	Vinyl Chloride	1	0.00E+00	0.00E+00	
75070	Acetaldehyde	1	0.00E+00	0.00E+00	
75092	Methylene Chlor	1	0.00E+00	0.00E+00	
75150	CS2	1	0.00E+00	0.00E+00	
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00	

78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK2 NAME=Harvest STCK2 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.40E+02	

50000	Formaldehyde	1	1.12E-01	0.00E+00
56235	CCl4	1	0.00E+00	0.00E+00
67663	Chloroform	1	0.00E+00	0.00E+00
71432	Benzene	1	0.00E+00	0.00E+00
71556	1,1,1-TCA	1	0.00E+00	0.00E+00
75014	Vinyl Chloride	1	0.00E+00	0.00E+00
75070	Acetaldehyde	1	0.00E+00	0.00E+00
75092	Methylene Chlor	1	0.00E+00	0.00E+00
75150	CS2	1	0.00E+00	0.00E+00
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00
78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00

7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=SLINE2 NAME=Harvest SLINE2 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.40E-01	0.00E+00
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	0.00E+00
71556	1,1,1-TCA	1		0.00E+00	0.00E+00
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		0.00E+00	0.00E+00
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00
78933	MEK	1		0.00E+00	0.00E+00
79016	TCE	1		0.00E+00	0.00E+00
100425	Styrene	1		0.00E+00	0.00E+00
106467	p-DiClBenzene	1		0.00E+00	0.00E+00
106934	EDB	1		0.00E+00	0.00E+00
106990	1,3-Butadiene	1		0.00E+00	0.00E+00
107028	Acrolein	1		0.00E+00	0.00E+00
107062	EDC	1		0.00E+00	0.00E+00
108054	Vinyl Acetate	1		0.00E+00	0.00E+00
108883	Toluene	1		0.00E+00	0.00E+00
123911	1,4-Dioxane	1		0.00E+00	

127184	Perc	1	0.00E+00	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK3 NAME=Harvest STCK3 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	1.00E+00	4.00E-04	
50000	Formaldehyde	1	0.00E+00	0.00E+00	
56235	CCl4	1	0.00E+00	0.00E+00	
67663	Chloroform	1	0.00E+00	0.00E+00	
71432	Benzene	1	0.00E+00	0.00E+00	
71556	1,1,1-TCA	1	0.00E+00	0.00E+00	
75014	Vinyl Chloride	1	0.00E+00	0.00E+00	
75070	Acetaldehyde	1	0.00E+00	0.00E+00	
75092	Methylene Chlor	1	0.00E+00	0.00E+00	
75150	CS2	1	0.00E+00	0.00E+00	
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00	

78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK4 NAME=Harvest STCK4 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.00E+00	

50000	Formaldehyde	1	5.96E+01	0.00E+00
56235	CCl4	1	1.47E-01	6.80E-03
67663	Chloroform	1	2.92E-01	1.68E-05
71432	Benzene	1	5.62E+01	3.33E-05
71556	1,1,1-TCA	1	2.94E-01	6.42E-03
75014	Vinyl Chloride	1	3.77E-01	3.36E-05
75070	Acetaldehyde	1	2.07E+00	4.31E-05
75092	Methylene Chlor	1	2.90E+00	2.36E-04
75150	CS2	1	0.00E+00	3.31E-04
75354	Vinylid Chlorid	1	1.49E-01	0.00E+00
78933	MEK	1	0.00E+00	1.70E-05
79016	TCE	1	2.90E-01	0.00E+00
100425	Styrene	1	1.10E+00	3.31E-05
106467	p-DiClBenzene	1	1.42E+00	1.25E-04
106934	EDB	1	1.44E-01	1.62E-04
106990	1,3-Butadiene	1	8.05E-01	1.65E-05
107028	Acrolein	1	4.71E-01	9.19E-05
107062	EDC	1	1.46E-01	5.38E-05
108054	Vinyl Acetate	1	0.00E+00	1.67E-05
108883	Toluene	1	2.46E+01	0.00E+00
123911	1,4-Dioxane	1	2.88E-01	2.81E-03
127184	Perc	1	2.98E-01	3.29E-05
1330207	Xylenes	1	5.30E+00	3.40E-05
7429905	Aluminum	1	0.00E+00	6.06E-04
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00

7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

CANCER RISK REPORT

REC	INHAL	DERM	SOIL	MOTHER	FISH	WATER	VEG	DAIRY	BEEF	CHICK	PIG	EGG	MEAT	ORAL	TOTAL
0001	1.36E-06	8.50E-09	4.31E-09	0.00E+00	0.00E+00	0.00E+00	8.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-08	1.38E-06
0002	1.59E-06	1.03E-08	5.21E-09	0.00E+00	0.00E+00	0.00E+00	9.86E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.54E-08	1.62E-06
0003	1.65E-06	1.15E-08	5.81E-09	0.00E+00	0.00E+00	0.00E+00	1.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-08	1.67E-06
0004	1.72E-06	1.39E-08	7.03E-09	0.00E+00	0.00E+00	0.00E+00	1.33E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-08	1.75E-06
0005	5.03E-06	3.53E-08	1.79E-08	0.00E+00	0.00E+00	0.00E+00	3.38E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.70E-08	5.12E-06
0006	2.79E-07	9.13E-09	4.63E-09	0.00E+00	0.00E+00	0.00E+00	8.76E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.25E-08	3.02E-07
0007	1.28E-07	2.55E-09	1.29E-09	0.00E+00	0.00E+00	0.00E+00	2.45E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-09	1.34E-07
0008	1.09E-07	2.09E-09	1.06E-09	0.00E+00	0.00E+00	0.00E+00	2.01E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-09	1.14E-07
0009	9.86E-08	1.92E-09	9.73E-10	0.00E+00	0.00E+00	0.00E+00	1.84E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-09	1.03E-07
0010	9.16E-08	1.82E-09	9.20E-10	0.00E+00	0.00E+00	0.00E+00	1.74E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-09	9.61E-08
0011	8.01E-08	1.67E-09	8.46E-10	0.00E+00	0.00E+00	0.00E+00	1.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.12E-09	8.42E-08
0012	1.35E-07	2.97E-09	1.50E-09	0.00E+00	0.00E+00	0.00E+00	2.84E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.31E-09	1.42E-07
0013	6.81E-08	1.48E-09	7.48E-10	0.00E+00	0.00E+00	0.00E+00	1.42E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.64E-09	7.18E-08
0014	6.18E-08	1.31E-09	6.61E-10	0.00E+00	0.00E+00	0.00E+00	1.25E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-09	6.50E-08
0015	6.09E-07	1.01E-08	5.13E-09	0.00E+00	0.00E+00	0.00E+00	9.71E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-08	6.34E-07
0016	2.12E-07	1.79E-09	9.07E-10	0.00E+00	0.00E+00	0.00E+00	1.72E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E-09	2.16E-07
0017	9.01E-07	1.45E-08	7.35E-09	0.00E+00	0.00E+00	0.00E+00	1.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.58E-08	9.37E-07
0018	1.12E-06	1.48E-08	7.52E-09	0.00E+00	0.00E+00	0.00E+00	1.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-08	1.16E-06
0019	1.37E-06	1.52E-08	7.69E-09	0.00E+00	0.00E+00	0.00E+00	1.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-08	1.41E-06
0020	1.57E-06	1.41E-08	7.14E-09	0.00E+00	0.00E+00	0.00E+00	1.35E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.47E-08	1.61E-06
0021	3.27E-07	3.06E-09	1.55E-09	0.00E+00	0.00E+00	0.00E+00	2.94E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.56E-09	3.34E-07

This file:
c:\HARP\projects\demo\Rep_Chr_Res_DerOEH_AllRec_AllSrc_AllCh_ByRec_Site.txt

Created by HARP Version 1.4e Build 23.10.01
Uses ISC Version 99155
Uses BPIP (Dated: 04112)
Creation date: 4/9/2013 2:55:36 PM

EXCEPTION REPORT
   (there have been no changes or exceptions)

INPUT FILES:
   Source-Receptor file: C:\Lakes\Harvest\HRA6.src
   Averaging period adjustment factors file: not applicable
   Emission rates file: HRA6.ems
   Site parameters file: C:\HARP\PROJECTS\DEMO\project.sit

Screening mode is OFF

Exposure duration: resident
Analysis method: Derived (OEHHA) Method
Health effect: Chronic HI
Receptor(s):   All
Sources(s):   All
Chemicals(s):   All

SITE PARAMETERS

DEPOSITION

   Deposition rate (m/s)   0.05

DRINKING WATER

*** Pathway disabled ***

FISH

*** Pathway disabled ***

PASTURE

*** Pathway disabled ***

HOME GROWN PRODUCE

   HUMAN INGESTION
   Fraction of ingested leafy vegetable
     from home grown source   0.15
   Fraction of ingested exposed vegetable
     from home grown source   0.15
   Fraction of ingested protected vegetable
     from home grown source   0.15
   Fraction of ingested root vegetable
     from home grown source   0.15

PIGS, CHICKENS AND EGGS

*** Pathway disabled ***

DERMAL ABSORPTION

*** Pathway enabled ***

SOIL INGESTION

*** Pathway enabled ***

MOTHER'S MILK

*** Pathway enabled ***

CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m^3)
0001	9901	DieselExhPM	Diesel engine exhaust, particulate matter (Diesel PM)	0.000E+00
0002	50000	Formaldehyde	Formaldehyde	0.000E+00
0003	56235	CCl4	Carbon tetrachloride	0.000E+00
0004	67663	Chloroform	Chloroform	0.000E+00
0005	71432	Benzene	Benzene	0.000E+00
0006	71556	1,1,1-TCA	Methyl chloroform {1,1,1-Trichloroethane}	0.000E+00
0007	75014	Vinyl Chloride	Vinyl chloride	0.000E+00
0008	75070	Acetaldehyde	Acetaldehyde	0.000E+00
0009	75092	Methylene Chlor	Methylene chloride {Dichloromethane}	0.000E+00
0010	75150	CS2	Carbon disulfide	0.000E+00
0011	75354	Vinylid Chlorid	Vinylidene chloride	0.000E+00
0012	78933	MEK	Methyl ethyl ketone {2-Butanone}	0.000E+00
0013	79016	TCE	Trichloroethylene	0.000E+00
0014	100425	Styrene	Styrene	0.000E+00
0015	106467	p-DiClBenzene	p-Dichlorobenzene	0.000E+00
0016	106934	EDB	Ethylene dibromide {EDB}	0.000E+00
0017	106990	1,3-Butadiene	1,3-Butadiene	0.000E+00
0018	107028	Acrolein	Acrolein	0.000E+00
0019	107062	EDC	Ethylene dichloride {EDC}	0.000E+00
0020	108054	Vinyl Acetate	Vinyl acetate	0.000E+00
0021	108883	Toluene	Toluene	0.000E+00
0022	123911	1,4-Dioxane	1,4-Dioxane	0.000E+00
0023	127184	Perc	Perchloroethylene {Tetrachloroethene}	0.000E+00
0024	1330207	Xylenes	Xylenes (mixed)	

			0.000E+00	
0025	7429905	Aluminum	Aluminum	
			0.000E+00	
0026	7439921	Lead	Lead	
			0.000E+00	
0027	7439965	Manganese	Manganese	
			0.000E+00	
0028	7439976	Mercury	Mercury	
			0.000E+00	
0029	7440020	Nickel	Nickel	
			0.000E+00	
0030	7440382	Arsenic	Arsenic	
			0.000E+00	
0031	7440439	Cadmium	Cadmium	
			0.000E+00	
0032	7440473	Chromium	Chromium	
			0.000E+00	
0033	7440484	Cobalt	Cobalt	
			0.000E+00	
0034	7440508	Copper	Copper	
			0.000E+00	
0035	7440666	Zinc	Zinc	
			0.000E+00	
0036	7664417	NH3	Ammonia	
			0.000E+00	
0037	7782492	Selenium	Selenium	
			0.000E+00	
0038	7783064	H2S	Hydrogen sulfide	
			0.000E+00	
0039	18540299	Cr(VI)	Chromium, hexavalent (& compounds)	
			0.000E+00	

CHEMICAL HEALTH VALUES

CHEM	CAS	ABBREVIATION	CancerPF(Inh)	CancerPF(Oral)	ChronicREL(Inh)	ChronicREL(Oral)	AcuteREL
			(mg/kg-d)^-1	(mg/kg-d)^-1	ug/m^3	mg/kg-d	ug/m^3
0001	9901	DieselExhPM	1.10E+00	*	5.00E+00	*	*
0002	50000	Formaldehyde	2.10E-02	*	9.00E+00	*	5.50E+01
0003	56235	CCl4	1.50E-01	*	4.00E+01	*	1.90E+03
0004	67663	Chloroform	1.90E-02	*	3.00E+02	*	1.50E+02
0005	71432	Benzene	1.00E-01	*	6.00E+01	*	1.30E+03
0006	71556	1,1,1-TCA	*	*	1.00E+03	*	6.80E+04
0007	75014	Vinyl Chloride	2.70E-01	*	*	*	1.80E+05
0008	75070	Acetaldehyde	1.00E-02	*	1.40E+02	*	4.70E+02
0009	75092	Methylene Chlor	3.50E-03	*	4.00E+02	*	1.40E+04
0010	75150	CS2	*	*	8.00E+02	*	6.20E+03
0011	75354	Vinylid Chlorid	*	*	7.00E+01	*	*
0012	78933	MEK	*	*	*	*	1.30E+04
0013	79016	TCE	7.00E-03	*	6.00E+02		

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      *                   *
0014  100425     Styrene         *                   *                   9.00E+02
      *                   2.10E+04
0015  106467     p-DiClBenzene   4.00E-02            *                   8.00E+02
      *                   *
0016  106934     EDB             2.50E-01            *                   8.00E-01
      *                   *
0017  106990     1,3-Butadiene   6.00E-01            *                   2.00E+01
      *                   *
0018  107028     Acrolein        *                   *                   3.50E-01
      *                   2.50E+00
0019  107062     EDC             7.20E-02            *                   4.00E+02
      *                   *
0020  108054     Vinyl Acetate   *                   *                   2.00E+02
      *                   *
0021  108883     Toluene         *                   *                   3.00E+02
      *                   3.70E+04
0022  123911     1,4-Dioxane     2.70E-02            *                   3.00E+03
      *                   3.00E+03
0023  127184     Perc            2.10E-02            *                   3.50E+01
      *                   2.00E+04
0024  1330207    Xylenes         *                   *                   7.00E+02
      *                   2.20E+04
0025  7429905    Aluminum        *                   *                   *
      *                   *
0026  7439921    Lead            4.20E-02            8.50E-03            *
      *                   *
0027  7439965    Manganese       *                   *                   9.00E-02
      *                   *
0028  7439976    Mercury         *                   *                   3.00E-02
      1.60E-04            6.00E-01
0029  7440020    Nickel          9.10E-01            *                   5.00E-02
      5.00E-02            6.00E+00
0030  7440382    Arsenic         1.20E+01            1.50E+00            1.50E-02
      3.50E-06            2.00E-01
0031  7440439    Cadmium         1.50E+01            *                   2.00E-02
      5.00E-04            *
0032  7440473    Chromium        *                   *                   *
      *                   *
0033  7440484    Cobalt          *                   *                   *
      *                   *
0034  7440508    Copper          *                   *                   *
      *                   1.00E+02
0035  7440666    Zinc            *                   *                   *
      *                   *
0036  7664417    NH3             *                   *                   2.00E+02
      *                   3.20E+03
0037  7782492    Selenium        *                   *                   2.00E+01
      *                   *
0038  7783064    H2S             *                   *                   1.00E+01
      *                   4.20E+01
0039  18540299   Cr(VI)          5.10E+02            *                   2.00E-01
      2.00E-02            *

EMISSIONS DATA SOURCE: Emission rates loaded from file: C:\Lakes\Harvest\HRA6.ems
CHEMICALS ADDED OR DELETED: none

EMISSIONS FOR FACILITY FAC=1   DEV=*   PRO=*   STK=AREA1   NAME=Harvest AREA1  EMS
(lbs/yr)
SOURCE MULTIPLIER=1
CAS             ABBREV                MULTIPLIER     BG (ug/m^3)   AVRG (lbs/yr)
MAX (lbs/hr)
9901            DieselExhPM                    1                         0.00E+00
```

50000	Formaldehyde	1	0.00E+00	0.00E+00
56235	CCl4	1	0.00E+00	0.00E+00
67663	Chloroform	1	0.00E+00	0.00E+00
71432	Benzene	1	1.68E-03	2.24E-07
71556	1,1,1-TCA	1	2.78E-03	3.70E-07
75014	Vinyl Chloride	1	0.00E+00	0.00E+00
75070	Acetaldehyde	1	0.00E+00	0.00E+00
75092	Methylene Chlor	1	3.37E-03	4.48E-07
75150	CS2	1	4.13E-02	5.50E-06
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00
78933	MEK	1	2.11E-01	2.80E-05
79016	TCE	1	8.76E-03	1.17E-06
100425	Styrene	1	6.57E-03	8.74E-07
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	1.68E-03	2.24E-07
108883	Toluene	1	3.96E-03	5.27E-07
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	7.58E-03	1.01E-06
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	2.40E+00	3.20E-04
7439921	Lead	1	5.54E-02	7.38E-06
7439965	Manganese	1	8.13E-02	1.08E-05
7439976	Mercury	1	3.14E-03	4.18E-07
7440020	Nickel	1	7.76E-02	1.03E-05
7440382	Arsenic	1	7.58E-03	1.01E-06
7440439	Cadmium	1	7.21E-03	9.59E-07
7440473	Chromium	1	2.22E-01	2.95E-05

7440484	Cobalt	1	1.63E-03	2.16E-07
7440508	Copper	1	2.77E-01	3.69E-05
7440666	Zinc	1	5.17E-01	6.89E-05
7664417	Ammonia	1	1.17E+05	1.34E+01
7782492	Selenium	1	1.85E-02	2.46E-06
7783064	H2S	1	2.71E-01	3.61E-05
18540299	Cr(VI)	1	1.11E-02	1.48E-06

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=SLINE1 NAME=Harvest SLINE1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.23E+00	0.00E+00
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	0.00E+00
71556	1,1,1-TCA	1		0.00E+00	0.00E+00
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		0.00E+00	0.00E+00
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00
78933	MEK	1		0.00E+00	0.00E+00
79016	TCE	1		0.00E+00	0.00E+00
100425	Styrene	1		0.00E+00	0.00E+00
106467	p-DiClBenzene	1		0.00E+00	0.00E+00
106934	EDB	1		0.00E+00	0.00E+00
106990	1,3-Butadiene	1		0.00E+00	0.00E+00
107028	Acrolein	1		0.00E+00	0.00E+00
107062	EDC	1		0.00E+00	0.00E+00
108054	Vinyl Acetate	1		0.00E+00	0.00E+00
108883	Toluene	1		0.00E+00	0.00E+00
123911	1,4-Dioxane	1		0.00E+00	

127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK1 NAME=Harvest STCK1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	1.00E+00	4.00E-04	
50000	Formaldehyde	1	0.00E+00	0.00E+00	
56235	CCl4	1	0.00E+00	0.00E+00	
67663	Chloroform	1	0.00E+00	0.00E+00	
71432	Benzene	1	0.00E+00	0.00E+00	
71556	1,1,1-TCA	1	0.00E+00	0.00E+00	
75014	Vinyl Chloride	1	0.00E+00	0.00E+00	
75070	Acetaldehyde	1	0.00E+00	0.00E+00	
75092	Methylene Chlor	1	0.00E+00	0.00E+00	
75150	CS2	1	0.00E+00	0.00E+00	
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00	

78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK2 NAME=Harvest STCK2 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.40E+02	

50000	Formaldehyde	1	1.12E-01	0.00E+00
56235	CCl4	1	0.00E+00	0.00E+00
67663	Chloroform	1	0.00E+00	0.00E+00
71432	Benzene	1	0.00E+00	0.00E+00
71556	1,1,1-TCA	1	0.00E+00	0.00E+00
75014	Vinyl Chloride	1	0.00E+00	0.00E+00
75070	Acetaldehyde	1	0.00E+00	0.00E+00
75092	Methylene Chlor	1	0.00E+00	0.00E+00
75150	CS2	1	0.00E+00	0.00E+00
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00
78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00

7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=SLINE2 NAME=Harvest SLINE2 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.40E-01	0.00E+00
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	0.00E+00
71556	1,1,1-TCA	1		0.00E+00	0.00E+00
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		0.00E+00	0.00E+00
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00
78933	MEK	1		0.00E+00	0.00E+00
79016	TCE	1		0.00E+00	0.00E+00
100425	Styrene	1		0.00E+00	0.00E+00
106467	p-DiClBenzene	1		0.00E+00	0.00E+00
106934	EDB	1		0.00E+00	0.00E+00
106990	1,3-Butadiene	1		0.00E+00	0.00E+00
107028	Acrolein	1		0.00E+00	0.00E+00
107062	EDC	1		0.00E+00	0.00E+00
108054	Vinyl Acetate	1		0.00E+00	0.00E+00
108883	Toluene	1		0.00E+00	0.00E+00
123911	1,4-Dioxane	1		0.00E+00	

0.00E+00				
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK3 NAME=Harvest STCK3 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.00E+00	4.00E-04
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	0.00E+00
71556	1,1,1-TCA	1		0.00E+00	0.00E+00
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		0.00E+00	0.00E+00
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00

78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK4 NAME=Harvest STCK4 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.00E+00	

50000	Formaldehyde	1	5.96E+01	0.00E+00
56235	CCl4	1	1.47E-01	6.80E-03
67663	Chloroform	1	2.92E-01	1.68E-05
71432	Benzene	1	5.62E+01	3.33E-05
71556	1,1,1-TCA	1	2.94E-01	6.42E-03
75014	Vinyl Chloride	1	3.77E-01	3.36E-05
75070	Acetaldehyde	1	2.07E+00	4.31E-05
75092	Methylene Chlor	1	2.90E+00	2.36E-04
75150	CS2	1	0.00E+00	3.31E-04
75354	Vinylid Chlorid	1	1.49E-01	0.00E+00
78933	MEK	1	0.00E+00	1.70E-05
79016	TCE	1	2.90E-01	0.00E+00
100425	Styrene	1	1.10E+00	3.31E-05
106467	p-DiClBenzene	1	1.42E+00	1.25E-04
106934	EDB	1	1.44E-01	1.62E-04
106990	1,3-Butadiene	1	8.05E-01	1.65E-05
107028	Acrolein	1	4.71E-01	9.19E-05
107062	EDC	1	1.46E-01	5.38E-05
108054	Vinyl Acetate	1	0.00E+00	1.67E-05
108883	Toluene	1	2.46E+01	0.00E+00
123911	1,4-Dioxane	1	2.88E-01	2.81E-03
127184	Perc	1	2.98E-01	3.29E-05
1330207	Xylenes	1	5.30E+00	3.40E-05
7429905	Aluminum	1	0.00E+00	6.06E-04
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00

Rep_Chr_Res_DerOEH_AllRec_AllSrc_AllCh_ByRec_Site

7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

CHRONIC HI REPORT

REC	CV	CNS	BONE	DEVEL	ENDO	EYE	GILV	IMMUN	KIDN	REPRO	RESP	SKIN	BLOOD	MAX
0001	4.09E-03	4.31E-03	0.00E+00	4.26E-03	0.00E+00	1.38E-08	4.71E-06	0.00E+00	2.28E-04	5.95E-06	3.65E-02	4.09E-03	1.10E-04	3.65E-02
0002	4.94E-03	5.22E-03	0.00E+00	5.16E-03	0.00E+00	1.62E-08	5.67E-06	0.00E+00	2.76E-04	6.93E-06	4.41E-02	4.94E-03	1.31E-04	4.41E-02
0003	5.51E-03	5.81E-03	0.00E+00	5.75E-03	0.00E+00	1.63E-08	6.26E-06	0.00E+00	3.08E-04	6.95E-06	4.91E-02	5.51E-03	1.43E-04	4.91E-02
0004	6.67E-03	7.03E-03	0.00E+00	6.95E-03	0.00E+00	1.72E-08	7.49E-06	0.00E+00	3.73E-04	7.24E-06	5.93E-02	6.67E-03	1.68E-04	5.93E-02
0005	1.70E-02	1.79E-02	0.00E+00	1.77E-02	0.00E+00	6.12E-08	1.97E-05	0.00E+00	9.48E-04	2.64E-05	1.51E-01	1.70E-02	4.62E-04	1.51E-01
0006	4.39E-03	4.60E-03	0.00E+00	4.55E-03	0.00E+00	2.31E-09	4.60E-06	0.00E+00	2.45E-04	6.69E-07	3.85E-02	4.39E-03	9.33E-05	3.85E-02
0007	1.23E-03	1.29E-03	0.00E+00	1.27E-03	0.00E+00	1.26E-09	1.31E-06	0.00E+00	6.85E-05	4.67E-07	1.08E-02	1.23E-03	2.73E-05	1.08E-02
0008	1.01E-03	1.06E-03	0.00E+00	1.05E-03	0.00E+00	1.22E-09	1.08E-06	0.00E+00	5.61E-05	4.66E-07	8.85E-03	1.01E-03	2.27E-05	8.85E-03
0009	9.23E-04	9.70E-04	0.00E+00	9.59E-04	0.00E+00	1.18E-09	9.93E-07	0.00E+00	5.15E-05	4.56E-07	8.12E-03	9.23E-04	2.10E-05	8.12E-03
0010	8.73E-04	9.17E-04	0.00E+00	9.07E-04	0.00E+00	1.15E-09	9.39E-07	0.00E+00	4.87E-05	4.48E-07	7.67E-03	8.72E-04	1.99E-05	7.67E-03
0011	8.02E-04	8.43E-04	0.00E+00	8.34E-04	0.00E+00	1.09E-09	8.65E-07	0.00E+00	4.48E-05	4.29E-07	7.05E-03	8.02E-04	1.84E-05	7.05E-03
0012	1.43E-03	1.50E-03	0.00E+00	1.48E-03	0.00E+00	1.52E-09	1.52E-06	0.00E+00	7.95E-05	5.69E-07	1.25E-02	1.43E-03	3.18E-05	1.25E-02
0013	7.09E-04	7.46E-04	0.00E+00	7.37E-04	0.00E+00	1.03E-09	7.67E-07	0.00E+00	3.96E-05	4.09E-07	6.24E-03	7.09E-04	1.64E-05	6.24E-03
0014	6.27E-04	6.60E-04	0.00E+00	6.52E-04	0.00E+00	9.95E-10	6.82E-07	0.00E+00	3.50E-05	3.99E-07	5.52E-03	6.27E-04	1.46E-05	5.52E-03
0015	4.86E-03	5.12E-03	0.00E+00	5.06E-03	0.00E+00	7.81E-09	5.29E-06	0.00E+00	2.71E-04	3.14E-06	4.29E-02	4.86E-03	1.14E-04	4.29E-02
0016	8.60E-04	9.06E-04	0.00E+00	8.96E-04	0.00E+00	2.11E-09	9.62E-07	0.00E+00	4.80E-05	8.86E-07	7.64E-03	8.60E-04	2.15E-05	7.64E-03
0017	6.97E-03	7.34E-03	0.00E+00	7.26E-03	0.00E+00	1.55E-08	7.74E-06	0.00E+00	3.89E-04	6.45E-06	6.15E-02	6.97E-03	1.71E-04	6.15E-02
0018	7.13E-03	7.52E-03	0.00E+00	7.44E-03	0.00E+00	2.16E-08	8.12E-06	0.00E+00	3.98E-04	9.21E-06	6.31E-02	7.13E-03	1.86E-04	6.31E-02
0019	7.30E-03	7.71E-03	0.00E+00	7.62E-03	0.00E+00	2.71E-08	8.49E-06	0.00E+00	4.08E-04	1.17E-05	6.47E-02	7.30E-03	2.00E-04	6.47E-02
0020	6.77E-03	7.15E-03	0.00E+00	7.07E-03	0.00E+00	2.69E-08	7.94E-06	0.00E+00	3.78E-04	1.17E-05	6.02E-02	6.77E-03	1.89E-04	6.02E-02
0021	1.47E-03	1.55E-03	0.00E+00	1.53E-03	0.00E+00	3.72E-09	1.65E-06	0.00E+00	8.22E-05	1.57E-06	1.31E-02	1.47E-03	3.70E-05	1.31E-02

Rep_Acu_AllRec_AllSrc_AllCh_ByRec
This file: c:\HARP\projects\demo\Rep_Acu_AllRec_AllSrc_AllCh_ByRec.txt

Created by HARP Version 1.4e Build 23.10.01
Uses ISC Version 99155
Uses BPIP (Dated: 04112)
Creation date: 4/9/2013 2:55:42 PM

EXCEPTION REPORT
(there have been no changes or exceptions)

INPUT FILES:
Source-Receptor file: C:\Lakes\Harvest\HRA6.src
Averaging period adjustment factors file: not applicable
Emission rates file: HRA6.ems
Site parameters file: C:\HARP\PROJECTS\DEMO\project.sit

Screening mode is OFF

Analysis method: Point Estimate
Health effect: Acute HI Simple (Concurrent Max.)
Receptor(s): All
Sources(s): All
Chemicals(s): All

CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m^3)
0001	9901	DieselExhPM	Diesel engine exhaust, particulate matter (Diesel PM)	0.000E+00
0002	50000	Formaldehyde	Formaldehyde	0.000E+00
0003	56235	CCl4	Carbon tetrachloride	0.000E+00
0004	67663	Chloroform	Chloroform	0.000E+00
0005	71432	Benzene	Benzene	0.000E+00
0006	71556	1,1,1-TCA	Methyl chloroform {1,1,1-Trichloroethane}	0.000E+00
0007	75014	Vinyl Chloride	Vinyl chloride	0.000E+00
0008	75070	Acetaldehyde	Acetaldehyde	0.000E+00
0009	75092	Methylene Chlor	Methylene chloride {Dichloromethane}	0.000E+00
0010	75150	CS2	Carbon disulfide	0.000E+00
0011	75354	Vinylid Chlorid	Vinylidene chloride	0.000E+00
0012	78933	MEK	Methyl ethyl ketone {2-Butanone}	0.000E+00
0013	79016	TCE	Trichloroethylene	0.000E+00
0014	100425	Styrene	Styrene	0.000E+00
0015	106467	p-DiClBenzene	p-Dichlorobenzene	0.000E+00
0016	106934	EDB	Ethylene dibromide {EDB}	0.000E+00
0017	106990	1,3-Butadiene	1,3-Butadiene	0.000E+00

0018	107028	Acrolein	Acrolein 0.000E+00
0019	107062	EDC	Ethylene dichloride {EDC} 0.000E+00
0020	108054	Vinyl Acetate	Vinyl acetate 0.000E+00
0021	108883	Toluene	Toluene 0.000E+00
0022	123911	1,4-Dioxane	1,4-Dioxane 0.000E+00
0023	127184	Perc	Perchloroethylene {Tetrachloroethene} 0.000E+00
0024	1330207	Xylenes	Xylenes (mixed) 0.000E+00
0025	7429905	Aluminum	Aluminum 0.000E+00
0026	7439921	Lead	Lead 0.000E+00
0027	7439965	Manganese	Manganese 0.000E+00
0028	7439976	Mercury	Mercury 0.000E+00
0029	7440020	Nickel	Nickel 0.000E+00
0030	7440382	Arsenic	Arsenic 0.000E+00
0031	7440439	Cadmium	Cadmium 0.000E+00
0032	7440473	Chromium	Chromium 0.000E+00
0033	7440484	Cobalt	Cobalt 0.000E+00
0034	7440508	Copper	Copper 0.000E+00
0035	7440666	Zinc	Zinc 0.000E+00
0036	7664417	NH3	Ammonia 0.000E+00
0037	7782492	Selenium	Selenium 0.000E+00
0038	7783064	H2S	Hydrogen sulfide 0.000E+00
0039	18540299	Cr(VI)	Chromium, hexavalent (& compounds) 0.000E+00

CHEMICAL HEALTH VALUES

CHEM	CAS	ABBREVIATION	CancerPF(Inh) (mg/kg-d)^-1	CancerPF(Oral) (mg/kg-d)^-1	ChronicREL(Inh) ug/m^3	ChronicREL(Oral) mg/kg-d	AcuteREL ug/m^3
0001	9901	DieselExhPM	1.10E+00	*	5.00E+00	*	*
0002	50000	Formaldehyde	2.10E-02	*	9.00E+00	*	5.50E+01
0003	56235	CCl4	1.50E-01	*	4.00E+01	*	1.90E+03
0004	67663	Chloroform	1.90E-02	*	3.00E+02	*	1.50E+02
0005	71432	Benzene	1.00E-01	*	6.00E+01	*	1.30E+03
0006	71556	1,1,1-TCA	*	*	1.00E+03	*	6.80E+04

0007	75014	Vinyl Chloride	2.70E-01	*	*	*
0008	75070	Acetaldehyde	1.00E-02	*	1.40E+02	*
0009	75092	Methylene Chlor	3.50E-03	*	4.00E+02	*
0010	75150	CS2	*	*	8.00E+02	*
0011	75354	Vinylid Chlorid	*	*	7.00E+01	*
0012	78933	MEK	*	*	*	*
0013	79016	TCE	7.00E-03	*	6.00E+02	*
0014	100425	Styrene	*	*	9.00E+02	*
0015	106467	p-DiClBenzene	4.00E-02	*	8.00E+02	*
0016	106934	EDB	2.50E-01	*	8.00E-01	*
0017	106990	1,3-Butadiene	6.00E-01	*	2.00E+01	*
0018	107028	Acrolein	*	*	3.50E-01	*
0019	107062	EDC	7.20E-02	*	4.00E+02	*
0020	108054	Vinyl Acetate	*	*	2.00E+02	*
0021	108883	Toluene	*	*	3.00E+02	*
0022	123911	1,4-Dioxane	2.70E-02	*	3.00E+03	*
0023	127184	Perc	2.10E-02	*	3.50E+01	*
0024	1330207	Xylenes	*	*	7.00E+02	*
0025	7429905	Aluminum	*	*	*	*
0026	7439921	Lead	4.20E-02	8.50E-03	*	*
0027	7439965	Manganese	*	*	9.00E-02	*
0028	7439976	Mercury	*	*	3.00E-02	1.60E-04
0029	7440020	Nickel	9.10E-01	*	5.00E-02	5.00E-02
0030	7440382	Arsenic	1.20E+01	1.50E+00	1.50E-02	3.50E-06
0031	7440439	Cadmium	1.50E+01	*	2.00E-02	5.00E-04
0032	7440473	Chromium	*	*	*	*
0033	7440484	Cobalt	*	*	*	*
0034	7440508	Copper	*	*	*	*
0035	7440666	Zinc	*	*	*	*
0036	7664417	NH3	*	*	2.00E+02	*
0037	7782492	Selenium	*	*	2.00E+01	*
0038	7783064	H2S	*	*	1.00E+01	*

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       *                    4.20E+01
0039  18540299   Cr(VI)          5.10E+02           *                    2.00E-01
       2.00E-02             *
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EMISSIONS DATA SOURCE: Emission rates loaded from file: C:\Lakes\Harvest\HRA6.ems
CHEMICALS ADDED OR DELETED: none

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=AREA1 NAME=Harvest AREA1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.00E+00	0.00E+00
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		1.68E-03	2.24E-07
71556	1,1,1-TCA	1		2.78E-03	3.70E-07
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		3.37E-03	4.48E-07
75150	CS2	1		4.13E-02	5.50E-06
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00
78933	MEK	1		2.11E-01	2.80E-05
79016	TCE	1		8.76E-03	1.17E-06
100425	Styrene	1		6.57E-03	8.74E-07
106467	p-DiClBenzene	1		0.00E+00	0.00E+00
106934	EDB	1		0.00E+00	0.00E+00
106990	1,3-Butadiene	1		0.00E+00	0.00E+00
107028	Acrolein	1		0.00E+00	0.00E+00
107062	EDC	1		0.00E+00	0.00E+00
108054	Vinyl Acetate	1		1.68E-03	2.24E-07
108883	Toluene	1		3.96E-03	5.27E-07
123911	1,4-Dioxane	1		0.00E+00	0.00E+00
127184	Perc	1		7.58E-03	1.01E-06
1330207	Xylenes	1		0.00E+00	0.00E+00
7429905	Aluminum	1		2.40E+00	3.20E-04
7439921	Lead	1		5.54E-02	

7439965	Manganese	1	8.13E-02	7.38E-06
7439976	Mercury	1	3.14E-03	1.08E-05
7440020	Nickel	1	7.76E-02	4.18E-07
7440382	Arsenic	1	7.58E-03	1.03E-05
7440439	Cadmium	1	7.21E-03	1.01E-06
7440473	Chromium	1	2.22E-01	9.59E-07
7440484	Cobalt	1	1.63E-03	2.95E-05
7440508	Copper	1	2.77E-01	2.16E-07
7440666	Zinc	1	5.17E-01	3.69E-05
7664417	Ammonia	1	1.17E+05	6.89E-05
7782492	Selenium	1	1.85E-02	1.34E+01
7783064	H2S	1	2.71E-01	2.46E-06
18540299	Cr(VI)	1	1.11E-02	3.61E-05
				1.48E-06

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=SLINE1 NAME=Harvest SLINE1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.23E+00	0.00E+00
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	0.00E+00
71556	1,1,1-TCA	1		0.00E+00	0.00E+00
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		0.00E+00	0.00E+00
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00
78933	MEK	1		0.00E+00	0.00E+00
79016	TCE	1		0.00E+00	0.00E+00
100425	Styrene	1		0.00E+00	0.00E+00
106467	p-DiClBenzene	1		0.00E+00	0.00E+00

106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK1 NAME=Harvest STCK1 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.00E+00	4.00E-04
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	

71556	1,1,1-TCA	1	0.00E+00	0.00E+00
75014	Vinyl Chloride	1	0.00E+00	0.00E+00
75070	Acetaldehyde	1	0.00E+00	0.00E+00
75092	Methylene Chlor	1	0.00E+00	0.00E+00
75150	CS2	1	0.00E+00	0.00E+00
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00
78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00

7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK2 NAME=Harvest STCK2 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.40E+02	1.12E-01
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	0.00E+00
71556	1,1,1-TCA	1		0.00E+00	0.00E+00
75014	Vinyl Chloride	1		0.00E+00	0.00E+00
75070	Acetaldehyde	1		0.00E+00	0.00E+00
75092	Methylene Chlor	1		0.00E+00	0.00E+00
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		0.00E+00	0.00E+00
78933	MEK	1		0.00E+00	0.00E+00
79016	TCE	1		0.00E+00	0.00E+00
100425	Styrene	1		0.00E+00	0.00E+00
106467	p-DiClBenzene	1		0.00E+00	0.00E+00
106934	EDB	1		0.00E+00	0.00E+00
106990	1,3-Butadiene	1		0.00E+00	0.00E+00
107028	Acrolein	1		0.00E+00	0.00E+00
107062	EDC	1		0.00E+00	0.00E+00
108054	Vinyl Acetate	1		0.00E+00	0.00E+00
108883	Toluene	1		0.00E+00	0.00E+00
123911	1,4-Dioxane	1		0.00E+00	0.00E+00
127184	Perc	1		0.00E+00	0.00E+00
1330207	Xylenes	1		0.00E+00	0.00E+00
7429905	Aluminum	1		0.00E+00	0.00E+00
7439921	Lead	1		0.00E+00	

0.00E+00				
7439965	Manganese	1		0.00E+00
0.00E+00				
7439976	Mercury	1		0.00E+00
0.00E+00				
7440020	Nickel	1		0.00E+00
0.00E+00				
7440382	Arsenic	1		0.00E+00
0.00E+00				
7440439	Cadmium	1		0.00E+00
0.00E+00				
7440473	Chromium	1		0.00E+00
0.00E+00				
7440484	Cobalt	1		0.00E+00
0.00E+00				
7440508	Copper	1		0.00E+00
0.00E+00				
7440666	Zinc	1		0.00E+00
0.00E+00				
7664417	Ammonia	1		0.00E+00
0.00E+00				
7782492	Selenium	1		0.00E+00
0.00E+00				
7783064	H2S	1		0.00E+00
0.00E+00				
18540299	Cr(VI)	1		0.00E+00
0.00E+00				

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=SLINE2 NAME=Harvest SLINE2 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)
MAX (lbs/hr)				
9901	DieselExhPM	1		1.40E-01
0.00E+00				
50000	Formaldehyde	1		0.00E+00
0.00E+00				
56235	CCl4	1		0.00E+00
0.00E+00				
67663	Chloroform	1		0.00E+00
0.00E+00				
71432	Benzene	1		0.00E+00
0.00E+00				
71556	1,1,1-TCA	1		0.00E+00
0.00E+00				
75014	Vinyl Chloride	1		0.00E+00
0.00E+00				
75070	Acetaldehyde	1		0.00E+00
0.00E+00				
75092	Methylene Chlor	1		0.00E+00
0.00E+00				
75150	CS2	1		0.00E+00
0.00E+00				
75354	Vinylid Chlorid	1		0.00E+00
0.00E+00				
78933	MEK	1		0.00E+00
0.00E+00				
79016	TCE	1		0.00E+00
0.00E+00				
100425	Styrene	1		0.00E+00
0.00E+00				
106467	p-DiClBenzene	1		0.00E+00
0.00E+00				

106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK3 NAME=Harvest STCK3 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		1.00E+00	4.00E-04
50000	Formaldehyde	1		0.00E+00	0.00E+00
56235	CCl4	1		0.00E+00	0.00E+00
67663	Chloroform	1		0.00E+00	0.00E+00
71432	Benzene	1		0.00E+00	

71556	1,1,1-TCA	1	0.00E+00	0.00E+00
75014	Vinyl Chloride	1	0.00E+00	0.00E+00
75070	Acetaldehyde	1	0.00E+00	0.00E+00
75092	Methylene Chlor	1	0.00E+00	0.00E+00
75150	CS2	1	0.00E+00	0.00E+00
75354	Vinylid Chlorid	1	0.00E+00	0.00E+00
78933	MEK	1	0.00E+00	0.00E+00
79016	TCE	1	0.00E+00	0.00E+00
100425	Styrene	1	0.00E+00	0.00E+00
106467	p-DiClBenzene	1	0.00E+00	0.00E+00
106934	EDB	1	0.00E+00	0.00E+00
106990	1,3-Butadiene	1	0.00E+00	0.00E+00
107028	Acrolein	1	0.00E+00	0.00E+00
107062	EDC	1	0.00E+00	0.00E+00
108054	Vinyl Acetate	1	0.00E+00	0.00E+00
108883	Toluene	1	0.00E+00	0.00E+00
123911	1,4-Dioxane	1	0.00E+00	0.00E+00
127184	Perc	1	0.00E+00	0.00E+00
1330207	Xylenes	1	0.00E+00	0.00E+00
7429905	Aluminum	1	0.00E+00	0.00E+00
7439921	Lead	1	0.00E+00	0.00E+00
7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00

7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

EMISSIONS FOR FACILITY FAC=1 DEV=* PRO=* STK=STCK4 NAME=Harvest STCK4 EMS (lbs/yr)
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.00E+00	0.00E+00
50000	Formaldehyde	1		5.96E+01	6.80E-03
56235	CCl4	1		1.47E-01	1.68E-05
67663	Chloroform	1		2.92E-01	3.33E-05
71432	Benzene	1		5.62E+01	6.42E-03
71556	1,1,1-TCA	1		2.94E-01	3.36E-05
75014	Vinyl Chloride	1		3.77E-01	4.31E-05
75070	Acetaldehyde	1		2.07E+00	2.36E-04
75092	Methylene Chlor	1		2.90E+00	3.31E-04
75150	CS2	1		0.00E+00	0.00E+00
75354	Vinylid Chlorid	1		1.49E-01	1.70E-05
78933	MEK	1		0.00E+00	0.00E+00
79016	TCE	1		2.90E-01	3.31E-05
100425	Styrene	1		1.10E+00	1.25E-04
106467	p-DiClBenzene	1		1.42E+00	1.62E-04
106934	EDB	1		1.44E-01	1.65E-05
106990	1,3-Butadiene	1		8.05E-01	9.19E-05
107028	Acrolein	1		4.71E-01	5.38E-05
107062	EDC	1		1.46E-01	1.67E-05
108054	Vinyl Acetate	1		0.00E+00	0.00E+00
108883	Toluene	1		2.46E+01	2.81E-03
123911	1,4-Dioxane	1		2.88E-01	3.29E-05
127184	Perc	1		2.98E-01	3.40E-05
1330207	Xylenes	1		5.30E+00	6.06E-04
7429905	Aluminum	1		0.00E+00	0.00E+00
7439921	Lead	1		0.00E+00	

7439965	Manganese	1	0.00E+00	0.00E+00
7439976	Mercury	1	0.00E+00	0.00E+00
7440020	Nickel	1	0.00E+00	0.00E+00
7440382	Arsenic	1	0.00E+00	0.00E+00
7440439	Cadmium	1	0.00E+00	0.00E+00
7440473	Chromium	1	0.00E+00	0.00E+00
7440484	Cobalt	1	0.00E+00	0.00E+00
7440508	Copper	1	0.00E+00	0.00E+00
7440666	Zinc	1	0.00E+00	0.00E+00
7664417	Ammonia	1	0.00E+00	0.00E+00
7782492	Selenium	1	0.00E+00	0.00E+00
7783064	H2S	1	0.00E+00	0.00E+00
18540299	Cr(VI)	1	0.00E+00	0.00E+00

ACUTE HI REPORT

REC	CV	CNS	BONE	DEVEL	ENDO	EYE	GILV	IMMUN	KIDN	REPRO	RESP	SKIN	BLOOD	MAX
0001	3.01E-04	4.00E-04	0.00E+00	4.39E-04	0.00E+00	2.52E-01	1.63E-07	1.93E-04	0.00E+00	9.68E-05	2.50E-01	0.00E+00	9.11E-05	2.52E-01
0002	2.88E-04	3.84E-04	0.00E+00	4.38E-04	0.00E+00	2.42E-01	1.86E-07	2.02E-04	0.00E+00	1.10E-04	2.39E-01	0.00E+00	1.04E-04	2.42E-01
0003	2.82E-04	3.76E-04	0.00E+00	4.40E-04	0.00E+00	2.37E-01	2.01E-07	2.08E-04	0.00E+00	1.20E-04	2.34E-01	0.00E+00	1.12E-04	2.37E-01
0004	2.77E-04	3.68E-04	0.00E+00	4.09E-04	0.00E+00	2.32E-01	1.59E-07	1.83E-04	0.00E+00	9.41E-05	2.30E-01	0.00E+00	8.86E-05	2.32E-01
0005	4.87E-04	6.43E-04	0.00E+00	6.32E-04	0.00E+00	4.06E-01	1.30E-07	2.38E-04	0.00E+00	7.70E-05	4.05E-01	0.00E+00	7.24E-05	4.06E-01
0006	6.03E-04	7.92E-04	0.00E+00	7.37E-04	0.00E+00	5.01E-01	8.63E-08	2.53E-04	0.00E+00	5.14E-05	5.00E-01	0.00E+00	4.82E-05	5.01E-01
0007	4.33E-04	5.70E-04	0.00E+00	5.40E-04	0.00E+00	3.61E-01	7.81E-08	1.91E-04	0.00E+00	4.64E-05	3.60E-01	0.00E+00	4.36E-05	3.61E-01
0008	1.55E-04	2.05E-04	0.00E+00	2.12E-04	0.00E+00	1.29E-01	6.07E-08	8.65E-05	0.00E+00	3.60E-05	1.28E-01	0.00E+00	3.39E-05	1.29E-01
0009	1.49E-04	1.98E-04	0.00E+00	2.12E-04	0.00E+00	1.25E-01	7.06E-08	9.02E-05	0.00E+00	4.19E-05	1.24E-01	0.00E+00	3.94E-05	1.25E-01
0010	1.43E-04	1.90E-04	0.00E+00	2.01E-04	0.00E+00	1.20E-01	6.43E-08	8.45E-05	0.00E+00	3.82E-05	1.19E-01	0.00E+00	3.59E-05	1.20E-01
0011	1.45E-04	1.93E-04	0.00E+00	2.04E-04	0.00E+00	1.22E-01	6.46E-08	8.55E-05	0.00E+00	3.83E-05	1.21E-01	0.00E+00	3.61E-05	1.22E-01
0012	2.52E-04	3.32E-04	0.00E+00	3.29E-04	0.00E+00	2.10E-01	7.13E-08	1.25E-04	0.00E+00	4.24E-05	2.09E-01	0.00E+00	3.99E-05	2.10E-01
0013	1.47E-04	1.95E-04	0.00E+00	2.07E-04	0.00E+00	1.23E-01	6.60E-08	8.70E-05	0.00E+00	3.92E-05	1.22E-01	0.00E+00	3.69E-05	1.23E-01
0014	1.55E-04	2.06E-04	0.00E+00	2.13E-04	0.00E+00	1.30E-01	6.07E-08	8.68E-05	0.00E+00	3.60E-05	1.29E-01	0.00E+00	3.39E-05	1.30E-01
0015	1.49E-04	1.98E-04	0.00E+00	2.14E-04	0.00E+00	1.25E-01	7.38E-08	9.19E-05	0.00E+00	4.38E-05	1.24E-01	0.00E+00	4.12E-05	1.25E-01
0016	1.45E-04	1.92E-04	0.00E+00	2.10E-04	0.00E+00	1.21E-01	7.75E-08	9.24E-05	0.00E+00	4.60E-05	1.20E-01	0.00E+00	4.33E-05	1.21E-01

0017	1.78E-04	2.36E-04	0.00E+00	2.53E-04	0.00E+00	1.49E-01	8.60E-08	1.08E-04	0.00E+00	5.11E-05	1.48E-01	0.00E+00	4.80E-05	1.49E-01
0018	2.08E-04	2.76E-04	0.00E+00	2.90E-04	0.00E+00	1.74E-01	8.88E-08	1.20E-04	0.00E+00	5.27E-05	1.73E-01	0.00E+00	4.96E-05	1.74E-01
0019	2.53E-04	3.34E-04	0.00E+00	3.43E-04	0.00E+00	2.11E-01	9.43E-08	1.39E-04	0.00E+00	5.60E-05	2.10E-01	0.00E+00	5.27E-05	2.11E-01
0020	3.91E-04	5.15E-04	0.00E+00	5.05E-04	0.00E+00	3.26E-01	1.01E-07	1.89E-04	0.00E+00	6.00E-05	3.25E-01	0.00E+00	5.64E-05	3.26E-01
0021	3.71E-04	4.89E-04	0.00E+00	4.85E-04	0.00E+00	3.09E-01	1.06E-07	1.85E-04	0.00E+00	6.30E-05	3.08E-01	0.00E+00	5.93E-05	3.09E-01

ATTACHMENT 3

Ambient Air Quality Assessment Analysis Summary File

AAQA for Harvest (1)
All Values are in ug/m^3

	Nox* 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	PM10 24 Hour	PM10 Annual	PM2.5 24 Hour	PM2.5 Annual
SLINE1	1.49E+00	6.77E-02	1.63E+00	4.78E-01	0.00E+00	0.00E+00	0.00E+00	5.16E+00	7.45E-01	5.25E-01	7.58E-02
STCK1	1.30E+00	4.25E-02	3.10E+00	8.50E-01	6.24E-03	4.67E-03	3.27E-04	9.74E-04	6.29E-05	8.95E-04	5.78E-05
AREA1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-02	2.49E-03	3.24E-02	2.49E-03
STCK2	4.52E+01	7.64E-01	1.09E+02	1.70E+01	0.00E+00	0.00E+00	0.00E+00	6.33E-02	6.67E-03	6.33E-02	6.67E-03
SLINE2	1.27E-01	4.89E-03	5.07E-01	1.06E-01	0.00E+00	0.00E+00	0.00E+00	1.77E+00	3.05E-02	1.81E-01	3.12E-03
STCK3	3.67E+00	1.18E-01	7.12E+00	2.38E+00	1.43E-02	9.07E-03	1.07E-03	6.95E-04	7.10E-05	6.38E-04	6.53E-05
STCK4	7.10E-01	6.23E-02	9.68E+00	4.36E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Background	1.16E+02	1.85E+01	3.09E+03	2.29E+03	1.92E+01	1.92E+01	8.87E+01	7.10E+01	4.78E+01	5.40E+01	5.40E+01
Facility Totals	168.23	20	3222	2315	19	19	89	78	49	55	54
AAQS	188.68	100	23000	10000	196	1300	105	50	20	35	12
	Pass	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**	**Fail**	**Fail**	**Fail**	**Fail**

*Tier III

District and EPA's Significance Level (ug/m^3)

NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	PM10 24 Hour	PM10 Annual	PM2.5 24 Hour	PM2.5 Annual
0	**1**	**2000**	**500**	**0**	**25**		**10.4**	**2.08**	**2.5**	**0.63**
							Pass	**Pass**	**Pass**	**Pass**

AAQA Emission (g/sec)

Device	NOx 1 Hour	NOx Annual	CO 1 Hour	CO 8 Hour	SOx 1 Hour	SOx 3 Hour	SOx 24 Hour	PM10 24 Hour	PM10 Annual	PM2.5 24 Hour	PM2.5 Annual
AREA1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-03	2.67E-03	2.67E-03	2.67E-03
SLine1	1.17E-02	3.32E-03	5.98E-04	5.98E-04	0.00E+00	0.00E+00	0.00E+00	1.24E-02	1.06E-02	1.26E-03	1.08E-03
SLINE2	1.34E-03	3.81E-04	6.86E-05	6.86E-05	0.00E+00	0.00E+00	0.00E+00	1.42E-03	1.21E-03	1.45E-04	1.24E-04
STCK1	1.51E-02	4.29E-03	7.26E-03	7.26E-03	1.46E-05	1.46E-05	4.87E-06	2.41E-05	2.06E-05	2.21E-05	1.89E-05
STCK2	2.00E-01	2.85E-02	1.21E-01	6.06E-02	0.00E+00	0.00E+00	0.00E+00	2.36E-03	2.01E-03	2.36E-03	2.01E-03
STCK3	1.51E-02	4.29E-03	7.26E-03	7.26E-03	1.46E-05	1.46E-05	4.87E-06	2.41E-05	2.06E-05	2.21E-05	1.89E-05
STCK4	9.44E-03	9.44E-03	6.42E-02	6.42E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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Focus
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Air Permitting
EPA Title V Permitting
Variance Petitions
Biodiesel Fuel
Solid Waste Landfills
Wastewater Treatment
Emissions Engineering
Permit Auditing
CalARP
Greenhouse Gas Verification

Education
California State University -Fresno
B.S., Mechanical Engineering

Registrations
Professional Mechanical Engineer (P.E.)
(CA Reg. No. M35147)

SJVAPCD Certified Air Permitting Professional
(Certificate Number 1065)

CARB GHG Lead Verifier
(Executive Order H-10-114)

Associations
Golden Empire Chapter, Air & Waste Management Association

Doug Shaffer is a Professional Engineer and an Engineer Associate for Insight Environmental. He has prepared and submitted numerous applications and engineering evaluations to the San Joaquin Valley Air Pollution Control District (Valley Air District). These applications requested Authorities to Construct for a wide variety of projects ranging from administrative changes of existing permits to major development projects.

Prior to becoming a consultant, Mr. Shaffer acquired over eight years of experience in managing, coordinating and conducting multi disciplinary environmental analysis while with the Valley Air District. Mr. Shaffer provides expert assistance with air quality issues including interpretation of proposed and existing rules and regulations, permitting, EPA Title V permitting and compliance, and emission reduction credit banking. He has analyzed rule interpretation for application to municipal and industrial landfill and wastewater treatment systems and is familiar with the intricacies of overlapping regulatory requirements. He is also familiar with the design criteria of air pollution control equipment, techniques utilized by industries and has special expertise in their design and regulation.

Working together with our clients for favorable results, Mr. Shaffer has composed and presented the thorough documentation necessary for successful variance petition presentation to the Valley Air District's Hearing Board.

Mr. Shaffer has participated in facility audits to determine the compliance status of our clients operations. He has assisted in compiling and submitting corrective action plans and directed permitting actions to place the operations in full compliance with such regulations as Title V of the Clean Air Act.

Mr. Shaffer is an integral part of Insight Environmental's CARB GHG Verification Body. His Lead Verification qualification includes sector-specific Oil & Gas Systems and Process Emissions accreditations.

Mr. Shaffer is knowledgeable with the requirements of California Accidental Release Prevention (CalARP) requirements.

As a Professional Engineer, Mr. Shaffer has reviewed and certified Federal Spill Prevention, Control, and Countermeasure (SPCC) plans.

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KATHY E. PARKER, CAPP REA

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Site Assessment & Characterization
Auditing

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M.S., Geology

University of California, Santa Barbara
Hazardous Materials Management Program

Registrations
California Registered Environmental Assessor (REA No. 03935)

Certified Air Permitting Professional (CAPP No. 1002)

Associations
Golden Empire Chapter, Air & Waste Management Association (past Chair)

Kathy Parker is a Principal and Project Manager. She has been certified as an air permitting professional under the San Joaquin Valley Air Pollution Control District Certified Air Permitting Professional (CAPP) program. Ms. Parker has eighteen years of experience in air quality issues dealing with the preparation and negotiation of permits, health risk assessment, emission reduction credit banking, environmental compliance auditing, mutual settlement discussions, and all aspects of the Title V Federal Operating Permit Program.

She has extensive interpretive and compliance experience with the rules and regulations adopted by the South Coast AQMD, the San Luis Obispo, Santa Barbara, Ventura, San Joaquin Valley, and Monterey Bay Unified APCDs, the California Air Resources Board, and the U.S. EPA. She provides environmental compliance assistance to oilfield, agricultural, food processing, governmental and manufacturing operations throughout California.

She has managed and performed activities required by California's AB 2588 air toxic "Hot Spot" legislation since 1989 including the preparation of emission inventory plans and reports, health risk assessments, public notification plans, and risk reduction audits.

Ms. Parker has over 15 years of experience in air dispersion modeling and related programs, including AERMOD, AERMET, AERMAP, ISCST3, ISC-PRIME, BPIP, PCRAMMET, WRPLOT, HARP and HARP On-Ramp applications. She executes these models and post-processors to determine the potential health risk due to emissions air toxic emissions from various projects and applies these tools to monitor and predict ambient air quality and odor impacts, pursuant to California Environmental Quality Act (CEQA) requirements.

As a Registered Environmental Assessor (REA) through the California Environmental Protection Agency - Office of Environmental Health Hazard Assessment REA, Ms. Parker has conducted numerous Phase I/II Environmental Site Assessments to identify potential environmental liabilities.

In addition to her contributions at Insight, Ms. Parker is also the current Education Committee Chairman of the Golden Empire Chapter of the Air & Waste Management Association.

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Texas A&M University Inland Spill Control School

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National Panel of Consumer Arbitrators - Certified Arbitrator

40 Hour Hazwoper Certified

Associations
Air & Waste Management Association (Board of Directors – Golden Empire Chapter)

Western States Petroleum Association
- Associate Member

RONALD W. HUNTER, REA

VICE PRESIDENT, PRINCIPAL
BAKERSFIELD, CALIFORNIA

Ronald Hunter is Vice President of Insight Environmental Consultants. He has been a Registered Environmental Assessor for many years and serves as Principal Project Manager on environmental compliance programs and air quality impact analyses. He has extensive experience in all phases of environmental compliance systems and programs covering over 25 years. Mr. Hunter's primary focus is in conducting and managing Air Quality Impact Analyses, preparation of air quality documentation in EIRs and Development and Resource Planning for large, commercial, industrial, alternative energy and residential client projects. These projects are designed to meet the rigorous regulatory and legal requirements of the California Environmental Act (CEQA). Mr. Hunter is thoroughly experienced in the environmental impacts of land/property acquisition and divestitures and has assisted many clients with planning and development of their property while significantly reducing environmental and economical impacts. He is a Registered Environmental Assessor (REA) through the California Environmental Protection Agency - Office of Environmental Health Hazard Assessment and has conducted many Phase I and Phase II Environmental Site Assessments.

He has proven expertise in organization and management of audits at various industrial facilities to determine their compliance status with existing and forcasted environmental regulations. He has managed and led large-scale efforts to examine several clients' ability to comply with Title V of the Federal Clean Air Act that have included reviewing over 20,000 permit conditions.

He has prepared and submitted numerous applications for emissions permits before the U.S. EPA as well as regulatory agencies in California, Texas, Louisiana, Oklahoma, Kansas and Montana. Mr. Hunter has negotiated numerous settlements with various regulatory agencies including the U.S. EPA, Oklahoma Corporation Commission, Kansas Department of Health and Environment, Louisiana Department of Environmental Quality, South Coast AQMD and Santa Barbara, Ventura and San Joaquin Valley Unified APCDs.

Mr. Hunter has managed large remediation efforts involving the activities of numerous contractors at multiple sites. These projects entailed multi-million dollar budgets – many of which were completed with significant savings. He has also managed the regulatory impacts and requirements related to installation and operation of one of the largest solar power arrays in the U.S.

Mr. Hunter has experience in the litigation of CERCLA cost-recovery cases, including *de minimis* settlement negotiations with the EPA and cost allocation among potentially responsible parties (PRPs). He also has experience in civil litigation, having directed counsel and provided technical and regulatory advice in depositions and discovery. He has participated in, conducted and directed, mediation and settlement of numerous environmental matters.

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- Electrical Generation
- Concrete Manufacturing

Associations
Air & Waste Management Association – Golden Empire Chapter

American Society of Mechanical Engineers (ASME)

Matt Daniel is an Associate at Insight Environmental. Mr. Daniel has worked in the environmental consulting business for a number of years with a focus on air quality regulation and issues. He is experienced in the preparation of air quality permits throughout central and southern California. His experience in working on various air quality issues includes negotiation of various air quality operating conditions as well as emission reduction credit banking applications. Mr. Daniel is also quite proficient in the various air quality requirements encompassed within the California Environmental Quality Act (CEQA). He has prepared numerous Air Quality Impact Analyses for residential, commercial, industrial, municipal solid waste landfills and land-use development projects. He also conducts health risk assessments and ambient air quality impact analyses for development projects throughout California. His knowledge and use of various California Air Resources Board (CARB) and San Joaquin Valley Air Pollution Control District-approved air dispersion models provides valuable support to our client's various development and expansion projects.

Mr. Daniel's experience in the preparation of Air Quality Impact Analyses (AQIAs) has included residential, commercial, municipal landfills, mining, and industrial development sites. Residential developments ranging in size from small neighborhood developments to large planned community multi-use developments have been completed by Mr. Daniel. He is experienced in air dispersion modeling and has conducted numerous modeling projects to determine the potential health risk due to air toxic emissions from various projects that could impact workers and nearby community receptors as well.

Mr. Daniel is also well-versed in the calculation, preparation and verification of Greenhouse Gas (GHG) impacts and inventories. He is a CARB-certified Lead Verifier for Electrical Generation facilities and Concrete Manufacturing operations sectors. Mr. Daniel has been instrumental in assisting many clients in reducing their GHG or carbon "footprint" and mitigating their impacts as required by California Assembly Bill 32 and federal EPA Part 98 Greenhouse Gas reporting.

Mr. Daniel has prepared and submitted a number of applications for Authorities to Construct (ATC) including several Title V facilities and has conducted numerous site inspections to document compliance with Permits to Operate (PTO) within the jurisdictions of the South Coast AQMD, San Joaquin Valley APCD and the Kern County APCD. He also is trained in compliance methodologies for fugitive emissions leak detection and assists in the inspection and compliance review of a number of oil and gas client's compliance programs.

Mr. Daniel holds a Bachelor of Science Degree in Mechanical Engineering from Rose-Hulman Institute of Technology in Terra Haute, Indiana.

Attachment 8:

Resolutions for PSP 92-091 and PSP 99-026 (ZA)

BEFORE THE ZONING ADMINISTRATOR

COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF SPECIAL USE PERMIT)

DECISION NO. 2380

APPLICATION NO. PSP 99-026 (ZA))

Decision of the Zoning Administrator of the County of Tulare approving a Special Use Permit requested by Tulare County Composting and Biomass, Inc., 24478 Road 140, Tulare, CA 93274, to amend PSP 92-091 for the expansion of an existing solid waste recycling and manufacture of composting fertilizer on a 35-acre site located on the west side of Road 140 (Lovers Lane), approximately 2,000 feet south of Avenue 248 (Cartmill Avenue), northeast of Tulare.

The Zoning Administrator hereby determines the following findings were relevant in evaluating this application:

1. An application for a Special Use Permit has been filed pursuant to the regulations contained in Section 16 of Ordinance No. 352, the Zoning Ordinance.

2. Under Board of Supervisors' Resolution No. 83-459, as amended, and Section 16 of the Tulare County Zoning Ordinance, the Zoning Administrator is authorized to approve or deny requests for special use permits for expansions and/or modifications of any existing uses for which a Special Use Permit has been issued.

3. Staff has given notice of the Zoning Administrator's intention to consider the granting of a Special Use Permit as provided in Section 16 of said Ordinance No. 352 and as provided in Section 65905 of the Government Code of the State of California.

4. Staff has performed necessary investigations, prepared a written report and recommended certain conditions of approval if this application is approved by the Zoning Administrator.

5. Public hearings were conducted on September 9 and 23, 1999, September 28, November 9, and December 7, 2000, in the Commission Meeting Room of the Resource Management Agency Offices in order to receive public testimony on the proposed application.

6. The applicant has requested an amendment to Special Use Permit No. PSP 92-091 for the expansion of an existing solid waste recycling facility and manufacture of composting fertilizer on a 35-acre portion of an 87.78 acre parcel in the AE-40 (Exclusive Agricultural - 40 acre minimum) Zone. The proposed expansion consists of an increase in the volume of material processed and a corresponding increase in vehicular traffic.

7. The AE-40 Zone allows most agricultural uses and limited residential uses. Fertilizer manufacturing and solid waste recycling are permitted in the AE-40 Zone upon approval of a Special Use Permit.

8. The 87.78 acre parcel involved in this application contains a cattle feedlot as well as the subject fertilizer manufacture and composting operation. No expansion or modification of the feedlot is proposed as part of this application.

9. The surrounding parcels are zoned AE-40 and contain vineyards, field crops and a farming office and shop buildings. The Sundale Elementary School is located approximately 1500 feet southeast of the fertilizer manufacturing and composting facility.

10. In order to meet State mandated reduction to the waste disposal stream, Tulare County has encouraged the growth of the recycling industry. The current operation accepts yard waste, construction waste and agricultural waste which reduces the volume of these materials flowing to the County landfills.

11. The Planning Commission approved Special Use Permit No. 92-091 on January 27, 1993, by Resolution No. 7109 and certified a Negative Declaration for the establishment of the use on the site. Two minor modifications have been approved subsequently to remove the condition that required the wash-down of trucks before they left the premises and to allow liquid food waste (not to include grease trap waste) to be accepted for composting. A Compliance Certificate for PSP 92-091 was issued on May 21, 1998.

12. The site is within Agricultural Preserve No. 650 and is under contract. The proposed expansion was determined to be consistent with all of the principles of compatibility as set forth in Government Code Section 51238.1 because the proposal does not physically change the site and the agricultural community uses the product produced at the facility.

13. The site plan approved in PSP 92-091 is not proposed to be changed in this application. A Special Use Permit amendment was required because the operation has exceeded the volume of material originally anticipated due to contracts with cities and successful recycling efforts to reduce the waste stream. The original project was not evaluated under the current operating conditions, so the Special Use Permit includes the current and projected increases to accommodate future expansions. The maximum volume to be processed (incoming material) is projected to be 500 tons/day. Storage of daily incoming will be limited to 8,000 tons.

Maximum tonnage for processing (in rows) would be 17,500 tons. Finished product storage is projected to be 5,000 tons. A volume limit was not specified for PSP 92-091; however, it was stated that a maximum of 15-20 truck trips per day were anticipated (for both delivery and removal) with a capacity of 600 to 1000 yards. The current proposal states that approximately 45 to 50 loads of material are delivered daily. The maximum number of truckloads in "any one day" may reach 85. A condition of approval has been included that limits the storage capacity of raw product on the site to 8,000 tons and the annual average traffic volume must not exceed 50 incoming trips per day.

14. The Tulare County RMA, Traffic Division has recommended that a southbound right turn pocket and a northbound left turn pocket be installed by the applicant as a condition of approval. There are two criteria used by the RMA to determine whether this design feature should be required for new (or expanded) uses that are subject to discretionary approvals. Left turn pockets are required when the total traffic volume, peak use exceeds 5,000 AADT (in this instance it is 7,000) and when the speed along the primary access road is high and nearly uninterrupted for several miles (this location also meets this criterion). Such a condition of approval would be consistent with prior actions that required turn pockets, such as Tulare County Recycling (PSP 95-117) and Sundale Vineyards (PSP 97-062) both also located along Road 140.

15. The primary intended use of the compost is bulk application to agricultural land as organic fertilizer and soil amendment. Finished compost is also sold to nurseries, landscapers, homeowners and municipalities for the same purpose.

16. Speaking in opposition to the proposal were Timothy Jones, representing Sundale Vineyards, the adjacent property owner, and Ward Stringham, a parent of a child that attends Sundale Elementary School and a property owner within two miles of the subject site. They expressed concerns regarding dust, odor, proper noticing, traffic, groundwater contamination and the need for an environmental impact report (EIR).

17. Several conditions have been added to address these concerns which are summarized as follows:

    a. Several mitigation measures have been incorporated into the project for dust, traffic and groundwater contamination. The Environmental Assessment Staff Report/Initial Study containing the proposed mitigation measures was recirculated for public review and the public hearing notice was renoticed. A mitigation monitoring program will be adopted to ensure that the

measures adequately reduce the impacts to a level that is less than significant.

b. A dust study was prepared by Seimer and Associates to address the issue of dust, including air pollution. The report is technical and has documentation of particulate sizes and relationships to distance particles can travel based on size and wind speed. The report finds that the dust in the vicinity of the site is generated from four sources; the compost facility, the feedlot, the vineyard activities, and the ambient air quality. The smallest particle size obtained from a dried composted sample was >400,000 microns. According to the report, a particle of this size can only travel about 50 ft. in a 10 mile per hour wind. Windspeed at this location rarely exceeds 10 miles per hour. On this basis, it was concluded that it is not possible for any significant amount of dust to travel from the Biomass processing site to the adjacent neighbor's vineyard. The overall operation was also analyzed and suggested improvements were recommended and most of those recommendations have been incorporated into the conditions of approval. The condition for an automatic misting of the trees was modified to require manual misting of the trees at least once per week during the dry season to remove buildup of dust on their leaves (Condition No. 4). Higher windspeeds are commonly associated with storms during the rainy season. The additional water on the trees would not be appropriate during that time. The condition to add more trees was not included because the prior conditions already required the trees to be "closely planted" (Condition No. 24). If any trees are removed, causing gaps in the wind-break, the enforcement of the original conditions of approval is all that is necessary. The opponents presented no analysis of the chemical components of the residue on the neighboring vineyard to indicate that it was from compost dust as opposed to feedlot or other dust. The facility is also under permit by the San Joaquin Valley Unified Air Pollution Control District

c. The Tulare County Environmental Health Services Branch as Lead Enforcement Agency (LEA) has the enforcement responsibility for odor complaints when the odor is detectable off-site. The LEA has not received any complaints against the subject facility. The amendment only affects the volume of material processed; it does not change the type of material composted nor increase the length of time the product stays on the site. Therefore, the project does not generate a potential for increased odor impacts. Regardless, a condition has been included that requires an odor management plan. It will incorporate processing timeframes for raw materials to prevent nuisance conditions.

d. The public hearings were properly noticed. Health and Safety Code Section 42301.6 is not applicable to this proposal because there are no emissions of a hazardous substance as defined by Section 44303 and the referenced noticing requirements only pertain to air emission permits, not to permits issued under a local zoning ordinance.

e. No substantial evidence in light of the whole record before the Zoning Administrator was presented to show that the proposed expansion as mitigated would have a significant effect on the environment. Therefore, an EIR is not required under CEQA.

18. No one challenged the proposed mitigation measures or offered any new mitigation measures.

19. The Environmental Assessment Officer has approved a Mitigated Negative Declaration for public review for the project, indicating that the project will not have any significant environmental impacts with the mitigation measures incorporated into the project.

The Zoning Administrator, after considering all of the evidence presented, found that the establishment, maintenance, and operation of the use of building or land applied for will not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood or to the general welfare of the County.

NOW, THEREFORE, BE IT DETERMINED AS FOLLOWS:

A. The Zoning Administrator finds and determines that while the project may have potential significant effects on the environment, mitigation measures have been included which avoid or substantially lessen the environmental effects to a level which is a less than significant. The potential significant effects and mitigation measures are summarized as follows:

1. **Excessive dust and reduction of air quality.** This effect will be mitigated by watering travelways and composting areas, installing and operating a misting system on compost turning equipment and misting the willow trees along the east and south property lines. (Conditions 2, 3 and 4)

2. **Traffic safety on Road 140.** This effect will be mitigated by installation of a northbound left turn pocket and a southbound right turn pocket into the subject site. (Condition 6)

3. **Degradation of groundwater quality.** This effect will be mitigated through the acquisition of necessary permits and approvals from the California Regional Water Quality Control Board (RWQCB), limiting the types of waste allowed, establishment of a low permeability working surface below the storage and treatment (composting) area, prohibiting discharge of wastes or composting and storing or placing raw composting materials within 100 feet of surface water or surface drainage courses, managing weed growth and preventing fly and mosquito breeding and containing runoff on site. (Conditions 12, 14, 15, 16 and 17)

B. In accordance with CEQA Guidelines Section 15070(b), the applicant has modified the project by agreeing to these mitigation measures as conditions of approval, and as shown as Conditions 2, 3, 4, 6, 12, 14, 15, 16, and 17 of this Decision.

C. The Zoning Administrator hereby finds that although said project may have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the Mitigated Negative Declaration have been incorporated into the application and determines that the Mitigated Negative Declaration for said Special Use Permit reflects the independent judgment of the County and has been completed in compliance with the California Environmental Quality Act of 1970 and the State Guidelines for the Implementation of said Act, as amended.

D. The Zoning Administrator hereby adopts the Mitigation Monitoring and Reporting Program as set forth in Exhibit "B".

E. The Zoning Administrator of the County of Tulare hereby approves Special Use Permit No. PSP 99-026 (ZA), subject to the following conditions which shall supersede the conditions of approval contained in Special Use Permit No. PSP 92-091 (ref. Planning Commission Resolution No. 7109).

1. The operator shall provide fire prevention, protection and control measures. A fire lane of a minimum of 12 feet is explicitly prescribed.

2. All travelways and composting areas shall be watered at least twice per day during the dry season (normally April through October) and as needed during the balance of the year to reduce the generation of dust. **

3. A misting system shall be installed and operated on the scarab and any other compost turning equipment to capture fine dust particles. **

4. The willow trees along the east and south property lines shall be misted at least once per week during the dry season to remove buildup of dust on their leaves. **

5. All new driveway approaches to the site shall be constructed and surfaced as per the Tulare County Improvement Standards.

6. A northbound left-turn pocket and southbound right-turn pocket into the subject site, including any roadway widening to accommodate said pockets, shall be installed on Road 140 in accordance with the Tulare County Resource Management Agency, Engineering Division (TCRMA) requirements within 90 days or by an agreement approved by the TCRMA. **

7. The applicant or his contractor shall obtain an encroachment permit from the TCRMA prior to doing any work within any County road right of way, such as those activities described in Conditions 5 & 6.

8. The applicant shall make all necessary arrangements for the relocation of all overhead and underground public utility facilities that interfere with any improvement work to be performed by the applicant. The applicant shall also make necessary arrangements with the public utility company affected for the cost of relocating such facilities and no portion of relocation cost will be paid by the county.

9. All activity areas used in conjunction with the composting and solid waste recycling operation shall be treated with an acceptable dust retarding treatment so that dust and mud will not create conditions detrimental to the surrounding areas and public roads. Said treatment shall be maintained at all times in order to keep dust from drifting to adjacent properties.

10. Objectionable odors originating at this facility shall not be perceived beyond the limits of the property boundary. An odor management plan shall be prepared and it will incorporate such information that details processing of raw material within a period of time to prevent nuisance conditions as prescribed by the Lead Enforcement Agency.

11. The composting piles and waste/runoff ponds shall be a minimum distance of 100 feet from water wells used for potable drinking water.

12. All internal runoff created by the facility operations and precipitation up to a 100-year, 24-hour storm shall be contained on site. **

13. Composting areas shall be compacted to 90 percent maximum dry density, graded to obtain a uniform, smooth working surface, free of pockets and depressions to inhibit vertical migration of waste water.

14. Discharging wastes or composting and storing or placing raw composting materials or compost within 100 feet of surface waters or surface drainage courses is prohibited. **

15. The applicant shall obtain necessary permits and approvals from the California Regional Water Quality Control Board (RWQCB). **

16. Waste acceptance at the site shall be limited to wood, yard, agricultural, and liquid food wastes (not to include grease trap waste) and those additives normally used in soil amendments. All liquid food waste shall be handled as approved by the Local Enforcement Agency (Tulare County Environmental Health Division). **

17. Drainage ponds and composting operations shall be managed to control weed growth and prevent fly and mosquito breeding. Drainage ponds shall have adequate vehicular access for inspection and spray treatment by the Tulare Mosquito Abatement District. These access roads shall be kept clear at all times of materials and weed growth. **

18. Upon ceasing composting operations at the facility, all wastes, natural geologic materials contaminated by wastes and surplus or unprocessed composting materials shall be completely removed from the site pursuant to the requirements of the RWQCB and County Environmental Health Department.

19. Stockpiling of raw material shall not exceed 15 feet in height and processed compost shall not exceed 10 feet in height.

20. A minimum of one on-site parking space shall be provided for each employee. On-site truck holding areas shall be provided so as to prohibit vehicles from parking or temporarily stopping on Road 140.

21. Trucks entering and leaving the site with loaded raw material or composting shall be covered.

22. Sale of the composted material shall be in bulk form only, bagging or packaging of the product shall be prohibited on the site unless an amendment to this Special Use Permit is approved for such use.

23. The property owners shall file a "Right to Farm Notice" with the Tulare County Recorder's Office. (Right to Farm Notice attached).

24. Poplar trees, or other trees as approved by the Planning Director, closely planted, shall provide a wind-break as indicated on the site plan.

25. The amount of raw product stored on-site shall not exceed 8,000 tons at any time. The annual average incoming truck traffic volume shall not exceed 50 incoming truck trips per work day.

26. The conditions of approval required herein shall be complied with within 90 days from the date of the Zoning Administrator's signed decision in order that the safety and general welfare of the persons using said premises, and the traveling public, shall be protected. If said conditions of approval are not complied with within said 90 day time period, the County may commence revocation/modification proceedings in accordance with Section 18 of the Tulare County Zoning Ordinance. The Zoning Administrator may grant one or more extensions of said 90 day time period, upon written request by the applicant.

27. Standardized conditions as set forth in Zoning Administrator Decision No. 2271, except as modified by Condition No. 26 (see Attachment No. 1).

** Mitigation measures

TULARE COUNTY ZONING ADMINISTRATOR

George E. Finney, Zoning Administrator

Date Approved: 4/2/01

EXHIBIT B
PSP 99-026 (ZA)
RMA Code Compliance is Responsible for Overall Monitoring

Mitigation Measure	Timing of Action	Monitoring Reporting Party	Check-off & Date
1) Air Quality			
a) All travelways and composting areas shall be watered at least twice per day during the dry season (normally April through October) and as needed during the balance of the year to reduce the generation of dust.	Periodically	RMA Code Compliance	
b) A misting system shall be installed and operated on the scarab and any other compost turning equipment to capture fine dust particles.	Within 90 days	RMA Code Compliance	
c) The willow trees along the east and south property lines shall be misted at least once per week during the dry season to remove buildup of dust on their leaves.	Periodically	RMA Code Compliance	
2) Transportation/Traffic			
a) A northbound left turn pocket and southbound right turn pocket into the subject site, including any roadway widening to accommodate said pockets, shall be installed on Road 140 in accordance with the Tulare County Resource Management Agency, Engineering Division (TCRMA) requirements within 90 days or by an agreement approved by the TCRMA.	Within 90 days	RMA Engineering	
3) Hydrology/Water Quality			
a) The applicant shall obtain necessary permits and approvals from the California RWQCB.	Within 90 days	RWQCB	

b) Waste acceptance at the site will be limited to wood, yard, agricultural, and liquid food waste (not to include grease trap waste), and additives normally used in soil amendments. All liquid food wastes will be handled and approved by the Local Enforcement Agency (Tulare County Environmental Health).	Periodically	HHSA Environmental Health Services	
c) A low permeability working surface shall be established below the storage and treatment (composting) area.	Within 90 days	RWQCB	
d) Discharging wastes or composting and storing or placing raw composting materials within 100 feet of surface water or surface drainage courses is prohibited.	Periodically	RWQCB	
e) Drainage ponds and composting operations shall be managed to control weed growth and prevent fly and mosquito breeding.	Periodically	RWQCB	
f) All internal runoff from facility operations and precipitation from 100-year, 24-hour storm shall be contained on site.	Periodically	RWQCB	

ATTACHMENT NO. 1

STANDARD CONDITIONS OF APPROVAL FOR SPECIAL USE PERMIT

(Reference Zoning Administrator Decision No. 2271)

1. Development shall be in accordance with the plan(s) as submitted by the applicant and/or as modified by the Zoning Administrator (ZA Exhibit "A") and with the Site Plan Development Standards pertaining to a use of this type adopted by the Planning Commission on February 20, 1970.

2. Regardless of Condition No. 1 above, and in accordance with Section 18 (Minor Modifications - Director's Approval) of the Zoning Ordinance, the Planning and Development Director is authorized to approve minor modifications in the approved plans upon a request by the applicant, or his successors, as long as said modifications do not materially affect the determination of the Zoning Administrator. Such modifications shall be noted on the approved plans and shall be initialed by the Planning and Development Director.

3. All exterior lighting shall be so adjusted as to deflect direct rays away from public roadways and adjacent properties.

4. The proposed facility shall be maintained and operated in accordance with all State and County health regulations.

5. Any structures built shall conform to the building regulations and the building line setbacks of the Ordinance Code of Tulare County insofar as said regulations and setbacks are applicable to such structures.

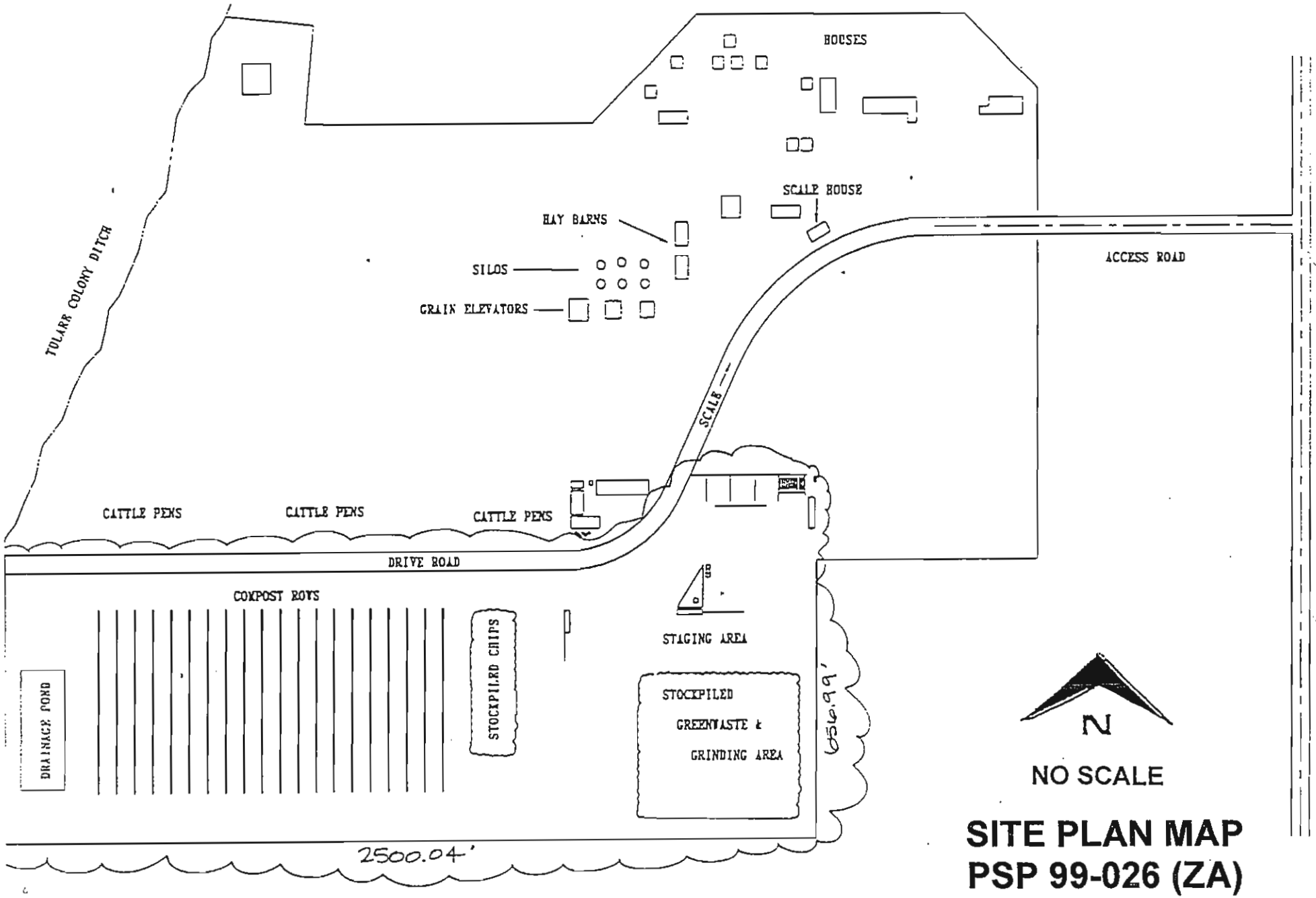
6. The conditions set down herein which require construction of improvements shall be complied with before the premises shall be used for the purposes applied for, in order that the safety and general welfare of the persons using said premises, and the traveling public, shall be protected. The Zoning Administrator may grant exceptions to this condition upon request by the applicant.

7. This Special Use Permit shall automatically become null and void two (2) years after the date upon which it is granted by the Zoning Administrator, unless the applicant, or his/her successor, has actually commenced the use or variance authorized by the permit within said two year period. The Zoning Administrator may grant one or more extensions of said two year time, upon request by the applicant.

8. This Special Use Permit will not be effective until ten (10) days after the date upon which it is granted by the Zoning Administrator and until the applicant, at his own expense, has executed and filed with the County Recorder, a certified copy of the decision of the Zoning Administrator granting said permit with a duly authorized acceptance, in the form approved by the County Counsel, endorsed thereon.

9. All standard conditions and all special conditions of approval of this Special Use Permit must be complied with at all times in order to continue the use or uses allowed. Compliance with such conditions is subject to review at any time. Normally, an initial review of compliance shall be conducted by the Tulare County Zoning Administrator twelve (12) months after the granting of said permit; however, the Zoning Administrator may schedule the review sooner under certain circumstances. Additional reviews may be undertaken at the discretion of the Zoning Administrator.

10. This Special Use Permit shall automatically expire and become null and void two (2) years after the use for which it was granted is discontinued or abandoned. However, upon application by the applicant, or his/her successor, the Zoning Administrator may extend the expiration date in accordance with the procedures set forth in the Zoning Ordinance.



SITE PLAN MAP
PSP 99-026 (ZA)
Z.A. Exhibit "A"

BEFORE THE PLANNING COMMISSION

COUNTY OF TULARE, STATE OF CALIFORNIA

IN THE MATTER OF SPECIAL USE PERMIT)

RESOLUTION NO. 7109

APPLICATION NO. PSP 92-091)

Resolution of the Planning Commission of the County of Tulare approving a Special Use Permit requested by Shanco Commodities Co., Inc., 24478 Road 140, Tulare, CA 93274 for the manufacture of composting fertilizer and a solid waste recycling facility on a 35-acre portion of an 87.78 acre site in the AE-40 (Exclusive Agriculture - 40 acre minimum) Zone on property located approximately 1,000 feet west of Road 140 (Lovers Lane) and approximately 2,000 feet south of Avenue 248 (Cartmill Road), northeast of Tulare.

WHEREAS, an application has been filed pursuant to the regulations contained in Section 16 of Ordinance No. 352, the Zoning Ordinance, and

WHEREAS, the Planning Commission has given notice of its intention to consider the granting of a Special Use Permit as provided in Section 18 of said Ordinance No. 352 and as provided in Section 65905 of the Government Code of the State of California, and

WHEREAS, Staff has performed necessary investigations, prepared a written report, and recommended approval of this application subject to conditions, and

WHEREAS, public testimony was received and recorded at a regular meeting of the Planning Commission on January 13, 1993 and January 27, 1993.

NOW, THEREFORE, BE IT RESOLVED as follows:

A. This Planning Commission hereby certifies that it has reviewed and considered the information contained in the Negative Declaration for the proposed project in compliance with the California Environmental Quality Act and the State Guidelines for the Implementation of the California Environmental Quality Act of 1970 prior to taking action on the project.

B. This Planning Commission hereby adopts the following findings of fact as to the reasons for approval of this application:

1. The applicant has requested a Special Use Permit for fertilizer manufacture and solid waste recycling (ground wood waste only) on a 35-acre portion of a 87.78 acre parcel in the AE-40 (Exclusive Agricultural-40 acres minimum) Zone. The site is located approximately 1000 feet west of Road 140 (Lovers Lane) and approximately 2000 feet south of Avenue 248 (Cartmill Road), northeast of Tulare.

2. The applicant proposes to receive and grind wood waste from contractors, selected agricultural wastes, and yard waste

(leaves, tree trimmings, and grass) to produce biomass and to combine with manure exclusively from the existing on-site feedlot to produce compost.

3. The subject site is zoned AE-40 and contains a feedlot and nonconforming fertilizer manufacture. The surrounding properties are all zoned AE-40 and contain vineyards and field crops.

4. The subject site is located outside any Urban Area Boundary and is subject to the policies of the Rural Valley Lands Plan (RVLP).

   The RVLP designates the site as exclusive agricultural and provides the following policy objectives:

   a. Discourage the conversion or division of agricultural lands to non-agricultural uses and parcel sizes.

   b. Provide for limited non-agricultural activities and necessary agricultural related industries in selected rural areas.

   Since fertilizer manufacturing and solid waste recycling are agricultural industries, this proposal meets the General Plan policies as they pertain to the RVLP.

5. The ERME Open Space Plan designates the site as extensive agriculture. This site is not within any Community Windshed Area. This plan encourages the maintenance of agricultural lands for agricultural purposes. The proposal would provide a service to the agricultural community as the product created is a soil additive that can increase soil condition and crop production. The facility would also consume wastes that would otherwise be a burden to county landfills. Therefore, the proposal is consistent with the policies of the Tulare County General Plan.

6. It may be necessary for the project applicant to secure subsequent approvals/permits from the California Integrated Waste Management Board and/or others pursuant to Public Resources Code 40000 et. seq.

7. Opposition to the proposal was received from Aram Kinosian, the property owner to the south. He was concerned that the project would generate excessive dust and adversely impact his vineyard. The applicants proposed providing a windbreak created by a row of trees along the east and south property lines, misting in the grinding operation, and complying with all of the SJVAPCD requirements to reduce dust emissions. Conditions of approval Nos. 19, 20 and 21 require measures for dust control that provide assurances that the adjacent permanent crops could not suffer detrimental effects from the proposal.

8. Appropriate State, County, and local agencies were contacted regarding this proposal. None objected to the proposal, but some did recommend conditions to assure that the use would not be detrimental to the environment and surrounding area. These conditions have been incorporated into staff's recommended conditions of approval.

9. The Environmental Assessment Officer has reviewed and approved a Negative Declaration for public review indicating the project would not have a significant effect on the environment.

C. This Planning Commission, after considering all of the evidence presented, found that the establishment, maintenance, and operation of the use of building or land applied for PSP 92-091 would not, under the circumstances of the particular case, be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood or to the general welfare of the County.

AND, BE IT FURTHER RESOLVED as follows:

A. This Planning Commission hereby finds said Special Use Permit will not have a significant effect on the environment and certifies that a Negative Declaration for said Special Use Permit has been completed in compliance with the California Environmental Quality Act and the State Guidelines for the Implementation of the California Environmental Quality Act of 1970.

B. This Planning Commission hereby approves Special Use Permit Application No. PSP 92-091, subject to the following conditions:

1. The applicant shall make all necessary arrangements for the relocation of all overhead and underground public utility facilities that interfere with any improvement work to be performed by the applicant. The applicant shall also make necessary arrangements with the public utility company affected for the cost of relocating such facilities and no portion of relocation cost will be paid by the County.

2. All activity areas used in conjunction with the composting and solid waste recycling operation shall be treated with an acceptable dust retarding treatment so that dust and mud will not create conditions detrimental to the surrounding areas and public roads. Said treatment shall be maintained at all times in order to keep dust from drifting to adjacent properties.

3. Objectionable odors originating at this facility shall not be perceived beyond the limits of the property boundary.

4. The applicant shall contact the San Joaquin Valley Unified Air Pollution Control District for an Authority to Construct Permit. If a permit is required, this permit shall be obtained within 60 days of approval of the special use permit.

5. The composting piles and waste/runoff ponds shall be a minimum distance of 100 feet from water wells for potable drinking water.

6. The applicant shall design, construct and maintain the composting area to retain on the site, all internal runoff created by the facility operations and precipitation up to a 100-year, 24-hour storm on the areas used for composting and stockpiling of materials.

7. Composting areas shall be compacted to 90 percent maximum dry density, graded to obtain a uniform, smooth working surface, free of pockets and depressions to inhibit vertical migration of waste water.

8. Discharging wastes or composting and storing or placing raw composting materials or compost within 100 feet of surface waters or surface drainage courses is prohibited.

9. The applicant shall contact the Local Enforcement Agency regarding acquisition of a Solid Waste Facility permit. If so required, this permit shall be obtained prior to any expansion of the operation.

10. The facility shall meet all requirements as administered by the California Regional Water Quality Control Board (RWQCB) for this type of operation.

11. Only wood, yard, and agricultural wastes and those additives normally used in soil amendments may be accepted onto the site for processing.

12. Drainage ponds and composting operations shall be managed to prevent fly and mosquito breeding. Drainage ponds shall have adequate vehicular access for inspection and spray treatment by the Tulare Mosquito Abatement District. These access roads shall be kept clear at all times or materials and weed growth.

13. Upon ceasing composting operations at the facility, all wastes, natural geologic materials contaminated by wastes and surplus or unprocessed composting materials shall be completely removed from the site pursuant to the requirements of the RWQCB and County Environmental Health Department.

14. Stockpiling of raw material shall not exceed 15 feet in height and processed compost shall not exceed 10 feet in height.

15. A minimum of one on-site parking space shall be provided for each employee. On-site truck holding areas shall be provided so as to prohibit vehicles from parking or temporarily stopping on Road 140.

16. Trucks entering and leaving the site with loaded raw material or composting shall be covered. Trucks shall be washed down before leaving the site to assure that no manure, mud or other debris will be tracked onto public roads. Wash-down water shall be contained and disposed of in accordance with requirements of RWQCB and/or Tulare County Environmental Health Department.

17. Sale of the composted material shall be in bulk form only, bagging or packaging of the product shall be prohibited on the site unless an amendment to this Special Use Permit is approved for such use.

18. The property owners shall file a "Right to Farm Notice" with the Tulare County Recorder's Office. (Right to Farm Notice attached)

19. This operation should meet all of the requirements of the San Joaquin Valley Unified Air Pollution Control District, Tulare Zone, Construction Mitigation Measures (Attachment 1).

20. Poplar trees, or other trees as approved by the Planning and Development Director, closely planted, shall provide a windbreak as indicated on the revised site plan.

21. Misting of the raw material shall be provided in the grinding operation, as needed, to reduce the emission of dust.

22. Standardized conditions as set forth in Planning Commission Resolution No. 5976 as amended by Resolution Nos. 6013, 6334, and 6702 shall apply to this application (see Attachment No. 2).

The foregoing resolution was adopted upon motion of Commissioner Kirkpatrick, seconded by Commissioner Huffman, at a regular meeting of the Planning Commission on the 27th day of January, 1993, by the following roll call vote:

AYES: Tracy, Kirkpatrick, Huffman, Jensen, Millwee

NOES: None

ABSTAIN: Brogan

ABSENT: Kapheim

TULARE COUNTY PLANNING COMMISSION

George E. Finney, Secretary

at

ATTACHMENT NO. 1

Suggested Air Quality Dust Mitigation Measures

(for Construction Sites)

Pre-Construction - Emissions generated during the pre-construction process are of a concern to the District. The following dust control practices should be implemented:

- All material excavated or graded should be sufficiently watered to prevent excessive amount of dust. Watering should occur at least twice a day with complete coverage, preferably in the late morning and after work is done for the day.
- All clearing, grading, earth moving, or excavation activities should cease during periods of high winds greater than 20 mph average over one hour.
- All material transported off-site should be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, earth moving, or excavation activities should be minimized at all times.
- The developer should mow, instead of disking, for weed control, thereby leaving the ground undisturbed and with a mulch covering.

During Construction - After clearing, grading, earth moving, or excavation operations, during the construction phase, fugitive dust emissions should be controlled by the following methods:

- All inactive portions of the construction site should be seeded and watered until grass growth is evident.
- All active portions should be sufficiently watered to prevent excessive amounts of dust.

General Fugitive Dust - At all times, fugitive dust emissions should be controlled using the following procedures:

- On-site vehicle speed should be limited to 15 mph.
- All areas with vehicle traffic should be watered periodically or have petroleum-based palliatives[1] applied for stabilization of dust emissions.
- Streets adjacent to the project site should be swept at least once per day to remove silt which may have accumulated from construction activities.
- Build a paved "apron" into project from ajoining paved roadways.

Ozone Precursors - At all times, ozone precursor emissions should be controlled by the following methods:

- All internal combustion engines driven equipment should be properly maintained and well tuned according to manufacturer's specifications.
- During the smog season (May through October), the construction period should be lengthened so as to minimize the number of vehicles and equipment operating at the same time.

SJVUAPCD 9/16/92

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[1] *Use of petroleum-based palliatives shall meet the road oil requirements of the District's Rule 463.1 - Cutback Asphalt Paving Materials.*

ATTACHMENT NO. 2

STANDARD CONDITIONS OF APPROVAL FOR SPECIAL USE PERMITS

(Planning Commission Resolution No. 5976 as amended by 6013, 6334 and 6702)

1. Development shall be in accordance with the plan(s) as submitted by the applicant and/or as modified by the Planning Commission (P.C. Exhibit "A") and with the Site Plan Development Standards pertaining to a use of this type adopted by the Planning Commission on February 20, 1970.

2. Regardless of Condition No. 1 above, the Planning and Development Director is authorized to approve minor modifications in the approved plans upon a request by the applicant, or his successors as long as said modifications do not materially affect the determination of the Planning Commission. Such modifications shall be noted on the approved plans and shall be initialed by the Planning and Development Director.

3. All exterior lighting shall be so adjusted as to deflect direct rays away from public roadways and adjacent properties.

4. The proposed facility shall be maintained and operated in accordance with all State and County health regulations.

5. Any structures built shall conform to the building regulations and the building line setbacks of the Ordinance Code of Tulare County insofar as said regulations and setbacks are applicable to such structures.

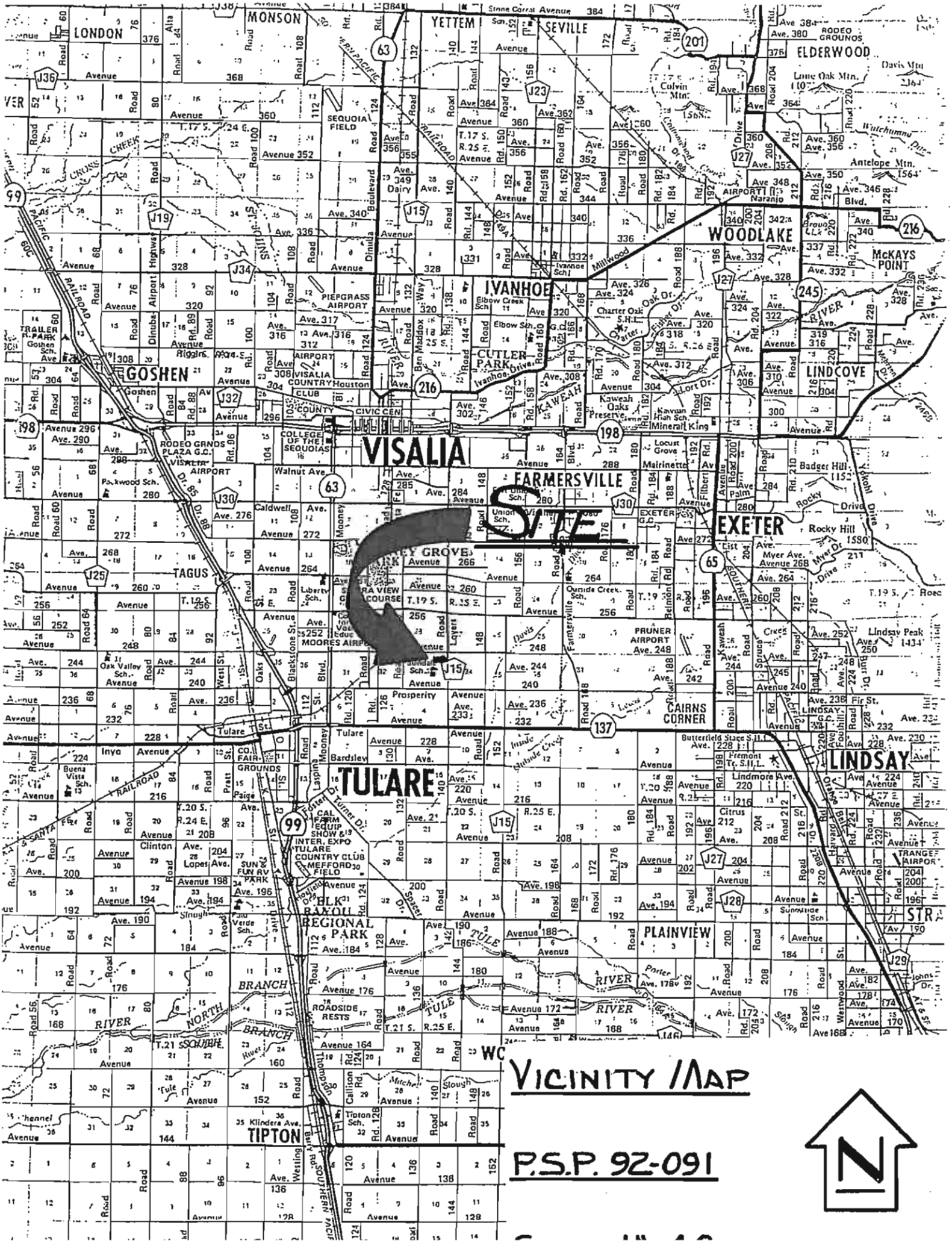
6. If there are conditions set down herein which require construction of improvements, they shall be complied with before the premises shall be used for the purposes applied for, in order that the safety and general welfare of the persons using said premises, and the traveling public, shall be protected. The Planning Commission may grant exceptions to this condition upon request by the applicant.

7. This use permit shall automatically be null and void two (2) years after the date upon which it is granted by the Planning Commission, unless the applicant, or his successor, has actually commenced the use authorized by the permit within said two year period. The Planning Commission may grant one or more extensions of said two year time, upon request by the applicant.

8. This use permit will not be effective until ten (10) days after the date upon which it is granted by the Planning Commission and until the applicant, at his own expense, has executed and filed with the County Recorder, a certified copy of the resolution of the Planning Commission granting said permit with a duly authorized acceptance, in the form approved by the County Counsel, endorsed thereon.

9. All standard conditions and all special conditions of approval of this Special Use Permit must be complied with at all times in order to continue the use or uses allowed. Compliance with such conditions is subject to review at any time. Unless a sooner review is required, an initial review of compliance shall be conducted by the Tulare County Planning Commission twelve months after the granting of the Special Use Permit. Additional reviews may be undertaken at the discretion of the Planning Commission.

10. This Special Use Permit shall automatically expire and become null and void two (2) years after the use for which it was granted is discontinued or abandoned. However, upon application by the applicant, or his/her successor, the Planning Commission may extend the expiration date in accordance with the procedures set forth in the Zoning Ordinance.


SITE
VISALIA
TULARE
LINDSAY
EXETER
FARMERSVILLE
IVANHOE
WOODLAKE
GOSHEN
TAGUS
TIPTON
PLAINVIEW
CAIRNS CORNER
LONDON
MONSON
YETTEM
SEVILLE
ELDERWOOD
LINDCOVE
McKAYS POINT
CUTLER-PARK
SEQUOIA FIELD
PIEDGRASS AIRPORT
VISALIA AIRPORT
COLLEGE OF THE SEQUOIAS
COUNTY CIVIC CEN
CAL FAIR EQUIP SHOW & INTER. EXPO
TULARE COUNTRY CLUB
MEFFORD FIELD
SUN & FUN RV PARK
BLK BAYOU REGIONAL PARK
ROADSIDE RESTS
PRUNER AIRPORT
MOORES AIRP
TRANGE AIRPOR
RODEO GROUNDS
Lone Oak Mtn.
Antelope Mtn.
Lindsay Peak
Rocky Hill
Badger Hill
Davis Mtn
Calvin Mtn.
Mineral King
Kaweah Oaks Preserve
Kaweah High Sch.
Ivanhoe Schl
Elbow Creek Sch
Elbow Sch.
Charter Oak S.H.L.
Oak Dr.
Ivanhoe Drive
Millwood
Rocky Drive
Myer Ave.
Myer Dr.
Fir St.
Butterfield Stage S.H.L.
Fremont Tr. S.H.L.
Lindmore Ave.
Sunnyside Sch
Tulare St.
Inyo Avenue
Walnut Ave
Caldwell Avenue
Prosperity Avenue
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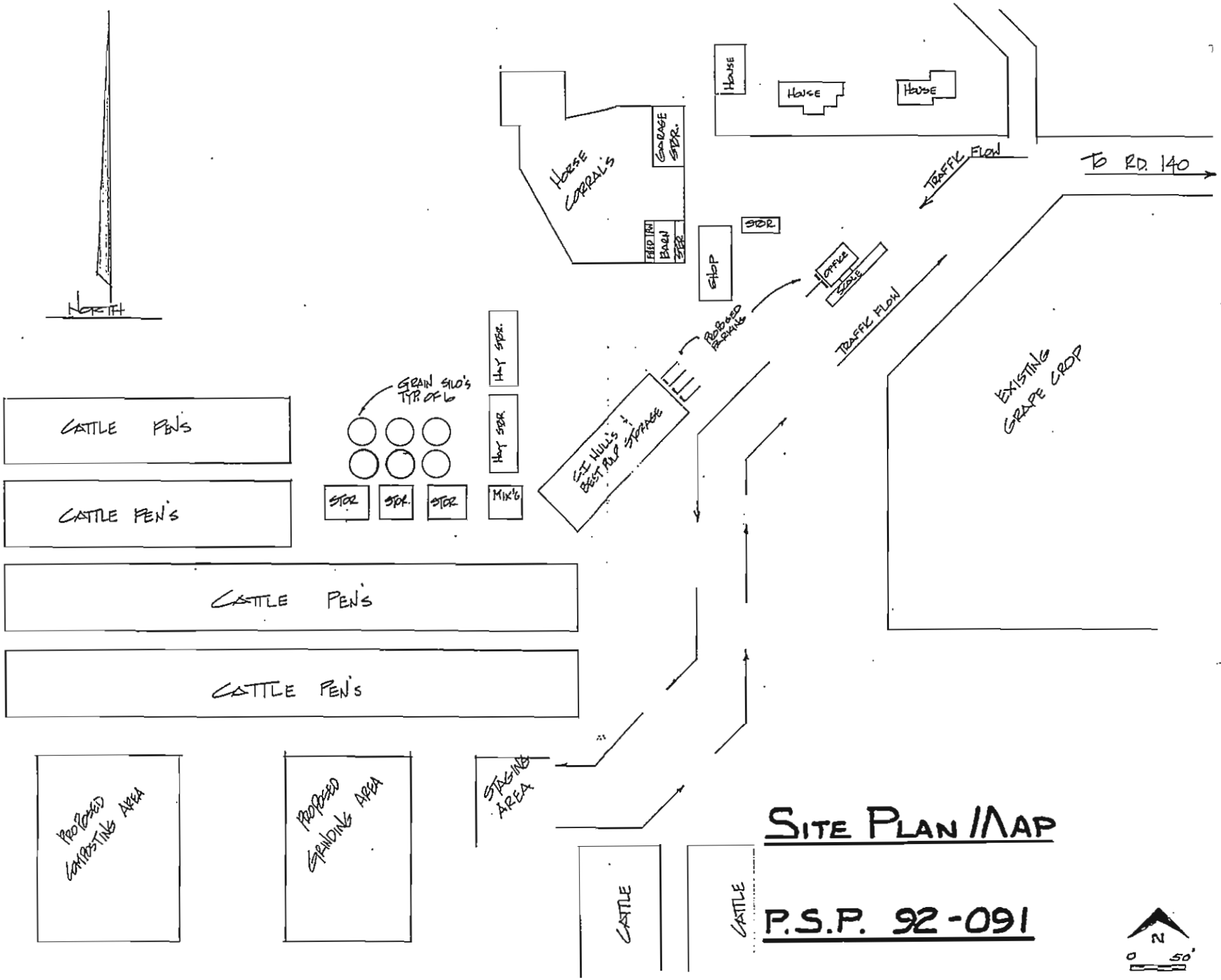
Road



SITE PLAN MAP

P.S.P. 92-091

Attachment 9:

Siemer & Associates, Dust Study, November 15, 1999

& ASSOCIATES INCORPORATED
Consultants to Agriculture and the Chemical Industry

November 15, 1999

Mr. Gary Birdsong
Manager
Shannon Brothers Company
24478 Road 140
Tulare, CA 93274

Dear Mr. Birdsong:

The following is my report regarding the Tulare County Composting and Biomass Operation. This report will be in two parts: the first part contains my comments and recommendations based on what I observed in my field examination. The second part is a photo log and comments on observations according to the individual pictures.

I have come to several conclusions based on observations related to your operation. These are as follows:

1. You should continue to water all areas of the operation, not just active ones. I observed several areas which were between activities that did not receive sufficient water to keep the surface crust moist. This led to occasional dust being raised when a vehicle drove through.

2. A suggestion you might consider would be to erect a misting system on the southern boundary to capture fine dust particles. This misting system could be coupled with an anemometer so that it would not be a continuous mist, but would only be activated when the air movement went above a certain velocity. If some of this mist was fed back onto the willows used as a wind and dust screen, they would be more effective as dust collectors because the foliage would be a wet surface, which is more effective as a collector than a dry surface. A dry surface will hold just so much particulate matter and then will become overloaded so that the particulate matter is released back into the air and will move through the wind screen. If the surface is occasionally rewet, then the particulates will be washed to the surface. It is not necessary that a continuous misting system be established on the total

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perimeter, but rather, consider focusing it at points of sensitivity, i.e. those areas closest to adjacent properties.

2a. Culture of the willows could be significantly improved. Many of the trees appeared to show a type of foliar toxicity, probably from the MagChlor used to settle the dust of the neighbor's roads. Slope of the road for water runoff goes to the willows in many places, and therefore, the willows are both stunted as well as almost defoliated. These conditions exist in areas where presumably you would most benefit from having heavy foliage, because at least the neighbor would have a psychological barrier to focus on. A part of the difficulty with improving the cultural practice would be to talk the neighbor out of the use of MagChlor to settle the dust on these roads. Use of a water truck periodically, particularly when heavy traffic is anticipated, would be a more effective means to settle the dust and still maintain vigor in the willow trees.

3. The information presented in this section is responsive to your request that I make a proposal on how to approach the neighbor and the vineyard, and to your specific question, "Could some area of the vineyard be purchased to reduce the dust loading on the southern neighbor's grapes, and if it is practical to do so, how much area would it be necessary to acquire to reduce the downwind dust burden?".

The answer is not straight forward. It is possible to calculate an estimated distance that particles of a certain size would move downwind in a mass of air moving at a certain velocity. But making an estimate of what volume of particles may be in the air at any one time is not practical, because it would be excessively expensive to generate these data, and it would only provide a snapshot in time.

This question has four components and another that is not very direct.

1). The first component is the dust that may arise from the composting activities. The watering procedures on the roads, work areas, and the compost piles themselves, appear to be an effective practice for suppressing the dust as is shown by the accompanying pictures. In addition, this is a widely effective practice as a means of dust suppression. The type of watering

for dust suppression found in the composting areas is practiced on nearly every deciduous farm in the San Joaquin Valley.

2). Dust coming from the feed lot on your northern boundary has the potential to contribute far more dust to the atmosphere than the composting activities as they are currently carried out.

The feedlot appeared to have no dust suppression activity, even though there were several high-volume sprinkler heads present in each large holding pen. The manure-soil mixture was observed to be dry and fine. This is a condition that can cause large amounts of dust to move into the air when the stock in the pens are active. When there is a prevailing northwest wind, this dust will be carried across your property to the neighboring vineyard. (The wind in the San Joaquin Valley is predominantly northwest – the reason that most airport runways are laid out on a northwest to southeast direction.)

The feedlot has the potential to overload any dust control operation you can put into place, short of encouraging the feed lot to adopt a water and dust suppression program. If this program was undertaken from about March 1 to September 15, or so (approximately five months), no significant dust would travel from the feed lot to the neighbor's vineyard.

3). The most difficult component to influence is the dust the neighboring vineyard grower generates in his own operation. The soil in the vineyard is conducive to significant dust generation during normal cultural practices, i.e. discing of soil for weed control and promoting water penetration as well as harvest activities. All of these activities promote dust in significant amounts. Traffic, tractors, cars, trucks, gondolas, on the road or in the vineyard, generate dust in large amounts. The substances applied to the main east-west road for dust control reduces but does not eliminate the dust problem. The material used on the roads for dust suppression aggravates the dust problem from the composting operation because it appears to be causing defoliation of the willow trees planted for a wind and dust break. This problem will need to be corrected before the

willows will develop sufficiently dense foliage to have any impact on the dust that will be intercepted.

4). The fourth source of dust is the air in the San Joaquin Valley, and you have no control over this. Anyone who has parked a freshly washed car at the airport for a week or more knows that a very obvious coating of dust settles on the car surface during the time the car was parked. This same level of dust settles on all plant surfaces, fruit and leaves. This is a dust burden that the neighboring grape grower will look to your operation as having caused.

There was no apparent difference in dust burden on the foliage or fruit over the first 100 rows of vines I inspected. There may have been a slight difference in dust burden on the first two rows, compared to the other 98 rows. This would be expected just from road traffic, and not necessarily the composting activities. The dust loading on the willow trees adjacent to the road and the composting area was much lower than the dust level on the grape leaves.

There was significant difference in dust loading on the fruit. This is not surprising since there are many sources of dust greater in volume than the composting activities. Lack of significantly increased dust on the north side of the vineyard suggests that the feed lot is not contributing significantly to the vineyard dust load.

The number of rows in the vineyard I examined caused me to look at fruit and vines nearly ¼ mile south of the Biomass area. With 100 rows and 12' row spacings, this equates to 1200'. There is 1320' in a ¼ mile. Assuming the road width and the distance to the nearest Biomass pile is more than 120', a full ¼ mile down wind was examined without any increased dust burden evident. This is significant because the area has experienced more severe temperature inversions this year than normal. These conditions tend to increase dust levels. On this basis, assessment of dust burden has been made under more severe conditions without finding dust burden differences from north to south in the vineyard.

5.) Having said all of the above, the composting and Biomass company should realize they will always be the "psychological" cause of the dust problems. At present, the company is alleged to be the cause of excess dust and fruit spotting. If yields are reduced because of bunch rot, late harvest, or any other malady, it is likely that these too will be blamed on the composting activities.

The maladies that I have listed are not the responsibility of the Biomass company, but the grower already blames your company and its activities for fruit spotting in some areas of the vineyard, which in some cases, were due to a condition known as "measles", caused by other conditions than dust. With respect to spotting, there was no difference between that observed in rows one and two as to that observed in row 100 or more. Bunch rot was observed to be more frequent further into the vineyard compared to rows closest to the composting activities. Nineteen-ninety-nine was one of the more unusual (cool spring and summer) growing years which tended to promote later harvests. This was an experience observed on many crops besides grapes throughout the state. The later harvest combined with some rain fall and tight bunches observed in this vineyard would all contribute to the increased bunch rot that was evident.

PURCHASE OF THOMPSON SEEDLESS PROPERTY AS A MEANS TO MITIGATE SOUTHERN NEIGHBOR'S DUST CONCERNS.

I considered this question from the standpoint of determining how much vineyard to purchase to act as a dust buffer. From a practical standpoint, you need not buy a dust buffer to mitigate the actual dust levels. You may be better off buying a "neighbor" buffer because regardless of how "clean" and "dust-contained" your operation is, it will always be seen as a dust generator.

Purchase of enough vineyard to be economically farmed, is what you should consider. Shop for a packing house or well established grape grower who will take on a long term lease of the property, preferably before you close the deal with your neighbor, so you become the middleman and not the

grower. The vineyard is generally strong and appears to have high yield when fresh market and winery yield are considered. This is strictly observational, I made no measurements or looked at any records.

If a dust buffer was to be considered, I would think no more than two to four rows would be required and this could be cut to zero if the roads were watered periodically even when they are not being used. This approach would get past the neighbor not using water for dust suppression, and getting rid of the MagChlor would benefit the willow trees. Halting the use of MagChlor and leaching the excess chlorine or tying it up with an activated charcoal would release the willow trees to grow in a more normal manner which would give you a more effective wind screen.

If you buy vineyard from your neighbor as a dust buffer, you should be sensitive to the possibility that he may feel it necessary to see other grapes and young cherries that may also develop "apparent" dust related problems. Cherries will be harvested earlier by far than the grapes, but dust on the fruit will down-grade price. Dust on the foliage after harvest can promote mite populations that will require control sprays (at extra expense) or next year's yield will suffer from lack of mite control.

A sample of the product was submitted to Valley Tech Laboratory in order to obtain some measure of the particulate size of the finished compost (See Valley Tech Laboratory report in Appendix 4). The lab submitted a representative which was subjected to a Standard Testing Sieve test. The screen sizes used are shown on the left side of Table 1, with the screen size ranging from 10 mesh/inch to 200 mesh/inch. I converted these values to microns^3, or cubic microns, for reasons explained below. The conversions were calculated on the basis that there are 25,000 microns/inch. The mesh values are stated in mesh/inch. To determine the number of microns/inch for each mesh size, the mesh number was divided into the number of microns/inch. These calculated values are shown in the center of the table, with an extra value calculated for the 325 mesh/inch screen size which was not included in the Valley Tech test. On the right side of the table are shown the percentages found by Valley Tech Labs in their analysis.

Table 1 –

MESH SIZE/INCH	MICRONS[3]	% RETAINED
10	1.56×10^7	19.7
20	1.95×10^7	28.1
40	2.44×10^7	36.8
60	7.20×10^7	8.8
100	1.56×10^7	1.1
150	4.62×10^6	0.3
200	1.95×10^6	0.8
325	4.55×10^5	---

Figure 1 shows the distance that spray droplets travel at three different wind speeds. The droplet sizes shown are typically found in aerial spray drift. The smaller particles of 50 and 100 micron volume diameter are examples of droplet sizes that drift long distances. These droplets are measured by their mean volume diameter. They are near circular in their shape. For this reason, the particle sizes of the Biomass particles were calculated as cubed particles to make a closer approximation to the droplet particle sizes. The approximate comparison of spray droplets and Biomass particles will be closest when the particles are wet, but even when dry, their size would still be larger by far than these small droplets.

Comparison of the smallest estimated particle size is still three orders of magnitude larger than the 400 micron spray droplet (>400,000 microns), which according to Figure 1 can only travel about 50 ft. in a 10 mile per hour wind. On this basis, it is not possible for any significant amount of dust to travel from the Biomass processing site to the adjacent neighbor's vineyard.

If you have questions or need further explanation of my findings, please contact me through my office. Thank you for using our services.

Sincerely,

SIEMER & ASSOCIATES, INC.

S.R. Siemer, Ph.D.

SRS/ta
536/5112

List of Appendices

1. **Sidney R. Siemer, Ph.D., R.P.E.**
2. **Investigation Report/Photo Log and Photos**
3. **Location Site Map**
4. **Valley Tech Agricultural Laboratory Services Report**

SIDNEY R. SIEMER, Ph.D, R.P.E.

RESUME

BIRTH: February 2, 1933
Santa Rosa, California

OCCUPATION: President, Siemer & Associates, Inc.
Consultant in Agriculture and the Chemical Industry, with emphasis on pesticide chemistry, biology, product registration, investigations and expert witness for agriculture related litigation.

EDUCATION:

1951 - High School, Sebastopol, California
1959 - B.S. – Soil Science – California Polytechnic College, San Luis Obispo, California
1968 - Ph.D. – Oregon State University, Corvallis,
Major: Plant Pathology
1st minor: Plant Physiology
2nd minor: Entomology

EXPERIENCE:

1979 – Present Established Siemer & Associates, Inc. as a consulting company, which does contract research of a confidential nature, offers consulting services to various companies in the agricultural and chemical industry and offers expertise in agricultural related damage investigations. This company has:

- Developed and registered with EPA and CDPR a fresh market grape ripener; (new product);
- Plant growth regulator registration pending at EPA (new product);
- Assisted in the development of program, leading to registration and marketing of a new nematocide, herbicide, and plant growth regulator for a major new company in the pesticide market;
- Updated all labels for major distributor to bring them into line with current EPA requirements;
- Participated in many EPA initiated data call-ins;
- Conducted more than 1000 field trials in California since 1979 from approximately Red Bluff in the north to the Salton Sea in the South;
- Conducted pesticide related safety seminars;
- Developed grape ripening screening methodology to enhance ripening of grapes grown for fresh market, wine or raisins;
- Submission of FIFRA Section 3 registration requests;
- Petitions for exemptions from the requirement of a tolerance;

- Authored the following in addition to many research reports; Measurement of Soil Surface Dissipation of Hydrogen Cyanamide Applied to Dormant Pruned Grapevines; Field Dissipation of Hydrogen Cyanamide in Soil; Residue Chemistry for Hydrogen Cyanamide on Grapes, Determination of Drift Concentration Resulting from Hydrogen Cyanamide Spray Application to Dormant Grapevines; Response to environmental risk assessment; Participated in writing "Safety Assessment" for Hydrogen Cyanamide;
- Developed methodology and protocols acceptable to the State of California and collected worker exposure and offsite data from several methods of methyl bromide soil fumigation applications to sustain industry use in the State of California. Was successful in mitigating exposure to workers and offsite drift to allow the industry to continue use with few restrictions;
- Registered the active ingredient, Sulfur Dioxide at EPA and Cal-EPA for use on fresh market grapes;
- Registered new pesticide with an unprecedented simultaneous registration at EPA and Cal-EPA which included the writing of a Public Interest Document and successful rebuttals of EPA reviews;
- Registration activities include international registrations of pesticides;
- Developed Worker Safety Video for new active ingredient pesticide.

1977 – 79

Plant Products Manager for W.R. Grace & Co. in Columbia, MD. Responsible for establishment of a worldwide research and development program leading to commercialization of new plant growth regulators. Budget responsibility was $300,000. While at Grace, I was able to:

- Gain patents on 5 different groups of plant growth regulators;
- Established a novel greenhouse growth regulator screening program;
- Established a research agreement with the experiment station of the Hawaiian Sugarcane Planters Association;
- Developed a business plan for worldwide marketing of sugarcane ripener products;
- Acted as consultant to the $100,000,000 fertilizer group on the impact of genetically engineered nitrogen fixation;
- Acted as consultant to Mr. Grace's 800,000 acre cattle ranch in Darwin, Australia, relating to economical development of the Cow-Calf operation;
- Presented plant growth regulator technology to major companies of the chemical industry.

1976 – 77

Established in the State of Washington a consulting firm doing field testing, product damage investigation, scientific consulting.

1973 – 76

Western Regional Coordinator for ICI United States. Established and supervised a development group of 6 professionals in the 11 western states and supervised its operation for 3 years with a budget of $450,000; consultant to the western research farm, assisted in preparation of the national development program; assisted in the development of the Agricultural Chemical Claims Procedure, participated in injury claims investigations.

1968 – 73

Principal Technical Representative in the Western U. S. for Abbott Laboratories, conducting research on:

- ProGibb and ProGibb Plus formulations of gibberellic acid on grapes, oranges, lemons, hops, artichokes, and sugarcane;
- 3-CPA stone fruit thinner on peaches, nectarines, plums, etc;
- Dipel formulation of B.t. was introduced to the market in 18 months as a new product on many crops in the Western U.S.

Had direct or coordinator experience in miscellaneous areas:

- Insect toxicology studies;
- Residue sample collections and analyses, both plants and animals;
- Structural studies relating chemical configuration to biological activity;
- Biological chemical screening: setting up, running and evaluating screening procedures and the data resulting therefrom;
- Literature development, both technical and sales oriented, for commercialization of products;
- Budget preparation relating to conception of new projects or continuance of established projects;
- Profitability studies relating to market development and potential and financial input requirements;
- Legal duties relating to cooperative research contracts and legal follow-up on crop damage claims;
- Use of Public Relations in establishing and promoting a product in a new or established market;
- Advertising directed at the promotion of new or established products;
- Product registration with EPA and the State of California.

1964 – 68

Instructor of Plant Pathology in the Dept. of Botany & Plant Pathology, OSU teaching General Plant Pathology. Research assistant conducting research on:

- Pink root of onion (Pyrenochaeta terrestris); field control, effects of fumigants on soil microflora, studying the biochemical aspects of genetic resistance in non-susceptible onion lines;
- The cause and control of basal sprout rot on Brussels sprouts.
- Chemical control of Fusarium root rot of beans;
- Chemical control of "damping-off" (Pythium ultimum) of table beets.

Assisting Dr. Vaughan (major professor) on:

- Selection of rust resistant varieties of table beets.
- Efficacy studies on bean rust control with oxathiin systemic fungicides;
- Effects of methyl bromide rates on soil microflora;
- Longevity studies on bean rust (Uromyces phaseoli) spores;

Worked in the Plant Clinic and did trouble shooting of vegetable diseases throughout Oregon.

1963 – 64	Research assistant in the Department of Agricultural Chemistry, OSU performing cholinesterase assays on dog and cat blood. Laboratory assistant in mite toxicity studies.
1959 – 65	FMC Corporation, Western Research, Research Biologist conducting field development evaluation of the following compounds: Insecticides; Ethion, Tedion, Thiodan. Herbicides; Dicryl, Solan, Casoron. Fungicides; Lanstan, Polyram. Plant Growth Regulators; cotton defoliants. Market development studies for: Lanstan – a soil applied fungicide. Casoron – a soil applied herbicide. Residues, Label preparation & registration: Insecticides Herbicides Fungicides Crop damage investigation.

5112 - BioMass

Investigation Report/Photo Log

The subject of this investigation relates to a waste reduction facility to the north of a fresh market Thompson Seedless grape vineyard. The vineyard owner is concerned about the dust that is generated in the waste reduction operations. The primary source of the dust is in the digestion process where the plant material is stirred after it has been sprayed with water to increase the moisture level and as the material is stirred there is a certain amount of dust generated. The stirring is required in order to promote aeration of the stacked material shown in the pictures, which ultimately leads to bacterial and fungal degeneration.

The source of the plant material is the various city and county waste collection units. The only material that is used in this process is plant material from various city and county collections. It is predominately lawn clippings, prunings and trees that are taken down. There is also some lumber, such as palettes, etc. that find their way into this process. Any trees or palettes, i.e. large plant sections (wood) are run through a shredder so that the material that is eventually put into the digestion process is generally small particles. The primary concern with the digestion process is the fines that get into the air that add to the dust burden. Fine particles, particularly in the 200 micron range or smaller, will be picked up by the prevailing northwest wind and carried to the Thompson Seedless grape vineyard. (Later available data showed no particles this small. See Table 1 in the body of the report.)

Examination of the vineyard shows that the vineyard owner is not concerned with the dust that he raises in his harvesting or cultural operations. It was described to me that when the vineyard is being cultivated, there is frequently a dust cloud that follows the tractor and disc operator moving through the vineyard. When I was present on October 7 there was a wine harvesting operation in progress where there were a number of medium size Kubota tractors as well as gondolas being pulled through the vineyard to collect fruit, and then an operation to dump this harvested fruit into large bins on a trailer presumably

going to the winery. During this operation there was a significant amount of dust moving into the air.

The significance of the rain was that it washed off much of the dust that was prevalent on the vines. The rainfall was fairly light since it did not wash dust off of protected leaves, i.e. leaves that were two or three layers deep or in the center of the vines. Pictures of these are in the exhibits.

Additionally, one of the major concerns of dust on any crop such as grapes or other deciduous crops is the potential for increasing mite populations. I made an examination looking for a mite population and evidence of mite damage on leaves of the first several rows that were immediately across the road from the Biomass field. The distance from the closest digestion pile to the vineyard is in the range of approximately 75'. The road on which vehicles of both property owners travel has a significant amount of dust on it that moves whichever way the wind is blowing. The soil type that is present in the vineyard appears to be a sandy loam.

A series of pictures taken on the Biomass property of the Scarab pulverizing machine shows a large amount of steam escaping from the churned pile of product being turned into humus by biological action, which had generated heat. Prior to the Scarab mixing the digestion pile, a water carrying vehicle, shown in pictures 1-2, 2-7 and 2-9, sprayed a large amount of water over the entire unit in order to put additional moisture into the digestion pile as the Scarab mixed the material. While the Scarab mixes the material, it also serves the purpose of quenching any dust associated with this activity. Pictures 1-1, 2, 3, 4, 5, 6, and 2-1, taken from the rear of the Scarab show that there is very little material thrust out the back, and the material that is thrown out the back is of larger particles which do not move more than approximately 10' off the back of the moving Scarab. This material settles rapidly back to the stack. There is no dark discoloration of the steam leaving the pile for more than 2' - 4', then this material is essentially all deposited back onto the digestion pile. The steam that is generated dissipates before it

has moved more than approximately 50' laterally, and probably 20' to 30' vertically. This is all water vapor.

I examined the digestion pile after the Scarab had remixed it, and several pictures show steam rising from the pile 50' or so after the Scarab had passed (1-5, 6, 7, 2-1). I felt this mixture and it was hot to the touch. I went to the front of the Scarab and performed the same exercise and found that the surface of the non-mixed portion was warm, but not hot. The warmth was as much associated from the sun shining onto this dark pile as anything else. The pile itself, after the Scarab had mixed it, was hot to the touch as already indicated. Observation of the Scarab after it had completed one run showed that the mixing equipment was approximately 6"to 8" off of the ground, so that the whole pile is being mixed from the bottom up. The mixing equipment is a rapidly rotating unit, not unlike that of a roto-tiller. The pictures show that the Scarab equipment not only mixes, but it also reshapes the pile to promote continued biological degradation of the organic matter.

Pictures numbered 2-4, 5 and 6 show the cattle feedlot adjacent to the Biomass operation. The feedlot is typical in the sense that it contains many feeder animals. It is also typical for this time of the year for the feed lot to be dry. The passageway that is adjacent to the Biomass operation is dry and dusty when animals move down through it. By contrast, several of the pictures show (2-3, 5, 6, and 9) the roadway in the Biomass operation close to the feed lot that has been wet down. In some cases, there is free standing water. The equipment used to wet down the roadway and the digestion piles is filling up at the well (shown in picture 7). This is the same equipment shown in the earlier picture with the Scarab where the digestion pile was being wet down.

The following picture (Number 8) shows the feed mill used for the feedlot, and gives an indication of the size of the feed lot with respect to the number of animals that are fed, and indirectly provides information on how much dust is generated from the feedlot activities.

Picture number 9 shows equipment trading on the road with no dust trail. The lack of dust is associated with the extent of watering done in this operation since it is the last week of October and normally a significant amount of dust would be expected from an operation like this, as is evident in the vineyard to the south. The amount of water that is being put on the roads by the Biomass facility is very high and very effective in suppressing dust.

Pictures 2-10 and 2-11 show the dry manure piled up in the feedlot as well as showing the dry, non-watered road adjacent to this pile. This is typical of most feedlot operations.

Picture 2-13 and 2-14 show a Biomass separation operation where some of the material that has gone through an initial digestion is being separated from very coarse material in a screening operation. The screened material can be seen moving up the conveyor belt with steam coming out at the base and also from the pile. There is a small amount of dust being generated at the top of the stack. Most of the particles that are in the air are large and appear to be settling rather quickly onto the pile. There is some dust material associated with the shredding operation (or screening operation) depending upon how dry the material is when it's being introduced. Picture 2-16 is of the waste separation and segregation operation. This is essentially the receiving yard where all of the debris is literally hand picked and sorted through to pull out cans, paper, rags, etc. as shown in picture 2-17.

Picture number 2-19 shows the finished Biomass product. Picture number 2-18 shows the finished product going off in a set of doubles where the material is covered with plastic. Picture number 2-19 shows the other end of the finished pile looking west, where beginning material and later stage material is shown further beyond it. This picture is primarily to depict the willow trees that have been planted at approximately 4' intervals on the south side of the 35 acre parcel. This windbreak was planted in an attempt to reduce the amount of dust that would reach the grapes that are on the other side.

In my opinion, a misting unit that was established in front of the willows would be a means by which much of the fine dust that may reach the windbreak could be quenched and brought back down to the property and prevented from leaving to blow further. Fine dust particles that were further up in the atmosphere arising from other properties, such as the adjacent feedlot or properties further on, would still pass over this facility and settle onto the grapes, however, that would not be as a result of the Biomass operation.

Observation of the willow windbreak shows that its growth rate is not very high, and also the amount of foliage on the trees is quite variable and essentially ineffective with respect to preventing fines particles traveling in a fair wind, i.e. 5 mph or higher, from reaching the grapes. That is to say that much of the fine dust would go right through this wind break. That is one of the reasons why it would be of value to consider a mister. The mister could also serve as a means to water the willows which in some places are currently watered with a double drip. Lack of growth would suggest that insufficient water is being supplied to them now. If the misting nozzles were to direct some mist onto the foliage, the foliage would be more effective as a dust trap and no doubt would also effectively cause more growth to occur, which would increase the effectiveness.

Picture 2-20 shows the beginning of a series of organic digestion piles. The picture shows how coarse much of the material is when the digestion process is initiated. The material that is most coarse is shredded wood arising from palettes and other waste wood products. As the organic decomposition progresses after water has been applied, most of this material will be converted into fine organic matter and carbon dioxide gas, which will ultimately be returned to the growth cycle to produce more green plants. Examination of the willow trees on the southwest end of the property suggest that some salt or herbicide is affecting a number of these trees. The foliage is sparse as indicated in pictures number 20, 21, 22, and 23, it is dying back in some places and in other places it is regrowing. Many of the smaller branches have leaves on the ends but no leaves back on the stem or branch. The foliage with the southern exposure is most severely affected while foliage with a northern exposure is least affected. This partial foliage effectively reduces the value of the willows as a dust capturing device.

It is significant in walking around on the south end and the dog-leg that runs north and south, that the surrounding property is protected from any leachate by the vertical difference in height around the margins. It is not a specific ditch but there is a tapering off of the land elevation moving from north to south, and also from west to east on the dog-leg piece. This difference in height protects surrounding property from any excess water that may run to the boundaries, particularly during the winter. Picture number 23 shows the elevation difference between the Biomass facility and the adjacent grape growers property to the south. From the top of the crown on the road running east and west to the property to its north, there is at least a 2' rise between the bottom of the depression to collect water on the Biomass facility and the crown of the grower's road. That clearly shows any water from rainfall will run from road crown on the southern property to the Biomass property, rather than the reverse.

This picture also shows that the windbreak is not growing well. Picture 2-23 looks west along the adjoining vineyard road, showing the sharp drop-off from the crown of the road to the northern property.

Picture 2-24 is the first picture of the neighbor's Thompson Seedless grapes. This picture shows the level of dust on a leaf that was protected from the rain shower. Surrounding foliage is shown as relatively clean, compared to the dust burden that was present prior to the rain shower.

Picture 3-1 shows a bunch of grapes left by the pickers in the outside row on the third vine from the end of the western-most block. This bunch shows some dust on the upper portion, but more importantly, it shows internal injury, similar, if not related to, measles. It shows external berry scarring, some raisining, and some bunch rot. Before the bunch rot was present, this bunch could have been salvaged if the grower chose; it would require some amount of hand pruning to remove the raisined bunches and some of the dust might have been wiped off. This bunch, however, would have been, at most, a number 2 grade, and, depending upon the market, it may not have been worth picking.

Not because of the dust, however, but because of the internal and surface blemishes. Pictures 3-5 and 6 show good bunches with picture number 3-5 showing a bunch that had a small amount of dust on the fruit of the upper shoulders, but the berries themselves were well formed. Some of the berries were showing an indication of bunch rot. This fruit could have been harvested unless the bunch rot was excessive, in which case the bunch would have been left. Picture number 3-6 shows two bunches near the end of the row that both had bunch rot. In the case of bunch rot, it would make no difference how much dust the fruit had on it, therefore, this fruit was not lost because of dust loading. Picture number 3-7 is taken down the row to indicate how much fruit was removed. Picture number 3-8 shows the berries that were actually removed from bunches that were harvested indicating that a significant amount of crop was taken off of this outside row of grapes even though there is a complaint from the grower.

Picture 3-9 is of fruit at the end of the third row in from the road on the north end of the western block. Several of these bunches show the presence of measles, which are not related to dust. Several bunches in the center of the picture were good and could have been harvested. This would imply that the harvesting crew was not looking very hard for good fruit. Picture 3-10, 11 and 12 are in row 52. There is still evidence of dust, but it is very slight, particularly on the bunch shown in picture number 3-10 and 11. Picture 3-12 shows a bunch that does not have a lot of dust or dirt on it, but does have bunch rot and symptoms of over-ripe berries, as well as some physiological disorder that is causing brown spotting under or in the skin. With few exceptions, all of this fruit is over-ripe and has been left hanging because of bunch rot, including the relatively good bunch shown in pictures 3-10 and 11.

The amount of dust shown in this part of the vineyard, though still evident on the foliage, is not nearly as significant as it was in the first row. However, the fruit quality is not much different here than it was in the first row. In fact, there appears to be far more bunch rot in row 53 than there was on row 1 as demonstrated by the amount of fruit that is still hanging on row 53 with bunch rot. This observation shows that dust from the Biomass facility is not affecting yield.

The rain showers that have fallen on this fruit would serve to concentrate dust, whatever its source. Without either the feedlot or the Biomass facility, there would still be a significant amount of dust to be expected in the vineyard. It is present on all vineyards, in fact, many growers want some of the finer dust and the yeast that occurs on the fruit because it is perceived to be the "bloom" that indicates strong healthy berries. Dust however, often becomes puddled if there is rain or even excess dew, which frequently happens when fruit is harvested late in the season. When the dust on the berries is puddled, it becomes more noticeable, and occasionally can result in a price reduction. The amount of fruit, however, that was removed from the rows closest to the Biomass facility suggests that most of the fruit from the location was sold into the fresh market. Further into this vineyard, i.e. row 53 and rows surrounding it, the bunch rot was much more severe and there was still some puddling of dust on the fruit. Row 65 shows a bunch in picture number 3-13 that has puddled dust on the fruit. In my opinion, this is not dust that is coming from the Biomass facilities. These rows, approximately 12' apart, multiplied by 65 rows, would be 780' south of the Biomass facility. The amount of dust being generated at the Biomass facility is small, and mostly large particled, indicating that the dust from that source would be expected to travel not more than 50' to 100' off their property. There is an approximate 50' buffer at the end of the processing rows, to permit turning the processing equipment. The road is approximately 30' wide, from the property line to the first row of grapes, and on that basis there is approximately 80' to 100' between the southern most source of dust and the first row of grapes. The additional 100' would mean that row 65 was nearly 900' south of this dust source, assuming that the dust from the Biomass facility was the only source. It is unreasonable to expect the large particles to travel this distance.

Picture number 3-14 is taken on row 75. There is a large amount of fruit left, which I suspect will be picked for wine purposes. Some evidence of harvesting for fresh market purposes is present based on the fact that fruit has been pruned off of bunches which is evident on the ground. Picture number 3-15 shows some of this fruit. Picture 3-14, however, shows fruit that has symptoms similar to measles, and they have a significant

amount of discoloration not associated with dust. There is, however, puddled dust on some of these berries, but as was mentioned before, the dust particle size is such that I do not believe it traveled from the Biomass facility. Instead, I believe the dust in this area is coming from the grape grower's own cultural activities.

Picture 3-16 is of a small bunch of grapes left after harvesters went through for wine picking purposes. Berries on this small bunch in row 102 still show dust puddling as a result of the rain showers. Again, I do not believe that this dust is coming from the Biomass facility.

Pictures 3-18 and 19 are of a large bunch of grapes in the east vineyard between the third and fourth vine in row 102 which has not been harvested by the pickers for wine grapes. This bunch shows a series of blemishes that are naturally occurring, many raisined grapes and puddled dust particles which are as a result of the rain showers and not of the Biomass facility. There is a picture at a distance (3-17) and then a close up (3-18) showing the surface of this fruit.

The eastern part of the vineyard has been completely picked over for fresh market purposes. From fruit left on the ground near where the packing stands were, it is evident that a significant amount of fruit had to be pruned or thrown away due to rot or raisining, or both. The worst fruit, i.e. primarily from bunch rot was left hanging on the vines and is in the process of being harvested for wine production. It is difficult to tell on what date this fruit was harvested, but based on the amount of bunch rot evident, it was not harvested soon enough.

In examining the dust loading on foliage in rows 13 with a southern face and 14 with a northern face, row 14 appears to have more dust on the foliage. This could be interpreted that dust was coming from the Biomass facility. However, it is more likely to be associated with the fact that the rain came from the south, impinging more directly on foliage with a southern face than on foliage with a northern face. Thus, the southern

foliage would be expected to be cleaner. On examination of the fruit, there appeared to be no difference in the puddling of the dust deposits on fruit on rows 13 or 14.

Judging from the fruit discarded on the ground around rows 2, 3 and 4, which was an indication of the packing station at this location, there is little or no difference in the amount of fruit discarded at this point than there was on rows up around row 100. As associated with rows around row 100, the fruit that is discarded is raisined fruit as indicated by bunches of raisins, rather than single berries on the ground which could also be raisined, but they would also raisin as a result of drying since harvest. The fact, however, that individual berries were removed suggests that bunch quality of the remaining fruit was high.

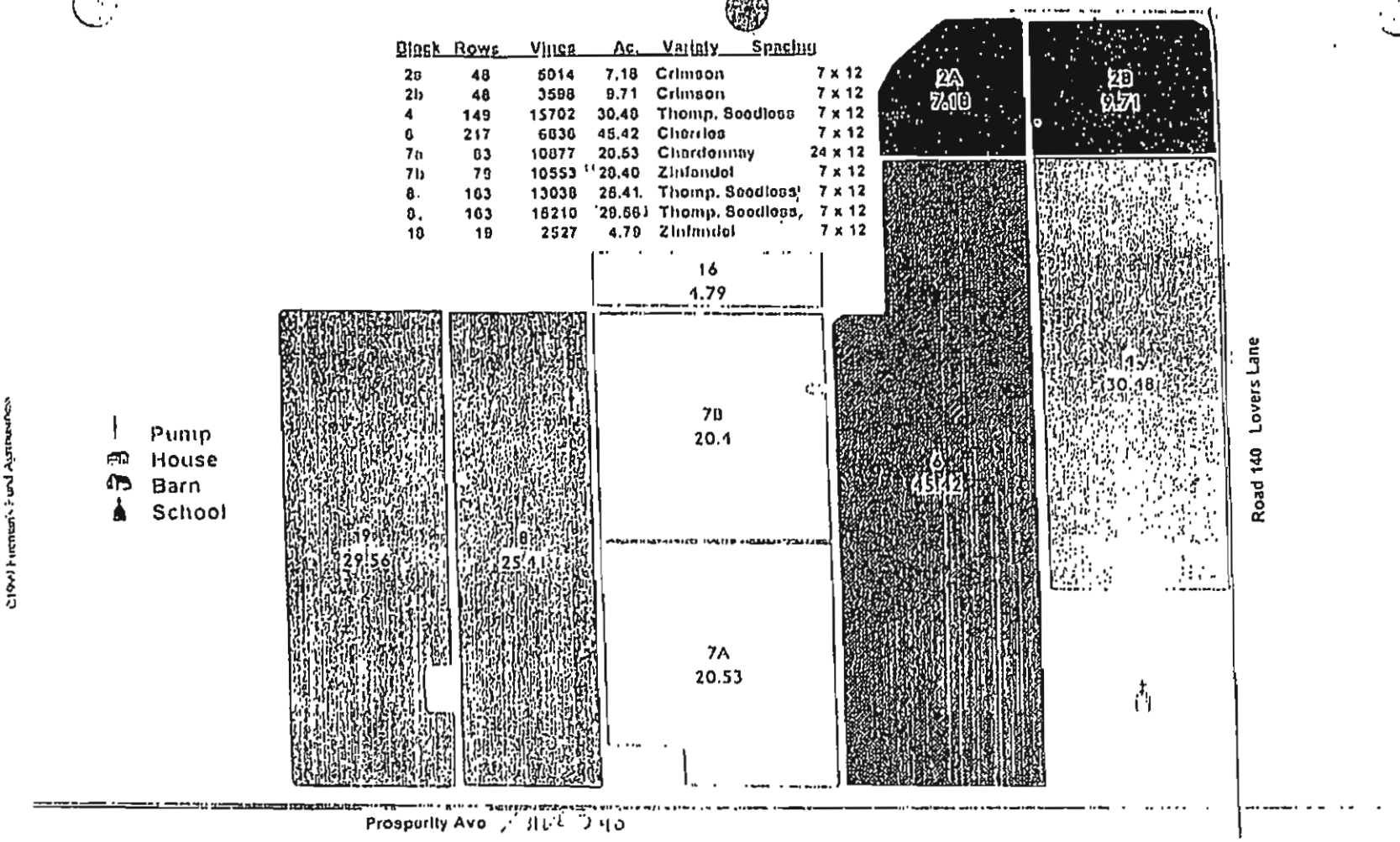
Examination of fruit on the eastern part of the vineyard in rows 1 and 2 suggests that the dust loading is slightly higher here than further into the vineyard. It is difficult to make any significant comparison, particularly since the rain shower has occurred and caused puddling of the dust deposits. The wind velocities of concern are not necessarily the higher velocity variety that occur in the winter time during storms. Winds that would occur from approximately the first of May to the first or middle of October would be of greater concern. This time period would be the most significant with respect to causing unsightly dust to occur on the fruit. These winds would be of greatest concern regarding movement of dust from the Biomass facility. The willows observed next to the road appear to be dying, however, I was told that their vitality is stronger in the Spring but in the Fall their vigor goes downhill.

The other grapes that are in close proximity to this operation have the potential to become hostage to additional dust concerns and also the cherries that are planted nearby have that same potential. Because the cherries will be harvested earlier in the season, they will not have as great a potential for damage on the fruit, but there is significant dust evident on the foliage and it appears to decrease on the trees further from the road. The road seems to contribute most of the dust. However, the cherries are just on the other side of a part of the dustiest part of the overall Biomass operation. Even though the willow trees are

growing more vigorously in this location, they still are not in a position to grab a lot of any fine dust that may move through from the Biomass operation. As the cherry trees get older and more valuable, dust related problems may become a potential point of friction. Cherries are susceptible to mite damage, which the dust will aggravate. In addition to that, many of the cherries are likely to die due to phytophthora and other problems. As I drove by, I saw several trees that are already going down to phytophthora. The Biomass organization needs to take these considerations into account, otherwise they will be forever held hostage. There is also a vineyard of what appears to be Ruby Seedless to the east of the facility. It is also to the east of the cattle feed operation. At some point, it may be of value to have a specific analysis made of the dust on some of the crops growing in this area to attempt to differentiate what might be coming from the feedlot and what is coming from the Biomass facility.

SRS/tn
523invest.rpt 5112

Block	Rows	Vines	Ac.	Variety	Spacing
2a	48	5014	7.18	Crimson	7 x 12
2b	48	3598	9.71	Crimson	7 x 12
4	149	15702	30.48	Thomp. Seedless	7 x 12
6	217	6836	45.42	Cherries	7 x 12
7a	83	10877	20.53	Chardonnay	24 x 12
7b	79	10553	20.40	Zinfandel	7 x 12
8.	103	13038	26.41.	Thomp. Seedless	7 x 12
9.	103	16210	29.56	Thomp. Seedless,	7 x 12
10	19	2527	4.79	Zinfandel	7 x 12



Chardonnay = 20.53
Cherries = 45.42
Crimson = 16.89
Thompson-Seedle = 85.45
Zinfandel = 25.19

T19S R25E

T20S R25E

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Valley Tech

AGRICULTURAL LABORATORY SERVICES

2120 South 'K' Street
Tulare, California 93274
Office: 559-688-5684
Fax: 559-688-5768

REPORT of ANALYSIS

Client: TCCBI
24478 ROAD 140
TULARE, CALIFORNIA

Lab No: 11-02XTCCBI
Sampled Date: 11-02-99
Submitted Date: 11-02-99
Report Date: 11-05-99
Submitted By: JOHN JONES

Material: Green Waste Compost

U.S. Standard Testing Sieve	% Retained:
10 Mesh	19.7
20 Mesh	28.1
40 Mesh	36.8
60 Mesh	8.8
100 Mesh	1.1
150 Mesh	0.3
200 Mesh	0.8

IF YOU SHOULD HAVE ANY QUESTIONS PLEASE CALL. THANK YOU.

SAM MODESITT
CHEMIST

The evaluation of dust from the compost facility is based not on analysis of chemical makeup or on air sampling, but on whether or not dust could make it to the vineyard. Because air sampling was deemed "excessively expensive", the Siemer report provided an evaluation based on calculating "an estimated distance that particles of a certain size would move downwind in a mass of air moving a certain velocity." The procedure for this evaluation consisted of conducting a single sieve analysis test of compost material (sample taken of finished compost, pg. 6), calculating particulate sizes from sieve test results, and comparing the transport of water droplets of varying sizes from a referenced study to the potential for downwind transport of the calculated particulate sizes. However, the procedures used provide incorrect and incomplete information for the following reasons.

First, the compost dust particle sizes are incorrectly calculated from the sieve test data Consequently, the particle sizes are overstated by orders of magnitude.

- In converting from sieve designations to particle size that would pass through the openings of the sieve, the space occupied by the mesh making up the sieve is not taken into account. The Siemer report states: "the mesh number was divided into the number of microns/inch." Consequently, the calculated openings and dust particle sizes are larger than the actual sieve openings and dust particle sizes. The ASTM standard for sieve analysis (D 422) gives the equivalent sizes openings in microns for each sieve size.

Sieve Designation (mesh: openings per inch)	Siemers Report Calculation By described procedure	ASTM Equivalent size openings microns (μm)	Over Estimation of opening sizes
10	25,000/10 = 2500	2,000 μm	25%
20	25,000/20 = 1250	850 μm	47%
40	25,000/40 = 625	425 μm	47%
60	25,000/60 = 416	250 μm	66%
100	25,000/100 = 250	150μm	67%
150	25,000/150 = 166.6	(using 140 mesh) 106μm	57%
200	25,000/200 = 125	75 μm	67%

- Next, these incorrect diameters are used to calculate particle volume The rationale for calculating cubed particles is not consistent with recognized aerosol science procedures for using particle diameters in determining behavior of particles in a moving air mass. Also, it is not in concert with the referenced figure, which uses microns (a unit for diameter or radius) and not microns cubed (a unit for volume). NOTE: Siemer report states spray "droplets are measured by their mean volume diameter"!

Siemer Report rationale for comparing droplets from the referenced figure and dust particles as cubed particles	"These droplets are measured by their mean volume diameter. They are near circular in shape. For this reason, the particle sizes of the Biomass particles were calculated as cubed particles to make a closer approximation to the droplet sizes."
Aerosol Science practices	"It is convenient to think of all aerosol particles as spheres for calculation, and this helps visualize the processes taking place. But, with the exception of liquid droplets, which are always spherical, many shapes are possible. . . . "Either particle radius or particle diameter can be used to describe particle size. In theoretical discussions of particle properties, the radius is most commonly used, whereas in more practical applications the diameter is the descriptor of choice. . . . "Two commonly encountered definitions of particle size are Feret's diameter and Martin's diameter. . . . *Feret's diameter* is the maximum distance from edge to edge of each particle, and *Martin's diameter* is the length of the line that separates each particle into two equal portions . . . "Sometimes a diameter is defined in terms of particle settling velocity. All particles having similar settling velocities are considered to be the same size, regardless of their actual size, composition, or shape Two such defintions

	which are most common are "**Aerodynamic diameter** Diameter of a unit density shere (density = 1 g/cm^3) having the same aerodynamic properties as the particle in question This means that particles of any shape or density will have the same aerodynamic diameter if their settling velocity is the same. "**Stokes' diameter** Diameter of a sphere of the same density as the particle in question having the same velocity as the particle Stokes' diameter and aerodynamic diameter differ only in that Stokes' diameter includes the particle density whereas the aerodynamic diameter does not "

- Although a moot point at this juncture, the cubed micron calculations in the Siemer report appear to be for cubes, not spheres (the values agree with cube calculations, but, in four of the seven cases, the exponents don't agree with either cube or sphere calculations). Cubed particles are not a good approximation of spherical droplet sizes. A cube is almost double the volume of a sphere whose diameter is equal to the length of the side of the cube. Either way, using particle volume, cube or sphere, instead of particle diameter to compare compost particle size to spray droplet sizes results in very large errors (from 1,000 times to 100,000 times, i.e., 3 to 5 orders of magnitude)

Sieve Designation	Volume of Sphere ($\pi d^3/6$)	Volume of Cube (d^3)	Siemer Report Given particle sizes (cubic microns)	Particle diameters ASTM values	Amount of error (orders of magnitude)
10	$\pi 2500^3/6 = 8.18 \times 10^9$	$2500^3 = 1.56 \times 10^{10}$	1.56×10^7	2,000 µm	3+
20	$\pi 1250^3/6 = 1.02 \times 10^9$	$1250^3 = 1.95 \times 10^9$	1.95×10^7	850 µm	4+
40	$\pi 625^3/6 = 1.27 \times 10^8$	$625^3 = 2.44 \times 10^8$	2.44×10^7	425 µm	4+
60	$\pi 416^3/6 = 3.77 \times 10^7$	$416^3 = 7.20 \times 10^7$	7.20×10^7	250 µm	5+
100	$\pi 250^3/6 = 8.18 \times 10^6$	$250^3 = 1.56 \times 10^7$	1.56×10^6	150µm	4+
150	$\pi 166.6^3/6 = 2.42 \times 10^6$	$166.6^3 = 4.62 \times 10^6$	4.62×10^6	106µm	4+
200	$\pi 125^3/6 = 1.02 \times 10^6$	$125^3 = 1.95 \times 10^6$	1.95×10^5	75 µm	4+

Second, the estimated distances the particles in the tested compost sample will travel downwind are underestimated because of the above errors. Using the particle diameters from the ASTM micron equivalents of the sieves openings and Figure 1 in the Siemer report shows that particles retained on the 100, 150, and 200 sieves (diameters of 150, 106, and 75 µm) would travel from approximately 50 to over 300 feet downwind in 10 mile-per-hour winds. Actual distances could be more or less, depending on the aerodynamic diameters or Stokes' diameters of the dust particles. These sizes comprise 2.2% of the weight of the sample. In other words, for every 100 pounds of finished compost, over 2 pounds would be small enough to be transported downwind from 50 to over 300 feet in 10 mile-per-hour winds.

Third, the compost particle size analysis is incomplete. A standard wash through a 200 sieve and comparing weights before and after the wash is a minimum effort required to provide quantitative data on the percent fines smaller than 75 µm. If a wash is not done, fine particles can adhere to the larger particles and be reported in the weights of the larger particle sizes. The reported sieve test results do not document whether the sample was washed to remove fines prior to sieving. An indication of smaller fines, as well as rounding errors in the calculations of percent retained on each sieve, is found in the 3.4 % unaccounted for. Further efforts to define smaller particle sizes could have included a hydrometer test. The hydrometer test for particles that pass the 200 mesh sieve is based on Stokes' diameters. Material passing through the 200 sieve, particle sizes less than 75 µm, could travel well over 600 feet according to the figure provided in the Siemer report. The amount of additional fines not accounted for could be well above 2% (3.4% minus allowance for rounding errors) of the weight of the sample. In other words, for every 100 pounds of finished compost, an additional 2 to 3 pounds could be small enough to be transported downwind from 300 to over 600 feet in 10 mile-per-hour winds.

Sieve Designation (mesh: openings per inch)	Siemer Report Sieve Analysis Percent Retained	ASTM Equivalent size openings microns (μm)
10	19.7	2,000 μm
20	28.1	850 μm
40	36.8	425 μm
60	8.8	250 μm
100	1.1	150μm
140	Not used in test	106 μm
150	0.3	Not given in standard
200	0.8	75 μm
	Total 96.6 % unaccounted for 3.4	

Attachment 10:

E-mail from Keith Jahnke to Aaron Bock

From: Keith Jahnke
To: Aaron Bock
CC: Hector Guerra; Ken Bowers
Date: 4/11/2013 2:25 PM
Subject: Fwd: Re: Response to CalRecycle Harvest Power DEIR 04 04 13.pdf comments- Adobe Reader

Aaron. I have reviewed the inspection reports dating back to 1994. No Violations of dust or odor have been observed during the Tulare County Local Enforcement Agency Inspections. Also, no complaints have been received during this time period. Site inspections include a determination if objectionable odors are observed offsite. The only dust related issue was that the operator held off improving drainage bye land leveling and deepening of the ponding basin until grapes were harvested because of the potential of creating dust.

Let me know if you have any further questions regarding this site.

Keith Jahnke
Tulare County
Health & Human Services Agency
Environmental Health Services Division
5957 S. Mooney Blvd.
Visalia, Ca 93277
(559) 624-7430

>>> Aaron Bock 4/11/2013 1:29 PM >>>
Keith,

Can you please forward a statement showing that Harvest Power has not had any odor or dust violations or complaints since its been in operation.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP
Planner IV
Tulare County Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
559-624-7050 - Direct
559-730-2653 - Fax

Attachment 11:

California Energy Commission e-mail to Aaron Bock

From: "Nguyen, Darren@Energy" <Darren.Nguyen@energy.ca.gov>
To: Aaron Bock <ABock@co.tulare.ca.us>
Date: 2/28/2013 2:55 PM
Subject: RE: Requesting Potential Grant Number for Harvest Power Project for CEQA purposes

Hi Aaron,

Unfortunately, grant numbers are assigned after projects get approved at the Commission Business Meeting. Since this project have not gone to the Business Meeting yet, there is no grant number associated with it.

Regards,

Darren Nguyen

Emerging Fuels and Technologies Office
Fuels and Transportation Division
California Energy Commission
Phone: (916) 654-5144
Fax: (916) 654-4753
Darren.nguyen@energy.ca.gov

----Original Message----
From: Aaron Bock [mailto:ABock@co.tulare.ca.us]
Sent: Thursday, February 28, 2013 11:43 AM
To: Nguyen, Darren@Energy
Subject: RE: Requesting Potential Grant Number for Harvest Power Project for CEQA purposes

Darren,

We are looking for a Grant Number for Harvest Power for our 30 day review period for the required "shortened review" letter to OPR. We would like to show this to OPR, in order to show them the urgency and commitment from the CEC towards the project. Please let me know if you have anything like that for projects that are not necessarily funded yet.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP
Planner IV
Tulare County Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
559-624-7050 - Direct
559-730-2653 - Fax

From: "Nguyen, Darren@Energy" <Darren.Nguyen@energy.ca.gov>
To: Aaron Bock <ABock@co.tulare.ca.us>
Date: 2/28/2013 3:02 PM
Subject: RE: Requesting Potential Grant Number for Harvest Power Project for CEQA purposes
Attachments: PON-11-601_NOPA_R2.pdf

Aaron,

I've attached the round 2 Notice of Proposed Awards (NOPA) along with the link to the posting. Hope this will help.

http://www.energy.ca.gov/contracts/PON-11-601_NOPA_R2.pdf

-Darren

-----Original Message-----
From: Aaron Bock [mailto:ABock@co.tulare.ca.us]
Sent: Thursday, February 28, 2013 11:43 AM
To: Nguyen, Darren@Energy
Subject: RE: Requesting Potential Grant Number for Harvest Power Project for CEQA purposes

Darren,

We are looking for a Grant Number for Harvest Power for our 30 day review period for the required "shortened review" letter to OPR. We would like to show this to OPR, in order to show them the urgency and commitment from the CEC towards the project. Please let me know if you have anything like that for projects that are not necessarily funded yet.

Thanks,

Aaron R Bock, MCRP, JD, LEED AP
Planner IV
Tulare County Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
559-624-7050 - Direct
559-730-2653 - Fax

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

NOTICE OF PROPOSED AWARD
Round 2

Alternative and Renewable Fuel and Vehicle Technology Program
Grant Solicitation PON-11-601
Biofuels Production Facilities

October 5, 2012

On January 11, 2012, the California Energy Commission (Commission) released a Grant Solicitation and Application Package entitled "Biofuels Production Facilities" under the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) to provide funding for the development of new, California-based biofuel production facilities that can sustainably produce low carbon transportation fuels.

This solicitation sought applications in three development stages:

- Stage 1: Early Technology Development
- Stage 2: Pilot and Demonstration Facilities
- Stage 3: Commercial Facilities

The solicitation also identified the following eligible biofuels, if used for transportation purposes:

- Diesel substitutes
- Gasoline substitutes
- Biomethane

The grant solicitation announced that the maximum funding available for this solicitation was $37.69 million and that the Energy Commission reserved the right to increase total funding under this solicitation by up to an additional $30 million. The solicitation encouraged applicants to identify whether their projects were "CEQA-ready" so that the Energy Commission could perform an initial round of scoring and funding to meet encumbrance deadlines associated with the portion of funds allocated in the 2010-2011 Investment Plan. On March 23, 2012, the Energy Commission released the "Notice of Proposed Awards (NOPA) – Round 1" which recommended projects for funding that achieved the highest passing scores and committed to providing California Environmental Quality Act (CEQA) compliance documentation by May 1, 2012.

The attached table entitled "Notice of Proposed Awards – Round 2" identifies the Round 2 projects recommended for funding and the amount of recommended funding. In

addition, the table lists the scores for all projects that were included in the Round 1 NOPA, and corrects a typographical error on the score of one Applicant on the Round 1 NOPA which was incorrectly listed as 94%, when in fact, the score was 93.4%. The correction of this typographical error does not affect the proposed award.

In accordance with the solicitation (PON-11-601, Section 13, Pages 8 - 10), all CEQA compliance documents must be submitted to the Energy Commission for review no later than March 15, 2013. If CEQA compliance documents are not received by March 15, 2013, the Energy Commission may cancel the proposed award and fund the next highest scored project from the second round of scoring.

Funding of proposed projects resulting from this solicitation is contingent upon the approval of these projects at a publicly noticed Business Meeting at the Energy Commission in Sacramento, California, and execution of a grant agreement. If the Energy Commission is unable to timely negotiate and execute a funding agreement with an Applicant, the Energy Commission, at its sole discretion, reserves the right to cancel the pending award and fund the next highest ranking application within the Round 2 NOPA. Applicants will be notified of such changes in a revised notice.

This notice is being posted on the Energy Commission's web site at http://www.energy.ca.gov/contracts/index.html. In addition, it is being mailed to each party that submitted a proposal to this solicitation.

Questions should be directed to: Kevyn Piper
Grants and Loans Officer
California Energy Commission
1516 Ninth Street, MS-1
Sacramento, CA 95814
(916) 654-4845

California Energy Commission

Alternative and Renewable Fuel and Vehicle Technology Program

Solicitation PON-11-601
Biofuels Production Facilities

Round 2 - Notice of Proposed Awards
October 5, 2012

Fuel Category: Diesel Substitute **Round 2 Proposed Awards: $8,641,723**

Proposal Number	Applicant	Project Title	Funds Requested	Proposed Award Round 1	Proposed Award Round 2	Score	Round 1	Round 2
Proposed Awards								
11	Springboard Biodiesel LLC*	Deploying Small Scale Biodiesel Facilities in CA	$758,200	$758,200		93.4%	Round 1 Awardee	
37	Buster Biofuels LLC	Escondido Biorefinery 2nd Generation (EB2G)	$2,641,723		$2,641,723	91.9%		Round 2 Awardee
27	New Leaf Biofuel, LLC	Scale up of Biodiesel Production Facility with Reduced Carbon Intensity (CI)	$511,934	$511,934		90.9%	Round 1 Awardee	
61	Yokayo Biofuels, Inc.	A Catalyst for Success	$1,860,330	$1,860,330		90.7%	Round 1 Awardee	
53	SacPort Biofuels Corp.	SacPort Renewable Diesel Pilot Project	$5,000,000	$5,000,000		89.4%	Round 1 Awardee	
10	Eslinger Biodiesel, Inc.	Developing Biodiesel Production at Kinder Morgan Distribution Terminals in California	$6,000,000		$6,000,000	89.3%		Round 2 Awardee
Pass But Not Funded								
50	AltAir Fuels, LLC	Alt Air Fuels, LLC Commercial Scale Biofuels Production Facility	$6,000,000		$0	87.6%		Finalist
18	GeoGreen Biofuels, Inc.	Biodiesel Feedstock Pretreatment Facility ("Pretreament")	$2,133,449		$0	83.7%		Finalist
35	Viridis Fuels, a California Corporation	Viridis/EBMUD Biodiesel Production Facility	$3,900,000		$0	82.6%		Finalist
6	Biodico	A Distributed Network of Ultralow Carbon Intensity Biorefineries with Cogeneration	$6,000,000		$0	82.2%		Finalist
55	Calgren Renewable Fuels LLC	Calgren Biodiesel	$2,681,685		$0	81.6%		Finalist
15	AccuChem Conversion Inc. & Blue Sun Biodiesel LLC	Upgrade, Expand AccuChem Soy Biodiesel Plant to Low Carbon Feedstock	$3,704,638		$0	81.3%		Finalist
33	TerViva Bioenergy, Inc.	Evaluation of the Pongamia Tree es a Biodiesel Feedstock	$1,466,934		$0	79.1%		Finalist

Proposal Number	Applicant	Project Title	Funds Requested	Proposed Award Round 1	Proposed Award Round 2	Score	Round 1	Round 2
43	American Biodiesel, Inc. dba Community Fuels	Expansion of Existing Facilities for Producing Low Carbon Intensity Biodiesel	$6,000,000		$0	78.9%		Finalist
57	Biotech Energy of America, Inc.	Multi-Sourced Aquatic & UCO Biomass-to-Fuel Demonstration Facility	$2,660,000		$0	76.0%		Finalist
46	Whole Energy Fuels Corporation	Glycerolysis Plant	$1,114,000		$0	74.0%		Finalist
47	Eastern Municipal Water District	Biodiesel Feedstock Production Facility at the Perris Valley RWRF	$2,399,000		$0	72.9%		Finalist
9	Menon International, Inc.	Aerobic Fermentation of California Cellulosic Agricultural Waste into Biofuel	$2,750,000		$0	72.7%		Finalist
2	The Regents of the Univarsity of California; University of California, San Diego	A Comprehensive Algae Biofuels Pilot, Demonstration, and Training Facility	$5,000,000		$0	72.6%		Finalist
42	Argo Fuels, LLC	Argo Fuel's Biodiesel Capacity Enhancements Project	$1,680,300		$0	72.4%		Finalist
25	Kiverdi, Inc.	Novel Fully Integrated Waste Biomass-to-Diesel Process	$1,498,640		$0	70.0%		Finalist
Did Not Pass								
17	BioEnergy Development, LLC	BED/USDA Pilot Plant - Albany, CA	$5,000,000		$0	63.4%		Did Not Pass
56	Sirona Fuels, Inc.	Sirona Fuels Production Capacity and Efficiency Scale-Up	$2,183,336		$0	63.3%		Did Not Pass
8	Pacific Biodiesel Technologies, LLC	Community-scale Biodiesel Plant Efficiency Upgrades to Create Economic Viability	$2,865,824		$0	61.9%		Did Not Pass
62	UrbanX Renewables Group, Inc.	2nd Generation Ultra-Clean Renewable Diesel Production Pilot Facility- Long Beach, CA	$5,000,000		$0	61.1%		Did Not Pass
19	SRI International	Hollow-Fiber Membrane Process for Separation and Purification of Biodiesel	$774,962		$0	55.4%		Did Not Pass
20	Pacific Oil Products, Inc.	Commercial Scale Algae Oil Demonstration Project - Tulare	$1,344,888		$0	52.2%		Did Not Pass
51	Extreme Green Technologies, Inc. (EGTJV)	Refinery Feedstock Production from Regionally Grown Crude Algae Oil	$1,000,000		$0	49.9%		Did Not Pass
29	Promethean Biofuels	Lab Method Pilot Development Project	$329,500		$0	N/A		Disqualified
52	Broken Box Energy LLC dba "California Agri-Energy"	Integrated Bio-Energy Center - Biodiesel, Biogas, Feedmeal, Renewable Energy	$750,000		$0	N/A		Disqualified
58	Urban Algae Inc.	UCO Biodiesel Waste Stream to Algae Biodiesel Proof-of-Concept	$1,150,000		$0	N/A		Disqualified
DIESEL SUBSTITUTE TOTAL			**$86,159,343**	**$8,130,464**	**$8,641,723**			

Fuel Category: Gasoline Substitute					Round 2 Proposed Awards: $9,664,657			
Proposal Number	Applicant	Project Title	Funds Requested	Proposed Award Round 1	Proposed Award Round 2	Score	Round 1	Round 2
Proposed Awards								
38	Mendota Bioenergy, LLC (MBLLC)	Advanced Biorefinery Center-Mendota Integrated Demonstration Plant	$5,000,000		$5,000,000	87.9%		Round 2 Awardee
31	ZeaChem Inc.	Pilot Plant end Commercial Feasibility Study for Biobased Gasoline Blendstocks	$4,664,657		$4,664,657	86.6%		Round 2 Awardee
23	EdeniQ, Inc.	California Cellulosic Ethanol Biorefinery	$3,900,000	$3,900,000		84.0%	Round 1 Awardee	
13	Kent BioEnergy Corporation	Fermentable Sugars for Ethanol Production from Microalgal Biomass	$1,500,000	$1,496,426		77.1%	Round 1 Awardee	
Pass But Not Funded								
54	Sierra Energy	Susteinable Gas Substitute Project	$1,500,000		$0	76.9%		Finalist
7	Reliant BioFuels, LLC	Low Carbon Biofuel Feedstock Refinery	$626,706		$0	76.9%		Finalist
28	Canergy, LLC	Pre-Work Low-Carbon Ethanol Production from Sugarcane and Sweet Sorghum	$1,478,331		$0	74.4%		Finalist
48	Logos Technologias, Inc.	The Alchemy Project: Waste to Fual	$500,000		$0	73.6%		Finalist
5	Pacific Ethanol Development, LLC	Madera Biomass Refinery	$2,441,021		$0	72.7%		Finalist
34	Fulcrum BioEnergy, Inc.	Fulcrum BioEnergy MSW-to-Biofuels Integration Study	$1,500,000		$0	70.9%		Finalist
Did Not Pass								
21	California Ethanol & Power, LLC (CE&P)	Permitting for California Surgarcane Ethanol Plant	$2,275,000		$0	68.9%		Did Not Pass
36	Altex Technologies Corporation	Mobile Biomass Conversion Synthetic Gasoline System (BCSGS)	$1,924,489		$0	68.2%		Did Not Pass
1	Marine BioEnergy, Inc.	Abundant Gasoline Substitute from Kelp Farmed in the Open Ocean	$775,606		$0	65.1%		Did Not Pass
30	Partnership for Environmental Progress, Inc.	Agave Biofuel Feasibility Study	$671,649		$0	65.1%		Did Not Pass
63	Seaborne Ventures, LLC	F3: Food and Fuel for the Future	$1,500,000		$0	58.5%		Did Not Pass
60	Caseus Energy, LLC	Caseus Energy: Whey Permeate to Fuel Grade Ethanol	$3,000,000		$0	N/A		Disqualified

Proposal Number	Applicant	Project Title	Funds Requested	Proposed Award Round 1	Proposed Award Round 2	Score	Round 1	Round 2
4	Ethanol Energy Systems, LLC	Ethanol Conversion Prototype	$400,000		$0	N/A		Disqualified
GASOLINE SUBSTITUTE TOTAL			$33,857,859	$5,396,426	$9,664,657			

Fuel Category: Biomethane **Round 2 Proposed Awards: $8,589,993**

Proposed Awards								
40	Clean World Partners	Sacramento BioRefinery #1 Phase II: SCALE-UP to 100 TPD	$6,000,000	$6,000,000		94.6%	Round 1 Awardee	
12	Tulare County Compost & Biomass Inc.	TCCBI Biomethane Production Facility	$4,787,694		$4,787,694	90.8%		Round 2 Awardee
32	Environ Strategy Consultants, Inc.	Anaerobic Digestion of Food Waste to Create Biomethane CNG Fuel	$2,422,740		$1,211,370	86.0%		Round 2 Awardee
44	Blue Line Transfer, Inc.	Blue Line Biogenic CNG Facility	$2,590,929		$2,590,929	83.8%		Round 2 Awardee
Pass But Not Funded								
39	Gas Technology Institute	Demler Biomethene Injection Project	$1,053,741		$0	81.6%		Finalist
49	MicroBio Engineering, Inc.	City of Fresno Demonstration of Commercial Biofuels Production with Algae	$1,040,000		$0	81.6%		Finalist
59	City of Napa and Napa Recycling & Waste Services, LLC.	Alternative and Renewable Anaerobic Digestion and Biofuel Production Facility	$3,641,378		$0	80.6%		Finalist
26	Delhi County Water District	Delhi Biogas Capture end Production Project Utilizing AIWPS ®	$1,860,000		$0	78.4%		Finalist
16	Southwest Transportation Agency	Fresno Dairy Waste to Liquefied Biogas Design/Planning Project Utilizing AIWPS®	$1,041,000		$0	75.9%		Finalist
22	Quantitative BioSciences, Inc.	Algae-Based Cleanup of Anaerobic Digester Biogas for Clean Biomethane Production	$1,000,000		$0	75.9%		Finalist
Did Not Pass								
45	Interra Energy, Inc.	Carbon Negative Transportation Grade Biomethane	$660,341		$0	62.8%		Did Not Pass
3	Environmental Energy and Engineering Company	Enhanced Biomethane Production from Manure Management	$562,497		$0	59.8%		Did Not Pass

Proposal Number	Applicant	Project Title	Funds Requested	Proposed Award Round 1	Proposed Award Round 2	Score	Round 1	Round 2
14	County of Los Angeles Department of Public Works (DPW), Environmental Programs Division	Los Angeles County Conversion Technology Center (CTC)	$860,000		$0	N/A		Disqualified
BIOMETHANE TOTAL			**$27,540,320**	**$6,000,000**	**$8,589,993**			
TOTAL FUNDING RECOMMENDED FOR ROUND 2					**$26,896,373**			
ROUND 1 TOTAL PROPOSED AWARDS (Posted 3/23/12)				**$19,526,890**				
ROUND 1 AND 2 TOTALS			**$147,557,322**	**$19,526,890**	**$26,896,373**			

* The Notice of Proposed Awards (3/23/12) mistakenly showed a score for Proposal #11 submitted by Springboard Biodiesel, LLC, as 94%, when in fact the score was 93.4%. This typographical error has been corrected and properly reflected in the Round 2 - Notice of Proposed Awards and this correction does not change the proposed award amount.

Expiraton Date: **October 12, 2012**

Attachment12:

Memo regarding discussion with neighbor

RESOURCE MANAGEMENT AGENCY

MEMORANDUM TO FILE

April 3, 2013

TO: **File**

FROM: **Hector Guerra, Chief, Environmental Planning Division**

SUBJECT: **Recap of in-person conversation with Mr. Bill Burt representing Sundale Vineyards re: Proposed Expansion of Harvest Power composting operations**

Project: Special Use Permits No. PSP 09-075 and PSP 12-039

APNs: 150-14—014, -016, & -009

Location: Approximately 1,500 feet west of Road 140 (Lovers Lane), between Avenues 240 and 248, east of Tulare

Contact With: Mr. Bill Burt, Controller, Sundale Vineyards, 23595 Road 140, Tulare, CA 93274

This memorandum memorializes a conversation with Mr. Bill Burt (Sundale Vineyards), Dana Mettlen (Planner II) and Hector Guerra (Chief Environmental Planner) that occurred during the week of March 24, 2013. The conversation concerned the above referenced composting facility's proposed expansion. Mr. Burt expressed concern with regard to odors and the dust that is generated from the project site (Harvest Power), most especially during the dry months of August and September. Mr. Burt states the reason for his concern is because Sundale Vineyards owns more than one hundred fifty acres of property that is in active grape cultivation and is located just south and east of the project site. The prevailing winds are from the northwest to the southeast which places Sundale Vineyards downwind from Harvest Power.

Mr. Burt noted that dust may be generated at the site by vehicles traveling along the byways within the site perimeter and by the turning of the compost piles. Mr. Burt indicated that he is concerned about the proposed expansion as related to the potential for increased food contamination by fecal matter, or E.coli. As was mentioned during our conversation, table grapes are generally harvested in August and September, the driest months of the year. Mr. Burt mentioned that after harvest the grapes go immediately into cold storage and cannot be washed or have contact with any moisture prior to, during, or after harvesting. Mr. Burt concluded that if dust from the composting facility was to blow into the vineyard, the resulting dust could not be washed from the grapes prior to cold storage; and the grapes might then be transported to consumers in a contaminated state.

The conversation included suggestions for mitigation, such as increased watering frequency by Harvest Power during grape harvest season. It was also recommended that Sundale Vineyards contact the Air District, an agency that monitors operations that require dust control, with their concerns about dust and to determine if there may have been a lapse in the applicant's adherence to the conditions of approval for the facility.

Attachment 13:

E-mail from Sung Kwon to Andre Amy

From: Sung Kwon
To: Aamy@dtsc.ca.gov
CC: Bock, Aaron; Guerra, Hector
Date: 04/15/2013 4:42 PM
Subject: Manure
Attachments: Kwon, Sung.vcf

Hello Mr. Amy,

This e-mail confirms our conversation today about animal manure. Thank you for letting us know that animal manure is not considered as a hazardous material or as hazardous waste.

Sincerely,

Sung H. Kwon, MCRP MBA AICP
Planner IV
Tulare County
Resource Management Agency
5961 South Mooney Blvd.
Visalia, CA 93277
(559) 624-7132 - direct
(559) 730-2653 - fax
skwon@co.tulare.ca.us

Attachment 14:

Draft General Order for Composting

DRAFT
STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY ORDER NO. DWQ-2012-XXXX

GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE
DISCHARGE OF WASTES AT COMPOST MANAGEMENT UNITS

The following Dischargers, as described in Table A below, may apply for coverage under these General Waste Discharge Requirements (Order), and are subject to the provisions, prohibitions, and discharge specifications set forth in the Order.

Table A: Discharger Information

Discharger	Any person responsible for discharging, or proposing to discharge waste to a Compost Management Unit (CMU); or any person who owns and/or operates a CMU; or any person responsible for ensuring compliance with the maintenance and monitoring operations at the CMU, as required under this Order.
The Discharger is required to pay an annual fee (i.e., waste discharge permit fee) as determined by the State Water Resources Control Board, and pursuant to California Water Code (Water Code) section 13260 *et seq*. The filing fee accompanying the Notice of Intent is the first year's annual fee. The annual fee is based on the threat to water quality and complexity of the discharge in accordance with California Code of Regulations (Cal. Code Regs.) title 23 section 2200. Dischargers enrolled under this Order will be assigned a threat to water quality and complexity rating of 3-C and will be assessed the corresponding fee for Discharge to Land sites, plus any applicable surcharges.	

Discharges of wastes by persons identified in Table A above from CMUs identified in Table B below are subject to the waste discharge requirements set forth in this Order. Administrative information regarding this Order is contained in Table C below.

Table B: Discharge Location

Discharge Point(s)	Discharge Description	Discharge Point Latitude(s)	Discharge Point Longitude(s)	Receiving Water(s)
Various locations throughout the State	Non-hazardous waste	Various	Various	Various groundwater basins in the State

Table C: Administrative Information

This Order was adopted by the State Water Resources Control Board on:	
This Order shall become effective on the date of adoption	

I, Thomas Howard, Executive Director, do hereby certify that this Order with all attachments is a full and correct copy of an Order adopted by the State Water Resources Control Board, on October 16, 2012.

_____
Thomas Howard
Executive Director

Table of Contents

A. Findings **1**
B. Enrollment Procedure **9**
C. General Discharge Specifications **10**
D. Prohibitions **11**
E. Design Specifications **13**
F. Monitoring Specifications **19**
G. Site Conditions and Maintenance Requirements **19**
H. Site Restoration Specifications **20**
I. Reporting Requirements **20**
J. Provisions **25**

List of Attachments

Attachment A: Definitions ..... **i**
Attachment B: Notice of Intent ..... **ix**
Attachment C: Requirements for a Technical Report in Support of a Notice of Intent ..... **xvii**
Attachment D: Notice of Termination ..... **xviii**

A. FINDINGS

The State Water Resources Control Board (State Water Board) finds that:

1. **DISCHARGER.** A Discharger, as the term applies under these *Statewide General Waste Discharge Requirements (WDRs) for the Discharge of Wastes at Compost Management Units, Order No. DWQ-2012-XXXX* (Order) is any person responsible for discharging, or proposing to discharge waste to a Compost Management Unit (CMU); or any person who owns or operates a CMU; or any person responsible for ensuring compliance with the maintenance and monitoring operations at the CMU, as required under this Order.

2. **COMPOST MANAGEMENT FACILITIES AND UNITS.** As defined in Attachment A of this Order, a Compost Management Facility (Compost Facility) refers to the entire parcel or parcels of property at which feedstocks, additives, amendments, compost (active or stabilized) and wastewaters are discharged for the production of compost. Compost Facilities may include one or more CMU. CMUs refer to an area of land, or portion of a Compost Facility, at which feedstocks, additive, amendments, compost (active or stabilized) and/or wastewaters are discharged for treatment or storage.

3. **COMPOST MANAGEMENT UNIT LOCATIONS.** The scope of this Order includes all CMUs, as defined herein, which are located within the State of California.

4. **MATERIAL DISCHARGE.** The following discharges to land and associated composting activities are not expected to pose a significant threat to the waters of the state, so long as the discharges are carried out in accordance with this Order.

    a. **Feedstocks:** The following types of feedstocks (as defined in Attachment A), or combination of feedstocks (also known as in-process or active compost) may be discharged to land at a CMU, provided the Discharger maintains compliance with the requirements of this Order:

        i. Agricultural materials;
        ii. Anaerobic digestate;
        iii. Biosolids (Class EQ, A, and/or B);
        iv. Food materials;
        v. Green materials;
        vi. Manure;
        vii. Paper materials; and/or
        viii. Vegetative food materials.

Feedstocks – other than those specified under Prohibitions, section D of this Order – listed in a Notice of Intent (NOI) approved by the Regional Water Quality Control Board (Regional Water Board) Executive Officer upon issuance of a Notice of Applicability (NOA), may also be discharged to land at a CMU, provided the Discharger maintains compliance with the requirements of this Order.

    b. **Exempt Composting Activities:** The following composting-related activities, as defined in Attachment A of this Order, are considered unlikely to produce an adverse

effect in waters of the state, provided that the discharge of wastewaters (i.e., runoff to surface waters and/or percolation to groundwater) from these activities does not occur. Therefore, these activities are conditionally exempt from the requirements of this Order, but may be subject to other federal, state, or local regulations:

i. Agricultural Composting;
ii. Chipping and Grinding Facilities and Operations;
iii. Chipping and Grinding Areas at CMUs;
iv. Composting conducted at facilities (e.g., Publicly Owned Treatment Works [POTWs], landfills) issued a State Water Board permit (e.g., WDRs, Industrial General Permit) addressing potential impacts to groundwater quality;
v. Lot Clearing for Fire Protection;
vi. Non-Commercial Composting; and
vii. Stabilized Compost Areas at CMUs, provided the Discharger maintains these areas to comply with the requirements contained in Design Specifications, section E.1.
viii. Within-Vessel and Fully-Enclosed Composting (e.g., anaerobic digesters).

c. **Additives and Amendments:** The use of additives and amendments, as defined and limited by this Order, is not expected to pose a significant threat to water quality as long as the Discharger maintains compliance with the requirements and prohibitions of this Order.

d. **Threshold Volume:** To be consistent with the numeric thresholds used by the California Department of Resources Recycling and Recovery (CalRecycle) for notification and registration tiers, the State Water Board will use a value of 12,500 cubic yards (cy) for the total volume, on site at any time, of any combination of feedstocks, additives, amendments, active or stabilized compost as the numeric threshold used as part of the tier assessment under this Order.

5. **DIVERSION OF WASTE.** The diversion of compostable wastes from disposal in landfills is desirable, but only if such diversion does not result in degradation, contamination, or pollution of surface water or groundwater. The purpose of adopting WDRs for discharges at CMUs of those feedstocks specified in Finding No. A.4.a of this Order is to provide an efficient and cost effective means of allowing properly managed CMUs in the state to process these diverted materials into a beneficially useful compost product in a manner that protects water quality.

Pursuant to Water Code section 13263(i), the State Water Board may prescribe general WDRs for a category of discharges, such as those specified in this Order – provided the general standards are appropriate. In accordance with Water Code section 13263(i), the State Water Board finds the discharges regulated by this Order:

a. Are produced by the same or similar operations;

b. Involve the same or similar types of feedstocks, additives, and/or amendments;

c. Require the same or similar treatment standards; and

d. Are more appropriately regulated under general discharge requirements than individual discharge requirements.

It is therefore in the public interest for the State Water Board to adopt these general WDRs for CMUs.

6. **THREAT TO WATER QUALITY.** When conducted outdoors, operations at CMUs are exposed to precipitation, which can cause piles of feedstocks, additives, amendments, and compost (active or stabilized) to generate wastewaters (i.e., mixtures of process storm water and leachate). Wastewaters can then percolate to groundwater, or mix with surface water, if not properly managed. For the purposes of this Order, wastewaters refers collectively to, but may not be limited to any compost leachate, washwater, process storm water, process water runoff, or any storm water coming into contact with: any pile containing feedstocks, additives, amendments, compost (active or stabilized), or combinations thereof; any residual materials derived from feedstocks, additives, amendments, or compost (active or stabilized); or any other wastewaters at the CMU, because such liquids have the potential to percolate to groundwater, or come into contact with surface water, if not properly managed.

   If not mitigated and managed in accordance with the requirements and prohibitions of this Order, these activities have the potential to cause adverse groundwater quality impacts characterized by elevated concentrations of nutritive salts (e.g., nitrate), non-nutritive salts (e.g., sodium chloride) and other pollutants. Potential surface water impacts can include these constituents of concern, in addition to sediment, oxygen-reducing materials, pathogens, pesticides and herbicides. The threat to water quality from outdoor composting activities can be mitigated through the incorporation of design specifications, water quality monitoring, and best management practices to prevent either the formation of wastewaters or by preventing the wastewaters from percolating to groundwater or flowing off-site to surface water bodies.

7. **WASTE CLASSIFICATION.** Cal. Code Regs. title 27, sections 20200 to 20230 establish a waste classification system. Wastes are classified as either inert waste, nonhazardous solid waste, or designated waste. Inert wastes pose minimal risk to water quality, nonhazardous solid wastes present a greater risk than inert wastes, and designated wastes pose the greatest risk to water quality. Wastes specified in Finding No. A.4.a meet the definition of nonhazardous solid waste.

   Cal. Code Regs. title 27 section 20200(a)(1) allows a finding to be made that, "…a particular waste constituent or combination of constituents presents a lower risk of water quality degradation than indicated by classification according to this article." Therefore, to the extent that a particular compostable waste type, as specified in Finding No. A.4.a, could be characterized as designated waste, such waste types shall be regulated as a nonhazardous solid waste under this Order pursuant to Cal. Code Regs. title 27 section 20200(a)(1) because the wastes specified in Finding No. A.4.a present a lower risk to water quality than typical designated wastes when managed as required by this Order.

   The only Cal. Code Regs. title 27 regulations that apply to nonhazardous solid waste apply to such wastes that are disposed of in a landfill. As specified in Finding No. A.5, the purpose of adopting this Order is to provide an efficient and cost effective means of allowing properly managed CMUs in the state to process diverted compostable wastes

(i.e., feedstocks) from landfills into a compost product, in a manner that protects water quality. Therefore, for compost operations eligible for coverage under this Order, the Cal. Code Regs. title 27 regulations shall not apply so long as the Discharger continues to meet the requirements of this Order.

8. **DESIGN SPECIFICATIONS.** The implementation and compliance with the Design Specifications contained within this Order will be protective of water quality. The Discharger's eligibility for enrollment under one of the three Design Specification tiers established under this Order is based on the following three considerations:

   a. Which of the feedstocks specified in Finding No. A.4.a are discharged, or proposed to be discharged, at the CMU;

   b. The total volume of feedstocks, additives, amendments, and compost (active or stabilized) discharged (i.e., stored and treated), or proposed to be discharged at the CMU at any time; and

   c. The ability to conduct composting in a manner such that leachate will not percolate to groundwater, or runoff to surface waters.

9. **LEGAL AUTHORITY.** In accordance with Water Code section 13000 *et seq*., this Order: implements the regulations and policies adopted by the State Water Board, including that agency's regulations under Cal. Code Regs. title 23; implements applicable provisions of the California Health and Safety Code; and is consistent with CalRecycle's regulations in Cal. Code Regs. title 14, section 17850 *et seq*.

10. **CLASSIFICATION OF A COMPOST MANAGEMENT UNIT.** CMUs are any area of land or portion of a Compost Facility, at which feedstocks, additives, amendments, compost (active or stabilized) and/or wastewaters are discharged for treatment or storage. CMUs also include containment structures and ancillary features for precipitation, drainage control, and monitoring. CMUs that qualify for being included under this Order are limited to the following classifications:

    a. **Existing Permitted Compost Management Units.** CMUs, for the purposes of this Order, are considered to be existing CMUs if they received all permits and WDRs necessary from the Regional Water Board for construction and operation, on or before the initial effective date of this Order.

    b. **New Compost Management Units.** CMUs, for the purposes of this Order, are considered to be new CMUs if the Discharger either:

       i. Proposes to construct and operate a CMU after the initial effective date of this Order; or
       ii. Began operating a CMU on or before the initial effective date of this Order, and for which the discharge of waste to land is not currently regulated by an order (i.e. a conditional waiver, individual or general WDRs that remain in effect), adopted by either the State Water Board or Regional Water Boards (collectively referred to as the Water Boards). This absence of an effective order includes, but is not limited to, those CMUs that were previously regulated pursuant to the requirements of a Conditional Waiver of Waste Discharge Requirements for

Composting Operations (Green Waste Composting Waiver) adopted by a Regional Water Board prior to 1999 and that have continued to operate in accordance with that waiver, after it was rescinded, but for which the Regional Water Board has not adopted individual WDRs.

11. **STORM WATER DISCHARGES.** For CMUs where storm water discharges off site, the Discharger may be required to enroll under State Water Board Order No. 97-09-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities (General Storm Water Permit) – or any future revision of this permit – if applicable to the CMU.

12. **STORM WATER MANAGEMENT.** The General Storm Water Permit requires the Discharger to prepare a Storm Water Pollution Prevention Plan (SWPPP) describing the best management practices (BMPs) that will be implemented to meet its requirements, reducing pollutant discharges to waters of the state. If CMUs are required to obtain coverage under both this Order and the General Storm Water Permit, the SWPPP must describe the BMPs that will be implemented to meet the requirements of the General Storm Water Permit and this Order as appropriate.

13. **MONITORING.** A release of waste, or waste constituents derived from a CMU may create, threaten to cause, or contribute to conditions of pollution, contamination or nuisance as defined under Water Code section 13050. Pursuant to Water Code section 13263, conditions of this Order must include, but are not limited to, the conductance of individual, group, or watershed-based monitoring, unless the Regional Water Board waives monitoring for a specific CMU, pursuant to Water Code section 13269(a)(23). Furthermore, Water Code section 13267(b) provides that: "In conducting an investigations specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposed to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of the state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including cost, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports."

    Technical reports on operation, maintenance, and performance relate directly to the Regional Water Board's need to know in a timely manner whether the Discharger is effectively operating and maintaining the CMU. Wastewater and/or groundwater, as required pursuant to the requirements of this Order, are necessary to measure whether effective operation mitigates impact on groundwater quality. This necessitates a comparison of constituents of concern in samples collected at the CMU. The cost burden of regularly obtaining information about potential impacts on water quality and submitting the required reports is reasonable given the costs of remediation in the event of failure. The technical reports required by this Order and the attached Monitoring and Reporting Program No. DWQ-2012-XXXX for Discharges Enrolled under General Waste Discharge Requirements for Discharges of Waste at Compost Management Units (hereinafter the MRP) are necessary to assure compliance with these WDRs.

14. **WATER QUALITY CONTROL PLAN.** The Regional Water Boards have each adopted a Water Quality Control Plan for their respective Regions (Basin Plan), which have subsequently been approved by the State Water Board. Revisions to each Basin Plan have also been adopted by each individual Regional Water Board and approved by the State Water Board. The Basin Plans designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives in all receiving waters identified in the Basin Plans. This Order implements the Basin Plans.

15. **ANTI-DEGRADATION.** In regulating the discharge of waste, pursuant to State Water Board Resolution No. 68-16, the State Water Board is required to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the state, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a Regional Water Board's policies (e.g., quality that exceeds water quality objectives). Further, any activity that produces a waste must be required to meet WDRs that will result in the best practicable treatment or control to assure that (1) pollution or nuisance will not occur, and (2) the highest water quality consistent with maximum benefit to the people of the state will be maintained.

    The State Water Board has considered the requirements of State Water Board Resolution No. 68-16 and finds that the degradation of groundwater or surface water by the select group of Dischargers described in this Order is not consistent with maximum benefit of the people of the state. Therefore, this Order includes requirements that will result in the best practicable treatment or control of the discharge to prevent degradation of groundwater and surface water.

16. **APPLICATION.** Water Code section 13260(a) requires any person discharging waste or proposing to discharge waste that could affect the quality of the waters of the state, other than into a community sewer system, to file a Report of Waste Discharge. Nothing in this Order is intended to require coverage under this Order if a Regional Water Board, through its Executive Officer, determines that a project could not affect the quality of the waters of the State in its region. Each Regional Water Board may regulate compost management units or other composting operations in any appropriate manner. This Order is one option available to the Regional Boards to regulate composting operations. For the purposes of this Order, a NOI and accompanying technical report (as described in Attachments B and C of this Order, respectively) is equivalent to the aforementioned Report of Waste Discharge. After the Regional Water Board determines that the NOI is complete and that the CMU can be appropriately regulated under this Order, a NOA will be issued by the Regional Water Boards' Executive Officer.

    Upon issuance of a NOA for coverage under this Order, the Discharger's' approved NOI becomes incorporated by reference into this Order, as it applied to the CMU. The Discharger is responsible for carrying out all operations at the CMU in a manner that complies with this Order, including the site specific manner of compliance indicated in the Discharger's approved NOI.

17. **ENFORCEMENT ACTIONS.** Pursuant to Water Code section 13350, any person who discharges waste, or causes or permits waste to be deposited where it is discharged into

the waters of the state is in violation of this Order and will be liable civilly. Remedies for such illegal actions may be proposed in accordance with Water Code sections 13350(d) and 13350(e).

Water Code section 13304(a) requires any person who has discharged or discharges waste into the waters of the state in violation of any WDR or other order or prohibition issued by the Water Boards or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the water of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the Regional Water Board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to overseeing cleanup and abatement efforts.

In overseeing all cleanup and abatement efforts, the Regional Water Board is a governmental agency that must expend limited staff resources to assure compliance with the law. Water Code section 13304(c) provides that the person or persons who discharged the waste, discharges waste, or threatened to cause or permit the discharge of the waste within the meaning of Water Code section 13304(a), are liable to that governmental agency to the extent of the reasonable cost actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial action.

Any Discharger who violates any of the requirements of this Order or the MRP, or conditions for enrollment will be subject to permit modification, revocation and reissuance, or termination.

18. **SITE RESTORATION.** The release of wastes or waste constituents derived therefrom, at an unmanaged, inactive, or abandoned CMU may cause, threaten to cause, or contribute to the degradation of the waters of the state. Prior to terminating any waste discharge activity, rendering an unmanaged, inactive, or abandoned CMU formally closed, the Discharger shall fulfill the requirements for site restoration as specified in this Order, for the protection of the waters of the state.

19. **CALIFORNIA ENVIRONMENTAL QUALITY ACT.** The State Water Board circulated a Mitigated Negative Declaration for general WDRs, in support of this Order, for those material discharges specified in Finding No. A.4 of this Order for composting, in accordance with the California Environmental Quality Act (CEQA) and with the terms and conditions of this Order contained therein. The State Water Board has assessed the potential impact on the physical environment of such discharges and has considered all of the comment s received. The State Water Board adopted the Mitigated Negative Declaration in Resolution No. (number to be determined).

20. **RESPONSIBILITY FOR MONITORING AND MAINTENANCE.** The Discharger, as a condition of this Order, may be required to conduct regular maintenance and monitoring to ensure the protection of water quality and beneficial uses. Dischargers are financially responsible for covering the costs associated with these activities pursuant to this Order, until the Regional Water Board, on behalf of the State Water Board, has determined that the CMU no longer poses a threat to water quality.

21. **ANNUAL FEES.** The Discharger is required to pay an annual fee (i.e., waste discharge permit fee) as determined by the State Water Board, and pursuant to Water Code section 13260 *et seq*. The filing fee accompanying the NOI is the first year's annual fee. The annual fee is based on the threat to water quality and complexity of the discharge in accordance with Cal. Code Regs. title 23 section 2200. Dischargers enrolled under this Order will be assigned a threat to water quality and complexity rating of 3-C and will be assessed the corresponding fee for Discharge to Land sites, plus any applicable surcharges.

22. **WATER RESOURCES FACTORS.** The State Water Board, pursuant to Water Code section 13241, has considered all water resource-related environmental and economic factors related to discharges of wastes associated with CMUs.

23. **PUBLIC PARTICIPATION.** All of the findings contained within this Order, supplemental information and details in the Information Sheet, and incorporated references were considered in establishing the following General WDRs for CMUs.

    All applicable Discharges and other interested parties and persons were notified of the intent to adopt Statewide General WDRs for Discharges of Waste at CMUs, and were provided with an opportunity for a public hearing and an opportunity to submit written comments.

    In a public meeting, all comments pertaining to this Order were heard and considered.

24. **STRATEGIC PLAN.** The issuance of this Order establishing General WDRs for CMUs is consistent with the goal to provide water resources protection, while considering economic and environmental impacts as stated in the Strategic Plan of the Water Boards.

25. **DELEGATION OF AUTHORITY.** The State Water Board delegates to the nine Regional Water Board Executive Officers by adoption of this Order, all the powers and authority that may be delegated pursuant to Water Code section 13223. The State Water Board intends for the Executive Officers to make modification or revisions in appropriate cases to the maintenance and monitoring requirements contained within the MRP; and to grant a Discharger's enrollment or termination under this Order and MRP pursuant to the eligibility and termination criteria established in this Order.

26. **DEFINITIONS.** In order to improve clarity, the definitions for terms and phrases having special meaning under this Order (e.g., "additives") are listed in Attachment A to this Order, which is hereby incorporated by reference and made a part of this Order.

27. **APPLICABILITY.** All materials and CMUs described in Finding Nos. A.4 and A.10 respectively, will be subject to the requirements herein upon the initial effective date of this Order, with exception of: (1) those CMUs described in Finding No. A.10.a for which the existing requirements, as determined by the Regional Water Board, are more protective of water quality, and (2) those CMUs or other composting operations described in Finding No. A.16 for which a Regional Water Board, through its Executive Officer determines that a project could not affect the quality of the waters of the State in its region..

IT IS HEREBY ORDERED, pursuant to Water Code, Division 7, and regulations adopted thereunder; any Discharger subject to the provisions of this Order shall comply with the following:

B. **ENROLLMENT PROCEDURE**

1. **New Compost Management Units.** Dischargers at new CMUs (as defined in Finding No. A.10.b of this Order) must seek enrollment under this Order, and submit to the appropriate Regional Water Board Executive Officer a complete *Notice of Intent to Comply with the Terms of General Waste Discharge Requirements for Discharges of Waste at a Compost Management Unit* (Attachment B), including the appropriate filing fee – pursuant to Cal. Code Regs. title 23 section 2200 – and a technical report including, but not limited to the information requested in Attachment C of this Order. Dischargers at new CMUs – as defined in Finding No. A.10.b.ii – must seek enrollment under this Order within six months upon its adoption by the State Water Board. Dischargers of new CMUs – as defined in Finding No. A.10.b.i – must seek enrollment under this Order six months prior to the anticipated receipt of materials for composting, and must receive a NOA from the Regional Water Board Executive Officer prior to receiving materials for the production of compost. Any Discharger of a new CMU must enroll under this Order, or individual WDRs.

2. **Existing Permitted Compost Management Units.** At any time, the Discharger of an existing permitted CMU, as defined in Finding No. A.10.a, may seek rescission of individual WDRs, and seek enrollment and authorization to discharge under this Order by submitting to the appropriate Regional Water Board a complete NOI (Attachment B). The NOI must be filed with an appropriate filing fee – pursuant to Cal. Code Regs. title 23 section 2200 –and a technical report including, but not limited to the information requested in Attachment C of this Order. Dischargers of CMUs subject to individual WDRs issued by the Regional Water Boards are not required to enroll under this Order if the requirements of the individual WDRs are more protective than those prescribed in this Order.

3. **Notice of Applicability.** Coverage under this Order will be extended to the Discharger by a Regional Water Board Executive Officer on behalf of the State Water Board, upon receipt of a NOA.

4. **Notice of Intent Updates.** The Discharger must submit an updated NOI to be accepted by a Regional Water Board's Executive Officer for those instances specified in Reporting Requirements, section I.2 of this Order. For the submittal of an updated NOI, a filing fee is not required.

5. **Termination of Enrollment.** At any time, enrollment under this Order may be terminated if any of the following occur:

    a. The Regional Water Board Executive Officer determines, based on site-specific conditions or management practices at the CMU, that the requirements of this Order are not adequate for the protection of the waters of the state, and thereby requires the Discharger to apply for individual WDRs. The applicability of this Order to such Dischargers will immediately terminate on the date of adoption of individual WDRs pursuant to Finding No. A.10.a; or

b. The Discharger, for reasons expressed to the Regional Water Board Executive Officer, through the submission of a Notice of Termination (NOT) and a Report of Waste Discharge, applies for issuance of individual WDRs pursuant to Finding No. A.10.a. The filing of a request by the Discharger for modification, revocation and reissuance, or termination of this Order does not stay any requirement of this Order; or

c. After terminating all waste discharge activities at the CMU, the Discharger, for reasons expressed to the Regional Water Board Executive Officer, must submit a NOT as an attachment to the Site Restoration Notification (submitted pursuant to Reporting Requirements, section I.11 of this Order). The filing of a request by the Discharger for termination of this Order does not stay any requirements of this Order; or

d. The Discharger may propose in a NOT submitted to the Regional Water Board Executive Officer, that composting activities at the CMU have changed, allowing for the CMU to meet the criteria for exemption, pursuant to Finding No. A.4.b of this Order. The filing of a request by the Discharger for modification, revocation and reissuance, or termination of this Order does not stay any requirement of this Order.

C. GENERAL DISCHARGE SPECIFICATIONS

1. The use of additives, defined in this Order and reported in an approved NOI, is allowed provided that the additives (other than water) total no more than 30% – on a dry-weight basis – of the total feedstocks for any given batch of compost Approved additives consist of:

   a. Fertilizing material (as defined in Attachment A of this Order) applied at rates that will be consumed or fixed/immobilized during active composting;

   b. Liquid food material (as defined in Attachment A of this Order) specified in a NOI approved by the Regional Water Board Executive Officer, and applied at a rate that minimizes leachate production;

   c. Manures (as defined in Attachment A of this Order);

   d. Water, when applied at a rate that minimizes leachate production; or

   e. Other material listed in an NOI approved by the Regional Water Board Executive Officers.

2. The use of any amendments, as defined in this Order and reported in the approved NOI, is allowed provided these are handled, stored, and processed in a manner only as proposed in the approved NOI and that the use of these amendments does not pose a threat to water quality.

3. All feedstocks, additives, amendments, and compost (active or stabilized) exposed to precipitation or run-on having the potential to either produce process storm water or leachate that would otherwise be in direct contact with the ground surface must be

located on containment structures constructed as required by this Order, or as approved by the Regional Water Board Executive Officer upon approving the NOI.

4. All CMUs must be constructed to allow all necessary equipment to operate on them during all times of the year that feedstocks, additives, amendments, and/or compost (active or stabilized) is present without damage to the CMU or containment structures or incapacitation of the equipment. In the event that any damage occurs to the containment structure, the Discharger must repair any damaged areas immediately and report each such incident to the Regional Water Board within 24-hours of the damaging event, pursuant to the Reporting Requirements, section I.9 of this Order.

5. The Discharger must design, construct, and maintain any containment structure, or CMU to prevent to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout, notwithstanding precipitation events, equipment movement, and other aspects of CMU operation.

6. The Discharger must, to the satisfaction of the Regional Water Boards, reuse the liquids captured in any wastewater or storm water detention pond at the CMU, in an effort to: maintain capacity in the ponds; prevent overflow; prevent potential violation of an NPDES permit; and/or prevent evapoconcentration of constituents during the dry season. In the event the Discharger finds, to the satisfaction of the Regional Water Board, that it is infeasible to reuse of the liquids captured in any wastewater detention pond at the CMU, the Regional Water Board Executive Officer may approve, as proposed by the Discharger in an NOI, an alternative disposal method to land for wastewaters.

7. All wastewater detention ponds must be monitored in accordance with the Monitoring Requirements, section F of this Order. The results of that sampling must be reported to the appropriate Regional Water Board in accordance with the Reporting Requirements, section I.3 of this Order.

8. To minimize the potential impacts to the waters of the state, the Discharger, to the satisfaction of the Regional Water Boards, must minimize the potential for piles of feedstocks, additives, amendments, or compost (active or stabilized) to become over saturated and generate leachate.

9. The Discharger must maintain all containment structures and monitoring systems in good working order whenever feedstocks, additives, amendments, compost (active or stabilized), and/or wastewaters are present at the CMU;

D. **PROHIBITIONS**

1. Discharges of the following wastes to new or existing CMUs pose a significant threat to the quality of the waters of the state, and are therefore prohibited from being discharged to any CMU regulated under this Order. Dischargers proposing to compost any of the following wastes must contact the Regional Water Board for individual WDRs.

    a. Animal carcasses as defined in this Order;

b. Any feedstock, additive, or amendment other than those specifically named in Finding Nos. A.4.a and C.1 of this Order, or listed in an approved NOI;

c. Liquid wastes other than those defined in Attachment A of this Order as leachate, liquid food material, wastewater, process storm water, or washwater;

d. Medical wastes as defined in the California Health and Safety Code, section 117690;

e. Municipal Solid Waste, other than those wastes, additives, and amendments specified in Finding Nos. A.4.a and A.4.c of this Order;

f. Septage;

g. Sludges (including untreated sewage sludge, water treatment sludge, and industrial sludge);

h. Wastes classified as "hazardous" as defined in the Cal. Code Regs. title 22, section 66261.3; and

i. Wood containing lead-based paint or wood preservatives, or ash from such wood.

2. The following activities conducted at CMUs pose a significant threat to the quality of the waters of the state, and are therefore prohibited from being performed at any CMU regulated under this Order.

a. Any feedstock, additive, amendments, or compost (active or stabilized) stored, processed, or composted outside of the designated storage, processing, and composting area, as those boundaries are defined in an approved NOI;

b. Any volume or weight percentage of any feedstock, additive, or amendment, exceeding those specified in this Order;

c. Concentration of constituents in any wastewater or storm water detention pond, through evapoconcentration, to reach hazardous levels as defined in Cal. Code Regs. title 22 section 66261.3;

d. Discharges of feedstocks, additives, amendments, compost (active or stabilized) or wastewaters to lands not owned or controlled by the Discharger, for the purposes of storage or composting;

e. Discharges of feedstocks, additives, amendments, compost (active or stabilized) or wastewaters that cause, threaten to cause, or contribute to the degradation of the waters of the state, pursuant to the Regional Board's Basin Plan;

f. Discharges of feedstocks, additives, amendments, or compost (active or stabilized) that cause spontaneous combustion;

g. Feedstocks, additives, amendments, compost (active or stabilized), or wastewaters discharged to surface waters or surface water drainage courses, except as specifically allowed under an NPDES permit applicable to the discharge;

h. Liquids other than ambient precipitation, process water, liquid food materials, or wastewaters (as defined in this Order) discharged to any runoff detention basin, as defined in Attachment A of this Order;

i. Wastewaters discharged directly onto the ground surface at CMUs, unless used for dust control or controlled irrigation.

3. Dischargers of existing CMUs located on, or proposing to site a new CMU on a property placed on the Cortese List, maintained by the Department of Toxic Substances Control, providing information about the location of hazardous materials release sites are prohibited.

E. **DESIGN SPECIFICATIONS.** Dischargers must implement one of the following design specification tiers based on the feedstock types discharged to the CMU.

1. **Tier 1:** This tier is applicable to any CMU to which the Discharger proposes to discharge, or is actively discharging, no more than 12,500 cy of feedstock at any given time, so long as the discharge meets the following additional limitations. For the purposes of this tier, the feedstocks discharged are restricted to those defined in this Order as “agricultural material”, “green material”, “paper material”, “vegetative food material”, or a combination of these feedstocks, and must only be discharged to a storage or composting area at a CMU described in an approved NOI. If at any time, either the volume or types of feedstocks discharged at a Tier 1 CMU are exceeded, the operation is no longer eligible for enrollment as a Tier 1 CMU, and the Discharger must submit a revised NOI to the appropriate Regional Water Board, within 30 days of the triggering event, proposing reclassification to either Tier 2 or Tier 3, as appropriate, or if not, then within 90 days of the triggering event, submitting a Report of Waste Discharge for regulating the discharge under individual WDRs.

a. The Dischargers must, to the satisfaction of the Regional Water Board, ensure and certify under penalty of perjury that at the Tier 1CMU:

i. The discharge of feedstock, as specified in the preceding paragraph, will not contribute to, cause, or threaten to cause a condition of contamination, pollution or nuisance;
ii. Containment structures are properly designed, constructed, and maintained to prevent conditions of contamination, pollution, or nuisance resulting from the discharge of waste;
iii. Areas used for the storage and/or treatment of feedstocks, additives, amendments, compost (active or stabilized), or wastewaters are:

(1) Designed, constructed, and maintained to control and manage all run-on, runoff, and precipitation which falls onto or within the boundaries of these areas, under conditions of a 25-year, 24-hour storm event. In the event precipitation exceeds the 25-year, 24-hour storm event, runoff from the CMU must be discharged in a manner consistent with the General NPDES Storm Water Permit and must not contribute to, cause, or threaten to cause contamination, pollution, or nuisance;

(2) Protected from inundation by surface flows associated with the site-specific maximum peak flow from the 25-year, 24-hour storm event that may occur during the period of processing, storage or treatment of materials; and

(3) Capable of preventing degradation of waters of the state as a result of waste discharge, processing, storage, and treatment. Such structures are designed, constructed, and maintained to (1) prevent ponding and impede vertical movement of liquid phase constituents of concern, and (2) reliably transmit any free liquid present during storage, treatment, and processing of materials (such as the act of composting as a treatment of feedstocks) laterally to a containment structure (e.g., pond, storage tank, etc.), to prevent liquids from entering ground or surface waters over the lifetime of the CMU and prevent conditions that could contribute to, cause, or threaten to cause a condition of contamination, pollution, or nuisance.

iv. Wastewater detention ponds, if used at the CMU, must be designed, constructed, and maintained to prevent conditions contributing to, causing, or threatening to cause contamination, pollution, or nuisance, and must be capable of containing, without overflow or overtopping (taking into consideration evaporation, the crest of wind-driven wastes, and water reused in the compost), all runoff from the CMU in addition to the ambient precipitation that falls into the wastewater detention pond, under conditions of a 25-year, 24-hour storm event. In the event precipitation exceeds the volume of the 25-year, 24-hour storm event, wastewater and storm water must only be discharged in a manner consistent with the General NPDES Storm Water Permit and must not contribute to, cause, or threaten to cause contamination, pollution, or nuisance;

v. Berms, if used on or around the CMU, must be designed, constructed, and maintained (unless superseded by more stringent NPDES permit requirements) to prevent run-on to and runoff from the CMU without overflow, resulting from a 25-year, 24-hour peak flow storm event. Berms must be adequately protected from erosion, and must not cause, threaten to cause, or contribute to conditions resulting in the infiltration of wastewaters, contamination, pollution, or nuisance; and

vi. Drainage conveyance systems, if used on or around the CMU, must be designed, constructed, and maintained for the conveyance of wastewaters from all composting and storage areas to a wastewater detention pond. Ditches must be lined and appropriately located and sized to capture and transmit, without overflow or infiltration, all wastewaters of the CMU in addition to all storm water that falls on the CMU as a result of a 25-year, 24-hour storm event. Ditches must be adequately protected from erosion, and must not cause, threaten to cause, or contribute to conditions resulting in the infiltration of wastewaters, contamination, pollution, or nuisance.

b. The Discharger must, to the satisfaction of the Regional Water Board, comply with all applicable monitoring requirements in accordance with Monitoring Specifications, section F of this Order.

2. **Tier 2:** This tier is applicable to any CMU for which the Discharger proposes to discharge or is actively discharging either (1) Tier 1 feedstocks (limited to "agricultural material", "green material", "paper material", "vegetative food material", or any combination of these feedstocks) in volumes greater than 12,500 cy; or (2) any feedstocks or combination of feedstocks specified in Finding No. A.4.a of this Order in any volume, to any storage or composting area at a CMU.

   a. The Discharger must, to the satisfaction of the Regional Water Board, and certify under penalty of perjury, ensure that at the CMU:

      i. The discharge of feedstock as specified in the preceding paragraph, will not contribute to, cause, or threaten to cause a condition of contamination, pollution or nuisance;
      ii. The working surface for all composting and storage areas must be designed, constructed, and maintained to prevent conditions of contamination, pollution, or nuisance. All working surfaces must meet the following specifications:

         (1) All working surfaces must have a hydraulic conductivity of $1x10^{-6}$ cm/s or less, and meet one the following construction and material specifications:

            (a) Asphalt concrete or Portland cement concrete designed to minimize the potential for cracking and to allow equipment to operate without damage;
            (b) Compacted clay, with a minimum thickness of one foot and protected from desiccation and installed in a manner such that the integrity will not be impaired by the operation of heavy equipment used at the CMU; or
            (c) An equivalent engineered alternative as proposed in an approved NOI.

         (2) The slope of the containment structure and working surface area are designed, constructed, and maintained to (1) prevent ponding and impede vertical movement of liquid phase constituents of concern; (2) reliably transmit any free liquid present during the storage, treatment, and processing of materials laterally to a containment structure to prevent liquids from entering surface water or groundwater over the lifetime of the CMU; and (3) prevent conditions that could contribute to, cause, or threaten to cause a conditions of contamination, pollution or nuisance; and
         (3) Wastewaters are conveyed to a wastewater detention pond, or other containment structure, approved by the Regional Water Board Executive Officer. The conveyance of liquids resulting from a site-specific maximum peak volume from at least a 25-year, 24-hour storm, will not cause damage to the collection and conveyance structures, and will cause neither the erosion nor inundation of the working surface. In the event that rainfall exceeds the volume of the 25-year, 24-hour storm event, runoff must only be discharged in a manner consistent with the General NDPES Storm Water Permit and must not contribute to, cause, or threaten to cause contamination, pollution, or nuisance.

iii. All wastewater detention ponds are designed, constructed, and maintained to prevent conditions contributing to, causing, or threatening to cause contamination, pollution, or nuisance, and must meet the following specifications:

(1) The wastewater detention pond must have, and maintain, a hydraulic conductivity of $1x10^{-6}$ cm/s or less, and may be constructed of the following materials:

(a) A liner system that includes a single composite liner system consisting of a 40-mil synthetic geomembrane (60-mil if high-density polyethylene) underlain by either one foot of compacted clay, or a geosynthetic clay liner that is installed over a prepared base;
(b) A liner system that includes Portland cement concrete – designed to minimize cracking and infiltration – underlain by a 40-mil synthetic geomembrane (60-mil if high-density polyethylene); or
(c) An equivalent engineered alternative as propose in an approved NOI.

(2) The wastewater detention pond must be capable of containing, without overflow or overtopping (taking into consideration evaporation, the crest of wind-driven waves, and water reused in the compost), all runoff from the CMU in addition to the ambient rainwater that falls into the wastewater detention pond, under conditions of a 25-year, 24-hour storm event. In the event that rainfall exceeds the volume of the 25-year, 24-hour storm event, wastewater and storm water must only be discharged in a manner consistent with the General NPDES Storm Water Permit and must not contribute to, cause, or threaten to cause contamination, pollution, or nuisance;

iv. Berms on or around all CMUs, including storage areas. Such berms must be designed, constructed, and maintained (unless superseded by more stringent NPDES permit requirements) to prevent run-on to and runoff from the CMU without overflow, resulting from a 25-year, 24-hour peak flow storm event, including at all points of ingress and egress by heavy equipment or vehicles (e.g., for cleanout and other maintenance purposes). Berms must be adequately protected from erosion, and must not cause, threaten to cause, or contribute to conditions that result in contamination, pollution, or nuisance, or the infiltration of wastewaters.

v. Drainage ditches are designed, constructed, and maintained for the conveyance of wastewaters from all composting and storage areas to a wastewater detention pond, and to prevent conditions contributing to, causing, or threatening to cause contamination, pollution, or nuisance, and must meet the following specifications:

(1) Drainage ditches must have, and maintain, a hydraulic conductivity of $1x10^{-6}$ cm/s or less, and may be constructed of the following materials:

(a) A liner system that includes Portland cement concrete – designed to minimize cracking and infiltration – underlain by a 40-mil synthetic geomembrane (60-mil if high-density polyethylene); or

(b) An equivalent engineered alternative as propose in an approved NOI.

(2) Ditches must be appropriately located and sized to capture and transmit, without overflow, erosion, or infiltration, all wastewaters of the CMU in addition to all storm water that falls on the CMU as a result of a 25-year, 24-hour storm event. Any precipitation volume in excess of the 25-year, 24-hour storm event must be handled in accordance with the General Storm Water Permit.

vi. All composting and storage areas are designed, constructed, and maintained as part of the entire storm water and wastewater management system to control and manage all wastewater, in addition to all run-on, runoff, and precipitation which fall onto or within the boundaries of these areas.

b. The Discharger must, to the satisfaction of the Regional Water Board, comply with all applicable monitoring requirements in accordance with Monitoring Specifications, section F of this Order.

3. **Tier 3:** This tier is applicable to any CMU for which the Discharger proposes to discharge or is actively discharging either (1) Tier 1 feedstocks (limited to "agricultural material", "green material", "paper material", "vegetative food material", or any combination of these feedstocks) in volumes greater than 12,500 cy; or (2) any feedstocks or combination of feedstocks specified in Finding No. A.4.a of this Order in any volume, to any storage or composting area at a CMU, and advocating that: (1) existing containment structures and/or current management practices at the CMU are equally protective of the waters of the state, as those specified for Tier 2 CMUs (Design Specifications, section E.2 of this Order); and (2) current management practices at the CMU minimize the potential emergence of leachate from any feedstock, additive, amendment, or compost (active or stabilized) pile.

a. The Discharger must, to the satisfaction of the Regional Water Board and certifying under penalty of perjury, ensure that at the CMU:

i. The discharge of feedstocks specified in Finding No. A.4.a of this Order, will not contribute to, cause, or threaten to cause a condition of contamination, pollution or nuisance;
ii. Discharges of feedstocks, additives, amendments, and compost (active or stabilized) must be managed to minimize leachate production;
iii. Liquids (i.e., leachate, liquid food material, wastewater, process storm water, or washwater), applied to feedstocks, additives, amendments, or compost (active or stabilized) must be managed to minimize exceeding the material's holding capacity (i.e., the amount of moisture it can hold without producing free liquids);
iv. Containment structures (including, but not limited to, pads, wastewater detention ponds, berms) are properly designed, constructed, and maintained to prevent

conditions of contamination, pollution, or nuisance resulting from the discharge of waste;

v. Areas used for the storage and/or treatment of feedstocks, additives, amendments, compost (active or stabilized), or wastewaters are:

(1) Designed, constructed, and maintained to control and manage all run-on, runoff, and precipitation which falls onto or within the boundaries of these areas, under conditions of a 25-year, 24-hour storm event, runoff from the CMU must be discharged in a manner consistent with the General NPDES Storm Water Permit and must not contribute to, cause, or threaten to cause contamination, pollution, or nuisance;

(2) Protected from inundation by surface flows associated with the site-specific maximum peak flow from the 25-year storm event that may occur during the period of processing, storage, or treatment of materials; and

(3) Capable of preventing degradation of waters of the state as a result of waste discharge, processing, storage and treatment. Such surfaces must be designed, constructed, and maintained to (1) prevent ponding and impede vertical movement of liquid phase constituents of concern, and (2) reliably transmit any liquid present during storage, treatment, and processing of materials (such as the act of composting as a treatment of feedstocks) laterally to a containment structure to prevent liquids from entering ground or surface waters over the lifetime of the CMU and prevent conditions that could contribute to, cause, or threaten to cause a condition of contamination, pollution, or nuisance.

vi. Wastewater detention ponds, if used at the CMU, must be designed, constructed, and maintained to prevent conditions contributing to, causing, or threatening to cause contamination, pollution, or nuisance, and must be capable of containing, without overflow or overtopping (taking into consideration evaporation, the crest of wind-driven wastes, and water reused in the compost), all runoff from the CMU in addition to the ambient precipitation that falls into the wastewater detention pond, under conditions of a 25-year, 24-hour storm event. In the event precipitation exceeds the volume of the 25-year, 24-hour storm event, wastewater and storm water must only be discharged in a manner consistent with the General NPDES Storm Water Permit and must not contribute to, cause, or threaten to cause contamination, pollution, or nuisance;

vii. Berms, if used on or around the CMU, must be designed, constructed, and maintained (unless superseded by more stringent NPDES permit requirements) to prevent run-on to and runoff from the CMU without overflow, resulting from a 25-year, 24-hour peak flow storm event. Berms must be adequately protected from erosion, and must not cause, threaten to cause, or contribute to conditions resulting in the infiltration of wastewaters, contamination, pollution, or nuisance; and

viii. Drainage conveyance systems, if used on or around the CMU, must be designed, constructed, and maintained for the conveyance of wastewaters from all composting and storage areas to a wastewater detention pond. Ditches must be lined and appropriately located and sized to capture and transmit, without overflow or infiltration, all wastewaters of the CMU in addition to all storm water that falls on the CMU as a result of a 25-year, 24-hour storm event. Ditches must be adequately protected from erosion, and must not cause, threaten to cause, or

contribute to conditions resulting in the infiltration of wastewaters, contamination, pollution, or nuisance.

b. The Discharger must, to the satisfaction of the Regional Water Board, comply with all applicable monitoring requirements in accordance with Monitoring Specifications, section F of this Order, including conducting either groundwater or vadose zone monitoring in accordance with the requirements specified in the MRP.

F. **MONITORING SPECIFICATIONS.** All Dischargers subject to this Order must implement, to the satisfaction of the Regional Water Board, the applicable requirements specified in the MRP, which is hereby incorporated by reference as part of this Order.

G. **SITE CONDITIONS AND MAINTENANCE REQUIREMENTS.**

1. The Discharger must regularly inspect and maintain all containment structures at the CMU, and report those conditions pursuant to Reporting Requirements, sections I.3 and I.7 of this Order. The frequency of inspections must be sufficient to prevent discharges of feedstocks, additives, amendments, compost (active or stabilized), or wastewaters from creating threatening to create, or contribute to conditions of contamination, pollution, or nuisance.

2. The Discharger must, by **August 31** of each year, conduct an annual survey of the CMU to confirm and certify under penalty of perjury, that all containment structures are prepared for the pending rainy season to (1) prevent ponding and impede vertical movement of liquid phase constituents of concern, and (2) reliably transmit any free liquid phase storage, treatment, and processing of materials (such as the act of composting as a treatment of feedstocks) laterally to a containment structure, to prevent liquids from entering ground or surface waters over the lifetime of the CMU and prevent a condition that could contribute to, cause, or threaten to cause a condition of contamination, pollution, or nuisance. Wet weather preparations must be completed by **October 1** of each year.

3. The Discharger must report annually on the then-current condition of, and maintenance activities conducted on all berms, ditches, working surfaces, detention ponds, and monitoring systems at the CMU. The report must address all maintenance conducted, and adverse conditions noted, since the prior reporting period (as specified in Reporting Schedule D.4, Table No. 2 of the MRP) with respect to all berms, ditches, working surfaces, detention ponds, and monitoring systems at the CMU. As part of the Working Surface Conditions and Maintenance Report, the Discharger must certify under penalty of perjury, that the CMU is in compliance with the requirements of the Order and applicable portions of its MRP. The Working Surface Conditions and Maintenance Report must include, but may not be limited to the information specified in Reporting Requirements, section D.2.b of the MRP.

4. The Discharger must provide the Regional Water Board with a Re-Certification Report, containing the information specified in Reporting Requirements, section I.8 of this Order, should the Discharger become aware of any area of non-compliance with the requirements of this Order or the MRP, either through the Discharger's inspection, or an inspection report provided by the Local Enforcement Agency (LEA) or Regional Water

Board. The Discharger must take immediate steps to implement temporary measures to mitigate these areas.

5. The Discharger must, for the purposes of dust control, limit the volume of water used and the rate of water applied, to a minimum necessary to reduce immediate dust hazards.

H. **SITE RESTORATION SPECIFICATIONS.** Any Discharger (1) no longer discharging feedstocks, additives, amendments, or compost (active or stabilized) at a CMU; and (2) permanently terminating operations, must implement the following requirements, unless the Discharger demonstrates to the satisfaction of the Regional Water Board, that it is infeasible to attempt site restoration:

1. The Discharger must remove and legally (pursuant to federal and state regulations) recycle, reuse, or appropriately dispose of all remaining storm water or wastewaters from the CMU, which includes, but may not be limited to sludges, precipitates, and settled solids;

2. The Discharger must remove and legally (pursuant to federal and state regulations) recycle, reuse, or dispose of all piles, soils, or other residuals (i.e., dust, particulates) containing feedstocks, additives, amendments, compost (active or stabilized) at the CMU;

3. The Discharger must jointly notify the appropriate Regional Water Board and LEA, in writing, at the conclusion of the site restoration activities, or portion thereof, in the case of incremental site restoration, certifying under penalty of perjury that all site restoration activities were performed in accordance with the site restoration requirements of this Order, and all other applicable federal, state, and local regulations. This notification must be incorporated as an attachment to the Dischargers' NOT.

I. **REPORTING REQUIREMENTS**

1. **General Reporting Requirements.** The Discharger must furnish:

   a. To the appropriate Regional Water Board, within a reasonable timeframe:

      i. Any information which the Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating enrollment under this Order, or to determine compliance with this Order;
      ii. Upon request by the Regional Water Board, copies of records required to be kept by this Order; and
      iii. Any information submitted to another regulatory agency, which may be of interest to the Regional Water Board;

   b. To the appropriate LEA or other regulatory agency, within a reasonable timeframe, any information submitted to the Regional Water Board, which may be of interest to that agency.

2. **Updated Notice of Intent.** The Discharger must submit an updated NOI at least 140 days prior to (1) any significant changes at the CMU (e.g., change in feedstock

types on site etc.); (2) any proposed change to the Design Specification contained in this Order (e.g., working surface construction materials); (3) any proposed change to the monitoring program at the CMU; or (4) any change in activities at the CMU that may affect compliance with the terms and conditions of this Order or the MRP. Receipt of an updated NOI will initiate the 30-day Regional Water Board review period.

3. **Design Report and CQA Plan**. The Discharger must submit a Design Report and a Construction Quality Assurance (CQA) Plan at least 30 days prior to any new construction of any working surfaces, wastewater detention ponds, berms, ditches, or any other water quality protection containment structure (as proposed in a Regional Water Board approved NOI) for Regional Water Board approval prior to construction prior to constructing these containment structures at a CMU. The Design Report must include water balance calculations for basins, design of stormwater conveyance features for run-on and runoff control, liner materials and thicknesses, rationale for liner system design for all working surfaces and wastewater detention ponds, and design of any other pertinent CMU containment features. The CQA Plan must ensure testing and quality assurance of liner materials and compacted soils in accordance with commonly accepted engineering practices, American Society for Testing and Materials (ASTM) test methods, and/or other appropriate material standards. The Design Report and CQA Plan must be prepared under the direction of a California-registered civil engineer or certified engineering geologist who must sign and provide their registration number(s) on the report/plan.

4. **CQA Report.** The Discharger must submit a CQA Report within 30 days after completion of construction of any working surface, wastewater detention pond, or approved engineered alternative (as proposed in the Dischargers NOI) under an approved CQA Plan, the Discharger must submit a *CQA Report* documenting that the containment structures at the CMU were properly constructed and tested as outlined in Reporting Requirements, section I.3 of this Order, The CQA Report must be prepared under the direction of a California-registered civil engineer or certified engineering geologist who must sign and provide their registration number(s) on the report.

5. **Wastewater Detention Pond Monitoring and Maintenance Report Requirements.** The Discharger must furnish to the appropriate Regional Water Board, a Wastewater Detention Pond Monitoring and Maintenance Report on an annual basis. The Wastewater Detention Pond Monitoring and Maintenance Report must be received by the appropriate Regional Water Board no later than 5:00 pm on February 1st of each year (or next subsequent immediate business day, if falling on a weekend or state-observed holiday), and may be submitted as part of the Annual Monitoring and Maintenance Report, and must contain the information specified in Reporting Requirements, section D.2.b of the MRP.

6. **Tier 3 - Specific Monitoring Report Requirements.** If operating pursuant to the Tier 3 Design Specifications of this Order, the Discharger must furnish to the appropriate Regional Water Board, a *Tier 3* - Specific Monitoring Report on an annual basis. The Tier 3 - Specific Monitoring Report must be received by the appropriate Regional Water Board no later than 5:00 pm on February 1st of each year (or next subsequent immediate business day, if falling on a weekend, or state-observed holiday), and may be submitted as part of the Annual Monitoring and Maintenance Report, and must contain the information specified in Reporting Requirements, section D.2.b of the MRP.

7. **Working Surface Conditions and Maintenance Report Requirements.** The Discharger must furnish to the appropriate Regional Water Board, a Working Surface Conditions and Maintenance Report on an annual basis. The Working Surface Conditions and Maintenance Report must be received by the appropriate Regional Water Board no later than 5:00 pm on February 1st of each year (or next subsequent immediate business day, if falling on a weekend, or state-observed holiday), and may be submitted as part of the Annual Monitoring and Maintenance Report, and must contain the information specified under the Reporting Requirements, section D.2.d of the MRP.

8. **Re-Certification Report Requirements.** The Discharger must furnish a Re-Certification Report to the appropriate Regional Water Board, should the Discharger become aware of any area of non-compliance with this Order or the MRP, either through the Discharger's inspection, and or inspection report provided by the LEA or Regional Water Board, the Discharger must take immediate steps to implement temporary measures to mitigate these areas. The Discharger must provide the appropriate Regional Water Board with a Re-Certification Report no later than 30 days after completing all mitigation measures, or **June 30** of that year, whichever is earliest. The Re-Certification Report must contain the information specified under the Reporting Requirements, section D.2.b of the MRP.

9. **Violations Notification Requirements.** If the Discharger determines a violation of the requirements of this Order or the MRP occurred at the CMU, must notify the appropriate Regional Water Board by telephone within 48-hours once the Discharger has knowledge of the violation. This notification must include a description of the noncompliance and its cause, the period of noncompliance (providing exact dates and times); and if the noncompliance has not been corrected: the anticipated time the noncompliance it is expected to continue. Also included in the notification must be steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. Depending on the severity of the violation, the Regional Water Board may require the Discharger to submit a separate technical report regarding the violation within 10 working days of the initial notification.

10. **Change in Ownership Notification Requirements.** The Discharger must notify the appropriate Regional Water Board and LEA, in writing, at least 45 days in advance of any transfer of the Order's responsibility and coverage from the current owner to a new owner for maintenance and monitoring of the CMU. This notification will consists of the current owners NOT (Attachment D of this Order), and include:

    a. A statement of acknowledgment that the current owner is liable for violations occurring up to the transfer date and that the new owner is liable for violations occurring after the date that ownership of the property transfers.

    b. A statement of acknowledgement that the new owners must accept responsibility for compliance with this Order, including financial assurances that the state may require, for implementation of monitoring and maintenance of the CMU.

    c. The new owners NOI and technical report (if applicable), as an attachment to the NOT; and

d. A copy of notification for change in ownership submitted to the LEA, as an attachment to the NOT.

11. **Site Restoration Notification Requirements.** The Discharger must jointly notify the appropriate Regional Water Board and the LEA, in writing, at least 30 days in advance of any intent to comply with the Site Restoration Specifications, section H in this Order. The Discharger must include a statement that all site restoration activities will conform to the requirements of this Order, and all other applicable federal, state, and local regulations.

12. **Significant Maintenance Activities Notification Requirements.** The Discharger must notify the appropriate Regional Water Board, either in writing, email, facsimile, or telephone, at least two working days prior to any significant maintenance as specified under the Reporting Requirements, section D.3.c of the MRP.

13. **Release Notification Requirements.** The Discharger must notify the appropriate Regional Water Board, by telephone, email, or mail within 24-hours of concluding a potential occurrence of a release from the CMU as specified under the Reporting Requirements, section D.3.c of the MRP.

14. **Incomplete Reports and Notifications.** Where the Discharger becomes aware that they failed to submit any relevant facts in a NOI or submitted incorrect information in a NOI; or in any report or notification to the Regional Water Board, the Discharger must promptly submit such facts or information within 24-hours.

15. **Endangerment of Health and Environment.** In addition to providing the LEA with notification of any areas of noncompliance which may endanger human health or the environment – pursuant to Cal. Code Regs. title 14, section 17850 *et seq*., – the Discharger must also notify the appropriate Regional Water Board by telephone or email within 24-hours. For the purposes of the Regional Water Board, this notification must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance.

16. **Monitoring and Reporting Program.** Pursuant to Water Code section 13267, the Discharger must comply with the MRP. In the event that a site specific MRP becomes necessary, the Discharger must comply with the requirements specified in an individual MRP issued to the Discharger by the Regional Water Board Executive Officer, pursuant to the delegated authority specified in Provisions, section J.18 of this Order. Failure to comply with the MRP or a site-specific MRP issued by the Regional Water Board Executive Officer, may subject the Discharger to civil liability pursuant to Water Code section 13268.

17. **Monitoring Wells.** The Discharger must comply with all notice and reporting requirements of the California Department of Water Resources and with any local agency well permitting requirements with regard to the construction, alternation, destruction, or abandonment of all monitoring wells used for compliance with this Order and the MRP, as required under Water Code sections 13750 through 13755, and local agency requirements.

18. **Reporting Declaration.** All application, reports, or information submitted to the Regional Water Boards must be signed and certified as follows:

    a. The NOI must be signed as follows:

        i. *For a corporation* – by a principal executive officer of at least the level of vice president.
        ii. *For a partnership or sole proprietorship* – by a general partner or the proprietor, respectively.
        iii. *For a municipality, state, federal, or other public agency* – by either a principal executive officer or ranking elected official.
        iv. *For a military facility* – by the base commander or the person with overall responsibility for environmental matters in that branch of the military.

    b. All other reports required by this Order and other information required by either the State Water Board or Regional Water Boards must be signed by a person designated in paragraph (a) of the Reporting Requirements, section I.18 of this Order, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:

        i. The authorization is made in writing by a person described in paragraph (a) of the Reporting Requirements, section I.18 of this Order;
        ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
        iii. The written authorization is submitted to the Regional Water Board.

    c. Any person signing a document under this section must make the following certification:

        "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

19. **Use of Licensed Professionals.** Any plan or report submitted in compliance with the requirements of this Order, which requires technical interpretation, or proposes either a design, or a design change that might affect the CMUs containment features, wastewater detention ponds, or monitoring systems must be prepared by, or under the direction of, appropriately qualified professionals (e.g., registered civil engineer, professional geologist, or other registered certified specialty geologist) licensed by the State of California. In addition, the lead qualified professional must sign and provide his or her registration number, or stamp the submitted plan or report.

The Discharger must provide documentation that plans and reports required under this Order are prepared by or under the direction of, appropriately qualified professionals. The California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of registered professionals. A statement of qualifications and registration numbers of the responsible lead professionals must be included in all plans and reports submitted by the Discharger. The lead professional must sign and provide his or her registration number, or stamp the submitted plan or report.

20. **Report Submittals.** Pursuant to Cal. Code Regs. title 23 sections 3892(d) and 3893, the Discharger must:

    a. Submit all reports and notifications required under this Order, and other information requested by the State or Regional Water Boards to determine compliance with the requirements of this Order, electronically over the Internet to the State Water Board's GeoTracker system in conformance with data dictionaries found in Cal. Code Regs. title 27, division 2, subdivision 2 (Monitoring and Release Information) and specifications contained in the State Water Resources Control Board EDF Guidelines and Restrictions (version 1.2i) and Survey XYZ Guidelines and Restrictions (version 6). These data dictionaries and documents are available through links provided at http://www/waterboards/ca/gov/ust;

    b. Upload to GeoTracker all water quality analytical data in Electronic Deliverable Format (EDF) and in accordance with the specification provided in Cal. Code Regs. title 23 section 3893; and

    c. Upload all reports and notifications in a searchable Portable Document Format (PDF), which includes the signed transmittal letter and professional certification.

J. **PROVISIONS.** Materials discharged at any CMU must not cause, threaten to cause, or contribute to conditions of pollution, contamination, or nuisance. These discharges must at all times conform with all applicable water quality standards including but not limited to, all applicable provisions and prohibitions contained in the applicable Basin Plan, including beneficial uses, water quality objectives, and implementation plans.

1. **Duty to Comply.** Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for enforcement action, and/or termination of enrollment under this Order.

2. **Corrective Action.** The Discharger must take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with this Order, including accelerated or additional monitoring necessary to determine the nature and impact of the noncompliance.

3. **Responsibility for Monitoring and Maintenance.** Dischargers must be responsible for covering the costs associated with the activities necessary to maintain compliance with this Order until the Regional Water Board has determined that the CMU or site activities no longer poses a threat to water quality.

4. **Proper Maintenance.** The Discharger must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the specification of this Order. Proper maintenance includes assuring effective performance, and, for laboratory and process controls, includes adequate and appropriate quality assurance procedures.

5. **Maintenance Period.** The CMU maintenance period must continue until the Regional Water Board finds that any feedstocks, additives, amendments, compost (active or stabilized), wastewaters, or other waste constituents or degradation products will not threaten the waters of the state, pursuant to Site Restoration Specifications, section H of this Order.

6. **Revision of Waste Discharge Requirements.** This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

    a. Violation of any terms or conditions of this Order;

    b. Obtaining this Order by misrepresentation or failure to disclose fully relevant facts; or

    c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for the modification, revocation and re-issuance, or termination of this Order or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

7. **Change in Ownership.** This Order is not transferable to any person except after notice to the appropriate Regional Water Board. The Discharger must submit a Change in Ownership Notification, pursuant to the Reporting Requirements, section I.10 of this Order.

8. **Property Rights.** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state, or local laws, nor create a vested right for the owner and operator to continue the regulated activity.

9. **Entry and Inspection.** Under the authority of Water Code section 13267, the Discharger must allow the State Water Board and/or Regional Water Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

    a. Enter premises where a regulated facility or activity is located or conducted, or where records must be kept under the specification of this Order;

    b. Have access to a copy, at reasonable times, any records that must be kept under the specification of this Order;

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or specified under this Order;

d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order, or as otherwise authorized by the Water Code, any substances or parameters at any location; and

e. To photograph or videotape any structures, facilities, activities, or other conditions that could result in adverse impacts to water quality and that are pertinent to compliance with this Order.

10. **Repository for Waste Discharge Requirements.** A complete and correct copy of this Order must be maintained at the local offices of the Discharger, and must be available to maintenance personnel at all times.

11. **Severability.** The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provisions to other circumstances, and the remainder of this Order, must not be affected thereby.

12. **Effective Date.** This Order becomes effective on October 16, 2012.

13. **Penalties for Investigations, Monitoring, or Inspection Violations.** The State Water Board and Regional Water Boards reserve the right to take any enforcement action authorized by law for violations of the terms and conditions of this Order.

14. **Civil Monetary Remedies.** The Water Code section 13550 *et seq.* provides that any person who intentionally or negligently violates any conditions issued or amended by the State Water Board, is subject to administrative civil liability of up to 10 dollars per gallon of waste discharged, or if no discharge occurs, up to 100 dollars per day of violation. The Superior Court may impose civil liability of up to 10,000 dollars per day of violation or, if a cleanup and abatement order had been issued, up to 15,000 dollars per day of violation.

15. **Other Regulations.** Dischargers enrolled under this Order may be subject to additional federal, state, or local regulations.

16. **Requesting Reconsideration or Judicial Review.** Pursuant to Water Code section 13330 *et seq*., any person aggrieved by the Order may, not later than 30 days from the date of adoption, file a petition for a writ of mandate for reconsideration by the State Water Board or judicial review. Petitions which are not received within 30 days of the State Water Boards adoption of the Order will not be subject to review by any court.

17. **Definitions.** Definitions of terms used in this Order must be as set forth in the Water Code section 13050; Health and Safety Code section 117690; California Code of Regulations title 22 section 66261.3; Code of Federal Regulations title 40 Part 258.2; and Attachment A of this Order.

18. **Delegation of Authority.** The State Water Board delegates to the nine Regional Water Board Executive Officers by adoption of this Order, all the powers and authority that may be delegated pursuant to Water Code section 13223. The State Water Board intends for the Executive Officers to make modification or revisions in appropriate cases, to the

maintenance and monitoring requirements contained within the Monitoring and Reporting Program No. DWQ-2012-XXXX for Discharges Enrolled under General Waste Discharge Requirements for Discharges of Waste at Compost Management Units; and to grant Discharges enrollment or termination under this Order and the MRP pursuant to the eligibility and termination criteria established in this Order.

DRAFT STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY ORDER NO. DWQ-2012-XXXX

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE OF WASTES AT COMPOST MANAGEMENT UNITS
(**ATTACHMENT A**)

DEFINITIONS

For the purpose of the *General Waste Discharge Requirements for Discharges of Wastes at Compost Management Units*, Order No. DWQ-2102-XXXX (hereafter referred to as the Order), the following terms, phrases, or abbreviations have a narrow scope of meaning, and are as follows:

"active compost" means any feedstock, additive, or amendment, or combination thereof, in the process of being rapidly decomposed and is unstable. "Active compost" is generating temperatures of at least 50 degrees Celsius (122 degrees Fahrenheit) during decomposition; or is releasing carbon dioxide at a rate of at least 15 milligrams per gram of active compost per day, or the equivalent of oxygen uptake.

"additive" means materials or products that are listed either in General Discharger Specifications, section C.1 of this Order, or in the Dischargers' approved Notice of Intent. Additive materials are stockpiled at the Compost Management Unit and mixed with feedstocks to adjust the moisture level, carbon-to-nitrogen ratio or other nutrient balance, or to increase porosity, or to create condition favorable to composting. Additives allowed under this Order include chemical fertilizers (when applied at rates that will be consumed or fixed/immobilized during active composting), manures (as defined in this Attachment), water, or any other material listed for that purpose in the Discharger's approve Notice of Intent under this Order. Additives, other than water, may not exceed 30 percent – on a dry-weight basis – of the total feedstocks to be treated for any given batch of compost. Additives do not include any substance listed in Prohibitions, section D of this Order, and shall not be considered as either feedstocks or amendments.

"**agricultural composting**" refers to composting conducted in agricultural settings where (1) the feedstock consists of materials generated on-site by the production and processing of farm, ranch, agricultural, horticultural, silvicultural, floricultural, vermicultural, or viticultural products, including manures, orchard and vineyard prunings, and crop residues; and (2) the resulting compost is returned in a similar amount to that same agricultural site, or an agricultural site owned or leased by the owner, parent, or subsidiary of the composting activity.

"**agricultural material**" consists of pre-consumer plant materials coming directly from lands used in the production of farm, agricultural, horticultural, aquacultures, silvicultural, floricultural, vermicultural, or viticultural products, including orchard and vineyard prunings, and crop residues. Agricultural materials must not contain any substance included in Prohibitions**,** section D of the Order.

"**amendments**" means materials added to stabilized compost to provide attributes for certain compost products, such as product bulk, product nutrient value, product pH, and soils blend. Amendments do not include substance listed in Prohibitions, section D of this Order, and shall not be considered as either feedstocks or additives.

"**anaerobic digestate**" is the solid material remaining after the anaerobic digestion of any combination of agricultural materials, biosolids, food materials, green materials, manure, paper materials, or vegetative food materials – as defined in this Attachment.

"**animal carcasses**" refers to any whole or part (including, but may not be limited to the flesh, organs, blood, bones, and marrow) of a carcass of a bird, fish, or mammal, which cannot meet the definition of "food material" as defined in this Attachment.

"**background water quality**" means the measured concentration of constituents or indicator parameters in water or soil that has not been affected by waste constituents or leachate from a Compost Management Unity. Concern arises from liquids whose concentrations are in excess of the established background water quality concentration and/or basin plan objectives established by the individual Regional Water Quality Control Boards.

"**beneficial uses**" is as defined in Division 7, section 13020(f) of the California Water Code.

"**biosolids**" means sewage sludge that has been treated and tested and shown to be capable of being beneficially and legally used as a soil amendment for agriculture, silvicultural, horticulture, and land reclamation activities as specified under title 40 Code of Federal Regulations Part 503, and are as described in the State Water Resources Control Board Water Quality Order No. 2004-0012-DWQ, "*General Waste Discharge Requirements for the Discharge of Biosolids to Land for the Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities*" as applicable for coverage under that general order.

"**brine**" means water saturated or strongly impregnated with common salt; or a strong saline solution (e.g., calcium chloride, sodium chloride).

"**California Environmental Quality Act (CEQA)**" refers to statute, promulgated in the Public Resources Code, beginning with Section 21000, and regulations, promulgated in California Code of Regulations, title 14, beginning with section 15000, requiring state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible.

"**California Water Code (Water Code)**" refers to Division 7, Section 13000 *et seq*., also known as the Porter-Cologne Water Quality Act, entrusting the State Water Resources Control Board and nine Regional Water Quality Control Boards with broad duties and powers to preserve and enhance all water quality and beneficial uses of the state's immensely complex waterscape.

"**chipping and grinding facilities and operations**" refers to those sites that do not produce compost, but mechanically reduce the size, or otherwise engages in the handling of "green material", and for which each load of "green material" is removed from the site within 48-hours from receipt, unless the Discharger has received written permission from the Local Enforcement Agency allowing the "green material" to remain onsite for up to 7 days.

"**chipping and grinding areas at Compost Management Units**" refers to a designated area at a Compost Management Unit used specifically for mechanically reducing the size of incoming feedstocks, additives, amendments, and for which each load of feedstock, additive, or amendment is removed from the designated chipping and grinding area at

the Compost Management Unit within 48-hours from receipt, unless the Discharger has received written permission from the Regional Water Quality Control Board Executive Officer allowing the "green material" to remain onsite for up to 7 days. Other than as specified in this definition, the stockpiling of feedstocks, additives, amendments, and/or compost (active or stabilized) in the chipping and grinding areas at a Compost Management Unit is prohibited.

"**composting**" refers to the process in which solid materials are decomposed in the presence of oxygen under controlled conditions through the action of bacteria and other microorganisms.

"**composting conducted at a publicly owned treatment works**" refers to the composting of treated biosolids at a publicly owned treatment works, currently operating pursuant to permit or waste discharge requirements issued by a Regional Water Quality Control Board or State Water Resources Control Board.

"**Compost Management Facility (Compost Facility)**" means the entire parcel of property at which feedstock, additive, amendments, compost (active or stabilized), and/or wastewaters are discharged for the production of compost. Such a facility may include one or more Compost Management Units.

"Compost Management Unit (CMU)" means an area of land, or a portion of a Compost Facility, at which feedstocks, additives, amendments, compost (active or stabilized), and/or wastewaters are discharged for treatment or storage. The term includes containment structures and ancillary features for precipitation, drainage control, and monitoring.

"**containment structures**" refers to any berm, ditch, working surface, wastewater detention pond, or other mechanism – approved by the Regional Water Quality Control Board Executive Officer on behalf of the State Water Resources Control Board – at a Compost Management Unit designed, constructed, and maintained to limit feedstock, additives, amendments, and/or compost (active or stabilized) from threatening to cause, causing, or contributing to conditions of contamination, pollution, or nuisance.

"**contamination**" is as defined in Division 7, section 13020(k) of the California Water Code.

"**depth to groundwater**" is the vertical distance measured, in feet, from the native ground surface to the first encountered groundwater.

"**distance to domestic drinking water supply wells**" is the horizontal distance measured, in feet, from the nearest edge of the Compost Management Unit to the center of the domestic well head.

"**Electronic Deliverable Format (EDF)**" is as defined in California Code of Regulations title 23, division 3, chapter 30, article 1, section 3891.

"**evapoconcentration**" is the process by which the ratio of solute to water solvent is increased by the removal of the solvent and retention of the solute.

"**feedstock**" refers to those materials specified in Finding No. A.4.a of the Order used in the production of compost. Feedstocks shall not be considered as either additives or amendments.

"**fertilizing material**" is as defined in Division 7, section 14533 of the Food and Agriculture Code.

"**food material**" means solid, and/or semi-solid materials resulting from the production or processing of food for animal or human consumption, but is no longer intended for such consumption, that is separated from the municipal solid waste stream. Food material includes, without limitation, food waste from food facilities (as defined in Health and Safety Code section 113789), food processing establishments (as defined in Health and Safety Code section 111955), grocery stores, institutional cafeterias (such as prisons, schools, and hospitals), restaurants, and residential food scrap collection. Food material must not contain any substance included in Prohibitions, section D of the Order.

"**geocomposite liner**" means a manufactured material using geotextiles, geogrids, geonets, and/or geomembranes in laminated or composite form.

"**geomembrane**" means flexible materials in planar form manufactured to meet specific engineering purposes. Commonly, they are used as a barrier to waste solids and fluids. The term "geomembrane" is synonymous with "synthetic liner" and "flexible membrane liner".

"**GeoTracker**" is as defined in California Code of Regulations title 23, division 3, chapter 30, article 1, section 3891.

"**Green Composting Waiver**" refers to the *"Conditional Waiver of Waste Discharge Requirements For Composting Operation"*. Adopted by most Regional Water Boards in 1996, this waiver covered the composting of green waste, and some food processing waste, agricultural waste, and paper waste (as defined in the Green Composting Waiver), discharged to land with a volume in excess of 500 cubic yards.

"**green material**" consists of, or contains, materials from plants, including leaves, clippings, cuttings, trimmings of grass, weeds, shrubbery, bushes, or trees, residential or community garden waste, and untreated wood waste, and does not include any substance included in Prohibitions, section D of the Order.

"**groundwater**" means water below the land surface that is at or above atmospheric pressure (i.e., perched, unconfined, or confined water).

"**groundwater elevation**" is the vertical distance measured, in feet, from mean sea level to the water table of the first encountered groundwater below the ground surface.

"**hydraulic conductivity**" means the ability of natural and artificial materials to transmit fluid. For water, including aqueous solutions, the term is expressed as a measure of the rate of flow (e.g., cubic centimeters per second) one can expect through a unit-area (e.g., one square centimeter) cross section of the material when the hydraulic gradient is unity (e.g., one centimeter of head loss per centimeter of travel through the material). The resulting numerical value is expressed in velocity units (e.g., centimeters per second).

"**in-progress compost**" refers to, and is synonymous with "active compost".

"**leachate**" means any liquid formed by the drainage of liquids from, or percolation/flow of liquids through any feedstock, additive, amendment, or active compost pile.

"**liquid food material**" means liquid materials resulting from the production or processing of food for animal or human consumption, but is no longer intended for such consumption, that is separated from the municipal waste stream (i.e., cheese whey, brewery waste, etc.). Liquid food material must not contain either: any waste included in Prohibitions, section D of the Order, or brines – as defined in this Attachment.

"**liner**" means a material or combination of materials designed, constructed, and maintained to contain any wastewater, storm water, feedstock, additive, amendment, compost (active or stabilized) discharged at a Compost Management Unit. Liners must meet the requirements specified in the Order.

"**lot clearing for fire protection**" refers to the storage of yard trimmings at a publicly designated site for the collection of lot clearing necessary for fire protection provided that the public agency designating the site has notified the fire protection agency.

"**mammalian tissue**" means materials consisting of, but may not be limited to, mammalian flesh, organs, hide, blood, bone, and/or marrow.

"**manure**" means accumulated herbivore or avian excrement (e.g., horse manure, cattle manure), which includes feces and urine, and any bedding material, spilled feed, or soil that is mixed with feces or urine.

"**National Pollutant Discharge Elimination System (NPDES)**" refers to the national program under the Clean Water Act section 402, for regulation of discharges of pollutant from point sources to waters of the United States. Discharges are illegal unless authorized by a National Pollutant Discharge Elimination System permit.

"**non-commercial composting**" is synonymous with backyard composting and community composting, whereby composting is conducted by a household, including, but not limited to, single family residences, duplexes, apartment buildings, or neighborhood, provided the feedstock does not contain greater than one cubic yard of food material, and that all feedstocks are generated and used onsite or within the residential neighborhood.

"**nuisance**" is as defined in Division 7, section 13020(m) of the California Water Code.

"**pad**" see definition for "working surface."

"**paper material**" means nonhazardous paper and paper by-products, and does not include any substance identified in Prohibitions, section D of the Order.

"**point of compliance (POC)**" means a vertical surface located along the hydraulically downgradient limit of a Compost Management Unit and that extends down through the upper most aquifer underlying the Compost Management Unit.

"**pollution**" is as defined in Division 7, section 13020(l) of the California Water Code.

"**Portable Document Format (PDF)**" is as defined in California Code of Regulations title 23, division 3, chapter 30, article 1, section 3891.

"**precipitation**" is any condensate of atmospheric water vapor deposited onto any Compost Management Unit, and includes hail, mist, rain, sleet, or snow.

"**process storm water**" refers to any form of precipitation which either: (1) falls onto, or otherwise comes into contact with any feedstock, additive, amendment, and/or active compost pile, and runs off the aforementioned piles without flowing through the pile; or (2) comes into contact with either leachate or washwater.

"**process water**" means liquid that is generated during (e.g., leachate) or used in (e.g., water) the production of compost.

"**publicly owned treatment works (POTW)**" is as defined in Part 403, section 403.3(q) of title 40 Code of Federal Regulations.

"**Regional Water Quality Control Board (Regional Water Board)**" is as defined in Division 7, section 13020(b) of the California Water Code.

"**run-off**" means any precipitation, wastewater, or other liquids that drain from any part of a Compost Management Unit.

"**run-on**" means any precipitation, wastewater, or other liquids that drain onto any part of the Compost Management Unit.

"**septage**" means any waste removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar wastewater handling device that has not passed through a municipal wastewater treatment facility.

"**sewage sludge**" means any solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a municipal wastewater treatment facility. It includes solids removed or used during primary, secondary, or advanced wastewater treatment processes. It does not include grit or screening material generated during preliminary treatment of domestic sewage at a municipal wastewater treatment facility.

"**sludge**" refers to the solid, semi-solid, or liquid residue produced by water, wastewater, or sewage treatment processes.

"**stabilized compost**" means any feedstock, additive, or amendment, or combination thereof, discharged to land for treatment by composting, which have undergone the "Process to further Reduce Pathogens (PFRP), as described in California Code of Regulations title 14, sections 17868.3, and that has reached a stage of reduced biological activity as indicated by reduced temperatures and rate of respiration below that of active compost.

"**storm water**" refers to any form of precipitation which <u>does not</u> either: (1) fall onto, or otherwise come into contact with any feedstock, additive, amendment, and/or active compost pile, and runs off the aforementioned poles without flowing through the pile; or (2) come into contact with any wastewater, as defined in this Attachment.

"**Title 14 California Code of Regulations (Cal. Code Regs. title 14)**" refers to that body of regulations, promulgated by the Department of Resources Recycling and Recovery, beginning with section 17850 of Division 7, Chapter 3.1, establishing standards and regulatory requirements for intentional and inadvertent composting resulting from the handling of compostable materials.

"**Title 23 California Code of Regulations (Cal. Code Regs. title 23)**" refers to that body of regulations, promulgated by the State Water Resources Control Board, under Division 3, establishing standards and regulatory requirements for the assessment of annual fees associated with waste discharge requirements.

"**Title 27 California Code Regulations (Cal. Code Regs. title 27)**" refers to the body of consolidated regulations, jointly promulgated by the State Water Resources Control Board and the Department of Resources Recycling, under Division 2, establishing standards and regulatory requirements for the treatment, storage, processing, or disposal of waste discharged to land.

"**vegetative food material**" means food material resulting from the production or processing of food for animal or human consumption, but is no longer intended for such consumption, that is derived solely from plants and is separated from the municipal solid waste stream. Vegetative food material may be processed or cooked but must otherwise remain in its essentially natural state and no salts, preservatives, fats or oils, or other adulterants shall have been added. Vegetative food material must not contain any substance included in Prohibitions, section D of the Order.

"**water quality control plan (Basin Plan)**" is as defined in Division 7, section 13020(j) of the California Water Code.

"**washwater**" refers to a type of wastewater generated from the washing of vehicles and/or equipment at any Compost Management Unit.

"**wastewater**" refers collectively to leachate, washwater, and/or process storm water.

"**wastewater detention pond**" means a lined basin designed to capture any process storm water, leachate, or washwater that otherwise runoff to surface waters or surface water drainage course or percolate to groundwater in violation of the Order. Wastewater detention ponds may also include other containment vessels (i.e., above or below ground tanks) approved for use at a Compost Management Unit, by the Regional Water Quality Control Board Executive Officer for the collect and potential reuse of the wastewaters.

"**Water Boards**" refers collectively to the State Water Resources Control Board and the nine Regional Water Quality Control Boards.

"**Waste**" is as defined in California Water code section 13020(d).

"**Water Quality Objectives**" is as defined in California Water Code section 13050(h).

"**waters of the state**" is as defined in California Water Code section 13050(f).

"**working surface**" means any area at a Compost Management Unit used for the storage and/or treatment of feedstocks, additives, amendments, or compost (active or stabilized).

"**within-vessel composting**" refers to the action of storing and composting any allowable feedstock under this Order, within a fully enclosed vessel or container (e.g., drum, silo, bin, tunnel, reactor, building) where by all wastewaters are retained and managed such that the potential to affect the waters of the state are eliminated.

DRAFT STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY CONTROL BOARD ORDER NO. DWQ-2012-XXXX

NOTICE OF INTENT
TO COMPLY WITH THE STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR THE DISCHARGE OF WASTES AT COMPOST MANAGEMENT UNITS
(**ATTACHMENT B**)

1. DISCHARGER INFORMATION

Owner Name:				
Mailing Address:				
City/Locale:	County:	State:	Zip:	Telephone Number:
Facsimile Number:		Email Address:		
Owner Type (check one):	□ Individual	□ Corporation	□ Partnership	□ Other:

Operator Name (if different than above):				
Mailing Address:				
City/Locale:	County:	State:	Zip:	Telephone Number:
Facsimile Number:		Email Address:		

2. COMPOST MANAGEMENT UNIT INFORMATION

Compost Facility or Management Unit Name:				
Physical Address:				
City/Locale:	County:	State:	Zip:	Telephone Number:

Type (check one): □ Existing Permitted Compost Management Unit Regional Water Board Order No.:_____ □ New Compost Management Unit	Compost Management Unit Size (acres): Input Capacity of Feedstock (cubic yards): Throughput Capacity (cubic yards):

Assessor Parcel Number(s):	Hydrologic Basin:
Township/Range/Section: T_____R_____S_____ _____B&M	Closest named surface water: (e.g. Sacramento River):

3. REASONS FOR FILING

□ New Discharge or Unit	□ Existing Discharge or Unit	□ Expansion or Change in Operations
□ Changes in Ownership/Operator	□ Other:	

4. STORM WATER PERMIT

Is there an Industrial Storm Water Permit for this facility? □ Yes □ No If yes, what is the WDID Number:
Related to storm water, have you received a "No Exposure Certification", "Notice of Termination", or "Notice of Exemption" for this facility? □ Yes □ No If yes, please provide a copy

The Notice of Intent for coverage under the Industrial Storm water Permit may be obtained over the internet at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

5. OTHER PERMITS

Has another agency issued permits or other entitlements (e.g., solid waste facility permit, notification permit, conditional use permit, building permit, grading permit) for the unit? □ Yes □ No

For each permit or entitlement, list the type, issuing agency, and date of issuance:

6. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Has a CEQA determination been made by an agency? □ Yes □ No	Name of agency:
Type of determination:	Date of determination:
If the CEQA determination was made after the date of adoption of this General WDR, then include a copy of the CEQA determination with this NOI.	

7. EXEMPT COMPOSTING ACTIVITIES

As defined in this General WDR (Finding No. A.4.b) are the composting activities conducted at the Unit exempt?
□ No or □ Yes (indicate which by checking one of the following boxes)

□ Chipping and grinding □ Onsite composting of agricultural materials □ In-Vessel Composting

□ Temporary collection and storage □ Non-commercial composting □ POTW onsite composting of treated biosolids

8. PROCESS

Allowable Materials (check all that apply, and specify the quantity onsite at any time):			
□ agricultural material	cu. yds.:	□ anaerobic digestate	cu. yds.:
□ biosolids	cu. yds.:	□ food material	cu. yds.:
□ green material	cu. yds.:	□ manure	cu. yds.:
□ paper material	cu. yds.:	□ vegetative food material	cu. yds.:
Maximum total permitted volume (cubic yards):			
Months during which compostable materials will be on-site:			
Additives/Amendments and maximum dry weight percentage used (list):			

9. SITE CONDITIONS

Highest anticipated depth to groundwater (feet below ground surface):
Average ground surface material hydraulic conductivity (centimeters per second):
Annual average precipitation (inches per year):
Distance to nearest domestic drinking water supply well (feet):

10. DESIGN SPECIFICATION TIERS

(check one)		
□ Tier 1	□ Tier 2	□ Tier 3
(Design Specifications, section E.1)	(Design Specifications, section E.2)	(Design Specifications, section E.3)

11. TIER 3 - SPECIFIC MONITORING

If the box for Tier 3 Design Specification has been marked, indicate the type of Tier 3 - Specific Monitoring to be implemented at the Unit

□ Vadose zone monitoring □ Groundwater monitoring

12. TECHNICAL REPORT

Provide a complete technical report with all the information required in Attachment C of this Order

13. FILING FEE

Pursuant to California Water Code section 13260 *et seq*., Dischargers enrolled under this Order are required to pay an annual fee, as determined by the State Water Resources Control Board. The filing fee accompanying this NOI is the first year's annual fee. The annual fee is based on the threat to water quality and complexity of the discharge in accordance with Cal. Code Regs. title 23 section 2200. Dischargers enrolled under this Order will be assigned a threat to water quality and complexity rating of 3-C and will be assessed the corresponding fee, plus any applicable surcharges. The NOI is to be accompanied by a check, made out to the *State Water Resources Control Board* for the payment of the filing fee.

14. CERTIFICATION

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature (Owner or Authorized Representative)	Date
Print Name	Title
Telephone Number	Email

DRAFT STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY CONTROL BOARD ORDER NO. DWQ-2012-XXXX

REQUIREMENTS FOR A TECHNICIAL REPORT IN SUPPORT OF A NOTICE OF INTENT TO COMPLY WITH THE STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE
DISCHARGE OF WASTES AT COMPOST MANAGEMENT UNITS
(**ATTACHMENT C**)

The technical report required as part of the Notice of Intent (NOI), must be organized such that each item listed below is addressed in the same format, including the numbering scheme. The entire *General Waste Discharge Requirements f or the Discharge of Wastes at a Compost Management Unit*, Order No. DWQ-2012-XXXX (Order) should be thoroughly reviewed for its requirements prior to preparation of this technical report. The minimum information needed to provide a complete review by the appropriate Regional Water Board staff is listed below. This list may not reference all information needed for every Compost Management Unit (CMU).

The technical report must be prepared under the direction of a California-registered professional Civil Engineer or Certified Engineering Geologist and signed (including registration number) by that professional.

A. **GENERAL INFORMATION** (also include on the NOI form where applicable).

1. Property owner. Include the name, address, telephone number, facsimile number, email address, and type of ownership (i.e., individual, corporation, etc.)

2. Compost Management Unit (CMU) operator. Include the name, address, telephone number, facsimile number, email address.

3. Address where legal notices may be served (if different than above).

4. Name and location of the CMU. Use the most accurate location, which may include: address; nearest town; cross streets.

5. Type of CMU (i.e., new or existing permit), as defined in Finding No. A.10 of the Order.

    a. Existing Permitted CMUs. CMUs which have received all permits and WDRs necessary from the Regional Water Board for construction and operation, on or before the initial effective date of this Order. Dischargers must identify any known Regional Water Board orders on the property.

    b. New CMUs. CMUs which have received all permits and WDRs necessary from the Regional Water Board for construction and operation, after the initial effective date of this Order. Dischargers must identify if the CMU was formerly covered under the *Conditional Waiver of Waste Discharge Requirements for Compost Operations* (Green Water Composting Waiver).

6. Size of the CMU (in acres).

7. Assessor's parcel number(s) (APN).

8. Section, township and range with base and meridian.

9. Regional Water Quality Control Board office

(http://www.waterboards.ca.gov/waterboards_map.shtml)

10. Any plans for CMU expansion.

11. Input capacity of the feedstock (in cubic yards)

12. Amount of stabilized compost produced (in cubic yards), and foreseeable uses.

B. **DESIGN INFORMATION**

1. Provide the current and/or proposed design of all working surfaces, berms, and conveyance ditches for the storage and/or treatment of feedstocks (as defined in Attachment A of this Order), additives, amendments, and compost (active or stabilized), along with information demonstrating that these containment structures comply with the appropriate tiered Design Specification, as specified in Design Specifications, section E of the Order. Dischargers proposing that feedstocks, additives, amendments, and/or compost (active or stabilized) will remain unsaturated, the technical report must include a discussion of the methods and monitoring to ensure that the material remains unsaturated, including contingency plan.

2. Provide information on how wastewaters (as defined in Attachment A of the Order) will be managed in accordance with this Order, and if applicable the Industrial Storm water Permit. The SWPPP for the CMU may be incorporated and referenced to supply this information. The information must include a description of and/or plan illustrating all precipitation controls, containment structures, (i.e., conveyance systems for storm water and/or wastewaters, wastewater detention ponds), and Best Management Practices (BMPs), including:

   a. A storm water conveyance system for controlling of run-on and runoff.

   b. Grading and conveyance of wastewaters to a detention pond, or sanitary sewer systems.

   c. A water balance showing that all wastewater detention ponds will have the capacity to hold all liquids that flow to them, and all ambient rainwater that falls into them, under conditions of a 25-year, 24-hour storm event, while taking into consideration evaporation and water that is reused in the compost.

   d. Recirculation of wastewaters for reuse during the composting process.

   e. Those to prevent contaminants from impacting runoff, such that runoff may be discharged under the Industrial Storm water Permit. Examples include, but may not be limited to covering of piles of feedstocks, additives, amendments, or compost (active or stabilized).

3. If applicable, provide the current and/or proposed design of any containment structures used in the Order, showing that they meet the appropriate tiered Design Specifications, as specified in Design Specifications, section E of the Order. The Discharger must provide an explanation in the technical report as to how the proposed liner system will protect groundwater from contamination, or pollution based on site-specific factors.

4. Include a grading plan for a proposed CMU, or an as-built grading plan for an existing permitted CMU, or if applicable a proposed grading plan for an existing permitted CMU.

5. For Dischargers enrolling under Tier 3 Design Specifications, provide:

    a. Information as to how piles of feedstock, additives, amendments, and compost (active or stabilized) will be managed such that the formation leachate will be minimized not form; and

    b. The design of the proposed groundwater or vadose zone monitoring system for the site. Include the proposed design and location of monitoring wells or vadose zone monitoring structures pursuant to the conditions in Design Specifications, section E.3 of the Order for Tier 3 CMUs.

6. Provide information regarding coverage under the General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial Storm water Permit); a copy of the NOI to comply with the Industrial Storm water Permit or WDID number; and a copy of the Storm Water Pollution Prevention Plan (SWPPP) for the CMU (if applicable).

7. If any new construction is proposed, provide information regarding the need for coverage under the General Permit for Storm Water Discharges Associated with Construction Activities, whether an NOI to comply with the permit will be or has been submitted to the State Water Board and whether a SWPPP has been or will be prepared.

C. **SITE CONDITION INFORMATION**

1. Describe the climate, including:

    a. Maximum, minimum, average annual precipitation at the nearest climatological station (measurements in inches/year). Include the name of the station; and

    b. Mean pan evaporation at the nearest climatologic station (measurements in inches/year) and the name of the station.

    c. Provide the 25-year, 24 hour precipitation event precipitation in inches, based on Department of Water Resources, Bulletin 195: *Rainfall Depth-Duration-Frequency for California*, revised November 1982, updated August 1986 (or other cited reference).

2. Discuss the average hydraulic conductivity (in centimeters per second) and thickness (in feet) of the existing or proposed working surface.

3. Discuss the groundwater conditions underlying the CMU, including:

    a. Maximum, and average depth to the first encountered groundwater below the native ground surface – in feet – and identify the source of the information;

    b. Maximum, and average groundwater elevation of the first encountered groundwater – in feet – relative to mean sea level;

    c. Identification of the direction of groundwater flow and the source of the information;

d. An estimate of the maximum anticipated depth to groundwater (in feet below ground surface) and groundwater elevation (in feet above mean sea level) below the native ground surface for the first encountered groundwater, and identify the source of the information; and

e. If available, water quality data from groundwater wells at or near the CMU, and the source of the information.

4. Describe the land uses within one-mile from the perimeter of the CMU.

5. Discuss the location and distance (in feet) to the nearest domestic drinking water supply well from the nearest property boundary of the CMU.

6. Discuss whether the CMU is located within a 100-year flood plain based on the federal Emergency Management Agency's (FEMA) designation and any design features to prevent inundation of the feedstocks, additives, amendments, and/or compost (active or stabilized). Include a reference to the appropriate Flood Insurance Rate Map and Community-panel number. CMUs located within a 100-year floodplain may be subject to state and/or local land use restrictions and permits.

7. Identify all nearby groundwater recharge areas and surface water bodies, including streams, ditches, canals, and other natural drainage courses.

8. Identify if the CMU is located on a property listed on the Cortese List maintained by the Department of Toxic Substances Control, for hazardous materials release sites (http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm). In the event the CMU is located on a hazardous materials release site, specify the site name and EnviroStor identification number.

D. **SITE MAP.** Provide a detailed site map showing the following:

1. Location and size (in acres) of the working surface used for the storage of feedstocks, additives, and amendments;

2. Locations and size (in acres) of the working surface used for active composting;

3. Location and size (in acres) of the area used for the storage of stabilized compost;

4. Location and size/capacity of all berms and ditches for the conveyance of wastewaters;

5. Location, size (in acres), and capacity (in acre feet) of all wastewater detention ponds (if applicable or proposed);

6. Location (if applicable) of all sampling points for the monitoring of wastewaters detained within ponds pursuant to the requirements of the Order. The Discharger must submit this information to the State Water Board's Internet GeoTracker system in accordance with Cal. Code Regs. title 23 section 3890 *et. seq.*;

7. Location (if applicable) of all sampling points for the monitoring of storm water runoff from the CMU under the Industrial Storm water Permit. The Discharger must submit this

information to the State Water Board's Internet GeoTracker system in accordance with Cal. Code Regs. title 23 section 3890 *et. seq.*; and

8. Location, or proposed location of all Tier 3 CMU groundwater monitoring wells or vadose zone monitoring structures pursuant to the conditions in Design Specifications, section E.3 of the Order for Tier 3 CMUs, specifying the:

    a. Total depth of the well of existing monitoring wells or estimated depth of proposed monitoring wells (in feet below ground surface);

    b. The existing or estimated screened interval of each well (in feet below ground surface); and

    c. Depth, location, and design of vadose zone monitoring structures.

    The Discharger, pursuant to Cal. Code Regs. title 23 section 3893(b) must additionally submit this information, in PDF format, to the State Water Board's Internet GeoTracker system in accordance with Cal. Code Regs. title 23 section 3890 *et. seq.*

E. **COMPOSTING METHOD**

1. Identify the compost feedstock types, volumes, sources, and suppliers.

2. Identify the additives, sources, suppliers and the maximum dry weight percentage used in the active compost.

3. Identify the amendments, sources, suppliers and the maximum dry weight percentage used in the stabilized compost.

4. Describe the method of composting (i.e., windrow, static, forced air, or mechanical)

5. Discuss the typical operation cycle and process time.

F. **OPERATIONS AND MONITORING SPECIFICATIONS**

1. Include a proposal for an annual survey of the operation prior to the rainy season to assure that the site has been graded and prepared for the rainy season to eliminate and prevent erosions and to prevent ponding, in compliance with requirements of the Order.

2. Describe the inspection and maintenance program that will be undertaken regularly during storage and treatment operations, such as inspection of the containment structures for emergence of leachate, ponding, or surface failures such as cracking or subsidence, in compliance with specification of the Order.

3. Describe the means by which composting and storage aspect of the operation will be conducted in a manner that does not cause, threaten to cause, or contribute to conditions of contamination, pollution, or nuisance.

4. Describe the method(s) to immediately correct conditions that would violate Prohibitions, section D of this Order.

5. Describe and provide information demonstrating the equipment (e.g. "Scarabs", loaders, and trucks) necessary to correct conditions that would violate Prohibitions, section D of this Order, can be operated in the working surface areas during wet conditions.

6. Provide information on how the working surfaces will be, or have been, compacted in compliance with, and meet the permeability requirements as specified in Design Specification, section E of the Order.

7. Describe and provide all necessary information demonstrating how leachate seeps will be prevented from occurring at Tier 3 CMUs.

8. For Dischargers enrolled under Tier 3 Design Specifications, include a proposal for establishing, operating, and monitoring either a groundwater or vadose zone monitoring network (pursuant to Design Specifications, section E.3.b of this Order) capable of meeting the applicable Tier 3 CMU monitoring requirements specified in this Order and the MRP.

9. For Dischargers enrolling under Tier 3 Design Specifications, provide and justify the statistical methods to determine background concentration limits for each naturally occurring constituent specified in Monitoring Requirements, section B.1.h, Table No. 1 of the MRP, or otherwise proposed in an approved NOI.

G. **SITE RESTORATION.** The technical report shall include a plan for site restoration of the CMU upon completion of operations under this Order. The site restoration plan, in addition to all activities required under Cal. Code Regs. title 14 section 17870, shall address returning the surface soils and drainage patterns to their pre-project state, to the extent feasible, and establishing soil erosion control by planting a suitable mixture of vegetation.

DRAFT STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY CONTROL BOARD ORDER NO. DWQ-2012-XXXX

NOTICE OF TERMINATION
OF COVERAGE UNDER THE STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE OF WASTES AT COMPOST MANAGEMENT UNITS
(**ATTACHMENT D**)

This document is only to be used for compost facilities/management units that have been issued a Notice of Applicability by the Regional Water Quality Control Board Executive Officer. Submission of this Notice of Termination constitutes official notification that the facility/management unit identified below no longer wishes to be covered under the General Order.

1. DISCHARGER INFORMATION

Owner Name:				
Mailing Address:				
City/Locale:	County:	State:	Zip:	Telephone Number:
Owner Type (check one):	□ Individual	□ Corporation	□ Partnership	□ Other:

Operator Name (if different than above):				
Mailing Address:				
City/Locale:	County:	State:	Zip:	Telephone Number:

2. COMPOST FACILITY/MANAGEMENT UNIT INFORMATION

Name:				
Physical Address:				
City/Locale:	County:	State:	Zip:	Telephone Number:

Type (check one): □ Existing Permitted Compost Management Facility/Unit Regional Water Board Order No.:_____ □ New Compost Management Facility/Unit	Assessor Parcel Number(s):

Township/Range/Section: T_____R_____S_____ _____B&M	Hydrologic Basin:
Closest named surface water: (e.g. Sacramento River):	

3. REASONS FOR FILING

□ Change in Ownership (Provision, section J.7 of this Order)	□ Applying for Individual Waste Discharge Requirements (Enrollment Procedure, section B.5.b of this Order)
□ Completion of Site Restoration Activities (Enrollment Procedure, section B.5.c of this Order)	□ CMU meets Criteria for Exemption (Enrollment Procedure, section B.5.d of this Order)
□ Other:	

Version 8.3.2012

Please briefly explain the reason for termination in the space below.

4. SITE RESTORATION

Provide a technical report demonstrating that the entire Compost Facility/Management Unit has met the requirements for site restoration in accordance with Site Restoration Specifications, section H of this Order, and provide certification of that site restoration by signing this form where indicated.

5. CERTIFICATION

I certify under penalty of perjury that 1) I am not required to be covered under the statewide General Waste Discharge Requirements for the Discharge of Waste to a Compost Management Unit, Order No. DWQ-2012-XXXX (**Order**), 2) that the above referenced Compost Facility/Management Unit has met the requirements for Site Restorations in accordance with Site Restoration Specifications, section H of this Order, and 3) this documents and all attachments were prepared under my direction or supervision in accordance with a systems designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I am understand that submittal of this Notice of Termination does not release the Discharger from liability for any violations of the Order.

Signature (Owner or Authorized Representative)	Date
Print Name	Title
Telephone Number	Email