

**FINAL ENVIRONMENTAL IMPACT REPORT
STATE CLEARINGHOUSE NO. 2017091011**

**RIALTO BIOENERGY FACILITY PROJECT
CITY OF RIALTO
SAN BERNARDINO COUNTY, CALIFORNIA**

Trinity Consultants, Inc.

February 2018

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**RIALTO BIOENERGY FACILITY PROJECT
CITY OF RIALTO
SAN BERNARDINO COUNTY, CALIFORNIA**

Prepared for:

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Trinity Project Number 170506.0078

February 2018

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1.0 SUMMARY OF THE FINAL ENVIRONMENTAL IMPACT REPORT

1.1 PURPOSE

The City of Rialto (City), as the lead agency under the California Environmental Quality Act (CEQA), has prepared this Final Environmental Impact Report (Final EIR) for the proposed Rialto Bioenergy Facility (RBF) Project. The State Clearinghouse (SCH) number for the EIR is SCH 2017091011.

This Final EIR contains all of the required contents as outlined in Section 15132 of the *CEQA Guidelines*, including:

- The Draft EIR or a revision to the draft (Section 3.0 Errata to the Draft EIR);
- Comments and recommendations received on the Draft EIR (Section 2.0 Comments Received and Responses);
- A list of persons, organizations, and public agencies commenting on the Draft EIR (Section 2.0 Comments Received and Responses);
- The responses of the lead agency to significant environmental points raised in the review and consultation process (Section 2.0 Comments Received and Responses);
- The Mitigation Monitoring and Reporting Program (Section 4.0 Mitigation Monitoring and Reporting Program), and
- Any other information added by the lead agency.

This Final EIR for the Proposed Project consists of comments on the Draft EIR, responses to comments, errata changes to the Draft EIR, and a mitigation monitoring and reporting program. This Final EIR is intended to be used along with the Draft EIR, which is incorporated by reference and bound separately.

This Final EIR assembles all the environmental data and analyses that have been prepared for the Proposed Project. It also includes public and agency comments on the Draft EIR and responses by the City to those comments. The intent of the Final EIR is to provide a forum to disclose and address comments pertaining to the analysis contained in the Draft EIR and to provide an opportunity for clarification, corrections, or minor revisions to the Draft EIR as needed.

The evaluation and response to comments is an important part of the CEQA process because it allows the following:

- The opportunity to review and comment on the methods of analysis contained in the Draft EIR;
- The ability to detect any omissions that may have occurred during the preparation of the Draft EIR;
- The ability to check for accuracy of the analysis contained within the Draft EIR;
- The ability to share expertise; and
- The ability to discover public concerns.

1.2 PROCESS

A Draft EIR was prepared for the Proposed Project and circulated for public review from November 21, 2017 to January 5, 2018, through the Governor's Office of Planning and Research, the State Clearinghouse, and the San Bernardino County Clerk. Copies of the Draft EIR and Appendices were made available at the City of Rialto, Planning Division (150 South Palm Avenue, Rialto, California 92376).

The City used several methods to solicit comments on the Draft EIR. The notice of availability (NOA) was mailed to various agencies, organizations, and individuals that had previously requested such notice. The Draft EIR and Appendices were also posted on the City website at <http://yourrialto.com/current-projects/>.

Written comments were received during the public review period of the Draft EIR. Pursuant to Section 15088 of the *CEQA Guidelines*, the City, as the lead agency for the Proposed Project, has reviewed the comment letters received on the Draft EIR. Responses to the comment letters are contained in Section 2, Comments Received and Responses to Comments, of this Final EIR. Changes in response to comments are included in Section 3.0, Errata; new text is presented in underline; deleted text is presented in ~~strikeout~~. Additionally, changes in the Project Summary section immediately below are also included in underline and ~~strikeout~~ to reflect updates in response to comments.

1.3 PROJECT SUMMARY

The following information is summarized from the Project Description in the Draft EIR. For additional detail in regards to project characteristics and project-related improvements, along with analyses of the project's potential environmental impacts, please refer to Draft EIR Sections 3.0 and 4.0, respectively.

Project Location/Existing Conditions

This facility is located at 503 East Santa Ana Avenue, east of South Riverside Avenue in the City of Rialto in San Bernardino County. The project site is located in Section 25 in Township 1 South and Range 5 West, as depicted on the U.S. Geological Survey (USGS) 7.5-minute series San Bernardino South, California quadrangle (latitude 34° 03' 12.06" north and longitude 117° 21' 34.81" west).

The Proposed Project site consists of one parcel of land with the following San Bernardino Assessor's Parcel Number (APN): 0258-151-24-0000. The topography of the Proposed Project site is generally flat with a gentle slope moving from the northwest corner to the southern boundary. The elevations on site are approximately 940 feet above mean sea level (amsl).

The project site is 5.7 acres and developed with a non-operating facility previously owned and operated by EnerTech. The existing non-operational biosolids plant is in a heavy industrial zone on a parcel owned by the City of Rialto. Existing on-site equipment, including biosolids drying components and wastewater processing components, will be incorporated into the Proposed Project.

The Proposed Project site is generally surrounded by industrial uses and vacant land. Large, vacant, undeveloped lots are located north, east, and south of the Proposed Project site. Immediately west of the facility is the City of Rialto Wastewater Treatment Plant (WWTP); an asphalt, aggregate and concrete producer; and a recycled parts yard. Immediately east of the site is a tributary to the Santa Ana River (the Rialto Channel). Northwest of the site is a pallets and skids operator, another aggregate materials producer, and a fuel depot storage field. A large railroad yard and the San Bernardino Freeway (I-10) are located beyond the general industrial land uses to the north of the site. South of the site are more industrial land uses, a landfill and vacant undeveloped land adjacent to the Santa Ana River. Surrounding land uses are within the Agua Mansa Industrial Corridor Specific Plan and designated for Heavy Industrial Uses. The General Plan land use designation for the surrounding area is General Industrial.

Proposed Project

RBF will produce 13.38 MW electrical equivalent of renewable energy from up to 1,080 tons per day of a combination of food waste extracted from municipal waste streams, liquid waste, and municipal biosolids and biogas captured from the adjacent WWTP. When fully operational, the Proposed Project will convert up to 700 tons per day (TPD) of food waste extruded from local municipal solid waste (MSW) into 5.15 MW of electrical power from biogas. Three MW of this power would be sold to SCE via the BioMAT Power Purchase Agreement, with the balance used in powering the RBF on-site loads. An additional 8.2 MW of electrical equivalent in the form of biogas would be injected into the local natural gas pipeline, which would include up to 1,400 standard cubic feet per minute (scfm) of biomethane.

Liquid waste is limited food wastes including expired organic food sauces, pre-consumer food wastes, food processing wastes, or other similar waste from food productions or preparations including sodas, fats, oils and grease, and food manufacturing wash down. The biosolids that will be received will be previously dewatered. All gases from the pyrolysis will be used to either heat the pyrolysis system or the solids dryers. All pyrolysis gas which is used will be controlled in the process and will include a gas conditioning system to remove pollutants. An enclosed flare will be used to control any pyrolysis gas not consumed by the pyrolysis or dryer heaters.

In addition to the anaerobic digestion process, the facility will include solids dryers to allow for drying of dewatered sludge cake from the digestion process. The drying system will be sized to allow for reception and drying of up to 300 TPD of onsite dewatered digestate and dewatered sludge from regional wastewater treatment plants. Dried material from the solids dryers will undergo pyrolysis to allow for generation of a pyrolysis oil to be introduced into the Anaerobic Digesters. This oil will assist in additional biogas production as well as gas for use in heating of the solids dryers. The pyrolyzed char will be shipped off site via truck for land application.

The Proposed Project includes its own WWTP. The anaerobic digestion process precedes the WWTP which is generating biogas to produce power from the food waste. Anaerobic digestion generates digestate (the remaining solids after digestion); that is dewatered in the centrifuges. The centrate from dewatered digestate from the centrifuge is then treated in the on-site WWTP.

The facility will be operating 24 hours a day, 7 days per week for biogas production and drying operations. The materials reception will be for 16 hours per day, 6 days per week. For this analysis, trucking activities are therefore assumed to occur 16 hours per day, 7 days per week. The facility would operate with up to 13 employees. Daily truck traffic would include 47 in-bound trips as follows: 43 biosolids feedstock, 1 biochar pellets, 1 chemicals/polymer materials delivery and waste pick-up, and 2 general supplies delivery.

Project Objectives

The Proposed Project objectives are as follows:

- Revitalize the existing, non-operational Rialto Biosolids Facility.
- Provide organics recycling as part of AB 1826 compliance to meet the organics recycling objectives from local municipal solid waste into renewable natural gas and electricity.
- Reduce greenhouse gas (GHG) emissions by over 433,000 metric tons of carbon dioxide equivalents (MTCO_{2e}) over the next 10 years regionally through diverting 1,080 tons per day of food waste and municipal biosolids from landfill disposal and converting it into 14 MW or equivalent electrical power from recycling organics waste streams.
- Create additional income stream for the City of Rialto (lease and tip fees) and employment opportunities for the citizens of Rialto and surrounding communities.
- Implement the City's General Plan General Industrial Land Use policies and objectives.

- Implement the Agua Mansa Industrial Corridor Specific Plan by developing a land use envisioned and previously authorized by the Agua Mansa Industrial Corridor Specific Plan.

1.4 REQUIRED ACTIONS AND PERMITS

Development of the project as proposed will require a number of discretionary and non-discretionary actions, permits, and/or related consultations included below.

U.S. Department of Energy

This EIR is a stand-alone CEQA document. The U.S. Department of Energy (DOE) will conduct its own National Environmental Protection Act (NEPA) compliance separately to address its funding involvement which is focused on design and securing permits and potentially also including construction.

City Actions and Permits

The Proposed Project will also require discretionary approval from the City of Rialto, which is the CEQA lead agency for the Proposed Project. As established in *CEQA Guidelines* Section 15124(d)(2), "If a public agency must make more than one decision on a project, all its decisions subject should be listed." Actions necessary to fully develop the project as proposed include:

- Certification of the EIR;
- Approve Conditional Use Permit;
- Approve Precise Plan of Design; and
- Approve Encroachment Permit.

Other Required Actions

CEQA Guidelines require that the City, to the extent the information is known, include a list of the agencies that are expected to use the CEQA document in their decision-making processes, a list of permits and other approvals required to implement the Proposed Project, and a list of related environmental review/consultation requirements established by Federal, State, or local law, regulation and/or policy. Based on the project as proposed, the additional actions that may be required include, but are not limited to, those outlined below.

U.S. Department of Energy: RBF has applied for federal funding from DOE. DOE may reference this CEQA document during preparation of its NEPA review.

California Energy Commission: The facility will require approval from the California Energy Commission (CEC) regarding the Proposed Project process and completion timeline to receive anticipated grant money for the Proposed Project. The CEC also has responsibility of reviewing and licensing energy facilities in California.

CalRecycle: The facility will require permitting and regulatory oversight of solid waste handling activities, including composting operations/facilities, in vessel digestion operations and facilities relative to permitting and inspections. The permitting and regulatory requirements for these operations and facilities are contained in Title 14, CCR and Title 27, CCR.

Rialto Water Services: The City of Rialto previously issued an Industrial User Wastewater Discharge Permit #2008-07 to EnerTech. RBF will update this Industrial User Wastewater Discharge Permit #2008-

07 with City of Rialto, Water Services. A Water Quality Management Plan will also be prepared subject to approval by the City of Rialto.

Santa Ana Regional Water Quality Control Board: An existing storm water plan was previously approved for the site. RBF has been discharging storm water under the existing storm water plan since acquisition of the site. The storm water permit will require an update to ensure that the storm water plan accounts for all flows in the final design of the site. The Proposed Project would include a biosolids permit with the RWCQB under Code of Federal Regulations Title 40, Part 503 and will be described in the CSE pursuant to PRC Section 50001(a)(1). Since the project will include compostable material and/or digestate that will go to land application, this operation will need to be conducted in accordance with 14 CCR Section 17852(a)(24.5), other regulatory local, state or federal agency requirements.

South Coast Air Quality Management District: RBF will apply to the SCAQMD for an Authority to Construct (ATC) permit as a facility that will generate regulated airborne emissions; SCAQMD will authorize construction of new equipment for the facility. The existing permits have been transferred to RBF. The only new ATC permit will be associated with the proposed digestion and power generation. RBF already holds a Permit to Operate (PTO) for the existing facility; RBF will require only an update of that existing permit. The existing PTO authorizes the facility to operate as a regulated emissions source. The existing PTO will be modified to reflect anticipated emissions from the updated facility, in accordance with emissions thresholds set in the ATC for the new equipment. RBF must also comply with all applicable SCAQMD rules and regulations including (but not limited to) those listed below.

- Rule 201: Permit to Construct
- Rule 203: Permit to Operate
- Rule 212: Standards for Approving Permits
- Rule 301: Permitting and Associated Fees
- Rule 401: Visible Emissions
- Rule 402: Nuisance
- Rule 404: Particulate Emissions
- Rule 1303: New Source Review Requirements
- Rule 1401: New Source Review of Toxic Air Contaminants
- Rule 1402: Control of Toxic Air Contaminants from Existing Sources
- Regulation XX: Regional Clean Air Incentive Market (RECLAIM) including key rules (Rule 2005: NSR for RECLAIM Pollutants)
- Regulation XXX: Title V Permits

San Bernardino County Flood Control District: The City of Rialto, as the underlying property owner, has permits from the San Bernardino County Flood Control District for RBF operations located within the Rialto Channel. RBF will have to renew and update the license agreement for the continued operations and maintenance of a 6-inch underground water pipeline on approximately 2.394 linear feet of San Bernardino County Flood Control District land on the west side and parallel to the Rialto Channel, south of Santa Ana Avenue. The existing license was due to expire in December 2017.

San Bernardino County Department of Public Works: The facility may need a Flood Control Encroachment Permit in the event there is work within the right-of-way of the Rialto Channel.

San Bernardino County Health Department, the Local Enforcement Agency (LEA): RBF currently holds a solid waste facilities permit (SWFP) issued by the San Bernardino County Health Department, the LEA. The SWFP authorizes the facility to process 1,080 tons per day of solid waste, including organic waste extracted from MSW, biosolids, and liquid organic waste. The updated PTO will be acquired after

completion of commissioning. The proposed activity will be regulated under a full SWFP issued by the LEA; and will be required to be described in the Non-Disposal Facility Element (NDFE) pursuant to Public Resources Code (PRC) Section 50001(a)(2). The LEA, in coordination with CalRecycle, provides permitting and regulatory oversight of solid waste handling activities, including composting operations/facilities, in vessel digestion operations and facilities relative to permitting and inspections. The permitting and regulatory requirements for these operations and facilities are contained in Title 14, CCR and Title 27, CCR. This facility is currently permitted by the LEA as a Large Volume Transfer/Processing Facility with a maximum throughput of 1,080 tons per day, however no solid waste activity has been observed at the site since approximately August of 2013. Based on the presented data, the project would require a permit for the anaerobic digestion and pyrolysis processes.

Since the Proposed Project will utilize a pyrolytic conversion system, which is a type of transformation as defined in PRC Section 40201, it will be regulated under a full SWFP issued by the LEA and will be required to be described in the Countywide Siting Element (CSE) pursuant to PRC Section 50001(a)(1).

City of Rialto Building Division: RBF will apply for a building permit from the City of Rialto Building Division, where the City will review and provide approval on construction-ready engineering documents. RBF has already begun coordinating with the City regarding a building permit, and anticipates acquisition of the permit within two weeks of construction.

San Bernardino County Fire Department, Hazardous Material Division: The facility will need to complete a Hazardous Materials Business Plan (HMBP) for submittal to the fire department. This plan will need to include all contingency measures and hazardous materials and waste onsite.

Utility providers (connection permits/work permits): The RBF site already has working utility (water, electricity, natural gas, and sewer/wastewater) connections. The facility includes construction and operation of an off-site gas pipeline with Southern California Gas. Natural gas export would be permitted through an anticipated gas purchase agreement.

2.0 COMMENTS RECEIVED AND RESPONSES TO COMMENTS

2.1 INTRODUCTION

In accordance with Section 15088 of Title 14 of the California Code of Regulation (*CEQA Guidelines*), the City has evaluated the comment letters received on the Draft EIR for the Rialto Bioenergy Facility Project and has prepared written responses to the comment letters. This section contains a copy of each comment letter received during the public review process and provides an evaluation and written response for each comment.

2.2 COMMENTS RECEIVED

During the public review period from November 21, 2017 through January 5, 2018, the City received five comment letters as listed below:

- Letter A – California Department of Toxic Substances Control (DTSC), dated December 20, 2017.
- Letter B – CalRecycle, Department of Resource Recycling and Recovery, dated January 2, 2018.
- Letter C – South Coast Air Quality Management District (SCAQMD), dated January 3, 2018.
- Letter D – San Bernardino County, Department of Public Works, dated December 22, 2017.
- Letter E – San Bernardino County, Public Health, Environmental Health Services, dated January 3, 2018.

2.3 COMMENTS AND RESPONSES TO COMMENTS

This section includes all written comments on the Draft EIR received by the City and the responses to those comments in accordance with Section 15088 of the *CEQA Guidelines*. In accordance with the *CEQA Guidelines*, responses are prepared for those comments that address the sufficiency of the environmental document regarding the adequate disclosure of environmental impacts and methods to avoid or mitigate those impacts. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the Draft EIR. Additionally, it should be noted that comments by public agencies should be limited to those aspects of a project that are within its area of expertise or which are required to be carried out or approved by the agency, and such comments must be supported by substantial evidence (*CEQA Guidelines* Section 15204).

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**Letter A – California Department of Toxic Substances Control (DTSC), dated
December 20, 2017.**

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Letter A



Department of Toxic Substances Control

Matthew Rodriguez
Secretary for
Environmental Protection

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

December 20, 2017

Mr. Daniel Casey
Associate Planner
Planning Division
Department of Development Services
City of Rialto
150 South Palm Avenue
Rialto, California 92376
dcasey@rialtoca.gov

DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR RIALTO BIOENERGY FACILITY
PROJECT (SCH# 201709 1011)

Dear Mr. Casey:

The Department of Toxic Substances Control (DTSC) has received your Notice of Completion of the draft EIR for the subject project. The following project description is stated in your document: "Rialto Bioenergy Facility, LLC, (RBF) will produce 13.38 megawatts (MW) in equivalent electricity of renewable energy from up to 1,080 tons per day of a combination of food waste, liquid waste, and municipal biosolids. Renewable energy will be produced in the form of electricity (3.0 MW) used for sale to Southern California Edison (SCE) through the BioMAT Power Purchase Agreement and biogas upgraded for delivery to the Southern California Gas Company (8.2 MW of equivalent power) for use in offsite power generation and vehicle fuels."

1

Based on the review of the submitted document, DTSC has the following comments:

1. The EIR states, "According to the Land Use Plan for the Specific Plan, the Proposed Project site is designated as Heavy Industrial. Areas designated as Heavy Industrial are intended to be used for manufacturing, resource extraction, freight, compounding of material, packaging, treatment, processing, or assembly of goods." The EIR should identify and determine whether current or historic uses at the project site may have resulted in any release of hazardous wastes/ substances. A Phase I Environmental Site Assessment may be appropriate to identify any recognized environmental conditions.

2

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| 2. If there are any recognized environmental conditions in the project area, then proper investigation, sampling and remedial actions overseen by the appropriate regulatory agencies should be conducted prior to the new development or any construction. | 3 |
| 3. If planned activities include building modifications/demolitions, lead-based paints or products, mercury, and asbestos containing materials (ACMs) should be addressed in accordance with all applicable and relevant laws and regulations. | 4 |
| 4. If the site was used for agricultural or related activities, residual pesticides may be present in onsite soil. DTSC recommends investigation and mitigation, as necessary, to address potential impact to human health and environment from residual pesticides. | 5 |
| 5. DTSC recommends evaluation, proper investigation and mitigation, if necessary, on onsite areas with current or historic PCB-containing transformers . | 6 |
| 6. If soil contamination is suspected or observed in the project area, then excavated soil should be sampled prior to export/disposal. If the soil is contaminated, it should be disposed of properly in accordance with all applicable and relevant laws and regulations. In addition, if the project proposes to import soil to backfill the excavated areas, proper evaluation and/or sampling should be conducted to make sure that the imported soil is free of contamination. | 7 |
| 7. If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the ND should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight. | 8 |

If you have any questions regarding this letter, please contact me at (714) 484-5476 or email at Johnson.Abraham@dtsc.oacgov.

Sincerely,



Johnson P. Abraham
Project Manager
Brownfields Restoration and School Evaluation Branch
Brownfields and Environmental Restoration Program – Cypress

kl/sh/ja

cc: See next page.

Mr. Daniel Casey
December 20, 2017
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cc: Governor's Office of Planning and Research (via e-mail)
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
State.clearinghouse@opr.ca.gov

Mr. Dave Kereazis (via e-mail)
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Mr. Shahir Haddad, Chief (via e-mail)
Schools Evaluation and Brownfields Cleanup
Brownfields and Environmental Restoration Program - Cypress
Shahir.Haddad@dtsc.ca.gov

CEQA# 2017091011

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Response to Comment A-1

Comment A-1 is an introductory statement to the comment letter from the DTSC. The comment letter acknowledges the DTSC's receipt of the Draft EIR and states portions of the project description from the Draft EIR.

The introductory statement does not raise any new issues, specific concerns, or questions regarding the adequacy of the Draft EIR. However, this comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment A-2

Comment A-2 includes the following statement from the DEIR "According to the Land Use Plan for the Specific Plan, the Proposed Project site is designated as Heavy Industrial. Areas designated as Heavy Industrial are intended to be used for manufacturing, resources extraction, freight, compounding material, packaging, treatment, processing or assembly of goods." The comment then states that the EIR should identify and determine whether current or historic uses at the project site may have resulted in any release of hazardous waste/substances. A Phase I Environmental Site Assessment may be appropriate to identify any recognized environmental conditions.

The commenter is referred to the Draft EIR, Appendix A, Initial Study, Section VIII, Hazards and Hazardous Materials; the previous Phase 1 Environmental Site Assessment (ESA) was introduced on page A.1-70. Current and past uses of the project site and implications for the release of hazardous materials or substances were included in a Phase I ESA prepared by LOR Geotechnical Group, Inc. on February 24, 2014 and prepared in accordance with ASTM E1527-13 and AAI, as set forth in 40 CFR part 312. The Phase I ESA revealed no evidence of recognized environmental conditions (RECs) or controlled recognized environmental conditions (CRECs) indicative of releases or threatened releases of hazardous substances on, at, in, or to the Proposed Project site. Additionally, a Landfill Closure Plan was prepared and approved by the Santa Ana Regional Water Quality Control Board. The Rialto Landfill has been clean closed and filled with highly compacted soils to a depth of 65 feet.

As the Phase I ESA provides no evidences of RECs or CRECs, there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment A-3

The comment indicates that the EIR should identify if there are any RECs in the project area, and if so, then proper investigation, sampling and remedial actions overseen by the appropriate regulatory agencies should be conducted prior to the new development or any construction.

See response to comment A-2. As the Phase I ESA provides no evidences of RECs or CRECs, there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment A-4

This comment states that if planned activities include building modifications/demolitions, lead-based paints or products, mercury, and asbestos containing materials (ACMs), these should be addressed in accordance with all applicable and relevant laws and regulations.

Please refer to Response A-2. As the Phase I ESA provides no evidences of RECs or CRECs, including ACMs and lead-based paint, there are no new environmental impacts. Asbestos containing transit pipe used by the WWTP for the storm water pipelines was found and subsequently properly removed and placed into two lined 40-yard bins for offsite disposal, and is therefore not an REC or CREC. Further, all onsite

structures were built after year 2007 of new building materials which typically no longer include lead-based paints or ACMs. The EnerTech plant was built in 2008 and RBF has no knowledge of ACMs, lead-based paints, PCB-containing transformers or soil or ground water contamination. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment A-5

The comment states that if the site was used for agricultural or related activities, residual pesticides may be present in onsite soil. DTSC recommends investigation and mitigation, as necessary, to address potential impact to human health and environment from residual pesticides.

See response to comment A-2. As the Phase I ESA provides no evidence of RECs or CRECs, including residual pesticides, there are no new environmental impacts. Additionally, a Landfill Closure Plan was prepared and approved by the Santa Ana Regional Water Quality Control Board. The Rialto Landfill has been clean closed and filled with highly compacted soils. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment A-6

This comment recommends evaluation, proper investigation and mitigation, if necessary, on onsite areas with current or historic PCB-containing transformers.

See response to comment A-2. Soil samples obtained during the investigation by Tetra Tech, and reported in the Phase I ESA, indicated no reportable to no significant concentrations of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), PCBs, metals, or pesticides. As the Phase I ESA provides no evidence of PCB-containing transformers, there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment A-7

The comment states that if soil contamination is suspected or observed in the project area, then excavated soil should be sampled prior to export/disposal. If the soil is contaminated, it should be disposed of properly in accordance with all applicable and relevant laws and regulations. In addition, if the project proposes to import soil to backfill the excavated areas, proper evaluation and/or sampling should be conducted to make sure that the imported soil is free of contamination.

See response to comment A-2. Soil samples obtained during the investigation by Tetra Tech, and reported in the Phase I ESA, indicated no reportable to no significant concentrations of VOCs, SVOCs, PCBs, metals, or pesticides. Additionally, a Landfill Closure Plan was prepared and approved by the Santa Ana Regional Water Quality Control Board. The Rialto Landfill has been clean closed and filled with highly compacted soils to a depth of 65 feet. As the Phase I ESA provides no evidence of contaminated soil, there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment A-8

This comment states that if during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the document should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.

See response to comment A-2. Soil samples obtained during the investigation by Tetra Tech, and reported in the Phase I ESA, indicated no reportable to no significant concentrations of VOCs, SVOCs, PCBs,

metals, or pesticides. Further, this Tetra Tech finding indicates that the concentrations of metals in the confirmation and backfill samples do not pose a significant threat to groundwater underlying the site. As the Phase I ESA provides no evidence of soil and/or groundwater contamination, there are no new environmental impacts.

The City of Rialto shall include as a Project Condition of Approval the following: If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area shall cease, and the applicant will follow all applicable laws and regulations.

This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

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**Letter B – CalRecycle Department of Resource Recycling and Recovery, dated
January 2, 2018.**

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California Environmental Protection Agency

Edmund G. Brown Jr., Governor



DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

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Letter B

January 2, 2018

Governor's Office of Planning & Research

JAN 02 2018

STATE CLEARINGHOUSE

Mr. Daniel Casey, Associate Planner
City of Rialto
Department of Developmental Services
150 S. Palm Avenue
Rialto, CA 92376

Subject: SCH No. 2017091011: Notice of Completion/Draft Environmental Impact Report for the Rialto Bioenergy Facility, Solid Waste Information System Number 36-AA-0446, San Bernardino County

Dear Mr. Casey:

Thank you for allowing the Department of Resources Recycling and Recovery (CalRecycle) staff to provide comments on the proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

PROJECT DESCRIPTION

The City of Rialto, Department of Development Services, acting as Lead Agency, has prepared and circulated a Draft Environmental Impact Report (EIR) in order to comply with CEQA and to provide information to, and solicit consultation with, Responsible Agencies in the approval of the proposed project.

The proposed project is located at 503 East Santa Ana Avenue, east of South Riverside Avenue in the City of Rialto. The project site is approximately 5.7 acres, and the site is currently zoned for General Industrial. The site is surrounded by industrial uses and vacant land. There are no residential properties in the near vicinity. Immediately west of the facility is the City of Rialto Wastewater Treatment Plant, an asphalt, aggregate and concrete producer, and a recycled parts yard. Immediately east of the site is a tributary to the Santa Ana River. Northwest of the site is a pallets and skids operator, another aggregate materials producer, and an oil tank storage field. There is also an inert landfill to the south.

The proposed project is an expansion of operations at the existing permitted Rialto Bioenergy Facility to allow the production of 13.38 megawatts (MW) in equivalent electricity of renewable energy from up to 1,080 tons per day (TPD) of a combination of food waste, liquid waste, and municipal biosolids. When operational, 700 TPD of food waste extruded from local municipal solid waste (MSW) into 5.15 MW of electrical power from biogas. The proposed project will produce renewable energy in the form of electricity (3.0 MW) through the BioMat program and biogas upgrade (8.2 MW of equivalent power) to Southern California Edison for use in offsite power generation and vehicle fuels. In addition, the project will capture and upgrade the biogas from the adjacent City of Rialto Wastewater Treatment Plant for delivery to the Southern California Gas Company.

COMMENTS

CalRecycle staff's comments on the proposed project are listed below. Where a specific location in the document is noted for the comment, please ensure the comment is addressed throughout all sections of the Draft EIR, in addition to the specific location noted.

1



THIS DOCUMENT IS THE PROPERTY OF THE CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY. IT IS TO BE RETURNED TO THE AGENCY UPON REQUEST.

**Rialto Bioenergy Facility Project
Final Environmental Impact Report**

NOC/DEIR for Rialto Bioenergy Project
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Comments for the Draft EIR are summarized in the following table:

Chapter/Section	Page	Comment	
4.7.5 Odor Issues/Impacts	2-8	Is the food waste extruded from local solid waste (wet fraction) and dewatered sludge unloaded in the receiving bins described in section 3.5.2.1 (page 3-13) an odor generating source? If so, what are the proposed mitigation measures? How will spillage of food waste and/or biosolids outside of the receiving bins be minimized? Are the contaminants remaining from the two stage polishing process described in section 3.5.2.2 (page 3-14) an odor generating sources? If so, what are the proposed mitigation measures?	2
2.6 - VII Hazards and Hazardous Materials	2-14	What mitigation measures will ensure that the transported food waste extruded from local municipal solid waste and liquid waste does not contain hazardous waste or other non-organic waste?	3
3.5.1 - Overall Facility Operations	3-12	What is the maximum number of trucks per day proposed to transport food waste and liquid waste to the facility for processing? The maximum daily truck traffic totals exclude the truck trips for food waste and liquid waste.	4
Table 3.2 - Summary of Rialto BioEnergy Facility Operations	3-13	The maximum daily tonnage by waste type (i.e. biosolids, food waste, liquid waste) were not included as parameters of the operations. Please include this information. Will source separated residential and commercial food waste also be received?	5
3.5.2.3 - Digestion	3-14	The proposed activity uses anaerobic digestion technology and will be subject to CalRecycle's In-Vessel Digestion regulatory requirements found in Title 14, California Code of Regulations (14 CCR), Chapter 3.2. The proposed activity will be regulated under a full Solid Waste Facilities Permit (SWFP) issued by the Local Enforcement Agency (LEA); and will be required to be described in the Non-Disposal Facility Element (NDFE) pursuant to Public Resources Code (PRC) Section 50001(a)(2).	6
3.5.2.7 - Pyrolysis	3-16	The proposed operations utilize a pyrolytic conversion system, which is a type of transformation as defined in PRC Section 40201. It will be regulated under a full SWFP issued by the LEA and will be required to be described in the Countywide Siting Element (CSE) pursuant to PRC Section 50001(a)(1). The Draft EIR notes that the solids (char) will be used for land application as a soil amendment. Will any sampling requirements need to be met prior to use as a soil amendment?	7

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Chapter/Section	Page	Comment
		Any compostable material and/or digestate that goes to land application will need to be conducted in accordance with 14 CCR Section 17852(a)(24.5), other regulatory local, state or federal agency requirements (e.g., Regional Water Quality Control Board, California Department of Food and Agriculture), and/or disposed in accordance with applicable requirements.

Solid Waste Facilities Permit

Currently, the Rialto Bioenergy Facility is permitted as a large volume transfer/processing facility and authorized to accept a maximum of 1,080 wet tons per day of biosolids only. The facility was initially permitted in December 2006; however, since late 2012 the facility has been and continues to be inactive.

The SWFP limits and restrictions will need to be consistent with the project described in the Draft EIR. The project description and analysis provided in the Draft EIR will be reviewed as part of CalRecycle's consideration of concurrence in a SWFP for the project, so the Draft EIR project description and analysis should be clear on the specifications and the key design and operation parameters (e.g., total daily tonnage, days/hours of operation, acreage, conversion technology to be used, design capacity, waste types, daily tonnage of each waste type, handling, processing, storage, etc.) for the proposed project.

8

Solid Waste Regulatory Oversight

The San Bernardino County Department of Public Health, Division of Environmental Health Services is the LEA for San Bernardino County and CalRecycle are responsible for providing regulatory oversight of solid waste handling activities such transfer/processing operations/facilities, in-vessel digestions operations/facilities and transformation facilities, including permitting and inspections. The permitting and regulatory requirements for these operations/facilities are contained in 14 CCR and 27 CCR. Please contact the LEA at (800) 442-2283 or by e-mail at Diana.Almond@dph.sbcounty.gov to discuss the permitting requirements for the proposed project.

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CONCLUSION

CalRecycle staff thanks the Lead Agency for the opportunity to review and comment on the environmental document and hopes that this comment letter will be useful to the Lead Agency preparing the Draft EIR and in carrying out their responsibilities in the CEQA process.

CalRecycle staff requests copies of any subsequent environmental documents, copies of public notices and any Notices of Determination for this proposed project.

If the environmental document is adopted during a public hearing, CalRecycle staff requests 10 days advance notice of this hearing. If the document is adopted without a public hearing, CalRecycle staff requests 10 days advance notification of the date of the adoption and proposed project approval by the decision making body.

If you have any questions regarding these comments, please contact me at 951.782.4168 or by e-mail at dianne.ohiosumua@calrecycle.ca.gov.

Sincerely,


Dianne Ohiosumua, Environmental Scientist
Permitting & Assistance Branch – South Unit
Waste Permitting, Compliance & Mitigation Division

**NOC/DEIR for Rialto Bioenergy Project
January 2, 2018
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**cc via email: Martin Perez, Supervisor
 Permitting & Assistance Branch – South Unit

 Diana Almond, San Bernardino County - LEA**

Response to Comment B-1

Comment B-1 is an introductory statement to the comment letter from the CalRecycle. The comment letter acknowledges the CalRecycle's receipt of the Draft EIR and states portions of the project description from the Draft EIR.

The introductory statement does not raise any new issues, specific concerns, or questions regarding the adequacy of the Draft EIR. However, this comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-2

The comment indicates that the EIR should identify if the food waste extruded from local solid waste (wet fraction) and dewatered sludge unloaded in the receiving bins described in section 3.5.2.1 (page 3-13) of the Draft EIR is an odor generating source. It further asks about the proposed mitigation measures and how spillage of food waste and/or biosolids outside of the receiving bins be minimized. The comment is also concerned about whether the contaminants remaining from the two stage polishing process described in section 3.5.2.2 (page 3-14) are odor generating sources and the proposed mitigation measures [Section 4.7.5 Odor Issues/Impacts].

The Proposed Project is designed to minimize odor sources and reduce spillage of food waste/biosolids through Project design and includes an odors collection and management system. Operationally, the receiving bins will be closed when they are not receiving materials. The odor collection system, which includes pipes ranging from 6 to 16 inches in diameter, will draw in foul air from the receiving bins through collection fans. The foul air will be supplied to the drier as cooling air and subsequently exhaust into the odor emissions controls (scrubbers and RTO). In regards to reducing spillage, the collection bins are 20 feet below grade and trucks will back up to the bins and unload directly into the bins. There are drainage inlets around the receiving bins to receive wash down water. Any water and spillage collected at the wash down drains will be collected by sump pumps and pumped directly to the City of Rialto WWTP located next door to the Proposed Project site.

As the Proposed Project design would substantially control odor emissions and the nearest sensitive receptors are at least one mile from any potential Project odor sources, potential odor impacts would be considered less than significant; there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-3

The comment indicates that the EIR should identify what mitigation measures will ensure that the transported food waste extruded from local municipal solid waste and liquid waste does not contain hazardous waste or other non-organic waste (NOP/IS p.2.6 - VII Hazards and Hazardous Materials).

The solid waste permits, govern what materials haulers can deliver to a permitted transfer stations. The managers of these permitted transfer stations then preprocess any food waste prior to delivery to the Rialto Bioenergy Facility, LLC and screen for materials gathered during collection which are outside their permit requirements. Additionally, solid waste permit holders implement measures to minimize collection of hazardous materials and other non-organics through management and education. The RBF Project will include three waste streams: municipal solid wastes (MSW), commercial food wastes and liquids. First, the food waste delivered to the plant would have been collected and handled by a permitted solid waste facility and not contain hazardous waste by service contract as well as continuous outreach and education by local waste haulers to their customers. Second, continual education and information is provided by local municipalities and waste haulers to households and generators of MSW to dispose of hazardous household waste (HHW) at designated drop off locations; this education is provided by the local, regional, and state responsible agencies as well as the Proposed Project. In addition the MSW processing system that feeds

the extruding mechanism includes a floor sort, screen, magnet, and perforated plates that do not allow large materials or contaminants into the extruder.

If HHW is found to be present in the MSW streams, the waste hauler bringing waste to the extrusion site will contact the city and waste sources to direct them not to dispose of HHW in the MSW disposal. Non-organic MSW waste would not be transported to the site as the MSW processing and extruder are designed to remove these contaminants at the transfer station upstream.

RBf will also include its own two stage process for removing any remaining non-organic contaminants from the wet fraction. The first stage uses a dynamic cyclone, or equivalent technology, to remove floatable contaminants, such as large plastics and fibers, from the stream. In the second stage of the process, after floatables are removed, the wet fraction stream would be pumped to a hydrocyclone, or equivalent technology, to remove grit including sand, dirt, rocks, and broken glass prior to entering the digester.

Finally, on-site quality control measures at the reception bins will be in place with the unloading of each truck. Each trucks received will be scheduled from an approved supplier; upon entry at a controlled gate, the truck is weighed and registered before unloading. If a supplier is found to deliver hazardous materials, there will be a series of quality assurance measures in place to respond, including fines and contract cancellation as well as reporting to the Local Enforcement Agency responsible for hazardous materials and hazardous waste disposal compliance.

The Proposed Project design would reduce the risk of collection of hazardous and non-organic materials through Project design to a less than significant level; there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-4

The comment indicates that the EIR should identify what are the maximum number of trucks per day proposed to transport food waste and liquid waste to the facility for processing. The maximum daily truck traffic totals exclude the truck trips for food waste and liquid waste. [Project Description, Section 3.5.1 - Overall Facility Operations]

The Proposed Project Draft EIR identified that truck trip totals included 43 trucks per day carrying “Feed Stock,” which included all waste streams, including “food waste and liquid waste” in addition to biosolids from the adjacent City of Rialto WWTP and other regional municipal waste water treatment plants. Therefore, “food and solid waste” maximum daily truck traffic totals were included in previous calculations. Based on the maximum daily tonnage by waste type identified below in response to comment B-5, the expected daily truck traffic totals by waste type are as follows: biosolids – 9 trucks, food waste – 29 trucks, liquid waste – 5 trucks. The daily trucks make-up identified here may change from day to day but will be less than the total trips included in the project description.

As the Proposed Project analysis included an assessment of the transport of food and liquid waste in the NOP/IS and found these truck trips to be less than significant, there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-5

The comment indicates that the EIR should identify maximum daily tonnage by waste type (i.e. biosolids, food waste, liquid waste) as parameters of operations. The comment further requests clarification as to whether source separated residential and commercial food waste was also going to be received. [Project Description, Table 3.2 - Summary of Rialto BioEnergy Facility Operations]

The Proposed Project's individual maximum daily tonnage for each waste type is as follows: biosolids – 450 tons, food waste – 800 tons, liquid waste – 200 tons. The total makeup on a daily basis will not exceed 1080 tons per day.

As the Proposed Project analysis included an assessment of the maximum daily tonnage by waste type in the NOP/IS and found these volumes to be less than significant, there are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-6

The comment indicates that the EIR should identify if the Proposed Project uses anaerobic digestion technology and will be subject to CalRecycle's In-Vessel Digestion regulatory requirements found in Title 14, California Code of Regulations (14 CCR), Chapter 3.2. The proposed activity will be regulated under a full Solid Waste Facilities Permit (SWFP) issued by the Local Enforcement Agency (LEA); and will be required to be described in the Non-Disposal Facility Element (NDFE) pursuant to Public Resources Code (PRC) Section 50001(a)(2). [Project Description, Section 3.5.2.3 – Digestion].

The Proposed Project would include compliance with: 1) CalRecycle's In-Vessel Digestion regulatory requirements found in 14 CCR, Chapter 3.2; 2) the SWFP issued by the LEA; and 3) will be described in the NDFE pursuant to PRC Section 50001(a)(2). [Project Description, Section 3.5.2.3 – Digestion]

As the Proposed Project will include compliance with CalRecycle's permitting and reporting requirements, there are no new environmental impacts. Section 3.0, Errata includes minor modifications to the Draft EIR, Section 3, Project Description to reflect these requirements. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-7

The comment indicates that the EIR should identify if the proposed operations utilize a pyrolytic conversion system, which is a type of transformation as defined in PRC Section 40201. It will be regulated under a full SWFP issued by the LEA and will be required to be described in the Countywide Siting Element (CSE) pursuant to PRC Section 50001(a)(1). The Draft EIR notes that the solids (char) will be used for land application as a soil amendment. Will any sampling requirements need to be met prior to use as a soil amendment? [Project Description, Section 3.5.2.7 – Pyrolysis]. The comment also indicates that the EIR should identify if there are any compostable material and/or digestate that goes to land application, which will need to be conducted in accordance with 14 CCR Section 17852(a)(24.5), other regulatory local, state or federal agency requirements (e.g., Regional Water Quality Control Board, California Department of Food and Agriculture), and/or disposed in accordance with applicable requirements.

The Proposed Project would include a biosolids permit with the Regional Water Quality Control Board (RWQCB) under Code of Federal Regulations Title 40, Part 503 and will be described in the CSE pursuant to PRC Section 50001(a)(1). There are no sampling requirements for biochar to be utilized for soil amendment.

As the Proposed Project will include compliance with RWQCB's and the CSE's permitting and reporting requirements, there are no new environmental impacts. Section 3.0, Errata includes minor modifications to the Draft EIR, Section 3, Project Description to reflect these requirements. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-8

The comment summarizes the requirements of the SWFP and states that the limits and restrictions need to be consistent with the project described in the Draft EIR.

See responses to comments B-2 through B-7. In addition, Section 3.0, Errata includes edits to the Draft EIR, Section 3, Project Description to include the updates to Responsible Agencies and permitting requirements. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment B-9

The comment summarizes the solid waste regulatory oversight of the San Bernardino County Department of Public Health, Division of Environmental Health Services as the LEA and CalRecycle for the Proposed Project.

See responses to comments B-2 through B-8 as well as responses to comments E-2 through E-7. In addition, Section 3.0, Errata includes edits to the Draft EIR, Section 3, Project Description to include the updates to Responsible Agencies and permitting requirements. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Letter C – South Coast Air Quality Management District, dated January 3, 2018.

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South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Letter C

SENT VIA USPS AND E-MAIL:

January 3, 2018

dcasey@rialto.ca.gov

Daniel Casey, Associate Planner
City of Rialto, Planning Division
150 South Palm Avenue
Rialto, CA 92376

Draft Environmental Impact Report (Draft EIR) for the Proposed Rialto Bioenergy Facility (RBF) Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final EIR.

SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to construct a bioenergy facility that will produce 13.38 megawatts of renewable energy from food waste, liquid waste, and municipal biosolids (Proposed Project). The Proposed Project would divert approximately 1,080 tons per day of waste from existing landfills. Based on a review of aerial photographs, the Proposed Project is bounded by industrial uses to the north, east, south, and west.

1

Air Quality and Health Risk Assessment (HRA) Analyses

In the Air Quality Section, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared them to SCAQMD's regional and localized air quality CEQA significance thresholds. The Lead Agency found that regional operational NOx emissions are significant and unavoidable. Additionally, the Lead Agency performed a HRA and found that the Maximum Exposed Individual Resident cancer risk would be 1.45 in one million which is below SCAQMD's CEQA significance threshold of 10 in one million for cancer risk¹. SCAQMD staff has concerns about the air quality and HRA analyses in the Draft EIR. The analysis utilized assumptions which have likely led to an under-estimation of the Proposed Project's health risks. Please see the attachment for more information.

2

Pursuant to the California Public Resources Code Section 21092.5 and CEQA Guidelines Section 15088, SCAQMD staff requests that the Lead Agency provide SCAQMD with written responses to all comments contained herein prior to the certification of the Final EIR.

Daniel Casey

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January 3, 2018

SCAQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Ms. Lijin Sun, Program Supervisor, CEQA IGR Section, at (909) 396-3308 if you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS:JC

SBC171122-05

Control Number

ATTACHMENT

Air Quality Analysis

1. The Lead Agency found that the Proposed Project's regional operational emissions would exceed SCAQMD's regional air quality CEQA significance threshold for NOx². However, the Lead Agency assumed that all of the Proposed Project's inbound collection trucks were not new trips because they would have traveled to another solid waste landfill even if the Proposed Project were not implemented³. The Lead Agency's finding was based on a displaced truck trip methodology that incorrectly assumed that the Proposed Project would reduce emissions by changing the distances that the collection trucks would travel. The Proposed Project would not eliminate collection truck trips that would otherwise haul materials to another waste facility. Further, there is no analysis that collection truck trips would be eliminated to support such an assumption. By excluding the emissions from collection truck trips caused directly by and attributed to the Proposed Project, the Draft EIR has likely underestimated the Proposed Project's operational emissions from collection trucks. Therefore, SCAQMD staff recommends that the Lead Agency include the emissions from collection truck trips in the Final EIR to ensure the Proposed Project's operational impacts on air quality are adequately analyzed and disclosed. 3
2. Section 3.5.1 – The reference to liquid waste should be clarified that the liquid waste is limited to expired food sauce packets or other similar waste food productions. 4
3. Section 3.5.1 – The process statement should clearly state if the biosolids which are received by the Proposed Project is already dewatered or if there is a dewatering system at the Proposed Project. 5
4. Section 3.5.1 – The process statement should clearly state that proposed facility includes its own waste water treatment system which processes the liquid food wastes, and the wet fraction from the biosolids. Additionally, the process statement should state that the waste water treatment system uses an anaerobic digestion process the liquid "food" wastes and "wet fraction". 6
5. Section 3.5.1 – The project description should state that all gases from the pyrolysis of the dried biosolids are burned in the dryers and treated by an air pollution control system. 7
6. Section 3.5.2 should be amended to address the clarifications recommended to Section 3.5.1 as discussed in Comment Nos. 2 through 5. 8
7. Table 4.2.A is missing the federal 1-hr NO2 standard of 0.1 ppm. 9
8. Table 4.5.A, Aeration Basins /Waste Water, the Lead Agency should provide additional justification for the N/A designation for criterial pollutants (VOC, in particular). 10

Health Risk Assessment (HRA)

9. The Lead Agency did not include emissions from the Aeration Basin/Waste Water operations. SCAQMD staff recommends including emissions from the operation of the Aeration Basin/Waste Water operations to accurately reflect a complete emission profile that is reasonably foreseeable for operation of the Proposed Project in the Air Quality Analysis and HRA. 11
10. The Lead Agency modeled exhaust emissions consistent with the methodology established by the San Joaquin Valley Air Pollution Control District⁴. In the SCAQMD staff's comment letter⁵ on the Proposed Project's Notice of Preparation/Initial Study (dated September 27, 2017), it was recommended that the Lead Agency use the SCAQMD's mobile source HRA Guidance when conducting a HRA for the Proposed Project. Since the Proposed Project is located within SCAQMD's jurisdiction, SCAQMD staff reiterates this recommendation that the Lead Agency review and use the SCAQMD's HRA Guidance for performing a mobile source HRA analysis for the Proposed Project⁶. 12
11. Truck travel was modeled as line sources. SCAQMD staff recommends that the Lead Agency revise the HRA using a line of volume sources that spans the entire truck travel area to ensure that impacts from are adequately analyzed. 13
12. Truck idling was modeled as a point source. SCAQMD staff recommends that the Lead Agency revise the HRA using a series of volume sources that spans the idling area to ensure that impacts are properly analyzed. 14
13. On-site idling is reasonably foreseeable. On-site idling emissions should include 15 minutes of idling to ensure that emissions from idling are properly analyzed and potential health impacts from idling are disclosed. The 15-minute idling is a more realistic representation of the idling activities and serves as a conservative estimate of impacts from idling. The 15-minute idling includes the emissions generated when entering the Proposed Project site while heading towards the dock area; idling at the dock; and the emissions generated when leaving the docks while departing from the Proposed Project. 15

Permits

14. Since permits from SCAQMD would be required for the Proposed Project, this makes SCAQMD Responsible Agency for the Proposed Project, and the Final EIR should identify SCAQMD as a Responsible Agency. Further, the Proposed Project will be required to submit complete and timely permit applications for the following equipment/systems: 16
 - a. Biosolids Dryer (2)

⁴ RBF HRA Model Inputs 101617 CEQA Final.

⁵ South Coast Air Quality Management District. September 27, 2017. Accessed at: <http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-rialtobioenergy-092717.pdf>.

⁶ Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

Daniel Casey

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- b. Pyrolysis System Burner
- c. RTO, Combustion
- d. Emergency Generator
- e. Flares (4)
- f. CHP Engine (4)
- g. Emergency Fire Pump
- h. Biogas Upgrader
- i. Receiving Units (3)
- j. Miscellaneous Foul Air Emissions Equipment (7)
- k. Biosolids Pellet/Char Loading (2)
- l. Cooling Towers
- m. Aeration Basins/Waste Water (4)

Should there be any questions on permits, please contact SCAQMD's Engineering and Permitting staff at (909) 396-2737. For more general information on permits, please visit the SCAQMD's webpage, at: <http://www.aqmd.gov/home/permits>.

Compliance with SCAQMD Rules and Regulations

15. The Final EIR should discuss how the Lead Agency will comply with other applicable SCAQMD rules and regulations, including, but are not limited to, the following:

- a. Rule 201: Permit to Construction
- b. Rule 203: Permit to Operate
- c. Rule 405: Solid Particulate Matter - Weight
- d. Rule 407: Liquid and Gaseous Air Contaminants
- e. Rule 409: Combustion Contaminants
- f. Rule 431.1: Sulfur Content of Gaseous Fuels
- g. Rule 1146: Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
- h. Rule 1147: NOx Reductions from Miscellaneous Sources
- i. Rule 1193 – Clean On-Road Residential and Commercial Refuse Collection Vehicles

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Response to Comment C-1

Comment C-1 is an introductory statement to the comment letter from the SCAQMD. The comment acknowledges the SCAQMD's receipt of the Draft EIR and states portions of the project description from the Draft EIR.

The introductory statement does not raise any new issues, specific concerns, or questions regarding the adequacy of the Draft EIR. However, this comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-2

The comment acknowledges the SCAQMD's review of the Draft EIR and that the SCAQMD has some concerns with the air quality and health risk assessment (HRA) which they detail in Comments C-3 through C-14.

The statement does not raise specific concerns. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-3

The comment summarizes that the Lead Agency found that the Proposed Project's regional operational emissions would exceed SCAQMD's regional air quality CEQA significance threshold for NO_x (Draft EIR, Section 4.8 – Significant Impacts.). The SCAQMD, however, disagrees with the Lead Agency's assumption that all of the Proposed Project's inbound collection trucks were not new trips because they would have travelled to another solid waste landfill even if the Proposed Project were not implemented (Draft EIR, Section 4.5.2 – Existing Baseline Emissions Methodology). The SCAQMD finds that the Lead Agency's finding based on a displaced truck trip methodology incorrectly assumed that the Proposed Project would reduce emissions by changing the distances that the collection trucks would travel. The SCAQMD believes the Proposed Project would not eliminate collection truck trips that would otherwise haul materials to another waste facility and that there is no analysis that collection truck trips would be eliminated to support such an assumption. The SCAQMD finds that by excluding the emissions from collection truck trips caused directly by and attributed to the Proposed Project, the Draft EIR has likely underestimated the Proposed Project's operational emissions from collection trucks. Therefore, SCAQMD staff recommends that the Lead Agency include the emissions from collection truck trips in the Final EIR to ensure the Proposed Project's operational impacts on air quality are adequately analyzed and disclosed.

. The Proposed Project would reduce emissions by changing the distances that the collection trucks would travel. The existing routes of collection of MSW and hauling to transfer stations are not impacted by the Proposed Project and, therefore, the baseline emissions with those routes are unchanged. With the implementation of the Proposed Project, the baseline hauling trips for commercial food waste would be directed from landfill disposal to RBF and baseline hauling trips for WWTP solids would be directed from land application to RBF. Both the commercial food waste and WWTP solids will provide recoverable energy for the Proposed Project.

As presented in the Draft EIR, Appendix B.3, Mobile Source Emissions, currently there are 15 truck trips a day travelling from WWTPs to designated land application sites at an average of 160 miles each way for a total of 4,800 miles per day. The WWTP sludge from those same biosolids sources would instead travel an average 52.1 miles each way from the WWTPs to the Proposed Project for a total of 1,563 miles per day. There are currently 28 truck trips a day hauling food waste from MSW from transfer stations to landfills at an average of 25.5 miles each way for a total of 1,428 miles per day. The food waste from transfer stations would instead travel an average 40.24 miles each way from the WWTPs to the Proposed Project for a total of 2,253 miles per day. Under existing conditions, trucks are hauling WWTP and food waste 6,228 miles per day to landfills; under the Proposed Project, the same trucks would be hauling the same biosolid wastes 3,816 miles. The Proposed Project would decrease regional biosolid truck hauling activity by 2,412 miles

travelled per day (6,228-3,816). The same trucks that would normally travel from transfer stations to landfills and from WWTP's to designated land applications will now travel directly to the Proposed Project.

The landfill disposal emissions for that volume of biosolids would be removed from the regional emissions inventory; the SCAQMD has not disputed those landfill emissions.

Even if the existing trucks which are currently transferring food and WWTP waste streams continued to transfer the existing waste stream at the same level of activity of 6,228 miles per day to landfills, and there was no regional reduction in truck hauling of 2,412 miles travelled per day, the Proposed Project would not exceed any new threshold over what was analyzed in the Draft EIR. Table 1, below, compares regional emissions with and without the removal of existing hauling emissions to landfills. The Proposed Project only exceeds NOx under either scenario.

Table 1: Summary of Peak Daily Operational Emissions

	NOx	VOC	CO	PM ₁₀	PM _{2.5}	SOx
<u>Summary of Gross RBF Project Emissions:</u>	135.59	<u>53.90</u>	293.72	23.41	22.91	98.39
<u>Summary of Net RBF Project daily emissions</u> (Minus existing landfill disposal emissions)	97.59	<u>52.60</u>	286.42	22.01	22.31	98.19
SCAQMD Regional Threshold	55	55	550	150	55	150
Threshold Exceeded?	YES	NO	NO	NO	NO	NO

Source: Trinity Consultants, 2017.

NOTE: The VOC emissions presented in this table are adjusted to reflect the additional 1.42 pounds per day estimated in response to Comment C-10.

While the comment expresses concerns about the methodology of summarizing Proposed Project emissions, the response supports that there are no new issues, no change in findings and no new environmental impacts or unresolved questions regarding the adequacy of the Draft EIR. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-4

The comment requests that the reference to liquid waste in Section 3.5.1 should be clarified.

Section 3.5.1 now includes the following additional explanation, "Liquid waste is limited food wastes including expired organic food sauces, pre-consumer food wastes, food processing wastes, or other similar waste from food productions or preparations including sodas, fats, oils and grease, and food manufacturing wash down." The statement does not raise new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required. Section 3.5.1 will be amended in Section 3.0 of the Final EIR, Errata.

Response to Comment C-5

The comment requests that the process statement should clearly state if the biosolids which are received by the Proposed Project is already dewatered or if there is a dewatering system at the Proposed Project.

The biosolids that will be received will be dewatered. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required. Section 3.5.1 will be amended in Section 3.0 of the Final EIR, Errata.

Response to Comment C-6

The comment requests that the process statement in Section 3.5.1 clearly state that proposed facility includes its own waste water treatment system which processes the liquid food wastes, and the wet fraction from the biosolids. Additionally, the process statement should state that the waste water treatment system uses an anaerobic digestion process the liquid “food” wastes and “wet fraction.”

The Proposed Project includes its own onsite WWTP. The anaerobic digestion process precedes the WWTP which is generating biogas to produce power from the food waste. Anaerobic digestion generates digestate (the remaining solids after digestion); that is dewatered in the centrifuges. The centrate from dewatered digestate from the centrifuge is then treated in the on-site WWTP. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required. Section 3.5.1 will be amended in Section 3.0 of the Final EIR, Errata.

Response to Comment C-7

The comment requests that the project description in Section 3.5.1 should state that all gases from the pyrolysis of the dried biosolids are burned in the dryers and treated by an air pollution control system.

All gases from the pyrolysis will be used to either heat the pyrolysis system or the solids dryers. All pyrolysis gas which is used will be controlled in the process and will include a gas conditioning system to remove pollutants. An enclosed flare will be used to control any pyrolysis gas not consumed by the pyrolysis or dryer heaters. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required. Section 3.5.1 will be amended in Section 3.0 of the Final EIR, Errata.

Response to Comment C-8

The comment requests that Section 3.5.2 should be amended to address the clarifications recommended to Section 3.5.1 as discussed in Comments Nos. C-4 through C-7.

Section 3.5.2 will be amended in Section 3.0 of the Final EIR, Errata, to reflect changes in Section 3.5.1 as discussed in Comments C-4 through C-7. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-9

The comment requests that Table 4.2.A be corrected to include the missing the federal 1-hr NO₂ standard of 0.1 ppm.

Table 4.2.A will be amended in Section 3.0 of the Final EIR, Errata, to reflect changes in response to Comment C-9. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-10

The comment requests that the Lead Agency provide additional justification for the N/A designation for criterial pollutants (VOC, in particular) in Table 4.5.A, for Aeration Basins /Waste Water.

The emissions from the aeration basins/WWTP were modeled using WATER9. The Proposed Project is including an ammonia scrubber with a 99.9% efficiency. The final emissions estimates used a 99% efficiency for a more conservative evaluation. With a 99% efficiency, the WWTP would emit 2.22 pounds per day of ammonia. The water stream will be pre-digested during the anaerobic digestion, where most of the VOCs either leave the digester as part of the biogas or are captured in dewatered digestate cake. The digestate cake will be dried in the biosolids dryer where any VOC's will volatilize and be emitted from the

dryers. All emissions from the dryers will be treated in the emission control system which includes the RTO for VOC destruction. Based on this unique facility design, the VOC emissions from the waste water are expected to be negligible.

With numerous regulations against the toxic dumping, there were no toxics estimated in the waste coming into the system. Hence, negligible volatile toxic emissions were estimated in the WWTP plant other than ammonia. The following information was used to estimate the negligible emissions of the VOC and PM. EPA's control of VOC from Industrial wastewater document (EPA-453/D/93/056, Section 2.5) indicated aqueous waste treatment from TSD facilities typically have concentrations of organics from 1 to 10 ppmv at the influent stage to the wastewater treatment plant.

Since this is principally a municipal wastewater source, it can be reasonably assumed that there is less than 0.5 ppm of VOC in the effluent stage. Under the worst-case scenario, if all the VOCs are emitted to the atmosphere through the ammonia scrubber, there would be 1.42 lbs/day of VOC emission.

Data available for VOC calculations include the following:

Estimated VOC is 0.5 ppm, which is 0.00005%
The total water going through the system is 340,006 gallons per day.
Which is $340006 \times 8.33 = 2832250$ lbs/day.

0.00005% of 2832250 = 1.42 pounds per day of VOC emission.

Although it is believed there would be negligible volatile toxics present from aeration basins, the typical air toxics based on NESHAP for POTWs (40 CFR part 63, subpart VVV) (acetaldehyde, acetonitrile, chloroform, ethylene glycol, formaldehyde, methanol, methylene chloride, tetrachloroethylene, toluene, and xylenes) were added to the HARP2 run. A conservative estimate of 100% of the 1.42 VOC emissions were assumed to be air toxics; because there were no field data, a basic analysis approach was applied; the 1.42 pounds/day was evenly divided by these NESHAP chemicals, and added to the final HARP2 run. This conservative VOC estimate of 1.42 pounds per day will be added to Tables 4.5.A, 4.7.B and 4.8.A in the Section 3.0, Errata.

The aeration is similar to sparging in a tank. The SCAQMD utilizes a standard equation to estimate sparging emissions, which is shown below for PM emissions. As a worst-case scenario, no PM emission control efficiency of the scrubber was used in the calculation.

Data available for PM calculations include the following:

Total Solids in waste stream is 194 ppm, which is 0.019%.
Surface area of the aeration tank is 4252 sq. ft.
Aeration (sparging) cfm = 1500 cfm

The calculation indicated 1.26E-05 lb/hr PM emissions. (0.000013 lb/hr)

$0.000013 \times 24 = 0.0003$ lb/day PM emissions.

These PM emissions are negligible and will not be added to Tables 4.5.A and 4.8.A in the Draft EIR.

Tables 4.5.A and 4.8.A in Section 3.0 of the Final EIR, Errata, will be amended to add 1.42 pounds per day of VOC and to reflect changes in response to Comment C-10. There are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-11

The comment points out that the Lead Agency did not include emissions from the Aeration Basin/Waste Water operations. The SCAQMD recommends including emissions from the operation of the Aeration Basin/Waste Water operations to accurately reflect a complete emission profile that is reasonably foreseeable for operation of the Proposed Project in the Air Quality Analysis and HRA.

See Response to Comment C-10. The emissions from the aeration basins/WWTP were modeled using WATER9. The Proposed Project is including an ammonia scrubber with a 99.9% efficiency. With a 99% efficiency, the WWTP would emit 2.22 pounds per day of ammonia. At 99.9% efficiency, the WWTP could emit 0.22 pounds per day of ammonia. The water stream will be pre-digested during the anaerobic digestion, where the VOCs are captured and directed to the pyrolysis system and substantially reduced from typical WWTP processes. Based on this unique facility design, the VOC emissions from the waste water are expected to be negligible; a conservative estimate of 1.42 pounds per day were derived from waste water emissions.

Although it is believed there would be negligible volatile toxics present from aeration basins, the typical air toxics based on NESHAP for POTWs (40 CFR part 63, subpart VVV) (acetaldehyde, acetonitrile, chloroform, ethylene glycol, formaldehyde, methanol, methylene chloride, tetrachloroethylene, toluene, and xylenes) were added to the HARP2 run. A conservative estimate of 100% of the 1.42 VOC emissions were assumed to be air toxics; because there were no field data, a basic analysis approach was applied; the 1.42 pounds/day was evenly divided by these NESHAP chemicals, and added to the final HARP2 run.

The Project HRA was updated based on Comments C-10 through C-15. Tables 4.5.A and 4.7.B will be amended in Section 3.0 of the Final EIR, Errata, to reflect changes in response to Comment C-10 through C-15. There are no substantial changes to the significance of the health risk impacts and no new environmental effects. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-12

The comment points out that the Lead Agency modeled exhaust emissions consistent with the methodology established by the San Joaquin Valley Air Pollution Control District. In the SCAQMD staff's comment letter on the Proposed Project's Notice of Preparation/Initial Study (dated September 27, 2017), it was recommended that the Lead Agency use the SCAQMD's mobile source HRA Guidance when conducting a HRA for the Proposed Project. Since the Proposed Project is located within SCAQMD's jurisdiction, SCAQMD staff reiterates this recommendation that the Lead Agency review and use the SCAQMD's HRA Guidance for performing a mobile source HRA analysis for the Proposed Project.

The Project HRA was updated based on Comment C-12. Tables 4.5.A and 4.7.B will be amended in Section 3.0 of the Final EIR, Errata, to reflect changes in response to Comment C-12. There are no substantial changes to the significance of the health risk impacts and no new environmental effects. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-13

The comment points out that truck travel was modeled as line sources. SCAQMD staff recommends that the Lead Agency revise the HRA using a line of volume sources that spans the entire truck travel area to ensure that impacts are adequately analyzed.

The Project HRA was updated based on Comment C-13, and as requested, the SCAQMD guidelines for mobile sources were applied to modeling emissions from truck idling and truck movement. Truck idling emissions were modeled as a single volume source. Truck movement emissions were modeled as a line of volume sources. Tables 4.5.A and 4.7.B will be amended in Section 3.0 of the Final EIR, Errata, to reflect

changes in response to Comment C-13. There are no substantial changes to the significance of the health risk impacts and no new environmental effects. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-14

The comment points out that truck idling was modeled as a point source. SCAQMD staff recommends that the Lead Agency revise the HRA using a series of volume sources that spans the idling area to ensure that impacts are properly analyzed.

The Project HRA was updated based on Comment C-14; truck idling was modeled as a point source. Tables 4.5.A and 4.7.B will be amended in Section 3.0 of the Final EIR, Errata, to reflect changes in response to Comment C-10. There are no substantial changes to the significance of the health risk impacts and no new environmental effects. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-15

The comment points out that on-site idling is reasonably foreseeable. On-site idling emissions should include 15 minutes of idling to ensure that emissions from idling are properly analyzed and potential health impacts from idling are disclosed. The 15-minute idling is a more realistic representation of the idling activities and serves as a conservative estimate of impacts from idling. The 15-minute idling includes the emissions generated when entering the Proposed Project site while heading towards the dock area; idling at the dock; and the emissions generated when leaving the docks while departing from the Proposed Project.

The Project HRA was updated based on Comment C-15 to include 15-minute on-site idling. Tables 4.5.A and 4.7.B will be amended in Section 3.0 of the Final EIR, Errata, to reflect changes in response to Comment C-15. There are no substantial changes to the significance of the health risk impacts and no new environmental effects. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment C-16

The comment points out that since permits from SCAQMD would be required for the Proposed Project, this makes SCAQMD Responsible Agency for the Proposed Project, and the Final EIR should identify SCAQMD as a Responsible Agency. Further, the Proposed Project will be required to submit complete and timely permit applications for the following equipment/systems.

RBF has already submitted its air permit applications for SCAQMD in late 2017. There are no new environmental effects. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

**Letter D – San Bernardino County Department of Public Works, dated
December 22, 2017.**

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825 East Third Street, San Bernardino, CA 92415-0835 | Phone: 909.387.7910 Fax: 909.387.7876



Department of Public Works

- Flood Control
- Operations
- Solid Waste Management
- Surveyor
- Transportation

Kevin Blakeslee, P.E.
Director

Letter D

Transmitted Via Email

December 22, 2017

City of Rialto
Daniel Casey, Associate Planner
150 S. Palm Avenue
Rialto, CA. 92376

File: 10{ENV}-4.01

RE: CEQA – NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT FOR THE BIOENERGY FACILITY FOR THE CITY OF RIALTO

Dear Mr. Casey:

Thank you for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. We received this request on November 22, 2017 and pursuant to our review, the following comments are provided:

Permits/Operations Support Division (Melissa Walker, Chief, 909-387-7995):

1. Since this project is near the San Bernardino County Flood Control District's (District) Rialto Channel facility, any work affecting the right-of-way would need a Flood Control Permit. If these permits are required, their necessity and any impacts associated with the construction should be addressed in the DEIR prior to adoption.

We respectfully request to be included on the circulation list for all project notices, public reviews, or public hearings. In closing, I would like to thank you again for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. Should you have any questions or need additional clarification, please contact the individuals who provided the specific comment, as listed above.

Sincerely,

Michael R. Perry
Supervising Planner
Environmental Management

MRP:PE:sr
Email dcasey@rialto.ca.gov

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Gary McBride
Chief Executive Officer

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Response to Comment D-1

The comment states that since the project is near the San Bernardino County Flood Control District's (District) Rialto Channel Facility, any work affecting the right-of-way would need a Flood Control Permit. The comment further states that if these permits are required, their necessity and any impacts associated with the construction should be addressed in the DEIR prior to adoption.

RBF has identified the San Bernardino County Flood Control District as a Responsible Agency, in the event that any work affecting the right-of-way would need a Flood Control Permit. The Proposed Project is not designed to encroach in the Rialto Channel Facility during operations or construction. If some unplanned event arises which requires encroachment in the Rialto Channel Facility, RBF will work with the San Bernardino County Flood Control District to avoid or minimize any adverse effects. There are no new environmental effects. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment D-2

The comment requests that the San Bernardino County Flood Control District be included on the project circulation list for public notices, reviews and hearings.

The San Bernardino County Flood Control District is now part of the Proposed Project notification list as a commenter on the Draft EIR. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

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**Letter E – San Bernardino County Department of Public Health Environmental
Health Services, dated January 3, 2018.**

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385 N. Arrowhead Avenue, 2nd Floor, San Bernardino, CA 92415 | Phone: 800.442.2283 Fax: 909.387.4323

**Public Health
Environmental Health Services**

Trudy Raymundo
Director
Corwin Porter, MPH, REHS
Assistant Director
Maxwell Ohikhuare, MD
Health Officer
Josh Dugas, REHS
Division Chief

January 3, 2018

Letter E

Daniel Casey
City of Rialto
150 South Palm Avenue
Rialto, CA 92376

SUBJECT: Draft Environmental Impact Report (DEIR) Comments for the Rialto Bioenergy Facility

Dear Mr. Casey,

San Bernardino County Local Enforcement Agency (LEA) received the Draft Environmental Impact Report (DEIR) for Rialto Bioenergy Facility, Rialto, California.

PROJECT DESCRIPTION

The project proposes to produce 13.38 MW is equivalent electricity of renewable energy from up to 1,080 tons per day of a combination of food waste, liquid waste, and municipal biosolids. The renewable energy will be produced in the form of electricity (3.0 MW) used for sale to Southern California Edison through the BioMAT program and biogas upgraded for delivery to the Southern CA Gas Company (8.2 MW of equivalent power) for use in offsite power generation and vehicle fuels. The proposed project will use up to 2.15 MW of equivalent power on site for its operations and will also capture adjacent City of Rialto wastewater treatment plant biogas and upgrade it for delivery to Southern CA Gas Company.

COMMENTS

Site Activities

It is mentioned that the site will be operational 24 hours a day, seven days per week and that material reception will be for 16 hours per day, 6 days per week. Is it known what days and hours the site will be open to receive materials?

There is no mention of storage times for the material on-site. For odor purposes, the LEA would be interested in knowing how long the food and biosolid materials would be stored on-site prior to being used.

Is there a breakdown available of approximate daily tonnages for each type of material received daily (waste type)? On the flow chart, Figure 3.8: Process Flow Schematic, it says the wet fraction will be 800 TPD max and the WWTP Cake will be 450 TPD max which is a total of 1250 TPD and in 3.5.1 Overall Facility Operations 1,080 tons per day of material will be used. Additionally, it would be helpful if

**Rialto Bioenergy Facility Project
Final Environmental Impact Report**

Rialto Bioenergy Facility DEIR
January 3, 2018
PAGE 2 of 3

clarification were provided on an estimated amount of each material being used for anaerobic digestion and pyrolysis daily.

In the truck traffic breakdown it mentions 43 biosolids feedstock, 1 biochar pellets, 1 chemicals/polymer materials delivery and waste pick-up, and 2 general supplies delivery. What about food waste feedstock?

5

Permitting Requirements

The County of San Bernardino, Environmental Health Division, Local Enforcement Agency (LEA) and CalRecycle are responsible for providing regulatory oversight of solid waste handling activities, including composting operations/facilities, in vessel digestion operations and facilities relative to permitting and inspections. The permitting and regulatory requirements for these operations and facilities are contained in Title 14, California Code of Regulations (14 CCR) and Title 27, CCR.

6

The proposed project is for operation of Rialto Bioenergy Facility, LLC, located at 503 E. Santa Ana Avenue. This facility is currently permitted by the LEA as a Large Volume Transfer/Processing Facility with a maximum throughput of 1,080 tons per day, however no solid waste activity has been observed at the site since approximately August of 2013. Based on the presented data, the project would require a permit for the anaerobic digestion and pyrolysis processes.

7

The applicant will need to work with the LEA to comply with 14 CCR and 27 CCR. Please contact the LEA to discuss permit requirements for the project. The LEA contact for this project is myself, Jessica Duron. I can be reached at 909-693-2262 or by e-mail at Jessica.Duron@dph.sbcounty.gov.

8

For your consideration, below is a link to a CalRecycle document detailing the requirements for EMSW Conversion Facility Guidelines, which may be useful during the permitting process for this facility.

<https://www2.calrecycle.ca.gov/Docs/106235>

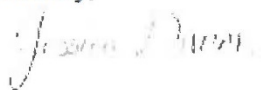
CONCLUSION

LEA staff thanks the Lead Agency for the opportunity to review and comment on this environmental document and hopes that this comment letter will be useful to the Lead Agency in carrying out their responsibilities in the CEQA process.

LEA staff requests copies of 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 (909) 693-2262 or by e-mail at Jessica.Duron@dph.sbcounty.gov.

Sincerely,



Jessica Duron, REHS
Environmental Health Specialist I, LEA Program

cc:

Virginia Rosales, CalRecycle (Virginia.rosales@calrecycle.ca.gov)

Rialto Bioenergy Facility DEIR
January 3, 2018
PAGE 3 of 3

Dianne Ohiosumua, CalRecycle (Dianne.ohiosumua@calrecycle.ca.gov)
Cindy Li, Santa Ana River Basin Regional Water Quality Control Board (Cindy.Li@waterboards.ca.gov)
Diana Almond, San Bernardino County LEA (Diana.Almond@dph.sbcounty.gov)

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Response to Comment E-1

Comment E-1 is an introductory statement to the comment letter from the County of San Bernardino, Environmental Health Division, Local Enforcement Agency (LEA) and summarizes portions of the Project Description from the Draft EIR.

The introductory statement does not raise any new issues, specific concerns, or questions regarding the adequacy of the Draft EIR. However, this comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment E-2

The comment states that the Draft EIR indicates that the site will be operational 24 hours a day, seven days per week and that material reception will be for 16 hours per day, 6 days per week. The comment asks if it is known what days and hours the site will be open to receive materials?

As stated in Section 3.5.1 of the Draft EIR, for the purposes of the Draft EIR analysis trucking activities were assumed to be for 7 days per week during 16 hours per day. The exact schedules are not yet known, but expected to be 16 hours per day 6 days per week. The assessment in the Draft EIR covered the most conservative scenario with truck activities analyzed for 7 days per week. This comment and response does not raise any new issues, specific concerns, or questions regarding the adequacy of the Draft EIR. However, this comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment E-3

The comment states that there is no mention of storage times for the material on-site. For odor purposes, the LEA would be interested in knowing how long the food and biosolid materials would be stored on-site prior to being used.

Materials will be continuously received and transferred to enclosed storage silos while en route to the anaerobic digester tanks. The holding times would be limited to a few hours per day as the waste stream materials are continuously processed in a 24 hour per day bioenergy facility. The facility will be operating a foul air collection system and ammonia scrubbers to ensure odor control; see also response to Comment B-2. Given the foul air collection system and ammonia scrubbers, low residence times in the reception area, and distance from any sensitive receptors, any foul odors are expected to be contained and combusted to a less than significant level. There are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment E-4

The comment requests additional information on the breakdown available of approximate daily tonnages for each type of material received daily (waste type). The comment asks that clarification be provided on the estimated amount of each material being used for anaerobic digestion and pyrolysis daily.

The maximum values on the Process Flow Diagram are to provide an indication as to what the process is being designed for in the event that either the WWTP plan cake or Wet fraction feed is lower than the normal values indicated or if a surge in either feed occurs in a given day. The plant normally expects to operate at 700 TPD wet fraction feed and 180 TPD WWTP cake feed and will not exceed more than 1080 TPD of total solids feed as dictated by the existing solid waste facility permit. See also response to Comment B-5.

As the waste steam materials would be being continuously processed 24 hours per day for 7 days per week, it is reasonable that approximately 1,080 tons would be used for anaerobic digestion and pyrolysis daily.

There are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment E-5

The comment requests additional information on truck traffic breakdown and about food waste feedstock.

The “biosolids feedstock” includes feed stock from WWTP and food sources. Of the 43 truckloads a day of feed stock, it is anticipated that 28 of those trucks would come from food sources. There are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment E-6

The comment summarizes the permitting requirements with the LEA as follows: The County of San Bernardino, Environmental Health Division, LEA and CalRecycle are responsible for regulatory oversight of solid waste handling activities, including composting operations/facilities, in vessel digestion operations and facilities relative to permitting and inspections. The permitting and regulatory requirements for these operations and facilities are contained in Title 14, CCR and Title 27, CCR.

Section 3.8 of the Draft EIR presents the Required Actions and Permits for the Proposed Project. This section is being updated to include the specific details in Comment E-6 through Section 3.0, Errata of the Final EIR. There are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment E-7

The comment states that the Proposed Project is for operation of Rialto Bioenergy Facility, LLC, located at 503 E. Santa Ana Avenue. This facility is currently permitted by the LEA as a Large Volume Transfer/Processing Facility with a maximum throughput of 1,080 tons per day, however no solid waste activity has been observed at the site since approximately August of 2013. Based on the presented data, the project would require a permit for the anaerobic digestion and pyrolysis processes.

Section 3.8 of the Draft EIR presents the Required Actions and Permits for the Proposed Project and will be updated to include the permit for the anaerobic digestion and pyrolysis processes. This section is being updated to include the specific details in Comment E-6 through Section 3.0, Errata of the Final EIR. There are no new environmental impacts. This comment is noted and will be provided to the Planning Commission and City Council for consideration. No further response is required.

Response to Comment E-8

The comment states that the applicant will need to work with the LEA to comply with 14 CCR and 27 CCR and provides a contact.

This comment is noted and will be provided to the Planning Commission and City Council for consideration. There are no new environmental impacts. No further response is required.

Response to Comment E-9

The comment provides a link to a CalRecycle document detailing the requirements for EMSW Conversion Facility Guidelines.

This comment is noted and will be provided to the Planning Commission and City Council for consideration. There are no new environmental impacts. No further response is required.

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3.0 ERRATA TO DRAFT EIR

3.1 INTRODUCTION

As provided in Section 15088(d) of the California Environmental Quality Act (CEQA) Guidelines, responses to comments may take the form of a revision to the text in the body of the Environmental Impact Report (EIR) or contained in marginal notes showing the information is revised in the response to comments. This section complies with the latter and provides changes to the Draft EIR presented in strikethrough text (i.e., ~~strikethrough~~) signifying deletions and double underline (i.e., double underline) signifying additions. These notations are meant to provide clarification, corrections, or minor revisions as needed as a result of public comments, because of changes in the project since the release of the Draft EIR, or correction of minor typographical errors found in the text from the Draft EIR as required by Section 15132 of the *CEQA Guidelines*. None of the corrections and additions constitutes significant new information or substantial project changes requiring recirculation as defined by Section 15088.5 of the *CEQA Guidelines*.

3.2 CHANGES TO THE DRAFT EIR

Changes to the Draft EIR are required based on the responses to comments. These changes include:

- Changes to the Draft EIR, Section 3.0 Project Description, including
 - o 3.5.1 Overall Facility Operations,
 - o 3.5.2 Process Description, and
 - o 3.8.3 Other Required Actions.
- Changes to the Draft EIR, Section 4.0 Air Quality and Greenhouse Gases, including,
 - o Table 4.2.A Ambient Air Quality Standards,
 - o Table 4.5.A Stationary Sources Emissions Methodology,
 - o Table 4.7.A Predicted Ambient Air Quality Impacts, and
 - o Table 4.7.B Long-Term Health Risk Levels from Proposed Project Operations.

The changes (added text in double underline; deleted text with ~~strikethrough~~) are shown in the indented text as follow:

Draft EIR, Section 3.0, Project Description, 3.5.1 Overall Facility Operations, page 3-13:

3.5.1 Overall Facility Operations

3.5.1 Overall Facility Operations

RBF will produce 13.38 MW electrical equivalent of renewable energy from up to 1,080 tons per day of a combination of food waste extracted from municipal waste streams, liquid waste, and municipal biosolids and biogas captured from the adjacent WWTP. When fully operational, the Proposed Project will convert up to 700 tons per day (TPD) of food waste extruded from local municipal solid waste (MSW) into 5.15 MW of electrical power from biogas. Three MW of this power would be sold to SCE via the BioMAT Power Purchase Agreement, with the balance used in powering the RBF on-site loads. An additional 8.2 MW of electrical equivalent in the form of biogas would be injected into the local natural gas pipeline, which would include up to 1,400 standard cubic feet per minute (scfm) of biomethane. Previously referenced Figure 3.2 illustrates the conceptual site plan for the Proposed Project.

Liquid waste is limited food wastes including expired organic food sauces, pre-consumer food wastes, food processing wastes, or other similar waste from food productions or preparations including sodas, fats, oils and grease, and food manufacturing wash down. The biosolids that will be received will be previously dewatered. All gases from the pyrolysis will be used to either heat the pyrolysis system or the solids dryers. All pyrolysis gas which is used will be controlled in the process and will include a gas conditioning system to remove pollutants. An enclosed flare will be used to control any pyrolysis gas not consumed by the pyrolysis or dryer heaters.

In addition to the anaerobic digestion process, the facility will include solids dryers to allow for drying of dewatered sludge cake from the digestion process. The drying system will be sized to allow for reception and drying of up to 300 TPD of onsite dewatered digestate and dewatered sludge from regional wastewater treatment plants. Dried material from the solids dryers will undergo pyrolysis to allow for generation of a pyrolysis oil to be introduced into the Anaerobic Digesters. This oil will assist in additional biogas production as well as gas for use in heating of the solids dryers. The pyrolyzed char will be shipped off site via truck for land application.

The Proposed Project includes its own WWTP. The anaerobic digestion process precedes the WWTP which is generating biogas to produce power from the food waste. Anaerobic digestion generates digestate (the remaining solids after digestion); that is dewatered in the centrifuges. The centrate from dewatered digestate from the centrifuge is then treated in the on-site WWTP.

The facility will be operating 24 hours a day, seven days per week for biogas production and drying operations. The materials reception will be for 16 hours per day, 6 days per week. For this analysis, trucking activities are therefore assumed to occur 16 hours per day, 7 days per week. The facility would operate with up to 13 employees. Daily truck traffic would include 47 in-bound trips as follows: 43 biosolids feedstock, 1 biochar pellets, 1 chemicals/polymer materials delivery and waste pick-up, and 2 general supplies delivery.

A summary of the proposed operations is provided in Table 3.2.

Table 3.2: Summary of Rialto Bioenergy Facility Operations

Parameter	Proposed Project
Char Production (TPD)	27
Dry Biosolids Pellets (TPD)	76
Pyrolysis Gas Production (scfm)	11,752
Biogas Production (scfm)	
Digesters	3,069
Rialto WWTP	200
Biogas Utilization (scfm)	
CHP Engines	1,260
Upgrading	2,010/2,340 (avg/max)
Pipeline (Biomethane)	1,203/1,400 (avg/max)
Electricity Consumption (kWh)	30,660,000
Electricity Generation (MW)	5.15
Natural Gas Consumption (scfh)	8,300
Water (GPD)	
Potable	29,728
Plant Water	41,015
Wastewater (GPD)	
Average	196,819
Maximum	310,000
Truck Activity Per Day	
Inbound	47
Outbound	47
TOTAL	94
Number of Employees	13

Source: Rialto Bioenergy Facility, 2017.

Draft EIR, Section 3.0, Project Description, 3.5.2 Process Description, page 3-13:

3.5.2 Process Description

3.5.2.1 Receiving

Food waste extruded from local solid waste (wet fraction) and dewatered sludge from municipal wastewater treatment facilities will be trucked to the site and unloaded into receiving bins containing live bottom screws. From the receiving bins, both the wet fraction and dewatered sludge will be pumped to storage silos.

Liquid food waste is limited to expired organic food sauces or other similar waste food productions including sodas, fats, oils and grease, and food manufacturing wash down. The biosolids that will be received will be previously dewatered.

3.5.2.2 Processing

From the storage silo, the wet fraction will be polished to remove any remaining contaminants in a two-stage process. The first stage uses a dynamic cyclone to remove floatable contaminants, such as large plastics and fibers, from the stream. These removed contaminants will be disposed of at the local municipal landfill through weekly waste hauler trips.

In the second stage of the process, after floatables are removed, the wet fraction stream would be pumped to a hydrocyclone, or equivalent technology, to remove grit including sand, dirt, rocks, and broken glass prior to entering the digester. This separated grit will be cleaned and picked up by a waste hauler to be disposed of at a Construction and Demolition (C&D) landfill or recycled.

If there is not sufficient wet fraction, the facility has the capability of receiving liquid food wastes for treatment in the anaerobic digesters. The liquid waste receiving process will consist of a screen and conditioning skid to remove contaminants that might be in the liquid waste. There will be a storage tank onsite to meter the food material directly into the digesters.

3.5.2.3 Digestion

Two 3.5 million gallon water level anaerobic digester tanks will perform the controlled anaerobic digestion of the wet fraction and pyrolysis oil. The tanks will be constructed of either concrete or steel. Wet fraction loaded to the digesters will be converted into biogas. In addition to the biogas produced in the digesters, the plant may receive biogas from the Rialto WWTP that is currently flared with no beneficial reuse. Primary use of the biogas is for renewable energy production. The two digesters will have a total of three emergency flares to be used during plant start-up, power loss, or other unplanned interruptions to safely dispose of the biogas.

3.5.2.4 Biogas Conditioning

From the digesters, biogas will undergo conditioning to remove contaminants to meet the requirements of all applicable equipment specifications, air permits, and pipeline injection requirements. Hydrogen sulfide (H_2S) removal will occur in two caustic scrubbers (or equivalent technology) to reduce H_2S content for applications downstream. The caustic scrubbers will use biological regeneration of the caustic to minimize chemical consumption. Biogas will then be directed into the gas conditioning system for the combined heat and power cogeneration (CHP) engines and to the biomethane upgrading system (BUG). The CHP biogas conditioning system will perform additional removal of H_2S , moisture, and other volatile compounds to meet engine fuel quality requirements before combustion for power generation. Each CHP engine will be outfitted with emission controls to meet all requirements of the South Coast Air Quality Management District (SCAQMD) and Best Available Control Technology (BACT). The Proposed Project will generate up to 5.15 MW of renewable energy, with 3 MW being sold to the electrical grid and 2.15 MW being used to provide power to the facility. In addition to providing electricity through the combustion of biogas, the CHP system will produce usable waste heat which will be used in the drying process described below. The efficiency of the CHP system will be over 80%. The balance of the biogas will be delivered to the BUG, where the biogas will be conditioned to remove carbon dioxide and any other contaminants to meet pipeline specifications before injection into the local natural gas distribution system. Southern California Gas Company and Public Utility Commission Rule 30 govern the biomethane quality and additionally continuous monitoring of the gas will be done by the gas utility.

3.5.2.5 Dewatering

After digestion of the remaining solids in the digester, the product, known as digestate, will be pumped to horizontal decanters for dewatering. In the decanter, solids will be separated from the liquids by centrifugal force and a dewatered cake will be generated. Liquids separated in the decanter, or centrate, will be collected in a tank and pumped to the wastewater equalization tank prior to treatment.

Dewatered cake from the centrifuges and biosolids from local wastewater treatment facilities received and stored in the second storage silo will be dried. The dryer will use a combination of on-site sources for heating, including direct engine exhaust from the CHPs, jacket water recovered from the CHPs, and a burner that will utilize pyrolysis gas. Biogas and natural gas will be available as backup sources of heat for drying. Cake in the dryer will be dried from 24% solids to greater than 90 percent solids, with each dryer rated for 4.95 ton per hour (TPH) of evaporation capacity.

3.5.2.6 Emission Control Systems

Exhaust from the dryers will be treated to meet emission requirements prior to discharge into the atmosphere. The emission control system will consist of a condenser for removal of solids and cooling of the exhaust, an acid scrubber for removal of ammonia, a regenerative thermal oxidizer for destruction of

volatile organic compounds (VOCs), and a sulfur oxides (SOx) scrubber for removal of sulfur compounds before exhaust to the atmosphere. In addition to the dryer exhaust, all foul air from odor control at the site will be treated in the above emission control system. This uses the foul air as makeup air for the dryer, minimizing the size of the emission control equipment. The treatment of the dryer exhaust will generate additional wastewater as the hot dryer exhaust is condensed to remove moisture from the air. This wastewater will be sent to the wastewater equalization tank.

The Proposed Project includes its own WWTP. The anaerobic digestion process precedes the WWTP and is creating gas to generate power from the food waste and generates digestate; this is dewatered in the centrifuges. The centrate from dewatered digestate from the digesters is then treated in the on-site WWTP.

The WWTP will collect all wastewater from the facility for treatment prior to discharge to the Inland Empire Brine Line (IEBL). The WWTP will consist of an activated sludge basin and solids separation using a clarifier or membrane system. The plant will reuse a portion of treated wastewater for dilution instead of using potable or recycled water at the WWTP.

3.5.2.7 Pyrolysis

Dried solids from the dryers will be delivered to a pyrolysis system. In the pyrolysis system, the solids will be heated to high temperatures in the absence of oxygen, further recovering available energy locked inside the material. The pyrolysis system will produce three products: 1) a condensable oil which will be fed back to the digesters, increasing biogas output; 2) a non-condensable gas that will be used to heat the pyrolysis system and provide additional heat to the dryer; and 3) a char consisting of ash and fixed carbon. All gases from the pyrolysis will be used to either heat the pyrolysis system or would be burned in the solids dryers. All gas will be burned in the process and will include a gas conditioning system to remove pollutants. The pyrolysis system has a storage tank and emergency flare that will operate if needed to ensure proper disposal of the pyrolysis gas at all times. Char from the second stage will be stored in a silo and will be trucked from the facility for land application as a soil amendment.

There will be approximately 1,080 wet tons (260 dry tons) per day of material that enter the facility and only 25 tons per day of material leaving by truck. This is over 90 percent reduction in dry mass, with almost 100% reuse of all products. In addition, any wastewater discharged will eventually reach the Orange County Sanitation District, which currently recycles roughly half of its influent wastewater.

The Proposed Project also includes an emergency backup generator for powering the gas safety equipment in the event of loss of facility power.

A list of equipment used in the process is summarized in Table 3.3 below. Figure 3.8 depicts the process flow for the Rialto Bioenergy Facility at a schematic level.

Table 3.3: Major Facility Equipment

Service / Name:	New (N) / Existing (E)	Rated Capacity
RECEIVING		
Biosolids Receiving Unit #1 (WWTP Cake)	E	86 yd ³
Biosolids Receiving Unit #2 (Wet Fraction)	E	86 yd ³
Biosolids Receiving Unit #3 (Wet Fraction & WWTP Cake)	N	86 yd ³
WWTP Cake Transfer Pump	N	60 TPH
Wet Fraction Transfer Pump	N	60 TPH
Wet Fraction /WWTP Cake Transfer Pump	N	60 TPH
Wet Fraction Storage Silo	E	1,125 tons
WWTP Cake Storage Silo	E	1,125 tons
PROCESSING		
Cake Blend Bin	E	30 yd ³

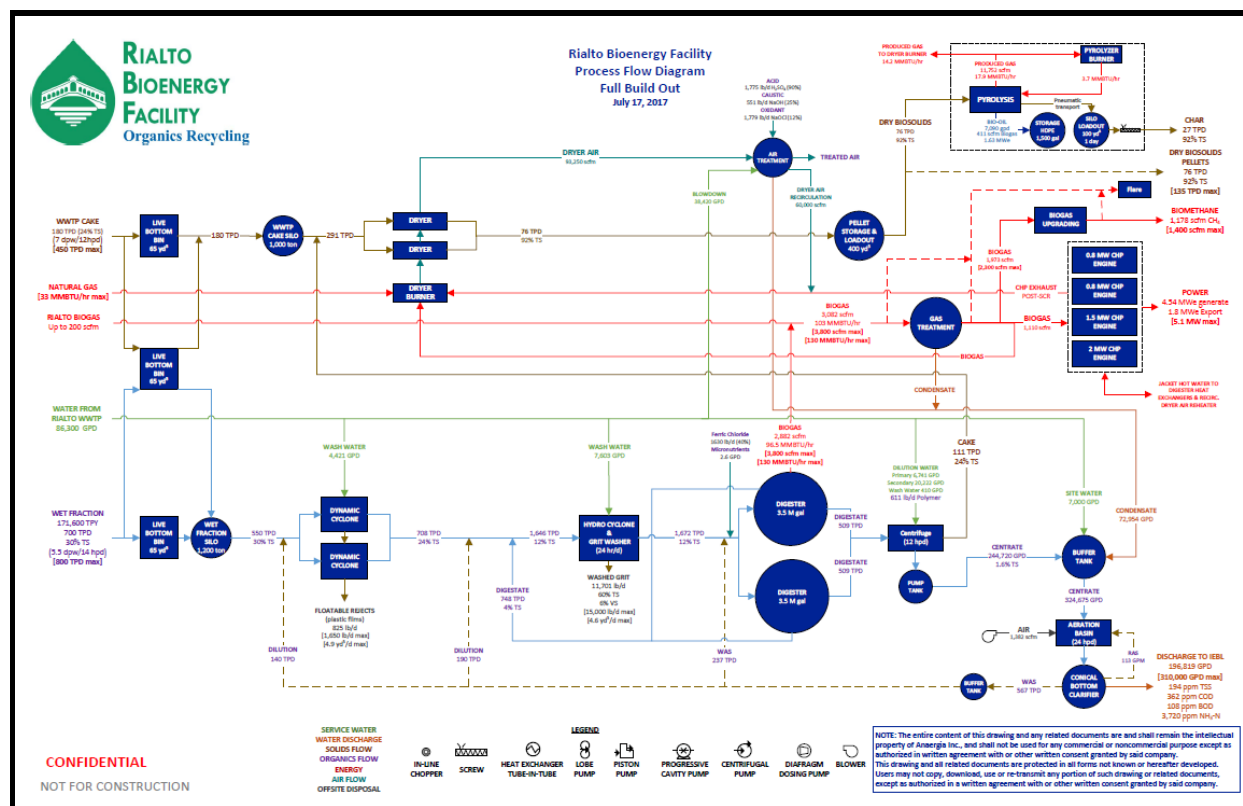
Table 3.3: Major Facility Equipment

Service / Name:	New (N) / Existing (E)	Rated Capacity
HP Biosolids Feed Pump #1	E	60-80 GPM
HP Biosolids Feed Pump #2	E	60-80 GPM
Dynamic Cyclone #1	N	140 GPM
Dynamic Cyclone #2	N	140 GPM
Hydrocyclone	N	735 GPM
DIGESTION		
Anaerobic Digester #1 + Four Electrical Mixers	N	3.5 M GAL
Anaerobic Digester #2 + Four Electrical Mixers	N	3.5 M GAL
Three Emergency Flares	N	40 MMBTU/hr each, total flare heat load of 120 MMBTU/hr
Digestate Heat Exchanger #1	N	1,200 kW
Digestate Heat Exchanger #2	N	1,200 kW
DEWATERING		
Centrifuge #1	E	240 gpm
Centrifuge #2	E	240 gpm
Bulk Bag Mixing (Polymer Tank Feed)	E	
Centrifuge Polymer Tank #1	E	750 GAL
Centrifuge Polymer Tank #2	E	750 GAL
Centrifuge Cake Bin (Recycle Bin)	E	60 yd ³
Centrifuge Centrate Tank	E	5,600 GAL
Biosolids Drier #1	N	16.5 MMBTU/hr
Biosolids Drier #2	N	16.5 MMBTU/hr
Pneumatic Transporter Package	E	
Solids Storage Silo & Loadout	E	900 yd ³
BIOGAS CONDITIONING		
Biogas Upgrading System	N	1,400 scfm RNG
Biological H ₂ S Treatment System #1	N	1,900 scfm
Biological H ₂ S Treatment System #2	N	1,900 scfm
H ₂ S Scrubber Vessel	N	1,500 scfm
Biogas Compression & Dehumidification System	N	1,500 scfm
Glycol Chiller	N	
Siloxane Scrubber Vessels	N	1,500 scfm
CHP Unit #1	N	800 kW
CHP Unit #2	N	800 kW
CHP Unit #3	N	1,550 kW
CHP Unit #4	N	2,000 kW
Cooling Tower	E	43 MMBTU/hr
Cooling Tower	E	
Cooling Tower	E	
Biosolids Feed Hopper	N	
PYROLYSIS		
Pyrolysis System	N	3.2 TPH solids feed 10.5 MMBTU/hr burner 11,944 SCFM pyrolysis gas 1.1 TPH char
Pyrolysis Oil Tank	N	7,300 gallons
Emergency Flare	N	27 MMBTU/hr
Pyrolysis Gas Storage Tank	N	
Char Storage Silo & Loadout	N	900 yd ³
WASTEWATER TREATMENT		
WWTP Buffer Tank	N	217,000 GAL
Aeration Basin	N	
Aeration Blower	N	
Clarifier	N	
WAS Buffer Tank	N	30,000 GAL

Table 3.3: Major Facility Equipment

Service / Name:	New (N) / Existing (E)	Rated Capacity
EMISSIONS CONTROL		
Ammonia Scrubber	N	30,000 CFM
Acid Holding Tank	N	5000 GAL
Acid Dosing Tank	N	
RTO	E	30,000 CFM
SOx Scrubber	E	30,000 CFM
Caustic Holding Tank	N	5000 GAL
Emergency Generator	N	500kW

Figure 3.8: Process Flow Schematic



Draft EIR, Section 3.0, Project Description, 3.8.3 Other Required Actions, page 3-23:

3.8.3 Other Required Actions

CEQA Guidelines require that the City, to the extent the information is known, include a list of the agencies that are expected to use the CEQA document in their decision-making processes, a list of permits and other approvals required to implement the Proposed Project, and a list of related environmental review/consultation requirements established by Federal, State, or local law, regulation and/or policy. Based on the project as proposed, the additional actions that may be required include, but are not limited to, those outlined below.

- **U.S. Department of Energy:** RBF has applied for federal funding from DOE. DOE may reference this CEQA document during preparation of its NEPA review.
- **California Energy Commission:** The facility will require approval from the California Energy Commission (CEC) regarding the Proposed Project process and completion timeline to receive anticipated grant money for the Proposed Project. The CEC also has responsibility of reviewing and licensing energy facilities in California.
- **CalRecycle:** The facility will require permitting and regulatory oversight of solid waste handling activities, including composting operations/facilities, in vessel digestion operations and facilities relative to permitting and inspections. The permitting and regulatory requirements for these operations and facilities are contained in Title 14, CCR and Title 27, CCR.
- **Rialto Water Services:** The City of Rialto previously issued an Industrial User Wastewater Discharge Permit #2008-07 to EnerTech. RBF will update this Industrial User Wastewater Discharge Permit #2008-07 with City of Rialto, Water Services. A Water Quality Management Plan will also be prepared subject to approval by the City of Rialto.
- **Santa Ana Regional Water Quality Control Board:** An existing storm water plan was previously approved for the site. RBF has been discharging storm water under the existing storm water plan since acquisition of the site. The storm water permit will require an update to ensure that the storm water plan accounts for all flows in the final design of the site. The Proposed Project would include a biosolids permit with the RWCQB under Code of Federal Regulations Title 40, Part 503 and will be described in the CSE pursuant to PRC Section 50001(a)(1). Since the project will include compostable material and/or digestate that will go to land application, this operation will need to be conducted in accordance with 14 CCR Section 17852(a)(24.5), other regulatory local, state or federal agency requirements.
- **South Coast Air Quality Management District:** RBF will apply to the SCAQMD for an Authority to Construct (ATC) permit as a facility that will generate regulated airborne emissions; SCAQMD will authorize construction of new equipment for the facility. The existing permits have been transferred to RBF. The only new ATC permit will be associated with the proposed digestion and power generation. RBF already holds a Permit to Operate (PTO) for the existing facility; RBF will require only an update of that existing permit. The existing PTO authorizes the facility to operate as a regulated emissions source. The existing PTO will be modified to reflect anticipated emissions from the updated facility, in accordance with emissions thresholds set in the ATC for the new equipment. RBF must also comply with all applicable SCAQMD rules and regulations including (but not limited to) those listed below.
 - o Rule 201: Permit to Construct
 - o Rule 203: Permit to Operate
 - o Rule 212: Standards for Approving Permits
 - o Rule 301: Permitting and Associated Fees
 - o Rule 401: Visible Emissions
 - o Rule 402: Nuisance
 - o Rule 404: Particulate Emissions
 - o Rule 1303: New Source Review Requirements
 - o Rule 1401: New Source Review of Toxic Air Contaminants
 - o Rule 1402: Control of Toxic Air Contaminants from Existing Sources
 - o Regulation XX: Regional Clean Air Incentive Market (RECLAIM) including key rules (Rule 2005: NSR for RECLAIM Pollutants)
 - o Regulation XXX: Title V Permits
- **San Bernardino County Flood Control District:** The City of Rialto, as the underlying property owner, has permits from the San Bernardino County Flood Control District for RBF operations located within

the Rialto Channel. RBF will have to renew and update the license agreement for the continued operations and maintenance of a 6-inch underground water pipeline on approximately 2,394 linear feet of San Bernardino County Flood Control District land on the west side and parallel to the Rialto Channel, south of Santa Ana Avenue. The existing license is due to expire in December 2017.

- **San Bernardino County Department of Public Works:** The facility may need a Flood Control Encroachment Permit in the event there is work within the right-of-way of the Rialto Channel.
- **San Bernardino County Health Department, Local Enforcement Agency (LEA):** RBF currently holds a solid waste facilities permit issued by the San Bernardino County Health Department, the LEA. The Solid Waste Facilities Permit (SWFP) that authorizes the facility to process 1,080 tons per day of solid waste, including organic waste extracted from MSW, Biosolids, and liquid organic waste. The updated PTO will be acquired after completion of commissioning. The proposed activity will be regulated under a full SWFP issued by the LEA; and will be required to be described in the Non-Disposal Facility Element (NDFE) pursuant to Public Resources Code (PRC) Section 50001(a)(2). The LEA, in coordination with CalRecycle, provides permitting and regulatory oversight of solid waste handling activities, including composting operations/facilities, in vessel digestion operations and facilities relative to permitting and inspections. The permitting and regulatory requirements for these operations and facilities are contained in Title 14, CCR and Title 27, CCR. This facility is currently permitted by the LEA as a Large Volume Transfer/Processing Facility with a maximum throughput of 1,080 tons per day, however no solid waste activity has been observed at the site since approximately August of 2013. Based on the presented data, the project would require a permit for the anaerobic digestion and pyrolysis processes.
- Since the Proposed Project will utilize a pyrolytic conversion system, which is a type of transformation as defined in PRC Section 40201, it will be regulated under a full SWFP issued by the LEA and will be required to be described in the Countywide Siting Element (CSE) pursuant to PRC Section 50001(a)(1).
- **City of Rialto Building Division:** RBF will apply for a building permit from the City of Rialto Building Division, where the City will review and provide approval on construction-ready engineering documents. RBF has already begun coordinating with the City regarding a building permit, and anticipates acquisition of the permit within two weeks of construction.
- **San Bernardino County Fire Department, Hazardous Material Division:** The facility will need to complete a Hazardous Materials Business Plan (HMBP) for submittal to the fire department. This plan will need to include all contingency measures and hazardous materials and waste onsite.
- **Utility providers (connection permits/work permits):** The RBF site already has working utility (water, electricity, natural gas, and sewer/wastewater) connections. The facility includes construction and operation of an off-site gas pipeline with Southern California Gas. Natural gas export would be permitted through an anticipated gas purchase agreement.

Draft EIR, Section 4.0, Air Quality and Greenhouse Gases, Table 4.2.A Ambient Air Quality Standards, page 4-4:

Table 4.2.A: Ambient Air Quality Standards

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO ₂ e for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants ^d		
NO ₂ 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) <u>and 0.1 ppm (federal)</u> 0.03 ppm (state) and 0.0534 ppm (federal)	
PM ₁₀ 24-hour average annual average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM _{2.5} 24-hour average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation)	
SO ₂ 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m ³ (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average	1.5 µg/m ³ (state) 0.15 µg/m ³ (federal)	

a. Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

b. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

c. For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

d. Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

e. Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million µg/m³ = microgram per cubic meter ≥ = greater than or equal to
MT/yr CO₂e = metric tons per year of CO₂ equivalents > = greater than

Draft EIR, Section 4.0, Air Quality and Greenhouse Gases, Table 4.5.A Stationary Sources Emissions Methodology, page 4-47:

Table 4.5.A: Stationary Sources Emissions Methodology

Stationary Sources (No. of sources if > 1)	Emissions Calculation Methodology		
	Criteria Pollutants	GHG	Air Toxics
Biosolids Dryer (2)	<u>Combustion Emissions:</u> BACT for NOx @ 9 ppmv. Remaining emission factors assumed SCAQMD default for natural gas except PM₁₀ emission factor reduced by 50% to account for biogas usage.¹ <u>Evaporative Emissions:</u> NH₃, H₂S and PM₁₀ emission rates based on engineering design. Dryer emissions (including converted NOx and SO_x) controlled through ammonia scrubber, RTO and SO_x scrubber.	GHG emission factors from EPA GHG Mandatory Reporting Rule, 40 CFR Part 98.	Emission factors from SCAQMD Reporting Procedures for AB2588 Facilities. Table B-1: Default EF for Natural Gas Combustion (lb/mmescf). ²
Pyrolysis System Burner	BACT for NOx @ 9 ppmv. Remaining emission factors assumed SCAQMD default for natural gas except PM ₁₀ reduced by 50% to account for pyrolysis gas usage. ¹	GHG emission factors from EPA GHG Mandatory Reporting Rule, 40 CFR Part 98.	Emission factors from SCAQMD Reporting Procedures for AB2588 Facilities. Table B-1: Default EF for Natural Gas Combustion (lb/mmescf). ²
RTO, Combustion	BACT for NOx @ 30 ppmv. Remaining emission factors assumed SCAQMD default for natural gas. ¹	GHG emission factors from EPA GHG Mandatory Reporting Rule, 40 CFR Part 98.	Emission factors from SCAQMD Reporting Procedures for AB2588 Facilities. Table B-1: Default EF for Natural Gas Combustion (lb/mmescf). ²
Emergency Generator	SCAQMD BACT Guidelines, Emergency ICE, Spark Ignition, > 130 HP ³	GHG emission factors from EPA GHG Mandatory Reporting Rule, 40 CFR Part 98.	Emission factors from SCAQMD Reporting Procedures for AB2588 Facilities. Table B-1: Default EF for Natural Gas Combustion (lb/mmescf). ²
Flares (4)	Aeron CEB1200 flare specs used for NO _x , VOC, CO and PM ₁₀ . Biogas has 40 ppm H ₂ S max, fully converted to SO ₂ .	GHG emission factors from EPA GHG Mandatory Reporting Rule, 40 CFR Part 98. ⁵	Emission factors from SCAQMD Reporting Procedures for AB2588 Facilities. Table B-7: Default EF for Digester Gas Combustion (lb/mmescf). ²
CHP Engine (4)	SCAQMD Rule 1110.2, Table III-B (NO _x , VOC); Vendor performance guarantee (CO); SCAQMD Rule 431.1 (SO _x); AP-42, Table 3.2-2 (Total PM x 75%). ⁴	GHG emission factors from EPA GHG Mandatory Reporting Rule, 40 CFR Part 98. ⁵	Emission factors from SCAQMD Reporting Procedures for AB2588 Facilities. Table B-7: Default EF for Digester Gas Combustion (lb/mmescf). ²
Emergency Fire Pump	Existing permit limits are applied (Permit No. G31607).	GHG emission factors from EPA GHG Mandatory Reporting Rule, 40 CFR Part 98.	Emission factors from SCAQMD Reporting Procedures for AB2588 Facilities. Table B-2: Default EF for Diesel/Distillate Oil Fuel Combustion (lb/mmescf). ²

Table 4.5.A: Stationary Sources Emissions Methodology

Stationary Sources (No. of sources if > 1)	Emissions Calculation Methodology		
	Criteria Pollutants	GHG	Air Toxics
Biogas Upgrader	N/A	Biogas upgrader system removes CO ₂ in biogas, which is estimated to be 40% by volume. ⁵	N/A
Receiving Units (3)	For material loading, fugitive foul air (1%) applied against CARB Stockpiling Composting Emission Factor (0.2 lb/ton). ⁶	N/A	N/A
Miscellaneous Foul Air Emissions Equipment (7)	For controlled foul air, VOCs are prorated by airflow applied against CARB Stockpiling Composting Emission Factor (0.2 lb/ton). ⁶	N/A	N/A
Biosolid Pellet/Char Loading (2)	Particulate emissions estimated from AP-42, Table 11.17.4 for product transfer (2.2 lb-PM/ton). Emissions controlled with baghouse (99%).	N/A	N/A
Pyrolysis Oil Storage Vessel	SCAQMD Guidelines, Liquid Organic Storage Tanks, Default VOC factor, Aboveground Tank, Diesel Fuel Oil.	N/A	N/A
Cooling Towers	SCAQMD Guidelines for Cooling Towers for PM10 from drift.	N/A	Prior AQMD permit application estimates for chlorine and ammonia.
Aeration Basins / Waste Water (4)	N/A VOCs estimated at 1 ppm @ 50% emission control	N/A	Ammonia emissions estimated with EPA WATER9 model.

Draft EIR, Section 4.0, Air Quality and Greenhouse Gases, Table 4.7.A Predicted Ambient Air Quality Impacts, page 4-59:

Table 4.7.A. Predicted Ambient Air Quality Impacts

Pollutant	Averaging Period	Background (µg/m³)	Project (µg/m³)	Project + Background (µg/m³)	NAAQS (µg/m³)	CAAQS (µg/m³)
NO ₂	1-hour (H1H)	140 139	102 101	241 240	N/A	339
	Annual	31.2	12.3	44.4	100	56

Draft EIR, Section 4.0, Air Quality and Greenhouse Gases, Table 4.7.B Long-Term Health Risk Levels from Proposed Project Operations, page 4-60:

Table 4.7.B: Long-Term Health Risk Levels from Proposed Project Operations

Location	Maximum Residential Cancer Risk (risk per million)	Maximum Worker Cancer Risk (risk per million)	Cancer Burden	Maximum Chronic Risk (Hazard Index)	Maximum Acute Risk (Hazard Index)
SCAQMD Threshold	10	10	0.5	1.0	1.0
Nearest Residential / Commercial Receptor	1.46 <u>1.49</u>	2.70 <u>2.76</u>	0.11	0.11	0.54 <u>0.33</u>
Significant?	No	No	No	No	No

Source: Trinity Consultants, 2018.

Draft EIR, Section 4.0, Air Quality and Greenhouse Gases, Table 4.7.B, Summary of Peak Daily Operational Emissions, page 4-76.

Table 4.8.A: Summary of Peak Daily Operational Emissions

Source	Emissions (pounds per day)					
	NO _x	VOC	CO	PM ₁₀	PM _{2.5}	SO _x
Existing Emissions 1,080 tons per day of organics waste disposal:						
Landfill Mobile Source	38.00	1.30	7.30	1.40	0.60	0.20
Landfill Emissions	N/A	N/A	N/A	N/A	N/A	N/A
Total Landfill Disposal Emissions	38.00	1.30	7.30	1.40	0.60	0.20
Proposed Project Emissions:						
<u>Mobile Sources:</u>						
Trucks	23.30	0.80	4.50	0.90	0.40	0.10
Employees	0.10	0.10	1.00	0.00	0.00	0.00
Total Mobile Sources	24.40	0.90	5.60	0.90	0.40	0.10
<u>Stationary Sources:</u>						
Combustion Sources	106.07	49.51	288.22	12.60	12.60	39.84
Foul Air Emissions	1.74	1.61	0.00	0.00	0.00	1.53
Biosolid Dryers - Evaporative Emissions	4.38	0.96	0.00	5.76	5.76	56.92
Pellet Storage and Loadout	0.00	0.00	0.00	2.06	2.06	0.00
Pyrolysis Storage Tank	0.00	0.02	0.00	0.00	0.00	0.00
Cooling and Waste Water	0.00	0.00 1.42	0.00	1.82	1.82	0.00
Biogas Upgrader (CO ₂ removal)	0.00	0.00	0.00	0.00	0.00	0.00
Total Stationary Sources	112.19	52.10 53.52	288.22	22.51	22.51	98.29
<u>Summary of RBF Project Emissions:</u>	135.59	53.00 53.90	293.72	23.41	22.91	98.39
Minus existing landfill disposal emissions	38.00	1.30	7.30	1.40	0.60	0.20
Maximum net Proposed Project daily emissions	97.59	51.70 52.60	286.42	22.01	22.31	98.19

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for use in implementing mitigation for the:

Rialto Bioenergy Facility Project

The program has been prepared in compliance with State law and the Rialto Bioenergy Facility Environmental Impact Report (EIR) (State Clearinghouse No. 2017091011) prepared for the Proposed Project by the City of Rialto.

The California Environmental Quality Act (CEQA) requires adoption of a reporting or monitoring program for those measures placed on a project to mitigate or avoid adverse effects on the environment (Public Resource Code Section 21081.6). The law states that the reporting or monitoring program shall be designed to ensure compliance during project implementation.

The monitoring program contains the following elements:

- 1) 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.
- 2) 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.
- 3) 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 program. As changes are made, new monitoring compliance procedures and records will be developed and incorporated into the program.

This Mitigation Monitoring and Reporting Program includes mitigation identified in the Draft EIR, with modifications as presented in this Final EIR.

4.2 MITIGATION MONITORING AND RESPONSIBILITIES

As the Lead Agency, the City of Rialto (City) is responsible for ensuring full compliance with the mitigation measures adopted for the Proposed Project. The City will monitor and report on all mitigation activities. Mitigation measures will be implemented at different stages of development throughout the project area. In this regard, the responsibilities for implementation have been assigned to the Applicant, Contractor, or a combination thereof. If during the course of Project implementation, any of the mitigation measures identified herein cannot be successfully implemented, the City shall be immediately informed, and the City will then inform any affected responsible agencies. The City, in conjunction with any affected responsible agencies, will then determine if modification to the Proposed Project is required and/or whether alternative mitigation is appropriate.

Project File Name:	Applicant:	Rialto Bioenergy Facility, LLC
Rialto Bioenergy Facility	Date:	February 2018

Mitigation Measure No. / Implementing Action	Responsible for Monitoring	Timing of Verification	Method of Verification	Verified Date / Initials	Sanctions for Non-Compliance
AIR QUALITY AND GREENHOUSE GAS EMISSIONS – IDENTIFIED IN DEIR					
4.8.1 and 4.9.1 - The applicant shall enter into a Title V permit with the SCAQMD and further reduce NOx emissions as part of the air permit application process, including participating in emissions reduction programs such as purchasing emission reduction credits, removing equipment, and/or accepting permit conditions to limit operations.	SCAQMD Permit Engineer	Prior to Issuance of Air Permit	SCAQMD review of plans		Withhold Air Permit

Mitigation Measure No. / Implementing Action	Responsible for Monitoring	Timing of Verification	Method of Verification	Verified Date / Initials	Sanctions for Non-Compliance
BIOLOGICAL RESOURCES - IDENTIFIED IN NOP/IS					
BIO-1 – All trenches must be inspected twice daily to ensure no wildlife become entrapped. Trenches shall be covered at night. All pipes must be inspected prior to closure to ensure no wildlife are present. If wildlife became entrapped in a trench, escape ramps shall be provided at each end for them to exit the trench. If a potential den or wildlife is observed at any time during construction, a qualified biologist must be contacted to determine the appropriate course of action.	City Engineer	During Construction and Grading	Evidence the construction documents include instruction in the event such wildlife is detected, and as applicable, Evidence appropriate control measures have been established AND Completion of required evaluation and report by a qualified biologist(s).		Stop Construction and Grading

Mitigation Measure No. / Implementing Action	Responsible for Monitoring	Timing of Verification	Method of Verification	Verified Date / Initials	Sanctions for Non-Compliance
CULTURAL RESOURCES/TRIBAL CULTURAL RESOURCES – IDENTIFIED IN NOP/IS					
CR-1 – The grading permit must contain a clause that, in the event that subsurface archaeological resources are encountered during ground disturbing activities in the project area, these activities must be suspended in the vicinity of the find until the deposits are recorded and evaluated by a qualified archaeologist. If human remains of any kind are found during construction activities, all work must cease immediately and the San Bernardino County Coroner must be notified. If the coroner determines the remains to be of Native American origin, he or she will notify the Native American Heritage Commission (NAHC); the NAHC will then identify the most likely descendants to be consulted regarding treatment and/or repatriation of the remains.	Community Development Director or designee	During Construction and Grading	Evidence the construction documents include instruction in the event such a resource is detected, and as applicable, Evidence appropriate buffer areas have been established. AND Completion of required evaluation and report by a qualified archeologist(s).		Stop Construction and Grading
CR-2 - Monitoring of ground-disturbing construction activities below depths of 5 feet by a qualified paleontologist is required to avoid inadvertent impacts to buried paleontological deposits. At the beginning of the project, monitoring should take place periodically (e.g., one or two days per week). If paleontological specimens are observed, a decision can be made to continue the schedule of periodic monitoring or to increase the frequency. If paleontological specimens are encountered during ground disturbance, the paleontological monitor shall have the authority to halt or redirect work until the find(s) can be identified, removed, documented, and evaluated. Recovered specimens must be curated in a museum repository with permanent retrievable storage (e.g., San Bernardino County Museum). A report must be prepared with an appended itemized inventory or specimens, if any are recovered.	Community Development Director or designee	During Construction and Grading	Evidence the construction documents include instruction in the event such a resource is detected, and as applicable, Evidence appropriate buffer areas have been established. AND Completion of required evaluation and report by a qualified archeologist(s).		Stop Construction and Grading

Mitigation Measure No. / Implementing Action	Responsible for Monitoring	Timing of Verification	Method of Verification	Verified Date / Initials	Sanctions for Non-Compliance
GEOLOGY AND SOILS - IDENTIFIED IN NOP/IS					
G-1 – Prior to Grading Plan approval, the applicant shall demonstrate to the satisfaction of the City Engineer that the soils on the site are stable for construction of the Regional Biosolids Processing Facility or that the grading plan or facility engineering has been designed to account for any site-specific soils issues related to the landfill.	City Engineer	Prior to Issuance of Grading Permit	Plan Check		Withhold Grading Permit

**Rialto Bioenergy Facility Project
Final Environmental Impact Report**

Mitigation Measure No. / Implementing Action	Responsible for Monitoring	Timing of Verification	Method of Verification	Verified Date / Initials	Sanctions for Non-Compliance
HAZARDS AND HAZARDOUS MATERIALS - IDENTIFIED IN NOP/IS					
HAZ-1 – RBF will prepare and implement a CalARP compliant Risk Management Plan for sulfuric acid. CalARP is authorized under Health and Safety Code Sections 25531 to 25543.3, with program regulations in CCR Title 19, Section 2735.1 through 2785.1. The intent of the Risk Management Plan is to provide basic information that may be used by first responders to prevent or mitigate damage to public health and safety and the environment from the release or threatened release of a hazardous material. A Risk Management Plan is prepared by the owner containing detailed information, including, but not limited to, the following: 1) regulated substances held on-site at the stationary source; 2) off-site consequences of an accidental release of a regulated substance; 3) the accident history of a stationary source; 4) the emergency response program for the stationary source; 5) coordination with local emergency responders; 6) hazard review or process hazard analysis; 7) operating procedures at the stationary source; 8) training of the stationary source's personnel; and 9) maintenance and mechanical integrity of the stationary source's physical plant; and incident investigation.	City Engineer	Prior to Issuance of Grading Permit	Plan Check		Withhold Grading Permit

Mitigation Measure No. / Implementing Action	Responsible for Monitoring	Timing of Verification	Method of Verification	Verified Date / Initials	Sanctions for Non-Compliance
HYDROLOGY AND WATER QUALITY – IDENTIFIED IN NOP/IS					
W-2 – Prior to issuance of City permits, the project applicant shall apply to be enrolled in the existing NPDES Statewide General Permit for Storm Water Discharges from Construction Activity (Construction Activity General Permit) as required by the State Water Resources Control Board (SWRCB). The Biosolids Facility will be subject to annual storm water reporting requirements to SWRCB in addition to the preparation of a SWPPP and monitoring plan.	City Engineer	Prior to Issuance of City Permits	Include inspection forms for routine monitoring during construction.		Withhold City Permits
W-4 – Prior to issuance of City permits, the project applicant will need to complete and file Form 200 (Form 200 - Report of Waste Discharge) as required by the Santa Ana RWQCB to document/disclose the disposal of the water that was dewatered from the sludge.	City Engineer	Prior to Issuance of City Permits	Plan Check		Withhold City Permits

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APPENDIX A – AIR POLLUTANT EMISSIONS MODELING REPORTING

HRA Plan Protocol Update

1. Dispersion Models

Air dispersion modeling will be used to estimate off-site air concentrations of chemicals associated with facility emissions. Trinity contacted the South Coast Air Quality Management District (SCAQMD or AQMD) and was advised to use the following option for the current HRA:

- Use AERMOD (AERMINUTE) and 3-5 years (as available) using the SCAQMD Meteorological Data available at <http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/data-for-aermod>.

As per the recommendation of the SCAQMD, for this HRA the most recent AERMOD version 16216r, which is the in-built dispersion module in California Air Resources Board (CARB)'s Hotspots Analysis Reporting Program (HARP2), or Breeze version 8.0.0.33 will be used. The options which will be used for this model are discussed in more detail below.

The following AERMOD model options as applicable are going to be used in the modeling analysis:

- AERMOD Version 16216r
- HARP2 Air Dispersion Modeling Risk Tool Version 2.0.10
- Projection Universal Transverse Mercator (UTM)
- Datum World Geodetic System 1984
- UTM Zone 11
- Hemisphere Northern
- Selection 1-Hour and Period Plotfiles
- AERMOD File .AMI and .AMZ
- AERMOD Output File Plot File by Source
- NED Terrain Data
- SCAQMD San Bernardino County Meteorological Station Data
- Urban Population Dispersion Option with San Bernardino County Population provided by SCAQMD

2. Meteorology

Trinity examined three SCAQMD meteorological data sets for stations that are near the City of Rialto.

These three meteorological (Met) stations are Fontana, San Bernardino, and Riverside. The land use and windrose plots (obtained using Breeze MetView to process the SCAQMD meteorological data) of each site were compared to the land use and wind patterns obtained for the City of Rialto. Since the submittal of the original HRA model, SCAQMD has posted new processed meteorological data taken from 2011 to 2016 for the Fontana station. This section has been updated accordingly to consider the new Fontana data.

Rialto Bioenergy Facility

Trinity examined City of Rialto meteorological and geophysical data to determine which of the SCAQMD datasets was most representative to conduct dispersion modeling at the Rialto Bioenergy Facility (RBF). Geophysical data as well as windrose data were examined to determine if the station could be considered representative of the RBF.

Figure 1 shows the terrain and locations of the stations relative to the RBF. Table 1 shows the stations' distances to the facility and elevations.

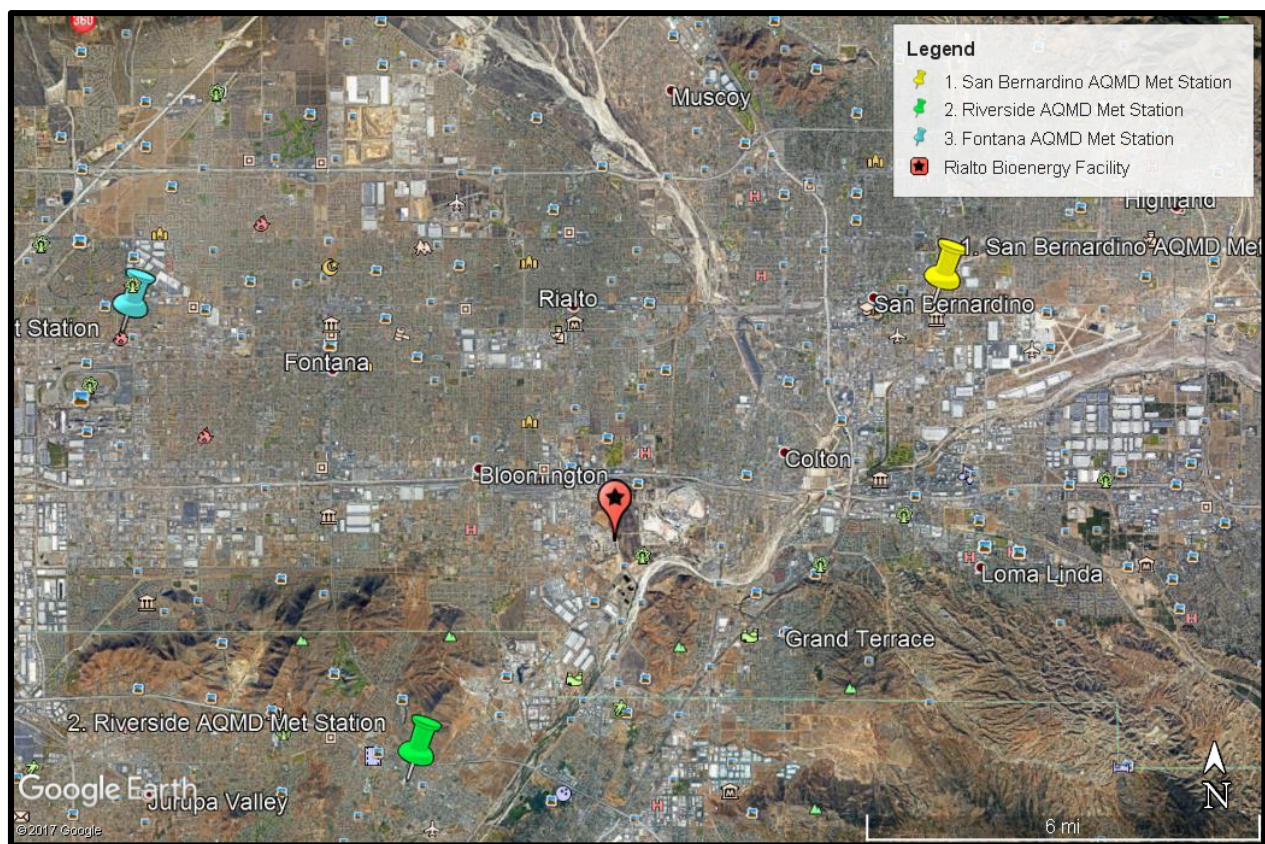


Figure 1. RBF and AQMD Meteorological Stations Locations and Terrain

Table 1. Distances between AQMD Meteorological Stations and RBF

Location	Distance from RBF to Station (miles)	Elevation (meters)
RBF	0	283
San Bernardino	6.1	305
Riverside	4.9	250
Fontana	8.3	367

As can be seen in Figure 1 and Table 1, all of the stations are within a 9-mile radius of RBF. There are few notable changes in a primarily flat terrain, except for a mountain range that lies between RBF and the Riverside Station (green pin). Table 1 shows that RBF has an elevation of 283 meters while the stations range in elevation from 250 to 367 meters, with the San Bernardino station being the most similar in elevation to RBF at 305 meters.

Figure 2 shows US Geological Survey (USGS) land cover data for the same area seen in Figure 1. Table 2 describes the areas surrounding RBF and the three stations.

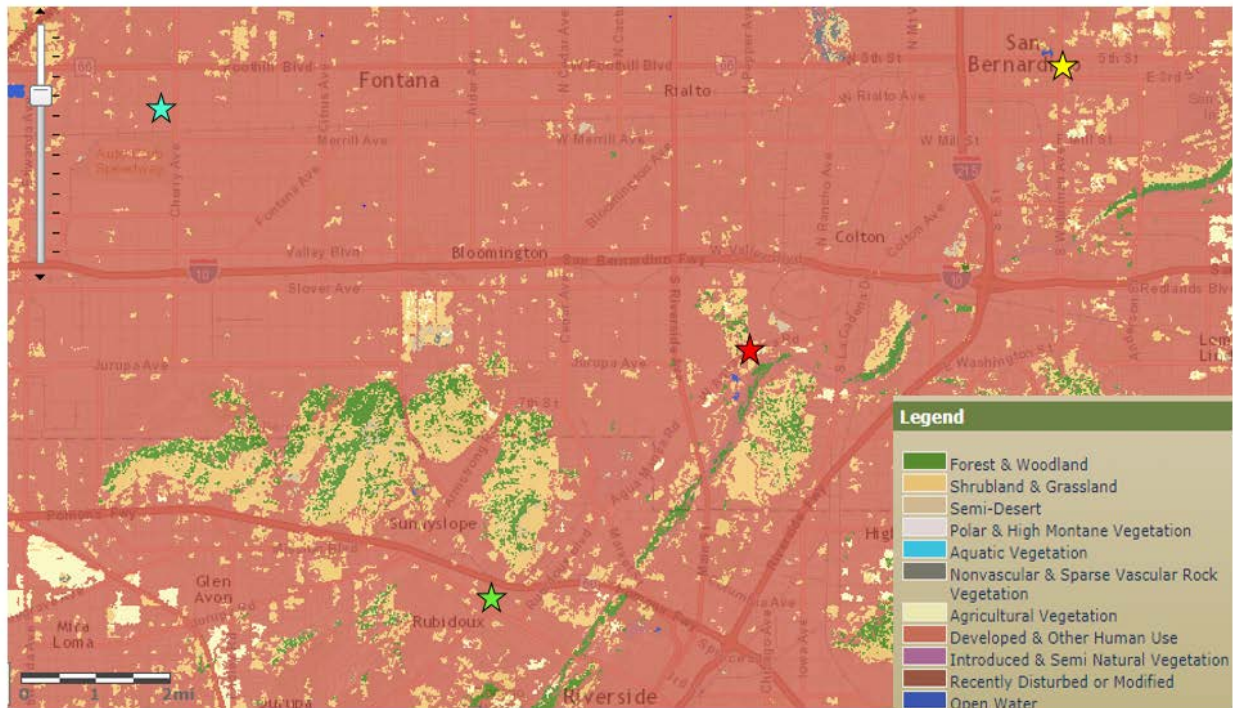


Figure 2. RBF and AQMD Meteorological Stations Land Use

Table 2. RBF and AQMD Meteorological Stations Land Use Summary

Star Color	Location	Land Use Description
Red	RBF	Primarily Developed & Other Human Use, surrounded by some Shrubland & Grassland and some Forest & Woodland
Yellow	San Bernardino Station	Primarily Developed & Other Human Use
Green	Riverside Station	Primarily Developed & Other Human Use, with some Shrubland & Grassland and some Forest & Woodland to the north and east
Blue	Fontana Station	Primarily Developed & Other Human Use

As shown in Figure 2 and Table 2, the vast majority of the land use in the greater area surrounding RBF and all of the stations is for Developed & Other Human Use. RBF is in a pocket of developed land, with some immediately surrounding Shrubland & Grassland and Forest & Woodland. The Fontana and San Bernardino stations are in entirely developed areas. The immediate area surrounding the Riverside station is developed, with some Shrubland & Grassland and Forest & Woodland to the north and east.

Figure 3 presents a windrose for City of Rialto, obtained from the California Air Resources Board¹ and windroses for the three stations.

¹ Source: <https://www.arb.ca.gov/toxics/harp/met/WindRoses.ppt>

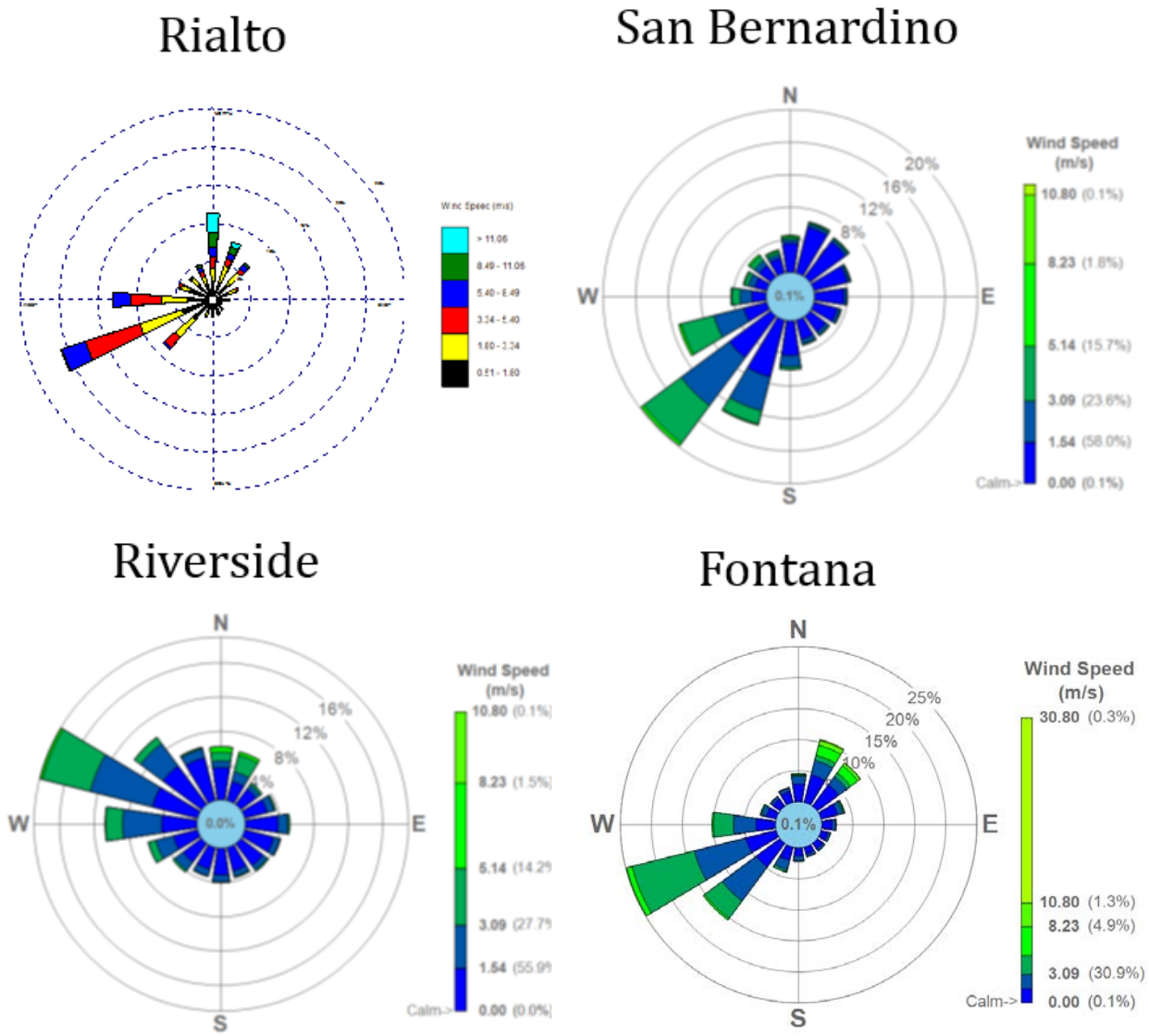


Figure 3. RBF and AQMD Meteorological Stations Windroses

As seen in Figure 3, in the City of Rialto the sector with the highest frequency of wind was from the southwestern direction. The sector with the second most frequent wind direction was west. However, while less frequent, the City of Rialto's strongest winds (>11 m/s) come from the northern direction. The average wind speed lies between 3 to 5 m/s. All of the stations mimic the City of Rialto in that they have prominent winds from the western direction and average wind speeds around 3 to 5 m/s. The Riverside station has wind patterns that differ slightly from the City of Rialto wind patterns. While both Fontana and San Bernardino stations have similar wind patterns to the City of Rialto's, the San Bernardino station is much closer in terms of elevation and the predominating wind pattern is from the southwest direction. These winds are most likely to blow toxics toward nearby sensitive receptors in the northeast direction of the facility and thus represent the most conservative set of meteorological data.

Based on the analysis performed by Trinity, Trinity suggests that the data from the San Bernardino Meteorological Station will be most suited and representative of RBF for a current HRA, primarily based on similarities in elevation and wind pattern.

3. Deposition

Particle Deposition will be predicted using the procedures and the values presented in the OEHHA Air Toxics "Hot Spots" Program Risk Assessment Guidelines (February, 2015). The default values for deposition rates, 2 cm/s for controlled sources and 5 cm/s for uncontrolled sources will be used in this HRA, as per the guidelines. SCAQMD AB2588 guidelines suggest that using a deposition rate of 2 cm/s is recommended in RBF's modeling scenario.

4. Emission Sources

The emission sources in the HRA will be represented either as a point source, an area source, or a volume source. The emission sources for the Rialto facility and emission source parameters input into AERMOD is shown in Section 4 and Appendix B. Note that a change was made to the trucks between the initial HRA submittal and the final HRA submittal. Truck movement and truck idling emissions were modeled as EPA line and point sources, respectively, in the initial HRA. The final HRA models all truck emissions as volume sources, in accordance with SCAQMD guidelines for mobile source emissions. Additionally, NH₃ emissions from the ammonia scrubber were increased, the fire pump engine operation time was corrected, and VOC emissions from the waste water aeration basins were added to the revised HRA.

Facility Plot Plan

Plot plans of the facility are provided in Appendix B. The plot plans identify locations of the sources and stack identification numbers. The plot plans also show the facility boundary. Figures 1 and 2 (above) reflect the type of land use bordering the facility in each direction.

5. Emission Rates

In accordance with SCAQMD HRA guidelines, the total facility emissions of substances will be rounded to the nearest unit of the applicable degree of accuracy to determine whether they must be accounted for in the HRA or not. If facility emissions of a substance exceed one-half of the applicable degree of accuracy unit for the substance, the substance emissions will be accounted for in the current HRA. One special emission source that was not discussed in SCAQMD mobile source guidelines is emissions from diesel truck movement and idling within the facility. Per a phone discussion with Hooshik Yoo from SCAQMD modeling division, San Joaquin Valley Air Pollution Control District (SJVAPCD) guidelines for truck emissions can be utilized for the RBF HRA analysis and SCAQMD will evaluate the applied methodology/parameters afterwards. As requested, the SCAQMD guidelines for mobile sources were applied to modeling emissions from truck idling and truck movement. Truck idling emissions were modeled as a single volume source. Truck movement emissions were modeled as a line of volume sources. In general, diesel exhaust particulate matter is by far the major contributor to the cancer and chronic risk factor from diesel engine combustion in trucks. For the purpose of this HRA, other toxic emissions from diesel combustion in the trucks were deemed negligible and were not considered.

Another change made in the final HRA is that the NH₃ emissions from the ammonia scrubber were increased. The ammonia scrubber controls all emissions generated in the aeration basin. A 99.9% control of NH₃ was applied to emissions from the ammonia scrubber in the initial HRA, but the control was lowered to 99% for a more conservative evaluation in the final HRA. In addition, the fire pump engine hourly toxic emission rates were incorrectly entered in the initial HRA. The fire pump engine will only operate for 15 minutes maximum in one hour, but in the initial HRA, emissions were calculated for 30 minutes operation in one hour. This has been corrected in the final HRA, which demonstrates the lowering of Acute impacts.

Due to the Proposed Project's unique facility design, the VOC emissions from the waste water aeration basins are expected to be negligible. A conservative estimate of 1.42 pounds per day (lbs/day) of VOC emissions was derived relying on guidance from EPA's control of VOCs in the Industrial wastewater document (EPA-453/D/93/056, Section 2.5). EPA's control of VOCs from the Industrial wastewater document indicates that aqueous waste at the influent stage of WWTPs typically has organic concentrations ranging from 1 to 10 ppmv. Since this facility is principally a municipal wastewater source, it can be reasonably assumed that there is less than 0.5 ppm of VOC in the effluent stage. In a worst-case scenario, after the waste water emissions have gone through the ammonia scrubber, the remaining VOCs emitted to the atmosphere would be 1.42 lbs/day. This is based on an estimated VOC concentration of 0.5 ppm (0.00005%) And that the total water going through the WWTP is 340,006 gallons per day (340,006 gallons/day X 8.33 lbs/gallon = 2,832,250 lbs/day). The 1.42 lbs/day of VOC emissions is 0.5 ppm x lbs/day of water throughput (0.00005% of 2,832,250).

Considering regulation regarding toxic dumping, there are negligible volatile toxics estimated to be in the waste coming into the facility. Hence, negligible volatile toxic emissions were estimated in the WWTP plant, other than ammonia. Although there would be negligible volatile toxics emitted from the aeration basin, the typical NESHAP air toxics for POTWs (40 CFR part 63, subpart VVV) include acetaldehyde, acetonitrile, chloroform, ethylene glycol, formaldehyde, methanol, methylene chloride, tetrachloroethylene, toluene, and xylenes and were added to the updated HARP2 run. A conservative estimate of 100% of the 1.42 lbs/day of VOC emissions were assumed to be air toxics. There was no field data, so a basic analysis approach was applied: the 1.42 lbs/day were evenly distributed among the NESHAP chemicals, and added to the final HARP2 run.

6. Health Effects Factors

For the HRA, the most recently approved unit risk factors, potency values, and reference exposure levels as determined and published by OEHHHA on February 2015 will be used. These factors are incorporated in the HARP2 Air Dispersion Modeling Risk Tool.

7. Maximally Exposed Individual

The Maximally Exposed Individual Resident (MEIR) and the Maximally Exposed Individual Worker (MEIW) will be located using the data output from HARP along with reviewing applicable public sources of information and databases, including, Google and online search to accurately recognize and identify the MEIR and the MEIW. The general locations of potential MEIs will be determined based on the location of sources and the surrounding land use.

8. Population Cancer Burden

The Zone of Impact (ZOI) will be defined once the air dispersion modeling process has determined the pollutant concentrations at each designated off-site receptor and a risk analysis has been performed. The results from the HARP model will provide the information necessary to identify the ZOI by generating the associated risk isopleths. In accordance with the OEHHHA guidelines, the ZOI for cancer risk is 1.0×10^{-6} and the ZOI for non-cancer acute and chronic 1.0. In addition, a cancer burden of 0.5 within the ZOI must be achieved.

9. Sensitive Receptors

Sensitive receptors must be identified within the ZOI, such as K-12 schools (public and private), healthcare facilities, nursing/convalescent homes, daycares and senior centers. As applicable, to determine the location of nearby sensitive receptors within the ZOI, Trinity will review applicable public sources of information and databases, including, Google and online search. Based on preliminary search using online tools such as Google Earth and online yellow page for establishments that may be considered sensitive receptors for the purpose of this HRA, Trinity found that a total of ten sensitive receptors within the potential ZOI. Additional business establishments will also be included as discrete receptors for assessing potential health risks of nearby workers and residents.

10. Multipathway Analysis

The multipathway analyses that are going to be included in this HRA will consider exposure via inhalation, soil ingestion, dermal absorption, homegrown produce, and mother's milk. The analysis will be conducted using the procedures and default values described in the SCAQMD AB2588 Risk Assessment Guidelines.