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INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

Victor Valley Wastewater Reclamation Authority 18 MGD Regional Wastewater Treatment Facility Expansion Project

LEAD AGENCY:

Victor Valley Wastewater Reclamation Authority
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1.0 INTRODUCTION

Following preliminary review of the proposed project, the Victor Valley Wastewater Reclamation Authority (VVWRA) has determined that the VVWRA 18 MGD Regional Wastewater Treatment Facility Expansion Project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects associated with implementation of the VVWRA 18 MGD Regional Wastewater Treatment Facility Expansion Project, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with CEQA (Public Resources Code Sections 21000-21177) and pursuant to Section 15063 of the CEQA Guidelines, VVWRA, acting in the capacity of Lead Agency, is required to undertake the preparation of an Initial Study to determine whether the proposed project would have a significant environmental impact. Based on this Initial Study, VVWRA has determined that the project, as modified to include the mitigation measures identified in this document, would not have a significant effect on the environment and proposes to adopt a Mitigated Negative Declaration. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080(c)(1), Public Resources Code).

This environmental documentation, which has been prepared by VVWRA in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions related to the project. The resulting document is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required.

The Environmental Determination and supporting analysis are subject to a 30-day public review period. During this review, comments from interested parties regarding the proposed project and associated environmental issues should be addressed to VVWRA at the address shown on the Notice of Intent. Following review of any comments received, VVWRA will consider these comments as a part of the project's environmental review and include them with the Initial Study for consideration pursuant to the CEQA Guidelines.

1.2 PURPOSE

The purposes of an Initial Study are to: (1) identify environmental impacts; (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or Negative Declaration; (3) enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an environmental document is prepared; (4) facilitate environmental assessment early in the design of the project; (5) provide documentation of the factual basis for the finding in a Negative Declaration that a project would not have a significant environment effect; (6) eliminate needless EIRs; and (7) determine whether a previously prepared environmental document could be used for the project; and (8) assist in the preparation of an EIR, if required, by focusing the EIR on the effects determined to be significant, identifying the effects determined not to be significant, and explaining the reasons for determining that potentially significant effects would not be significant.

Section 15063 of the State CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include: (1) a description of the project, including the location of the project; (2) an identification of the

environmental setting; (3) an identification of environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

As soon as the Lead Agency (in this case, VVWRA) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.4 INCORPORATION BY REFERENCE

Pertinent documents relating to this Initial Study have been cited and incorporated, in accordance with Sections 15148 and 15150 of the CEQA Guidelines, to eliminate the need for inclusion of voluminous engineering and technical reports. Of particular relevance are previous environmental documents that present information regarding descriptions of environmental settings, future development-related growth and cumulative impacts. This Initial Study has incorporated by reference the 1997 *VVWRA Sewerage Facilities Plan Update, Sewerage Facilities Plan Update Year 2000 Amendment and 2005 Amendments*, and the *Initial Study for the VVWRA Wastewater Reclamation Plant Expansion*. These planning and environmental clearance documents include policies related to the proposed project, as well as existing conditions for the area and General Plan buildout environmental analysis utilized throughout this Initial Study. The documents are available for review at Victor Valley Wastewater Reclamation Authority located at 20111 Shay Road, Victorville, CA, 92394.

1997 Sewerage Facilities Plan Update, Sewerage Facilities Plan Update Year 2000 Amendment & Sewerage Facilities Plan Update Year 2005 Amendment

The Victor Valley Wastewater Reclamation Authority's Sewerage Plan serves as an operational planning document for the wastewater treatment facility. The Plan sets forth policies and recommendations for plant operation to accommodate future growth in the region. The Sewerage Facilities Plan Update Year 2000 Amendment and 2005 Amendment contain revised population projections and adjusted the findings and recommendations contained in the original 1997 Sewerage Plan based on these new population forecasts. The 2005 Amendment document is utilized to design and construct facility improvements in time to accommodate population growth within the service area and the resulting flow of sewage.

Initial Study for VVWRA's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and California Bio-Mass, Inc. Recycling, Transfer, C&D, and Compost Facility, December 5, 1999

This Initial Study/Mitigated Negative Declaration, prepared by Tom Dodson & Associates dated December 5, 1999, was prepared for a previous expansion of the VVWRA facility from 9.5 to 11.0 MGD. This expansion project was completed in 2002. This document includes an analysis of the previous expansion project's impacts in regards to land use, geology, air quality, noise, traffic, aesthetics, cultural resources, biological resources, and several other impact categories.

Initial Study/Mitigated Negative Declaration, VVWRA 14.5 MGD Regional Wastewater Treatment Facility Expansion Project, September 1, 2004

This Initial Study/Mitigated Negative Declaration, prepared by RBF Consulting, was prepared to analyze the potential environmental impacts of expanding the VVWRA regional facility to include clarifier modifications, new tanks, a decant treatment system, digester improvements, sludge lagoon improvements, new sludge drying beds, and other miscellaneous associated improvements. The document includes analysis of a range of environmental impacts, including land use, geology, air quality, noise, traffic, aesthetics, cultural resources, biological resources, and several other impact categories.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The proposed project site is situated in the northwestern portion of the City of Victorville, approximately two miles west of Interstate 15 (I-15), four miles east of U.S. Highway 395, three miles north of Air Expressway, and two miles south of the northerly Victorville City boundary (refer to Exhibit 1, REGIONAL VICINITY MAP, and Exhibit 2, SITE VICINITY MAP). The subject site is bounded by the Mojave River to the east, open space to the north, open space to the west, and a composting facility/Shay Road to the south.

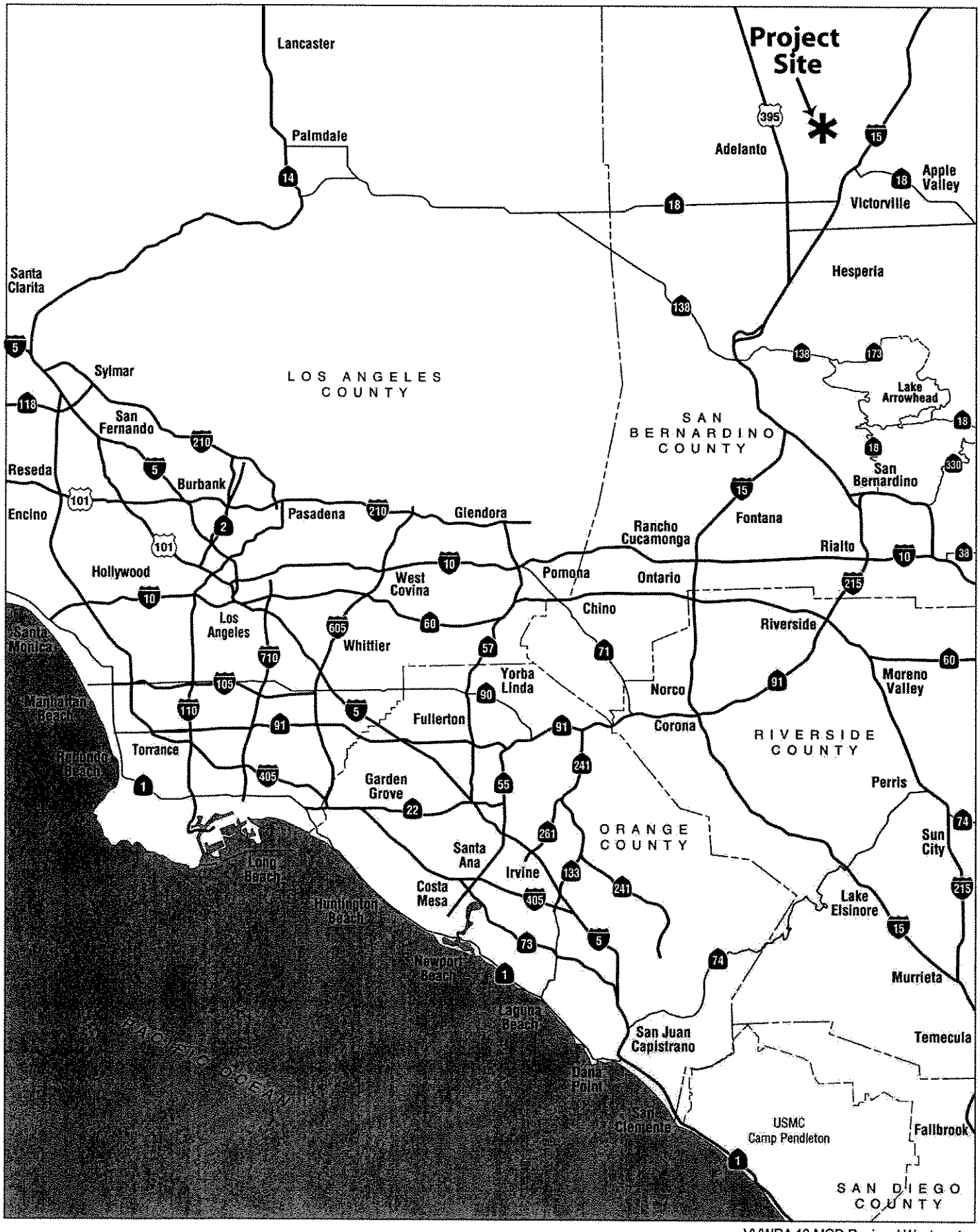
The proposed project consists of upgraded and new facilities within the southern portion of the existing treatment facility, along with four new percolation ponds immediately west of Shay Road.

2.2 ENVIRONMENTAL SETTING

Victor Valley Wastewater Treatment Plant is a 117-acre developed site located in the City of Victorville, County of San Bernardino, California. The existing plant consists of the following major components: influent flow metering, preliminary treatment (screening and grit removal), primary sedimentation, secondary treatment (conventional activated sludge and secondary clarification), tertiary filtration, and disinfection. Following primary treatment, effluent from the primary sedimentation tanks flows to the aeration tanks or to the flow equalization basins. During high flow periods, the excess primary effluent is diverted to the flow equalization basins and pumped back into the treatment system during low flow conditions. The flow equalization basins allow the downstream facilities to be operated at a substantially lower and more constant flow. After the secondary clarifiers, the secondary effluent can be split to the existing percolation ponds (located within the existing facility boundaries), or it can continue through the tertiary treatment system (coagulation, flocculation, filtration, chlorination, dechlorination) for discharge directly to the Mojave River. Reclaimed water pumps also divert a portion of the disinfected tertiary effluent for plant reuse. All solids are treated on-site through solids thickening, anaerobic digestion, and solar drying beds prior to disposal off site. Site access is provided via Shay Road at the facility's southern boundary. The facility is gated and fenced.

Man-made features surrounding the subject site include a composting facility to the south; Shay Road to the south; several scattered residences to the east and south; the Mojave River and National Trails Highway to the east; and the Southern California Logistics Airport (SCLA), formerly George Air Force Base, to the west.

The topography of the project varies from flat within developed areas to undulating topography on the eroded old river terrace, which occupies the area of the existing sludge drying beds. The geologic sediments underlying the project area are unconsolidated and range from river wash deposits at the reclamation plant to older alluvium, primarily old terrace deposits. Elevations range from 2,600 feet above sea level at the reclamation plant to 2,720 feet above sea level. The major biotic communities encountered within the project area are saltbush scrub and Mojave creosote bush scrub. Along the Mojave River a continuous band of desert cottonwood-willow riparian community exists within the channel, both upstream and downstream.



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APPROXIMATE

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VVWRA 18 MGD Regional Wastewater Treatment Facility Expansion Project

Regional Vicinity

Exhibit 1

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Scale: N.T.S.

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VVWRA 18 MGD Regional Wastewater Treatment Facility Expansion Project

Site Vicinity

Exhibit 2

2.3 BACKGROUND

The Victor Valley Wastewater Reclamation Authority (VVWRA) owns and operates the existing reclamation facility located within approximately 117-acres. The reclamation facility was originally built in 1981 with a 4.8 million gallon per day (MGD) capacity. Due to substantial population growth in the 1980s (five to 10 percent annually) the plant was expanded in 1989 to a 9.5 MGD capacity. However, in the following years, population growth in the Victor Valley region slowed to less than the projected growth rate of one percent per year due to the California recession and the closure of George Air Force Base. As the population growth rate once again increased in the mid-1990's, the plant was further expanded in 2000 to 11.0 MGD capacity to accommodate future population forecasts. Current average dry weather flow at the existing facility is approximately 12.0 MGD. It is projected that system demand will exceed 15.0 MGD by 2008. The proposed project would increase facility capacity to 18.0 MGD.

Today, the reclamation facility serves the surrounding communities in the Victor Valley, including the City of Victorville, City of Hesperia, Town of Apple Valley, SCLA, San Bernardino County Service Area 64 (Spring Valley Lake), and San Bernardino County Service Area 42 (Oro Grande).

2.4 PROJECT CHARACTERISTICS

It should be noted that all designs for plant expansion are conceptual, and may be modified during final design. This Initial Study has made conservative assumptions and has considered a reasonable range of project alternatives, such that no further CEQA documentation is anticipated to be necessary to allow facility construction and operation.

The proposed upgrade and expansion project consists of the following improvements (it should be noted that minimal changes to the existing treatment process are proposed):

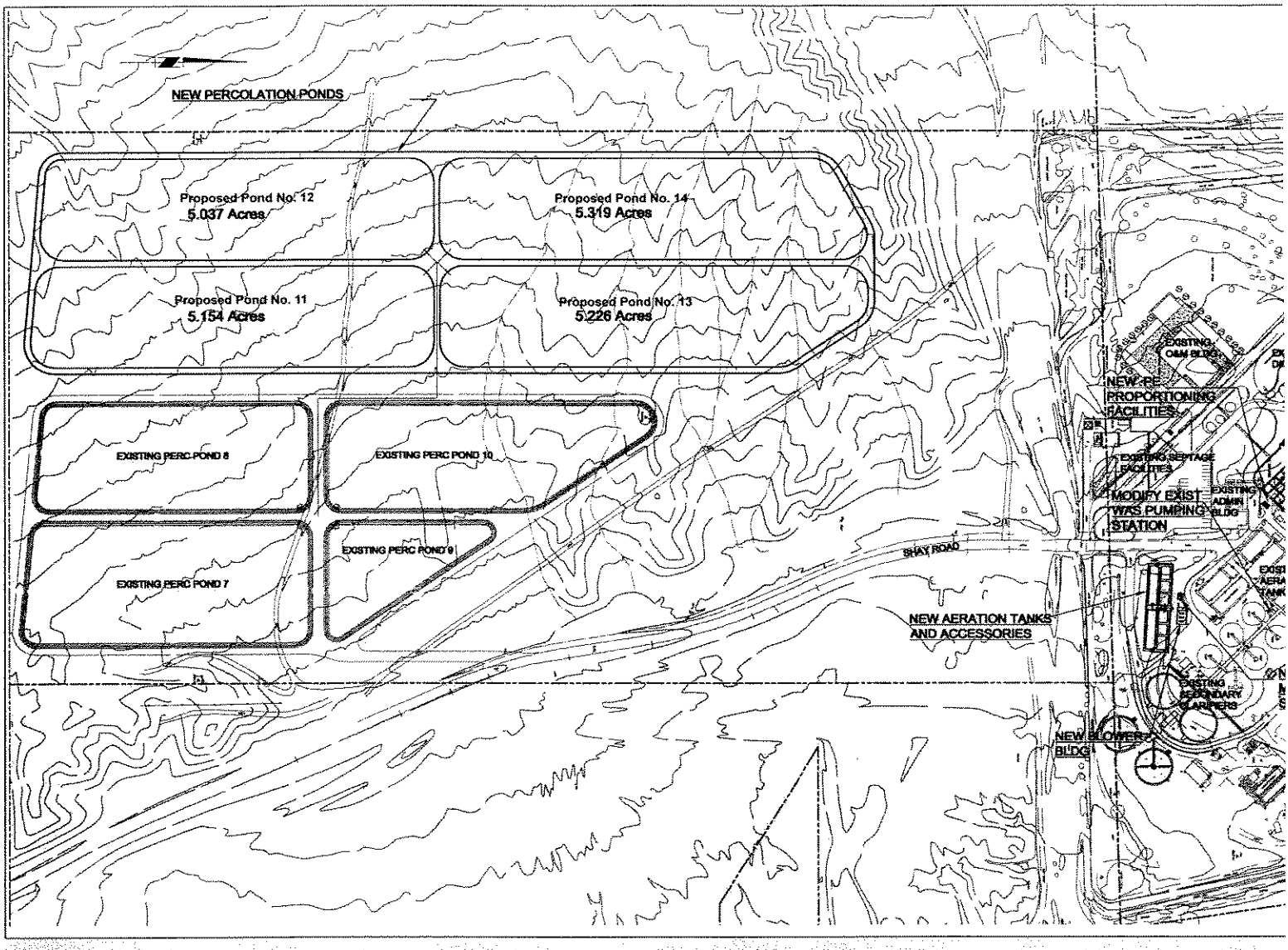
- *Aeration Tanks*: Two new aeration tanks will be added, each with a maximum depth of 22 feet. These open-air tanks collect wastewater and recycled activated sludge. Diffused air is applied uniformly throughout the tanks resulting in absorption, flocculation and oxidation of organic matter.
- *New Blower Building*: Located next to the new aeration tanks, this building is where the engine driven blowers are located and serves to supply air to the aeration tanks.
- *Influent Bar Screens*: One additional influent bar screen will be installed near the head of the treatment plant. The screen has openings that are used to retain the coarse solids in raw sewage.
- *Influent Flow Meter*: The existing influent flow meter will be replaced near the head of the treatment plant and measures wastewater flow as it enters the treatment plant.
- *Secondary Effluent Pump Station*: Two new secondary effluent pumps will be installed in an existing structure that is located easterly near the head of the plant to pump secondary effluent to the south percolation ponds.
- *Percolation Ponds*: Four new percolation ponds, approximately 5 acres each and 5 feet in depth, will be constructed south of the treatment plant and west of Shay Road. The percolation ponds will actively receive secondary effluent pumped from the secondary effluent pump station. The collected effluent will settle in the ponds and percolate through the soil at designated volumes.

- *Flow Equalization Pump Station*: The existing flow equalization pump station will be replaced near the existing primary effluent equalization basins, adjacent to the existing blower building. The pump station will act to equalize primary effluent flow into the secondary treatment process.
- *Primary Effluent Proportioning Facilities*: Construction of a new primary effluent proportioning facility where primary effluent flow will be proportioned to the new aeration tanks.
- *Modifications to Existing Waste Activated Sludge (WAS) Pumping Station*: The existing WAS pump station, which is capable of dissipating excess sludge from the mixed liquor channel, will be replaced to increase the pumping capacity.
- *Return Activated Sludge (RAS) Metering Structure*: A new RAS meter structure, which provides positive metering on the withdrawal of sludge from the secondary clarifiers to the new aeration basins, will be constructed.
- *Modifications to Tank Drain Pump Station*: The existing tank drain pumps will be replaced to increase its pumping capacity. The upgraded tank drain system, separate from the floor drain system, will give VVWRA the capability to drain the largest connected tank in 8 to 12 hours.
- *Miscellaneous Existing Equipment Modifications*: Includes the modifications to existing generator engines to provide more power output from the generators while meeting the Mojave Desert Air Quality Management District (MDAQMD) requirements.

Of the above-described facilities, the amount of area disturbed at any given time during construction will be minimal with the exception of the new percolation ponds. The ponds may require an area of approximately 20 acres to be graded and the individual ponds installed as generally depicted in Exhibit 3, SUBJECT SITE. Grading of the site will not require any removal of soil from the project site. The total area encompassed by the ponds is estimated to be approximately 20 acres. An existing pipeline would be utilized to connect the existing wastewater treatment facilities to the new percolation ponds.

2.5 PHASING

It is anticipated that the project would be constructed in a single phase, commencing in 2006 and concluding in 2008.



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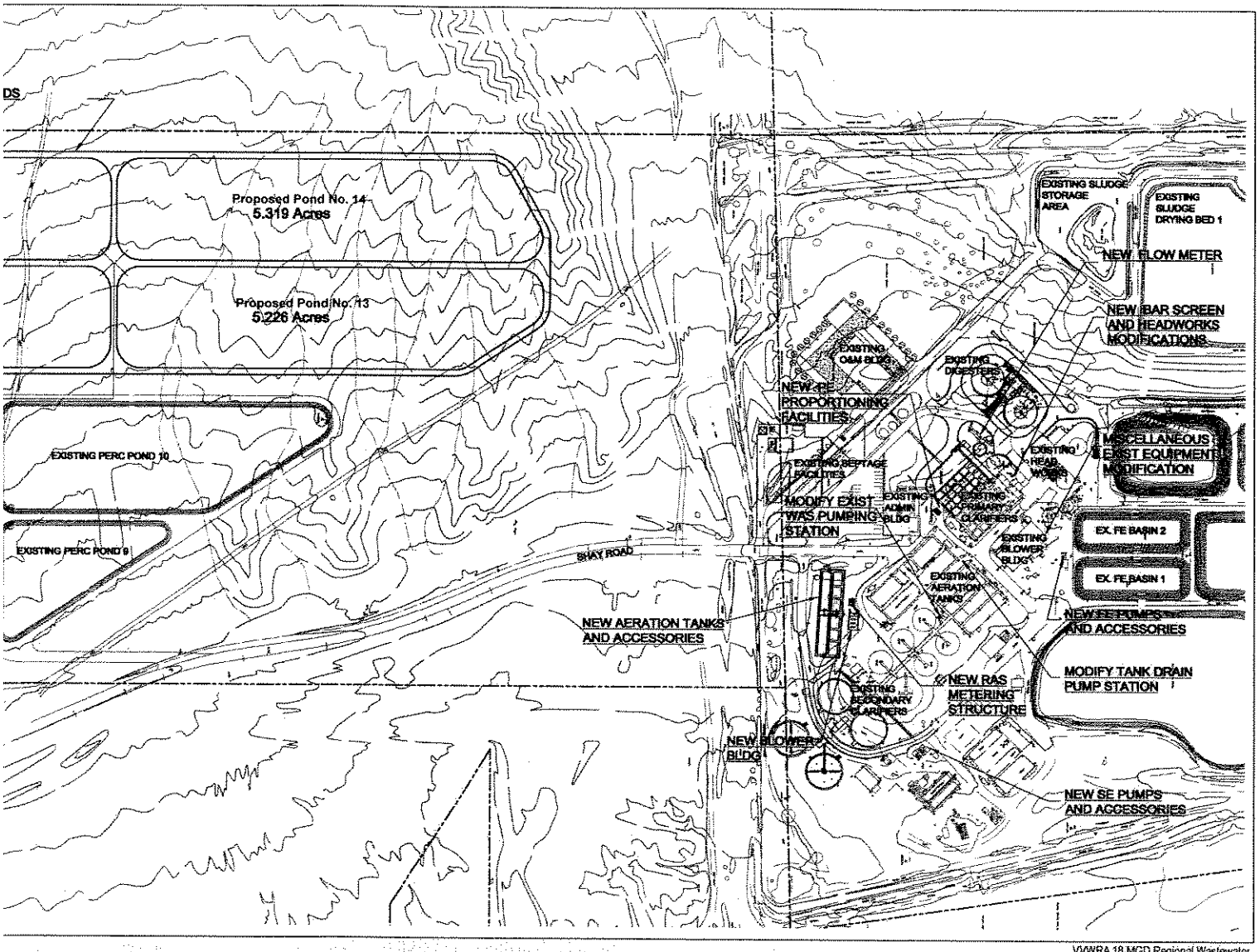

VVWRA 18 MGD Regional Wastewater Treatment Facility Expansion Project

Subject Site

Exhibit 3

3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

Project Title: VVWRA 18 MGD Regional Wastewater Treatment Facility Expansion Project
Lead Agency Name and Address: Victor Valley Wastewater Reclamation Authority 20111 Shay Road Victorville, CA 92394
Contact Person and Phone Number: Mr. Daniel P. Gallagher (760) 246-8638
Project Location: The proposed project will be constructed on property owned by VVWRA located in the northern portion of the City of Victorville, west of and adjacent to the Mojave River channel and northeast of the Southern California Logistics Airport (SCLA). Proposed improvements would occur on the existing reclamation facility site as well as property owned by VVWRA located immediately to the south.
Project Sponsor's Name and Address: Victor Valley Wastewater Reclamation Authority 20111 Shay Road Victorville, CA 92394
General Plan Designation: The proposed project is located in an area designated Rural Residential as shown on the City of Victorville General Plan Land Use Policy Map.
Zoning: The project site is located within the City's R1 (Single Family Residential) zoning district.

Description of the Project: (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary, support or off-site features necessary for its implementation.)

The proposed expansion project consists of the following improvements (it should be noted that minimal changes to the existing treatment process are proposed):

- *Aeration Tanks*: Two new aeration tanks will be added, each with a depth of 22 feet. These open air tanks collect wastewater and recycled activated sludge. Diffused air is also applied uniformly throughout the tanks resulting in absorption, flocculation and oxidation of organic matter.
- *New Blower Building*: Located next to the new aeration tanks, this building is where the engine driven blowers are located and serves to supply air to the aeration tanks, grit tanks and de-nitrification tanks.
- *Influent Bar Screens*: One additional influent bar screens will be installed near the head of the treatment plant. These screens are devices with openings that are used to retain the coarse solids in raw sewage.
- *Influent Flow Meter*: The existing influent flow meter will be replaced near the head of the treatment plant and measures wastewater flow as it enters the treatment plant.
- *Secondary Effluent Pump Station*: One secondary effluent pump station will be installed easterly near the head of the plant to pump secondary effluent to the percolation ponds.
- *Percolation Ponds*: Four new percolation ponds, approximately 5 acres each and 5 feet in depth, will be constructed south of the treatment plant and west of Shay Road. The percolation ponds will actively receive secondary effluent pumped from the proposed secondary effluent pump station. The collected effluent will settle in the ponds and percolate through the soil at designated volumes.
- *Flow Equalization Pump Station*: The existing flow equalization pump station will be replaced near the head of the plant, adjacent to the proposed influent bar screens. The pump station will act to equalize the flow into the treatment plant from the existing equalization basins.
- *Primary Effluent Proportioning Facilities*: Construction of a new primary effluent proportioning facility where primary effluent flow is proportioned to the new aeration tanks.
- *Modifications to Existing Waste Activated Sludge (WAS) Pumping Station*: The existing WAS pump station, which is capable of dissipating excess sludge from the mixed liquor channel, will be replaced to increase the pumping capacity.
- *Return Activated Sludge (RAS) Metering Structure*: A new RAS meter structure, which provides positive metering on the withdrawal of sludge from the secondary clarifiers to the new aeration basins, will be constructed.
- *Modifications to Tank Drain Pump Station*: The existing WAS pump station will be modified to increase its pumping capacity. The upgraded tank drain system, separate from the floor drain system, will give VVWRA the capability to drain the largest connected tank in 8 to 12 hours.
- *Miscellaneous Existing Equipment Modifications*: Includes the modifications to existing generator engines to provide more power output from the generators while meeting the Mojave Desert Air Quality Management District (MDAQMD) requirements.

Surrounding Land Uses and Setting:

Man-made features surrounding the subject site include a composting facility to the south; Shay Road to the south; several scattered residences to the south; the Mojave River and National

Trails Highway to the east, and the Southern California Logistics Airport (SCLA), formerly George Air Force Base, to the west.

The topography of the project varies from flat within developed areas to undulating topography on the eroded old river terrace. The geologic sediments underlying the project area are unconsolidated and range from river wash deposits at the reclamation plant to older alluvium, primarily old terrace deposits. Elevations range from 2,600 feet above sea level at the reclamation plant to 2,720 feet above sea level. The major biotic communities encountered within the project area are saltbush scrub and Mojave creosote bush scrub. Along the Mojave River a continuous band of desert cottonwood-willow riparian community exists within the channel, both upstream and downstream.

Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).

None have been identified.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant With Mitigation Incorporation," as indicated by the checklist on the following pages.

X	Aesthetics		Land Use and Planning
	Agriculture Resources		Mineral Resources
	Air Quality		Noise
X	Biological Resources		Population and Housing
X	Cultural Resources		Public Services
X	Geology and Soils		Recreation
X	Hazards & Hazardous Materials	X	Transportation/Traffic
X	Hydrology & Water Quality		Utilities & Service Systems
X	Mandatory Findings of Significance		

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities & Service Systems

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the project's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the project. To each question, there are four possible responses:

- **No Impact.** The project will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The project will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Less Than Significant with Mitigation Incorporated.** The project will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact**. The project will have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. *Would the project:*				
a. Have a substantial adverse effect on a scenic vista?			✓	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			✓	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?		✓		
2. AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:.				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson act contract?				✓
c. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				✓
3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			✓	
d. Expose sensitive receptors to substantial pollutant concentrations?			✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Create objectionable odors affecting a substantial number of people?			✓	
4. BIOLOGICAL RESOURCES. *Would the project:*				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓
5. CULTURAL RESOURCES. *Would the project:*				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?				✓
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?				✓
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Disturb any human remains, including those interred outside of formal cemeteries?				✓
6. GEOLOGY AND SOILS. *Would the project:*				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
2) Strong seismic ground shaking?			✓	
3) Seismic-related ground failure, including liquefaction?			✓	
4) Landslides?			✓	
b. Result in substantial soil erosion or the loss of topsoil?		✓		
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
7. HAZARDS AND HAZARDOUS MATERIALS: *Would the project:*				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		✓		
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		✓		
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓
8. HYDROLOGY AND WATER QUALITY. *Would the project:*				
a. Violate any water quality standards or waste discharge requirements?			✓	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?		✓		
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			✓	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			✓	
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
f. Otherwise substantially degrade water quality?			✓	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j. Inundation by seiche, tsunami, or mudflow?				✓
9. LAND USE AND PLANNING. *Would the project:*				
a. Physically divide an established community?				✓
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			✓	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓
10. MINERAL RESOURCES. *Would the project:*				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓
11. NOISE. *Would the project result in:*				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			✓	
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			✓	
12. POPULATION AND HOUSING. *Would the project:*				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			✓	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. PUBLIC SERVICES.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?				✓
2) Police protection?				✓
3) Schools?			✓	
4) Parks?			✓	
5) Other public facilities?				✓
14. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓
15. TRANSPORTATION/TRAFFIC. *Would the project:*				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			✓	
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				✓
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		✓		
e. Result in inadequate emergency access?				✓
f. Result in inadequate parking capacity?			✓	
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				✓
16. UTILITIES AND SERVICE SYSTEMS. *Would the project:*				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				✓
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g. Comply with federal, state, and local statutes and regulations related to solid waste?				✓

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		✓		
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

3.4 EARLIER ANALYSIS

Earlier analysis may be used where, pursuant to the tiering, Program EIR, or other CEQA process, one or more effects have been adequately addressed in an earlier EIR or Negative Declaration (CEQA Guidelines Section 15063(c)(3)(D)). This Initial Study incorporates by reference the relevant portions of the following documents, particularly with respect to cumulative and growth-inducing impacts.

- *Victor Valley Wastewater Reclamation Authority's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and CALIFORNIA Bio-mass, Inc. Recycling, Transfer, C&D Compost Facility, Initial Study/Mitigated Negative Declaration,* VVWRA, Tom Dodson & Associates, December 5, 1999.[1]

- *Initial Study/Mitigated Negative Declaration, VVWRA Regional Wastewater Treatment Facility Expansion Project,* RBF Consulting, September 1, 2004.

3.5 MITIGATION MEASURES

Mitigation measures are included within this Initial Study after the appropriate impact discussion in order to reduce potentially significant impacts to insignificant levels (refer to Section 4.0, *Environmental Analysis*).

[1] It should be noted that the 20-acre percolation pond area proposed as part of this project was analyzed in the *Victor Valley Wastewater Reclamation Authority's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and CALIFORNIA Bio-mass, Inc. Recycling, Transfer, C&D Compost Facility, Initial Study/ Mitigated Negative Declaration,* prepared by Tom Dodson & Associates (dated December 5, 1999). The results of this previous Initial Study/Mitigated Negative Declaration (particularly in regards to biological and cultural resources) have been incorporated throughout this document.

4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified within the Initial Study. Explanations are provided for each item below.

4.1 AESTHETICS. *Would the proposal:*

a) Have a substantial adverse effect on a scenic vista? ***Less Than Significant Impact.***

Construction Phase

During the construction phase of the proposed project, construction equipment would be utilized for grading and construction of four new percolation ponds and associated facilities, thus creating a temporary disturbance to the aesthetic environment resulting from construction equipment and vehicles, project staging area, and construction supplies. However, these construction-related visual disturbances would be temporary, would occur within the existing facility, would be minimized by the implementation of standard construction practices and cease upon completion of the project (see Betterment Measures AES-1 and AES-2). In addition, the proposed project site is located in an area below the existing surrounding topography (within the Mojave River canyon area), and no scenic vistas are located in the immediate vicinity. No significant construction-related impacts are anticipated to occur in regards to scenic vistas.

Operational Phase

The proposed project site is located in an area below the existing surrounding topography (within the Mojave River canyon area). The project is located in an isolated area of Victorville with no scenic vistas located in the immediate vicinity. In addition, the subject site is located within a developed environment, adjacent to existing wastewater treatment and industrial waste/composting facilities. The project is an upgrade and expansion occurring within and adjacent to the existing facility. Therefore, no significant long-term aesthetic impacts are anticipated relative to scenic vistas during project operation.

Although impacts in regards to scenic vistas are not expected to be significant, the following design guidelines will be implemented:

Betterment Measures:

AES-1 Project construction shall implement standard practices to minimize potential adverse aesthetic impacts during construction, including the following:

- Construction staging areas shall be located as far as practicable from sensitive receptors;
- Construction areas shall receive appropriate routine maintenance to minimize unnecessary debris piles;
- Construction areas shall have appropriate erosion and dust control programs in place;
- Construction lighting (if necessary) shall be limited to that sufficient for safety and security, and shall be directed to minimize light and glare impacts to any adjacent sensitive receptor(s).

AES-2 VVWRA shall provide landscape plans for disturbed areas associated with the proposed project. The periphery of the area shall be planted with native or xeric

non-native trees or shrubs that provide a visual buffer from Shay Road and that break-up the large expanse of graded area. The remaining disturbed areas that will not be used for operations shall be revegetated with a native plant mix comparable to the adjacent creosote bush scrub plant community.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?* ***Less Than Significant Impact.***

The project would not disturb scenic resources within a designated state scenic highway. The project site is located in an isolated area that can be characterized as disturbed due to the current operation and adjacent industrial facilities. Furthermore, the project is an upgrade and an expansion to the existing facility. Therefore, impacts in this regard would be considered less than significant.

c). *Substantially degrade the existing visual character or quality of the site and its surroundings?* ***Less Than Significant Impact.***

Construction Phase

Refer to 4.1a and 4.1b, above.

Operational Phase

Refer to 4.1a and 4.1b, above.

Design Guidelines:

Refer to Design Guidelines AES-1 and AES-2, above.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?* ***Less Than Significant Impact with Mitigation (Mitigation Applicable to Operational Phase Only).***

Construction Phase

It is not anticipated that implementation of the proposed project would require nighttime construction. In addition, on-site construction equipment would not be of the nature to be a substantial source of daytime light or glare. Impacts in this regard are not anticipated to be significant.

Operational Phase

The project site is located in an isolated area with industrial uses, and on-site lighting would be limited to those created for the operation of the facility. These include lighting for entryways, pathways, signs, and safety lighting. Any new night lighting required for project operation would comply with local standards in regards to nighttime light and glare. In addition, no sensitive receptors exist within ¾-mile of the proposed project site. With the following mitigation measures, impacts are anticipated to be reduced to less than significant levels.

Mitigation Measure:

AES-3 Outdoor night lighting intensity shall be limited to that necessary for adequate security and safety. All outdoor lighting shall be directed to prevent "spillage" onto adjacent properties.

4.2 AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?* ***No Impact.***

The City of Victorville land use designation for the subject site is Rural Residential, while the site is zoned Single Family Residential. Additionally, based upon the Farmland Mapping and Monitoring Program for the California Resources Agency, project components do not affect an agricultural resource area and thus do not impact designated Prime Farmland, Unique Farmland or Farmland of Statewide Importance. No impacts are anticipated in this regard.

b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?* ***No Impact.***

There are no Williamson Act parcels or parcels zoned for agricultural use within the project areas. No impact is anticipated in this regard.

c) *Involve other changes in the existing environment that, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use?* ***No Impact.***

The implementation of the project would not result in changes in the environment that would result in the conversion of farmland to non-agricultural use. No impact is anticipated in this regard.

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

The project site is located within the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD's current guidelines and emission thresholds established in the *California Environmental Quality Act and Federal Conformity Guidelines*, updated March 2002, were adhered to in the assessment of air quality impacts for the proposed project. The City regularly relies on the MDAQMD standards as the applicable air quality standards.

The air quality assessment includes estimating emissions associated with short-term construction and long-term operation of the proposed project. The URBEMIS2002 model was used to estimate construction related emissions.

Both the State of California and the Federal government have established health based Ambient Air Quality Standards (AAQS) for six criteria air pollutants. These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen oxides (NO_X), sulfur oxides (SO_X), PM_{10}, and lead (Pb). Despite implementing many strict controls, the MDAB still fails to meet the Federal and State air quality standards for two of the criteria pollutants: ozone (O_3) and particulate matter (PM_{10}). Atmospheric concentrations of the other four criteria pollutants do not exceed State or Federal standards.

The net increase in pollutant emissions determines the significance and impact on regional air quality as a result of the proposed project. The results also allow the local government to determine whether the proposed project will deter the region from achieving the goal of reducing pollutants in accordance with the AQMP in order to comply with Federal and State Ambient Air Quality Standards (AAQS).

a) *Conflict with or obstruct implementation of the applicable air quality plan?* ***Less Than Significant Impact.***

Regulatory Setting

U.S. Environmental Protection Agency

The principal air quality regulatory mechanism at the Federal level is the Clean Air Act (CAA) and, in particular, the 1990 amendments to the Federal Clean Air Act (FCAA) and the National Ambient Air Quality Standards (NAAQS) that the FCAA establishes. These standards identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2 is a form of nitrogen oxides [NO_X]), sulfur dioxide (SO_2 is a form of sulfur oxides [SO_X]), particulate matter less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$, respectively), and lead (Pb); refer to Table 1 (National and California Ambient Air Quality Standards). The EPA also has regulatory and enforcement jurisdiction over emission sources beyond State waters (outer continental shelf) and those that are under the exclusive authority of the Federal government, such as aircraft, locomotives, and interstate trucking.

California Air Resources Board

The CARB, a department of the California Environmental Protection Agency (CalEPA), oversees air quality planning and control throughout California. Its responsibility lies with ensuring implementation of the 1989 amendments to the California Clean Air Act (CCAA), responding to the FCAA requirements and regulating emissions from motor vehicles sold in California. It also sets fuel specifications to further reduce vehicular emissions. The amendments to the CCAA establish California Ambient Air Quality Standards (CAAQS) and a legal mandate to achieve these standards by the earliest practicable date. These standards apply to the same criteria pollutants as the FCAA and also include sulfate, visibility, hydrogen sulfide, and vinyl chloride; refer to Table 1.

Table 1
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]	Federal Standards[2]	
		Concentration[3]	Primary[4]	Secondary[5]
Ozone (O3)	1 Hour	0.09 ppm (180 μg/m)	0.12 ppm (235 μg/m³)	0.12 ppm (235 μg/m³)
	8 Hour	0.07 ppm	0.08 ppm (157 μg/m³)	0.08 ppm (157 μg/m³)
Particulate Matter (PM10)	24 Hour	50 μg/m³	150 μg/m³	150 μg/m³
	Annual Arithmetic Mean	20 μg/m³	50 μg/m³	50 μg/m³
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard	65 μg/m³	65 μg/m³
	Annual Arithmetic Mean	12 μg/m³	15 μg/m³	15 μg/m³
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	9 ppm (10 mg/m³)
	1 Hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	35 ppm (40 mg/m³)
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	N/A	0.053 ppm (100 μg/m³)	0.053 ppm (100 μg/m³)
	1 Hour	0.25 ppm (470 μg/m³)	N/A	N/A
Lead (Pb)	30 Days Average	1.5 μg/m³	N/A	N/A
	Calendar Quarter	N/A	1.5 μg/m³	1.5 μg/m³
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	N/A	0.030 ppm (80 μg/m³)	N/A
	24 Hour	0.04 ppm (105 μg/m³)	0.14 ppm (365 μg/m³)	N/A
	3 Hour	N/A	N/A	0.5 ppm (1300 μg/m³)
	1 Hour	0.25 ppm (655 μg/m³)	N/A	N/A
Visibility-Reducing Particles	8 Hour (10 am to 6 pm, PST)	Extinction Coefficient = 0.23 km@<70% RH	**No Federal Standards**	
Sulfates	24 Hour	25 μg/m3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m3)		

Source: California Air Resources Board, April 2005.

ppm = parts per million; μg/ m³ = micrograms per cubic meter; mg/ m³ = milligrams per cubic meter; km = kilometers; RH = relative humidity; PST = pacific standard time; N/A = not applicable.

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter-PM10, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In 1990, the CARB identified vinyl chloride as a Toxic Air Contaminant and determined that there was not sufficient available scientific evidence to support the identification of a threshold exposure level. This action allows the implementation of health-protective control measures at levels below the 0.010 ppm ambient concentration specified in the 1978 standard.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. EPA also may designate an area as *attainment/unclassifiable* if (1) monitored air quality data show that the area has not violated the ozone standard over a three-year period; or (2) there is not enough information to determine the air quality in the area. For PM10, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over the three years, are equal to or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.
3. Concentration is expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

MDAQMD Air Quality Attainment Plan

PM_{10} Non-Attainment

The U.S. EPA has designated certain geographical areas as having violated the NAAQS for PM_{10}. The geographical areas when so designated become Federal non-attainment areas. The FCAA requires areas designated non-attainment with the PM_{10} NAAQS, to comply with Federal attainment planning requirements. A large portion of the MDAQMD was classified non-attainment and therefore must comply with all the Federal requirements associated with PM_{10} attainment planning.

The "Moderate" non-attainment classification requires the MDAQMD to develop and adopt an SIP revision that provides for the adoption and implementation of Reasonably Available Control Measures (RACM) and Reasonably Available Control Technology (RACT) to reduce PM_{10} emissions arising form human activities. The SIP revision must include quantitative

milestones to be achieved every three years. Such milestones must demonstrate reasonable further progress (RFP) in reducing PM_{10} emissions toward attainment of the NAAQS. In addition to these RFP requirements, the SIP revision must include a demonstration that the plan will provide for attainment of the Federal PM_{10} standards by the earliest practicable date.

1991 Air Quality Attainment Plan

The portion of the Southeast Desert Modified Air Quality Maintenance Area (SDMAQMA), in which the project site is located, has been given a Severe-17 non-attainment designation by the U.S. EPA. This area includes the Coachella Valley/San Jacinto region in Riverside County, the Victor Valley/Barstow region in San Bernardino County (which includes the project site) and the Antelope Valley region in Los Angeles County. The U.S. EPA designated this area as Severe-17 on the basis of a 0.24 ppm ozone value measured in Banning, California.

The Severe-17 designation requires the MDAQMD to implement a program to reach the ozone standard by November 15, 2007. In addition, the 1990 Clean Air Act Amendments require the demonstration of RFP through the development of a control strategy, which provides for a three percent annual reduction in ROG emissions, averaged over a three-year period. In response to the requirements of the CCAA, the MDAQMD (at that time, the San Bernardino County Air Pollution Control District) published its final 1991 Air Quality Attainment Plan (AQAP).

The "Post 1996 Attainment Demonstration and Reasonable Further Progress Plan" (ADP), adopted October 26, 1994, provides an update to the efforts utilized to meet the state and Federal standards. The ADP contains the following statement of the nature of the ozone non-attainment problem in the desert portion of San Bernardino County:

> *"The control strategy plan shows that the District (MDAQMD) is overwhelmingly impacted by ozone transported from the South Coast Air Basin (SCAB) and its attainment demonstration is dependent on SCAB's attainment of the federal ozone standard...the plan shows that the District will attain the 0.12 ppm federal ozone standard in the year 2007, by SCAB substantially reducing its ozone precursor emissions (VOCs and NO_x) to reduce the effects of transported ozone on the District's monitored ozone concentrations."*

The ADP concludes that the Federal ozone standard will be met in 2007, as a result of emission reduction in the SCAB. An Urban Airshed Model (UAM) evaluation was conducted by the South Coast Air Quality Management District (SCAQMD) to demonstrate this. Adding in the effect of the emission reduction identified by the MDAQMD in the ADP, results in the reduction of peak ozone concentrations from 12 ppm down to six to nine ppm.

As shown below, emissions for both construction and long-term operation of the proposed project would be below MDAQMD thresholds for all criteria pollutants. In addition, the proposed project would be compatible with existing adjacent land uses. It should also be noted that the proposed project will not exceed the San Bernardino Association of Governments (SANBAG) growth projections for population or employment. As such, the project is not anticipated to conflict with any applicable air quality management plans. Impacts in this regard are anticipated to be less than significant.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?* ***Less Than Significant Impact.***

Construction Phase

The Mojave Desert Air Basin currently has a non-attainment status for State and Federal ozone, moderate non-attainment for its PM_{10} standards, and is proposed for non-attainment status for its $PM_{2.5}$ standards. The proposed project site is located within the Mojave Desert Air Basin and is governed by the Mojave Desert Air Quality Management District (MDAQMD). The air quality documents applicable to the project area include the MDAQMD's *2004 Ozone Attainment Plan* and the *1994 Federal Particulate Matter (PM_{10}) Attainment Plan*. These documents provide guidelines and contain emission generation factors to calculate air pollutant emissions and to determine compliance with State and Federal air quality standards.

A project would normally be considered to have a significant effect on air quality if the project violates any ambient air quality standard, contributes substantially to an existing air quality violation, exposes sensitive receptors to substantial pollutant concentrations, or conflicts with adopted environmental plans and goals of the community where it is located. Table 2, (Construction Emissions Thresholds) includes the yearly and daily significance thresholds for each pollutant type used.

Table 2
CONSTRUCTION EMISSIONS THRESHOLDS

Pollutant	Annual Threshold (Tons/Year)	Daily Threshold (Pounds/Day)
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO_x)	25	137
Volatile Organic Compounds (ROGs)	25	137
Particulate Matter (PM_{10})	15	82
Source: Mojave Desert Air Quality Management District, *California Environmental Quality Act and Federal Conformity Guidelines*, March 2002.		

Short-term minor impacts associated with the construction phase may result in local nuisances associated with increased dust/particulate levels. This would be a temporary construction impact that would exist on a short-term basis during construction and would cease upon completion of construction. Adherence to standard dust control procedures would reduce potential construction-related air quality impacts to less than significant levels. Temporary construction related air quality impacts would include:

- Particulate (fugitive dust and PM_{10}) emissions from clearing and grading activities on-site;
- Exhaust emissions and potential odors from the construction equipment used on-site as well as the vehicles used to transport materials to and from the site; and
- Exhaust emissions from the motor vehicles of the construction crew.
- Construction emissions (PM_{10}, reactive organic gases [ROG] and NO_x) are estimated for the following types of emissions:
  - site excavation, tunneling equipment exhaust and fugitive dust;

- demolition;
- stationary equipment; and
- mobile equipment

Construction of the proposed expansion improvements would create air emissions through the operation of combustion-driven construction equipment and fugitive dust. Appendix A (Air Quality Data), details the assumptions and formulas used to estimate construction-related emissions. As indicated below, construction related emissions are not anticipated to exceed threshold criteria for significant air quality impacts. As stated in Table 3, (Daily Project Construction Emissions) construction-related activities associated with project implementation during the first year of construction would result in approximately 12.78 lbs/day of ROG, 81.95 lbs/day of NO_x, 107.95 lbs/day of CO, and 13.38 lbs/day of PM_{10}. During the second year of construction, which would include a majority of building activities would result in a total of approximately 15.95 lbs/day of ROG, 105.8 lbs/day of NO_x, 128.68 lbs/day of CO, and 4.22 lbs/day of PM_{10}. Project emission during construction would not exceed any MDAQMD air quality thresholds for criteria pollutants. Based on the above, the proposed project would not result in significant air quality impacts for short-term construction. Betterment measures to minimize air quality impacts to the maximum extent practicable are provided below.

Table 3
DAILY PROJECT CONSTRUCTION EMISSIONS

Emissions Source	Pollutant (lbs/day)[1]			
	ROG	NO_x	CO	PM_{10}
Year 1				
Unmitigated Construction Emissions	12.78	81.95	107.95	13.38
Mitigated Emissions[2]	12.78	81.95	107.95	4.87
MDAQMD Threshold	*137*	*137*	*548*	*82*
Threshold Exceeded?	**No**	**No**	**No**	**No**
Year 2				
Unmitigated Construction Emissions	15.95	105.88	128.68	4.22
Mitigated Emissions[2]	15.95	105.88	128.68	4.22
MDAQMD Threshold	*137*	*137*	*548*	*82*
Threshold Exceeded?	**No**	**No**	**No**	**No**

ROG = Reactive Organic Gases NO_x = Nitrogen Oxides CO = Carbon Monoxide
PM_{10} = Particulate Matter

Notes:
1. Calculations include emissions from numerous sources including: grading, construction worker trips, stationary equipment, diesel mobile equipment and asphalt off gassing.
2. Mitigation includes applying soil stabilizers to inactive areas, replacing groundcover in disturbed areas quickly, watering exposed surfaces twice daily and covering stockpiles with a tarp.

Source: Emissions calculated using the URBEMIS 2002, Version 8.7 Computer Model as recommended by CARB and the MDAQMD.

Betterment Measures:

AQ-1 During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the Mohave Desert Air Quality Management District Rule 403.2, *Fugitive Dust Control in the Mojave Desert Planning Area*:

(a) Use periodic watering for short-term stabilization of disturbed surface area to minimize visible fugitive dust emissions. For purposes of this Rule, use of a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance;
(b) Take actions sufficient to prevent project-related trackout onto paved surfaces;
(c) Cover loaded haul vehicles while operating on Publicly Maintained paved surfaces;
(d) Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate Visible Fugitive Dust emissions;
(e) Cleanup project-related trackout or spills on Publicly Maintained paved surfaces within twenty-four hours; and
(f) Reduce non-essential earth-moving activity under high wind conditions. For purposes of this rule, a reduction in earth-moving activity when visible dusting occurs from moist and dry surfaces due to wind erosion shall be considered sufficient to maintain compliance.

AQ-2 All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

Operational Phase

Mobile Sources

The wastewater treatment plant is anticipated to result in a nominal increase in air emissions from long-term operations of the plant. For the purposes of quantifying project related emissions, the analysis assumes that 10 workers will commute to and from the project site. These workers may be added to the VVWRA staff to operate and maintain the proposed facilities associated with the plant expansion. Additionally, the analysis assumes that up to 5 haul trucks with a 20 cubic yard capacity will be used on a daily basis to remove sludge debris. To be conservative, the destination haul site was assumed to be within the California Street Landfill in the City of Redlands (a solid waste facility permitted to accept sludge bio-solids). As shown on Table 4, LONG-TERM (OPERATIONAL) EMISSIONS, emissions from the proposed project would not exceed MDAQMD thresholds. Based on the expected number of trips generated during project operations and the current Level of Service on the local roadway system, a Carbon Monoxide hotspot would not occur.

Table 4
LONG-TERM (OPERATIONAL) EMISSIONS

Emissions Source	Pollutant (lbs/day)			
	ROG	NO_x	CO	PM_{10}
Sludge Removal Truck Trips	2.89	27.8	19.9	0.9
Employee Commuter Trips	1.5	1.5	13.9	0.11
Total Operational Emissions[2]	4.39	29.3	33.8	0.20
MDAQMD Threshold	*137*	*137*	*548*	*82*
Threshold Exceeded?	**No**	**No**	**No**	**No**

ROG = Reactive Organic Gases NO_x = Nitrogen Oxides CO = Carbon Monoxide
PM_{10} = Particulate Matter

Notes:
1. Sludge removal trips assume a round trip length of 104 miles, 5 round trips per day. Employee trips assume 10 workers traveling a one way distance of 25 miles.

Source: Emissions calculated using the EMFAC2002 Computer Model as recommended by the MDAQMD.

Stationary Source Emissions

It is not anticipated that any of the equipment that will be utilized on-site will create an exceedance in criteria pollutant thresholds. Per the Mojave Desert Air Toxics Hot Spots Program (Assembly Bill 2588), any stationary equipment be used on-site that utilized propane, natural gas or diesel (or any combustible fuel) would be subject to the MDAQMD permitting requirements. Should a permit be required, the MDAQMD Stationary Source Compliance staff will require the quantification of emissions during the permit application and specify any necessary off-sets should they be required. It should also be noted that the MDAQMD CEQA guidelines do not specify a wastewater treatment plant as a regulated use for toxics. Therefore, operation of the proposed facility is not expected to result in an adverse risk of toxic exposure.

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

Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions are from mobile sources, which travel well out the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area. Accordingly, the cumulative analysis for a project's air quality analysis must be regional by nature.

The project area is in attainment for CO. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the MDAB. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, the greatest cumulative impact on the quality of regional air will be the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. However, based upon the results of the air quality emissions during construction and operation (refer to Tables 3 and 4), the project does not present a significant burden to the

local air quality condition. Thus, due to the project's relatively small scale, the contribution to the cumulative air emissions is not "cumulatively considerable".

d) *Expose sensitive receptors to substantial pollutant concentrations?* ***Less Than Significant Impact.***

The nearest receptors to the project site are located more than a ¾-mile from the vicinity of the project. In addition, the project is not anticipated to exceed any air quality thresholds for criteria pollutants as administered by MDAQMD. Also refer to Response 4.3b, above. Impacts in this regard are not anticipated to be significant.

e) *Create objectionable odors affecting a substantial number of people?* ***Less Than Significant Impact.***

Construction Phase

Construction activities associated with the project may generate detectable odors from construction equipment exhaust. Odors associated with diesel and gasoline fumes are transitory in nature and would not create objectionable odors affecting a substantial number of people. In addition, the nearest sensitive receptors to the site are located approximately ¾-mile from the subject site. Moreover, the impacts of these odors would be short-term would cease upon project completion, resulting in a less than significant impact.

Operational Phase

Implementation of this project has the potential to generate additional odors from wastewater reclamation activities. The existing wastewater treatment plant generates odors and an expansion of the plants treatment capacity has the potential to increase the odors associated with such processing.

The project site is located approximately ¾-mile from the nearest sensitive receptor and the existing reclamation plant already exhibits the clean organic odor associated with a properly operated treatment system. Although reclamation plant operations occasionally turn anaerobic and also emit sour odors, this does not happen often and it is a correctable situation. The VVWRA wastewater reclamation plant has had very few odor complaints over the past ten years of operations. Expansion of the plant's capacity includes upgrading the system and provides the additional ability to manage and control odors. Based on the operating history of the existing plant and the enhanced ability to manage the treatment process that would occur from implementing the proposed expansion project, the potential odor impacts from this component of the proposed project are not forecast to be significant. As such, impacts are considered less than significant in this regard.

4.4 BIOLOGICAL RESOURCES. *Would the project:*

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?* ***Less Than Significant with Mitigation Incorporated.***

The proposed percolation ponds would affect one major habitat type, creosote bush scrub, and limited areas of atriplex scrub habitat. The area has been studied during prior field surveys and records searches for previous VVWRA projects. Based on the results of these various studies

the project area includes old river terrace deposits where desert tortoises (a federal and California State listed Threatened Species) have been observed in the past. The site is also within an area known to be occupied by the Mohave ground squirrel (MGS), which is listed as a State Threatened Species. The project would impact approximately 20 acres of native land for the construction of the percolation ponds. The proposed percolation pond area has been analyzed as part of a separate CEQA document (*Victor Valley Wastewater Reclamation Authority's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and CALIFORNIA Bio-mass, Inc. Recycling, Transfer, C&D Compost Facility, Initial Study/Mitigated Negative Declaration,* VVWRA, Tom Dodson & Associates, December 5, 1999), and mitigation for impacts to desert tortoise and MGS were previously provided. In addition, tortoise exclusionary fencing has already been constructed around the proposed percolation pond area. Thus, impacts due to construction of the proposed percolation ponds would not be significant.

In addition to the percolation ponds, proposed project components would also include numerous improvements within the boundaries of the existing VVWRA facility (refer to Exhibit 3, SUBJECT SITE). These improvements would occur within a previously disturbed area, surrounded by similar wastewater treatment structures and equipment. Moreover, the existing facility is surrounded by exclusionary tortoise fencing. Improvements at the existing VVWRA facility would not disturb sensitive biological resources. However, as sensitive species are known to exist in the project vicinity, mitigation measures have been provided to minimize impacts to the maximum extent practicable..

BIO-1 Worker education programs, defined construction areas, habitat mitigation, and well defined operational procedures shall be implemented.

BIO-2 Attraction of common ravens and other potential desert tortoise predators to the project area shall be reduced to the maximum extent possible, primarily by controlling trash disposal by construction crews and facility employees.

BIO-3 Unauthorized, public off-road use of any project areas shall be discouraged by posting of signs and by VVWRA inspectors monitoring the construction crew.

BIO-4 Construction personnel or other persons related to the project shall not be permitted to bring pets or firearms into construction areas.

BIO-5 Trash from construction crews and facility employees, especially food items or packaging, shall be disposed of in scavenger-proof containers and removed daily to avoid attracting desert tortoise predators to the area.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***No Impact.***

The area to be disturbed during construction of the proposed percolation ponds does not contain riparian or wetland habitat.[2] In addition, miscellaneous improvements at the existing

[2] *Victor Valley Wastewater Reclamation Authority's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and CALIFORNIA Bio-mass, Inc. Recycling, Transfer, C&D Compost Facility, Initial Study/Mitigated Negative Declaration,* VVWRA, Tom Dodson & Associates, December 5, 1999.

VVWRA facility would occur within a previously disturbed area. No impacts would occur in this regard.

c) *Have a substantial adverse effect on federally protected wetlands as identified by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal etc.) through direct removal, filling, hydrological interruption, or other means?* ***No Impact.***

Refer to Response 4.4b, above.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?* ***No Impact.***

Improvements proposed as part of the project will be located outside of the wildlife corridor area associated with the Mojave River floodplain. Furthermore, the project would not impede the use of native wildlife nursery sites. No impacts are anticipated in this regard.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* ***Less Than Significant Impact***

The only known local policies and ordinances affecting biological resources on the project site are those State and County ordinances protecting native desert plant species. As with most of the surrounding desert area, the project site contains Joshua trees and other cacti that are protected and require mitigation. Impacts to Joshua trees and other cacti have been previously analyzed in a separate CEQA document, and mitigation has been provided.[3] Impacts in this regard would not be significant.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?* ***No Impact.***

There is no adopted habitat conservation plan, natural community conservation plan or other adopted habitat conservation plan applicable to the subject site. However, it should be noted that the West Mojave Multi-species Habitat Conservation Plan (MSHCP) is being finalized by the U.S. Bureau of Land Management (the public review period for the Final Environmental Impact Statement has concluded, and a Record of Decision is pending).[4]The project site is not designated as a conservation area and its use for the proposed project has no potential to conflict with the West Mojave MSHCP or any other adopted plan. No impacts are anticipated in this regard.

4.5 CULTURAL RESOURCES. *Would the project:*

a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?* ***No Impact.***

[3] *Victor Valley Wastewater Reclamation Authority's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and CALIFORNIA Bio-mass, Inc. Recycling, Transfer, C&D Compost Facility, Initial Study/Mitigated Negative Declaration,* VVWRA, Tom Dodson & Associates, December 5, 1999.

[4] Personal communication between Alan Ashimine, RBF Consulting and Larry LePre, United States Bureau of Land Management, Desert District Office, July 11, 2005.

Due to the scope and nature of the proposed project, implementation would not impact any structures. Therefore, no impacts to historic resources would occur.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?* ***No Impact.***

The proposed percolation ponds would impact approximately 20 acres of undeveloped land. However, the proposed percolation pond area has been analyzed as part of a separate CEQA document (*Victor Valley Wastewater Reclamation Authority's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and CALIFORNIA Bio-mass, Inc. Recycling, Transfer, C&D Compost Facility, Initial Study/Mitigated Negative Declaration,* VVWRA, Tom Dodson & Associates, December 5, 1999) which included an examination of cultural resources. This previous document concluded that archaeological resources have the potential to exist within the percolation pond area, and mitigation measures reducing impacts to less than significant levels were provided.

In addition, all project improvements aside from the percolation ponds would occur within the existing VVWRA facility, in a previously disturbed area. Therefore, these areas are determined to be of low sensitivity for historical and archaeological resources. However, if buried cultural materials are encountered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. Impacts in regards to archaeological resources are not anticipated to be significant.

Betterment Measure:

CUL-1 If buried cultural materials are discovered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

c) *Directly or indirectly destroy a unique paleontological resource or site of unique geologic feature?* ***Less Than Significant with Mitigation Incorporated.***

As stated above, the proposed 20-acre percolation pond area has been previously analyzed within a separate CEQA document. The previous CEQA document stated that the geological properties beneath the subject area exhibit a potential for paleontological resources to exist, and mitigation measures reducing impacts to less than significant levels were provided.

While the miscellaneous improvements within the existing VVWRA facility would be constructed in a previously disturbed area, a potential for disturbance would remain in areas where excavation would occur. The mitigation measures provide below would reduce impacts to paleontological resources to less than significant levels.

Mitigation Measures:

CUL-2 The excavation of areas identified as likely to contain paleontological resources should be monitored by a qualified paleontological monitor. Monitoring should be done on all undisturbed subsurface areas with bedrock, older alluvium, and alluvium which might be present below the surface. The monitor should be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The monitor should also remove samples of sediments which are likely

to contain the remains of small fossil invertebrates and vertebrates. The monitor must have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

CUL-3 Collected samples of sediments should be washed to recover small invertebrate and vertebrate fossils. Recovered specimens should be prepared so that they can be identified and permanently preserved.

CUL-4 Recovered specimens shall be identified and curated and placed into a repository with permanent retrievable storage.

CUL-5 A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the repository, would signify completion of the program to mitigate impacts to paleontological resources.

d) *Disturb any human remains, including those interred outside of formal cemeteries?* ***No Impact.***

There are no known formal or informal gravesites containing human remains within the limits of the subject site. No impacts in this regard are anticipated. In the event of an inadvertent discovery, VVWRA shall adhere to the requirements in section 15069.5 of the State CEQA Guidelines.

4.6 GEOLOGY AND SOILS. *Would the project:*

Building safety and construction of facilities are regulated by the requirements set forth within the Uniform Building Code (UBC). The UBC represents the most current practices in building safety and construction of earthquake resistant structures. All project facilities will be designed to meet current applicable design standards, relative to geotechnical, soils and seismic constraints.

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

1. *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.* ***No Impact***

No known active faults occur within the project area. No potential exists for fault rupture to impact the proposed project. Therefore, no impacts are anticipated in this regard.

2. *Strong seismic ground shaking?* ***Less Than Significant Impact.***

Southern California is likely to experience, on average, one earthquake of Magnitude 7.0, and ten earthquakes of Magnitude 6.0 over a period of 10 years. Active faults are faults that are considered likely to undergo renewed movement within a period of concern to humans. These include faults that are currently slipping, those that display earthquake activity, and those that have historical surface rupture. The California Geological Survey defines active faults as those that have had surface displacement within Holocene time (about the last 11,000 years). Such

displacement can be recognized by the existence of sharp cliffs in young alluvium, unweathered terraces, and offset modern stream courses. Potentially active faults are those believed to have generated earthquakes during the Quaternary period, but prior to Holocene time.

As with most of southern California, the project area is subject to significant seismic ground shaking. Major active faults near the project site include the northwest to southeast trending faults (San Andreas and San Jacinto) in the vicinity of Cajon Junction just south of Cajon Pass, which is the southern entry into the Victor Valley along Interstate 15, and the Helendale Fault. These faults are located approximately 20 miles south of the project site:

San Andreas Fault: The San Andreas Fault is over 600 miles in length and has a slip rate of approximately 20 to 35mm per year. At its closest point, this fault is located approximately 20 miles south of the project site and is capable of a magnitude of 6.8 to 8.0 earthquake.

San Jacinto Fault: The San Jacinto Fault is over 130 miles in length and has a slip rate of 7 and 17mm per year. The fault is capable of a magnitude of 6.5 to 7.5 earthquake.

Helendale Fault: The Helendale Fault is near the communities of Victorville, Apple Valley, and Lucerne Valley, approximately 55 miles in length. The fault is capable of magnitude 6.5 to 7.3 earthquake.

The proposed project would not affect subsurface geology or the probability of a seismic event. In the event of an earthquake, the proposed project could sustain damage. However, the project does not include the development of habitable buildings and is not located adjacent to residences. In addition, adherence to the seismic requirements of the latest Uniform Building Code would provide specific standards for facility designed to withstand ground shaking within an acceptable level of risk. As such, impacts in this regard are anticipated to be less than significant.

Betterment Measure:

GEO-1 To protect human health and operational capability of those facilities occupied by humans or those facilities that are essential for maintaining wastewater treatment during an earthquake emergency, VVWRA shall abide by appropriate design requirements to meet performance standards. Should the new facilities that will be occupied or are essential to treatment operations be exposed to the maximum ground shaking forecast for the project site, the structures shall be designed to maintain structural integrity and functional capability and not collapse or otherwise pose a significant safety or health hazard to employees working at the time the earthquake occurs. This is a safety and functional based performance standard for certain facilities since the continued operation of the treatment plant immediately after an earthquake occurs is essential.

3. *Seismic-related ground failure, including liquefaction?* ***Less Than Significant Impact.***

Liquefaction is the loss of strength of cohesionless soils when the pore water pressure in the soil becomes equal to the confining pressure. Liquefaction generally occurs as a "quicksand" type of ground failure caused by strong ground shaking. The primary factors influencing liquefaction potential include groundwater, soil type, relative density of the sandy soils, confining pressure, and the intensity and duration of ground shaking.

Previous geotechnical reports prepared for the facility indicate that groundwater exists at a depth ranging from 25 to 50 feet below ground surface (BGS). In addition, the potential for liquefaction is expected to be low because of the medium dense nature of the soils in the area. Therefore, the upgrade and expansion of the facility and its operation are anticipated to be subject to less than significant seismic-related ground failure impacts.

4. *Landslides?* ***Less Than Significant Impact.***

Landslides are mass movements of the surface that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. No landslide or mudflow evidence was found within the proposed project area of potential impact. However, the project site is partially underlain by Mojave River alluvium soils, which may be susceptible to localized slope instability, especially in areas with steep topography. Although no project facilities are proposed on steep slopes, the Mojave River channel is situated to the east of the proposed project site. Furthermore, treated effluent will be placed in the proposed percolation ponds (maximum depth of 5 feet) which may potentially be released during a landslide. However, as previously mentioned, the project facilities are not proposed on steep slopes and the volume of treated effluent in the percolation ponds is not sufficient to cause significant impacts. Less than significant impacts are anticipated in this regard.

b) *Result in substantial soil erosion or the loss of topsoil?* ***Less Than Significant Impact with Mitigation (Mitigation Applicable to Operational Phase Only).***

Construction Phase

Construction of the proposed project may temporarily increase the potential for soil loss due to wind and water erosion. In addition, grading during the construction phase of the project would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. Although the impact of the construction activities would be short-term, the contractor will be required to comply with standard engineering practices for erosion control and a qualified soils engineer will monitor soil compaction during construction. Additionally, the implementation of a Storm Water Pollution Prevention Plan (SWPPP) would reduce potential soil erosion impacts to less than significant levels requiring no mitigation measures.

Operational Phase

Certain facilities proposed by this project encompass areas that are exposed to erosion from surface runoff, which originates from the west (from the Southern California Logistics Airport) and flows across the old river terrace deposits on the western side of Shay Road towards the Mojave River channel. Due to the topography and the volume of flows across the proposed percolation pond area, the potential erosion hazards are high. As a result, a potential for significant erosion may exist during long-term operation of the facility. Mitigation measures will need to be implemented to control potential erosion impacts on the steeper slopes during operation of the project.

Mitigation Measures:

GEO-2 Areas disturbed during construction which will not be used for facilities to support the facility expansion or operations shall be revegetated as soon as feasible. The topsoil which will contain seeds from any plants in the area shall be set aside in a manner that it can be placed back on the surface of areas not being used

following completion of construction. A revegetation plan shall be implemented that will achieve 40% of existing ground cover within a five-year period.

GEO-3 During construction and after installation of facilities that affect any concentrated surface flows or stream channel, adequate measures shall be taken to divert drainage flows around or through the construction area to control erosion and sedimentation potential in the construction area and downstream to the Mojave River. The performance standard for site runoff shall be consistent with the water quality objective established in the Water Quality Control Plan for the Lahontan Region. Extrapolating the suspended material concentration from the Plan would require the concentrations of suspended material in the Mojave River not to exceed a 10% increase in concentration or a concentration that will cause a nuisance or adversely affect the River's beneficial uses in the project area. To meet this threshold, VVWRA shall require the construction contractor to prepare and submit the required Notice of Intent to the State Water Quality Control Board for an NPDES construction permit and prepare a Stormwater Pollution Prevention Plan (SWPPP) for this project since it exceeds the minimum acreage of disturbance. The SWPPP shall include sufficient measures to ensure that the Basin Plan surface water quality objectives are not exceeded for this stretch of the Mojave River.

GEO-4 Stored backfill shall be placed in areas which are not subject to the erosive flows of water to mitigate potential water erosion impacts.

GEO-5 Should water erosion damage occur in areas disturbed for this project during construction, VVWRA shall restore eroded areas not being converted to operating areas to pre-project conditions.

GEO-6 Potential long-term erosion/sedimentation impacts will be further reduced by requiring the construction contractor to properly backfill and compact all disturbed operating areas, and return them to a final grade or condition that will not result in future erosion. Additionally, the portions of any stream channels disturbed by this project which will not be utilized for project operating areas shall be returned to as near their pre-project condition as reasonably feasible.

GEO-7 Adequate storm runoff facilities will be installed within operating areas and downstream to the Mojave River channel to ensure that flows from the areas utilized for operations shall not cause or result in significant erosion or sedimentation that could violate the water quality objectives referenced above.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?* ***Less Than Significant Impact.***

Refer to Response 4.6a, above. Due to the fact that the project does not propose any habitable structures and that construction of the project would follow all applicable guidelines of the Uniform Building Code (UBC), impacts in this regard are anticipated to be less than significant.

Betterment Measure:

Refer to betterment measure GEO-1, above.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?* ***Less Than Significant Impact.***

Soils underlaying the project area (Mojave River Alluvium, Undifferentiated Alluvium, and Older Alluvium) all exhibit low expansion potential due to their relatively high permeability.[5] As such, impacts in regards to expansive soils are anticipated to be less than significant. Also, refer to Response 4.6c.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?* ***No Impact.***

The project does not propose septic tanks nor habitable structures requiring the use of septic tanks. In addition, the project itself is a sewage treatment facility. No impacts are anticipated in this regard.

4.7 HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* ***Less Than Significant with Mitigation Incoporated.***

Generally, raw sewage is considered a biohazard. Sewage would be safely contained and conveyed during long-term operation of the project. A failure in the facility in which raw sewage is released into the environment may result in a hazard to surrounding sensitive uses. However, as the project is subject to monitoring for such leaks/spills, the likelihood of such failure generating hazardous conditions is negligible. In addition, the pipeline would be constructed in accordance with standard design/construction practices. VVWRA would prepare a contingency response plan in the event any spillage were to occur.

None of the facilities required to support this project have any potential to create any health hazards. Percolation of secondary treated effluent has been successfully demonstrated to operate in a manner that does not cause any public health hazards for downstream users based on more than ten years of percolation at the existing facility.

Operation of the plant would also likely involve the routine use, storage, and transport of cleaning chemicals, mechanical maintenance chemicals, and other industrial materials. All such hazardous materials would be used, stored, and transported in accordance with applicable local, state, and federal (including Occupation Health and Safety Administration [OSHA]) requirements. Impacts in this regard are anticipated to be less than significant.

Mitigation Measure:

HAZ-1 If a hazardous or toxic substance is released during construction, operation, or maintenance of the proposed project, the VVWRA or its contractor shall have a contingency response plan in place that will accomplish the following: a) properly clean up and remove any contaminated soil or other material; b) restore the affected area to background conditions or to regulatory threshold levels for the contaminant(s) accidentally released; and c) deliver the contaminated material to an appropriate treatment, recycling, or landfill facility in accordance with the

[5] SCLA Specific Plan Amendment and Rail Service Project Draft EIR, RBF Consulting, January 5, 2004.

regulations of the type of contaminant accidentally released and collected for management.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?* ***Less Than Significant Impact.***

The proposed project is not anticipated to result in a release of hazardous materials into the environment (refer to Response 4.7a, above). However, during the short-term period of project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor will be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?* ***No Impact.***

No existing or proposed school facilities are located within a one-quarter mile radius of the project site. Thus, impacts to existing schools would not occur.

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?* ***Less Than Significant with Mitigation Incorporated.***

No surface contamination is known to occur within the project area, and it is anticipated that the project can be constructed without exposing the facilities or employees to any known areas of contaminated by hazardous materials. However, adequate measures shall be in place should any suspected hazardous materials be encountered.

Another issue of concern is the trichloroethylene (TCE) groundwater plume that has been identified beneath the former George Air Force Base (now the Southern California Logistics Airport), which is located to the southwest of the reclamation plant. TCE concentrations in the Upper Aquifer have been observed to be approximately an order of magnitude higher than TCE concentrations in the Lower Aquifer. According to the Lahontan Regional Water Quality Control Board (RWQCB), the TCE plume in the Lower Aquifer has been migrating to the northeast of SCLA and extends to the vicinity of the reclamation plant, where TCE has been detected at concentrations of approximately 10 parts per billion (ppb). This groundwater plume was identified as a Recognized Environmental Condition (REC) in a hazardous materials public records search prepared for the proposed project. A system of groundwater monitoring wells and extraction wells has been installed in the Upper and Lower aquifers by the Air Force to characterize and remediate the TCE plume.

Although groundwater flow directions can change over time depending on flows in the Mojave River, rainfall, and groundwater pumping, the proposed project is anticipated to have a beneficial impact in regards to the existing TCE groundwater contamination. It is likely that

increases in groundwater levels in the vicinity of the ponds will slow the eastward migration of the small TCE plume in the Lower Aquifer. Increases in groundwater levels may also slow the eastward migration of the larger plume (Upper Aquifer). When the extraction well system in the Lower Aquifer is operational, it is likely that some recharged effluent will be captured by the extraction wells, thereby diluting the concentrations of TCE.

Moreover, the proposed project would be constructed in accordance with best management practices identified for the construction of a project within the "Border Zone of a Contaminated Property (within 2,000 feet of a contaminated site). The project will comply with the Border Zone requirements of California Health and Safety Code Section 25200. In addition, should groundwater be encountered during construction of the project, a qualified hazardous materials specialist would be attained to characterize the source, nature, and extent of contamination, and contain it to minimize potential impacts to surrounding uses.

The following mitigation measure will reduce any unanticipated hazards to below a level of significance.

Mitigation Measure:

HAZ-2 If groundwater or an area of suspected contamination by a hazardous substance is encountered, the VVWRA shall retain the services of a qualified hazardous materials specialist to characterize the source, nature and extent of the contamination, contain the contamination so as not to present a hazard to employees or the facility, and to remove the contamination and restore the area to meet current remediation standards, or require the responsible party to remediate the contamination.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? ***No Impact.***

The proposed project is located within the SCLA Planning Area adjacent to the Southern California Logistics Airport (SCLA), formerly known as the George Air Force Base. The proposed upgrade and expansion would not create a safety hazard for the project area. The project does not propose any large/habitable structures capable of creating hazards in regards to the adjacent SCLA.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? ***No Impact.***

No private airstrips exist near the project site. No impacts are anticipated in this regard. Also refer to Response 4.7e, above.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***No Impact.***

Based on a review of the City's General Plan, the proposed project facilities are not located in an area affected by any emergency response or evacuation plan. No impacts are anticipated in this regard.

h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?* ***No Impact.***

The project area has low-density vegetation cover and is not identified as a high fire hazard area in either the City or County General Plan. No potential exists for the proposed project to create a significant fire hazard due to the type of vegetation on the project site. No impacts are anticipated in this regard.

4.8 HYDROLOGY AND WATER QUALITY. *Would the project:*

a) *Violate any water quality standards or waste discharge requirements?* ***Less Than Significant Impact.***

Construction Phase

Refer to Response 4.6b, above.

Operational Phase

The proposed project would contain all sewage and reclaimed water on-site. Currently, the average discharge of reclaimed water to the adjacent Mojave River is approximately 5.5 million gallons per day (MGD). This amount of current discharge into the Mojave River is well below the permitted capacity of eight MGD. Discharge will increase slightly with implementation of the project. Upon implementation of an enhance reclaimed water program, it is expected that additional reclaimed water could be distributed to nearby businesses and utilities, thus keeping the discharge to the Mojave River approximately the same. As stated above, percolation of secondary treated effluent has been successfully demonstrated to operate in a manner that does not cause any public health hazards for downstream users based on more than 23 years of percolation at the existing facility. Previous groundwater studies prepared for the VVWRA facility have concluded that groundwater is similar in most respects to the effluent that will be recharged in the percolation ponds. Recharge of plant effluent is anticipated to have only minimal impacts to groundwater in the site vicinity. Impacts in this regard are anticipated to be less than significant. Also refer to Response 4.6b, above, for a discussion of impacts in regards to long-term operational runoff impacts.

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

The proposed project would construct 4 new percolation ponds over a total of approximately 20 acres, each approximately 5 feet in depth. The percolation ponds are a natural type of secondary effluent treatment in which percolation occurs through the soil at a designated rate. The net effect of returning this treated effluent to the soil will be to compensate or replace a percentage of the groundwater extracted to supply the Victor Valley communities. This is considered a positive benefit of the project, not an adverse impact.

A hydraulic modeling evaluation (CH2MHill, 1999) was prepared for a previous, similar expansion of the VVWRA facility to analyze potential impacts in regards to an adverse build-up of a water mound beneath proposed percolation ponds. The previous expansion also proposed

percolation ponds which would percolate water into the Alto Sub-basin, immediately south of the proposed subject site. The study concluded that impacts to water levels are generally confined to the area within several hundred feet from the edge of the percolation ponds. In addition, VVWRA previously installed a monitoring system that would ensure that subsurface water levels do not exceed safe limits. Continued operation of the monitoring wells as required in HWQ-1 will reduce impacts to below a level of significance.

Mitigation Measure:

HWQ-1 VVWRA shall continue to operate existing monitoring wells to measure the level of water beneath the percolation ponds. If the water level rises to within five feet of the bottom of the percolation pond in operation, VVWRA will switch discharge of treated effluent to an alternate pond to prevent the groundwater level from becoming standing water in the pond and reducing the rate percolation.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?* ***Less Than Significant Impact.***

Runoff from the San Gabriel and San Bernardino Mountains are the primary contributors to the surface stream flows and groundwater aquifers in the Mojave Desert. The West Fork of the Mojave River and Deep Creek originate in the San Bernardino Mountains and serve as the head waters of the Mojave River. The Sheep Creek drainage, originating in the San Gabriel Mountains, is the primary drainage west of Interstate 15. Most of the Sheep Creek drainage flows terminate at El Mirage Dry Lake.

The Mojave River flows north from the San Bernardino Mountains through the Alto Subarea, and Victor Valley communities, through the Centro Subarea and the City of Barstow, and finally through the Baja Subarea into Soda Lake. These subbasins of the Mojave River Basin are also termed the Upper, Middle and Lower Basins. The proposed project would not alter the drainage patterns of any of the aforementioned waterways.

Within the area being set aside for percolation ponds, the surface runoff would be captured and not permitted to leave the pond area. Thus, the runoff from this 20-acre area would be captured and retained on-site for percolation or discharge (after monitoring for water quality). Moreover, runoff from the project area within the existing VVWRA facility would also be contained on-site and would be retained for percolation or discharge after monitoring for water quality. Impacts in this regard would not be significant.

Also refer to Response 4.6b, above, in regards to impacts relating to erosion and siltation.

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

Refer to Response 4.8c, above.

e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?* ***Less Than Significant Impact.***

Refer to Response 4.8c, above.

f) *Otherwise substantially degrade water quality?* ***Less Than Significant Impact.***

Beyond analysis provided above, the proposed project is not anticipated to otherwise degrade water quality within the project site vicinity. Impacts are anticipated to be less than significant in this regard. Refer to Response 4.8a, above.

g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?* ***No Impact.***

The proposed project does not involve any housing developments. No impacts would occur in this regard.

h) *Place within a 100-year flood hazard area structures that would impede or redirect flood flows?* ***No Impact.***

According to the City of Victorville General Plan Safety Element, the subject site is situated outside of the 100-year flood hazard area. Impacts in this regard are not anticipated.

i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?* ***No Impact.***

Refer to Response 4.8h above.

j) *Inundation by seiche, tsunami, or mudflow?* ***No Impact.***

No water bodies, other than the small volume that flows in the Mojave River, occur within the project area. It is not anticipated that the volume of water contained within the proposed sludge drying beds or percolation ponds would be large enough to produce seiche or tsunami damage, even in the event of a seismic or spill event. No impacts are anticipated in this regard.

4.9 LAND USE AND PLANNING. *Would the project:*

a) *Physically divide an established community?* ***No Impact.***

The proposed project would upgrade and expand the existing VVWRA wastewater reclamation plant. No established community would be impacted by the proposed project, and no impacts are anticipated in this regard.

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

The proposed project site is designated as Rural Residential by the City's General Plan Land Use Element and is zoned R1 (Single Family Residential). The City's R1 zoning district (18.16.030) allows for utilities or public service facilities necessary to serve the area. As the project is consistent with this zoning district, impacts in this regard are not anticipated to be significant.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?* ***No Impact.***

See Response 4.4 f above.

4.10 MINERAL RESOURCES. ***Would the project:***

a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?* ***No Impact.***

The proposed improvements would occur within the existing facility. The analysis of mineral resources in the project area contained in the City of Victorville's General Plan does not identify any such resources at this location. Further, none of the uses within the project area require substantial commitments of resources or capital that would prevent future utilization of the any mineral resources that may exist beneath the ground surface. Therefore, no potential exists for the proposed project to have a significant adverse impact on mineral resources.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?* ***No Impact.***

Refer to Response 4.10a, above.

4.11 NOISE. ***Would the project result in:***

a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?* ***Less Than Significant Impact.***

Construction Phase

Short-term construction operations may result in adverse noise generation impacts. Construction noise levels can range from 75 to 100 dB depending on the type and number of pieces of equipment being used for constructing the plant expansion facilities. All construction activities are proposed for daylight hours, and based on the distance to the nearest sensitive receptors (approximately ¾-mile), no potential exists for significant adverse noise impacts from construction activities. Regardless, the VVWRA will implement the following measures to ensure that construction activities do not adversely impact residences east and south of the project site.

In addition, the construction process would generate construction worker trips to and from the site, utilizing Shay Road. However, the construction process would be short-term in nature, and relatively few residences exist along Shay Road. Impacts are anticipated to be less than significant in this regard.

Betterment Measures:

NOI-1 Construction activities for the proposed project shall be limited to the daytime hours of 6:00 am to 7:00 pm for the duration of construction activities. Construction shall not occur on weekends or federal holidays.

NOI-2 The VVWRA shall ensure that all construction equipment is operated with required noise attenuation devices (such as mufflers) based on the regulations in

place at the time of construction. Enforcement shall be accomplished by random field inspections by VVWRA personnel or a qualified noise consultant during construction activities.

NOI-3 If night-time construction activities must be carried out, VVWRA must ensure that noise levels at the nearest residences do not exceed 50 dBA integrated over either one hour or over a 12 hour period. If complaints are received from night-time construction activities, the activity causing the noise will either be buffered to this threshold (50 dBA at the sensitive noise receptor location) or the activity will be shifted to the daytime. Only during a declared emergency will this measure not be implemented.

Operational Phase

Ongoing operations at the reclamation plant are not forecast to experience any significant new noise generation activities. The treatment plant is already a high noise environment due to existing pumps and activities, and additional proposed facilities are not anticipated to result in a noticeable increase in noise. In addition, no sensitive noise receptors occur within approximately ¾- mile of the subject site. Therefore, impacts in this regard are anticipated to be less than significant. However, the following betterment measures has been provided below to minimize potential noise impacts to the maximum extent practicable.

Betterment Measure:

NOI-4 Nighttime operations at the VVWRA facility normally do not exceed 50 dBA integrated over either one hour or over a 12 hour period. If complaints are received from night-time operational activities, the activity causing the noise will either be buffered to this threshold (50 dBA at the sensitive noise receptor location) or the activity will be shifted to the daytime if possible. Only during a declared emergency will this measure not be implemented.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? ***Less Than Significant Impact.***

Construction Phase

Construction equipment required for proposed project implementation is not anticipated to generate excessive groundborne vibrations or noise levels. In addition, the nearest sensitive receptor is situated approximately ¾-mile away from the subject site. Impacts in this regard are considered to be less than significant.

Operational Phase

Daily operations at the VVWRA facility are not anticipated to result in impacts in regards to groundborne vibration or noise levels. However, the increased facility size may result in the necessity for additional heavy truck trips along Shay Road. However, given that truck trips would be minimal and would only occur during the daytime and the relatively low existing traffic conditions along Shay Road (noise conditions are anticipated to stay well below the City's 65 dBA noise limit), impacts in this regard are not anticipated to be significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? ***Less Than Significant Impact.***

The proposed project involves expansion of the existing wastewater treatment facilities. Pump operation associated with the expansion of the facilities has the potential to increase ambient noise levels on-site. However, the current noise environment within the project vicinity is high and the nearest sensitive receptors are located approximately ¾-mile away. Therefore, impacts in this regard are anticipated to be less than significant.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?* ***Less than Significant Impact.***

As noted in Response 4.11a, implementation of the proposed project may result in short-term increased noise levels within the project vicinity due to construction activities. This would be a temporary condition that would cease upon project completion and is subject to noise ordinance requirements of the City of Victorville. Also refer to Response 4.11c, above.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?* ***Less than Significant Impact.***

The project is located adjacent to the Southern California Logistics Airport (SCLA). The project is not anticipated to subject people residing or working in the project area to excessive noise levels. Refer to Responses 4.11a through 4.11d, above.

f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?* ***Less Than Significant Impact.***

Refer to Response 4.11e, above.

4.12 POPULATION AND HOUSING. *Would the project:*

a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?* ***Less Than Significant Impact.***

As stated above, the VVWRA proposes to upgrade and expand its current facility to accommodate anticipated increases in demand for service as a result of projected population growth within the VVWRA service area. Current capacity at the facility is 14.5 MGD, and the proposed upgrade and expansion would increase the capacity to 18 MGD. It should be noted that demand on the existing VVWRA sewage system is anticipated to increase beyond flows projected in the VVWRA's *Sewerage Facilities Plan Update, Year 2000 Amendment*. For areas served by VVWRA, increase in demand is due to variances and increases in densities among approved land uses previously accounted for within their respective jurisdiction's General Plan. As such, this population growth has been previously accounted for, and impacts in regards to growth inducement are not anticipated to be significant.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?* ***No Impact.***

The proposed project site does not include any existing housing. Based on this, no impacts would occur.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?* ***No Impact.***

As the project proposes expansion of the existing facilities in a vacant area, no impacts necessitating the construction of replacement housing elsewhere would occur.

4.13 PUBLIC SERVICES. *Would the project:*

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratio, response times or other performance objectives for any of the public service:*

1) *Fire protection?* ***No Impact.***

The proposed project is not particularly susceptible to fires. The project does not pose a significant fire hazard, nor is the proposed project forecast to require additional fire protection services/facilities. Impacts in this regard are not anticipated to be significant.

2) *Police protection?* ***No Impact.***

The VVWRA facility is fenced to control access and the type of activities that occur on-site, so as to prevent criminal activity. The proposed project does not include uses that would require additional police service or facilities. No impacts are anticipated in this regard.

3) *Schools?* ***Less Than Significant Impact.***

The proposed project is not growth-inducing and will not create any direct demands on the school system. Although a nominal number of new employees may be necessary for construction and long-term operation of the expanded treatment plant, demand on the local school system is anticipated to be nominal. Impacts in this regard are not expected to be significant.

4) *Parks?* ***Less Than Significant Impact.***

The proposed project will not create any direct demands on the parks and recreation system. Although a nominal number of new employees may be necessary for construction and long-term operation of the expanded treatment plant, demand on the local park system is anticipated to be nominal. Impacts in this regard are not expected to be significant.

5) *Other Public Facilities?* ***No Impact.***

No additional public facilities are anticipated to be impacted by the proposed expansion project.

4.14 RECREATION. *Would the project:*

a) *Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* ***Less Than Significant Impact.***

Refer to Response 4.13a-4, above.

b). *Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse effect on the environment?* ***No Impact.***

The project does not include recreational facilities, nor would it require the construction or expansion of existing recreational facilities. No impacts are expected to occur in this regard.

4.15 TRANSPORTATION/TRAFFIC. *Would the project:*

a) *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?* ***Less Than Significant Impact.***

Shay Road is a two-lane road with a paved road section 26 feet wide. It currently provides access to residences, the VVWRA treatment plant, and the solid waste/composting facility. Based on the paved road section, Shay Road would be capable of handling 500 vehicles per hour and more than 8,000 vehicle trips per day and still provide a level of service "C" or better (which is an acceptable level of service in the City of Victorville). More than adequate capacity exists on Shay Road to accommodate construction/long-term operational traffic without causing a significant adverse impact to circulation along this road. Impacts in this regard are not anticipated to be significant.

b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?* ***No Impact.***

Refer to Response 4.15a, above.

c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?* ***No Impact.***

Due to the nature and scope of the proposed project, implementation would not have the capacity to result in a change in air traffic patterns. No impacts are anticipated in this regard.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* ***Less Than Significant with Mitigation Incorporated.***

Shay Road is a paved road that follows the local topography. It has several curves that create short sight-distance situations and during peak traffic periods when many vehicles are entering and exiting Shay Road during construction periods, it is recommended that a flag person be provided to control traffic. Impacts in this regard are not anticipated to be significant.

Mitigation Measure:

TRA-1 During construction a specific employee parking area will be maintained with a maximum of two entrances/exits. VVWRA shall provide a flag person to control traffic during morning and evening peak hours to ensure that hazards are minimized for employees entering or exiting the site during construction of the facilities.

e) Result in inadequate emergency access? ***No Impact.***

The proposed project would not alter the treatment facility's current access point at the terminus of Shay Road. Although located several miles from the nearest emergency station, access to the project site is adequate. Based on the lack of adverse impact on local circulation and no modifications to Shay Road will be required to meet access requirements of the proposed project, no potential for significant impacts on emergency access are forecast to occur during construction or operation.

f) Result in inadequate parking capacity? ***Less Than Significant Impact.***

Temporary on-site parking will be provided for all construction workers during construction of the upgrade and expansion project. In addition, adequate parking currently exists at the reclamation plant for employees. Proposed improvements are not expected to generate the need for a substantial number of additional long-term employees. Impacts in this regard are not anticipated to be significant.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ***No Impact.***

The project area is isolated at the terminus of a road (Shay Road) with no outlet and is not served by alternative transportation. The proposed project has no potential to conflict with City adopted policies supporting alternative transportation. No significant impacts are anticipated in this regard.

4.16 UTILITIES AND SERVICE SYSTEMS. *Would the project:*

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? ***No Impact.***

As the proposed project is designed to upgrade and expand current wastewater operations to meet anticipated future demands, the project would not itself be a generator of wastewater, the proposed project would therefore not exceed wastewater treatment requirements. No impacts are anticipated in this regard.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? ***No Impact.***

The project proposes upgrades and expansions to the existing wastewater treatment facility, the effects of which are being analyzed within this document. The proposed project would not require or result in the construction of any additional water or wastewater treatment facilities other than those identified in this document. No impacts are anticipated in this regard.

c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* ***No Impact.***

Stormwater drainage issues have been evaluated in Section 4.6, GEOLOGY AND SOILS, AND 4.8, HYDROLOGY AND WATER QUALITY. The project would not result in the construction of new storm water drainage facilities or result in the expansion of existing facilities. Effects from run-off due to construction and operation do not pose significant impacts based on mitigation required to control stormwater runoff. Impacts are not anticipated to be significant.

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?* ***No Impact.***

The proposed project has no potential to adversely impact local or regional water supplies. The percolation of additional treated effluent into the local and regional aquifer is considered a beneficial impact to water supplies based on the return of at least a portion of the groundwater extracted for municipal water supplies to the aquifer. No impacts are anticipated in this regard.

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

Refer to Response 4.16a and 4.16b, above.

f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?* ***Less Than Significant Impact.***

Improvements to the current facility have the capacity to increase the volume of sewage sludge or biosolids. Currently, biosolids generated by the wastewater facility is mitigated by utilization of the existing compost facility on-site, which is regulated by state, federal, and local statues and regulations regarding its disposal. The existing compost facility has the capacity to accept the increased volume of sewage sludge from the expansion of the plant. Impacts in this regard are considered less than significant.

g) *Comply with federal, state, and local statutes and regulations related to solid waste?* ***No Impact.***

Refer to Response 4.16f, above.

4.17 MANDATORY FINDINGS OF SIGNIFICANCE.

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?* ***Less Than Significant with Mitigation Incorporated.***

With implementation of recommended mitigation measures stated above, implementation of the proposed project would not have the potential to degrade the quality of the environmental, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the

number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?* ***Less Than Significant with Mitigation Incorporated.***

Due to the relatively limited nature of the proposed project, implementation would not involve significant cumulative impacts. Although the project may incrementally affect other resources that were determined to be less than significant, the project's contribution to these effects is not considered "cumulatively considerable", in consideration of the relatively nominal impacts of the project and mitigation measures provided above.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?* ***Less Than Significant with Mitigation Incorporated.***

As stated above, with implementation of recommended mitigation measures provided within this document, implementation of the proposed project would not have the potential to cause substantial adverse effects on human beings, either directly or indirectly. As explained in the discussion of air quality impacts, no known health risks are associated with the project. Impacts in this regard are not anticipated to be significant.

5.0 REFERENCES

5.1 ENVIRONMENTAL EVALUATION PERSONNEL

Lead Agency:

Victor Valley Wastewater Reclamation Authority
20111 Shay Road
Victorville, CA 92394

Mr. Daniel P. Gallagher, General Manager

Consultants:

RBF Consulting
14725 Alton Parkway
Irvine, CA 92618

Mr. Alan Ashimine, Environmental Analyst
Mr. Youji Yasui, Environmental Analyst
Mr. Eddie Torres, Air/Noise Specialist
Mr. Richard Beck, Hazardous Materials Specialist
Ms. Michelle Jung, Environmental Analyst

5.2 REFERENCE DOCUMENTS

Area Designations for State and National Ambient Air Quality Standards, California Air Resources Board, May 13, 2002.

CEQA Air Quality Handbook, SCQAMD, April 1994.

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County of San Bernardino General Plan, Final Environmental Impact Report. May 1989.

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Proposed Amendments to the Area Designations, California Air Resources Board, December 2003.

San Bernardino County General Plan, July 1, 1989, Revised December 21, 2000.

Sewerage Facilities Plan Update, Year 2000 Amendment, October 26, 2000.

Sewerage Facilities Plan Update, Year 2002 Amendment, April 30, 2002.

Sewerage Facilities Plan Update, Year 2005 Amendment, 2005.

Southern California Earthquake Data Center, website: www.data.scec.org/faults/faultmap.html

Thomas Guide, San Bernardino County, 2004.

Victor Valley Wastewater Reclamation Authority's Proposed Wastewater Reclamation Plant Expansion from 9.5 MGD Capacity to 11.0 MGD Capacity and Related State Revolving Fund Loan Application and CALIFORNIA Bio-mass, Inc. Recycling, Transfer, C&D Compost Facility, Initial Study Mitigated Negative Declaration, Tom Dodson & Associates, VVWRA, December 5, 1999.

VVWRA Regional Wastewater Treatment Facility Expansion Project Initial Study/Mitigated Negative Declaration, RBF Consulting, September 1, 2004.

6.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 3.5 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared. ✖

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

Signature:	
Title:	General Manager
Printed Name:	Daniel P. Gallagher
Agency:	Victor Valley Wastewater Reclamation Authority
Date:	August 31, 2005