

INITIAL STUDY

FOR THE

MONTE VISTA WATER DISTRICT

PLANT 30 WELLHEAD TREATMENT PROJECT

Prepared for:

Monte Vista Water District
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Montclair, California 91763

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ENVIRONMENTAL CHECKLIST FORM

INTRODUCTION

1. Project Title: Monte Vista Water District Plant 30 Wellhead Treatment Project
2. Lead Agency Name: Monte Vista Water District
Address: 10575 Central Ave, Montclair, CA 91763
3. Contact Person: Mr. Van Jew, Monte Vista Water District
Phone Number: (909) 267-2113
4. Project Location: The proposed project is located at the 5616 San Bernardino Avenue, Montclair, CA 91763. The project will be located at the existing Monte Vista Water District Well 30 site, which is located in San Bernardino County. The project site is located within Section 23, Township 1 South, Range 8 West of the USGS 7.5 Minute Ontario topographical quadrangle. The GPS coordinates of the proposed project 34.077348°, -117.682896°. Refer to Figures 1 and 2 for aerial depictions of the regional and site location.
5. Project Sponsor's Name and Address: Monte Vista Water District
10575 Central Ave, Montclair, CA 91763
6. General Plan Designation: Public Quasi Public
7. Zoning Classification: Single Family Residential
8. Project Description:

Introduction

Monte Vista Water District (MVWD or District) proposes to install a wellhead treatment facility that would provide groundwater treatment for Wells 30, 32, and 33 (the locations of which are shown on Figure 3). Wells 30 and 32 are owned by MVWD, and Well 33 is co-owned with the City of Chino. Due to space constraints at Wells 32 and 33, water from Wells 32 and 33 will be conveyed to the Well 30 site for treatment. MVWD will serve as the Lead Agency under the California Environmental Quality Act (CEQA) for this project. This Initial Study evaluates the potential effects to the environment from implementing the project. The Initial Study Environmental Checklist Form contains 21 environmental issues as summarized on page 7 of this document. Review of the data contained in this Initial Study will assist MVWD to determine the appropriate environmental determination for the proposed project in order to comply with CEQA, the statute, and State CEQA Guidelines. Appendix 1 to this document contains the Basis of Design Report (BDR) for the proposed project. There are several acronyms used to describe the proposed project. These acronyms are referenced at the beginning of this document.

Project Description

The proposed project consists of development of a Wellhead Treatment Plant within the existing Well 30 site to treat water delivered from MVWD Wells 30 and 32, and from Well 33, which is co-owned by both MVWD and the City of Chino. Phase 1 of the project will provide the capacity to treat up to 4,000 gallons per minute (GPM) and Phase 2 will facilitate the treatment of up to 6,000 GPM. The anticipated extraction rate from each well is about 2,000 GPM.

Groundwater sampling and a previously completed study have identified the following target contaminants for treatment within MVWD wells: 1,2,3-trichloropropane (1,2,3-TCP), nitrate, and perchlorate. The California State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) established a maximum contaminant level (MCL) of 0.005 µg/L in July of 2017 for 1,2,3-TCP. Wells 30, 32, and 33 have observed 1,2,3-TCP concentrations above the MCL, and in order to comply with the DDW MCL, granular activated carbon (GAC) will be used for treatment as the best available technology (BAT). These wells have also shown detections of 1,2-dibromo-3-chloropropane (DBCP) but at levels that could be handled with blending. GAC will also remove any DBCP concentrations as an ancillary benefit. MVWD wells also have elevated nitrate levels that exceed the 10 mg/L-Nitrate (N) MCL. MVWD is currently utilizing blending as the primary compliance strategy for nitrate, limiting the water quantity that can be extracted from the basin. To mitigate the issues associated with blending, the proposed project will include nitrogen removal through use of ion exchange (IX).

As stated above, the proposed project would provide treatment for 1,2,3-TCP, perchlorate, and nitrate at Wells 30, 32, and 33. Well 33 is the only one of the three wells with current treatment consisting of more than disinfection. Treatment includes regenerable IX for nitrate and perchlorate removal. MVWD intends to bring the treated Well 33 water and untreated Well 32 water to the Well 30 site for GAC and partial IX treatment. It is noted that the treatment plant at Well 33 was not constructed to treat the full 2,000 gpm through the IX system (i.e., a portion of the raw water bypasses treatment, and the total flow from the Well 33 treatment plant is 2,000 gpm). The future treatment plant at Well 30 will have the flexibility to treat the full capacity from the three wells (6,000 gpm).

Existing Water Quality

The existing (raw) water quality at Wells 30, 32, and 33 are shown in Table 1 below. Well 33 already has IX, so the IX treated effluent water quality for Well 33 is included in the table.

**Table 1
 RAW WATER QUALITY FOR MVWD GROUNDWATER WELLS (09/2004 TO 06/2018)**

| Parameter | Unit | MCL | | W30 Raw | W32 Raw | W33 Raw | W33 IX Eff |
|-----------------------------------------|---------------------------|-------|-----------------------------|------------------------|------------------------|------------------------|------------|
| 1,2,3-Trichloropropane (1,2,3-TCP) | ug/L | 0.005 | Avg | 0.008 | 0.006 | 0.007 | - |
| | | | Range | <0.005-0.039 | <0.005-0.014 | <0.005-0.011 | - |
| | | | 95 th Percentile | 0.031 | 0.014 | 0.011 | - |
| Alkalinity (Total) as CaCO ₃ | mg/L as CaCO ₃ | - | Avg | 129 | 128.1 | 146 | 130 |
| | | | Range | 57-190 | 58-170 | 100-170 | 130-130 |
| | | | 95 th Percentile | 160 | 150 | 160 | 130 |
| Calcium | mg/L as Ca | - | Avg | 53 | 50 | 62 | 59 |
| | | | Range | 15-77 | 15-70 | 31-74 | 59-59 |
| | | | 95 th Percentile | 68 | 66 | 70.2 | 59 |

| Parameter | Unit | MCL | | W30 Raw | W32 Raw | W33 Raw | W33 IX Eff |
|-------------------------------|---------------------------|------|-----------------------------|-------------------|-------------------|-------------------|------------------|
| Chloride | mg/L | - | Avg | 24 | 16 | 13 | - |
| | | | Range | 11-63 | 9.6-23 | 9-22 | - |
| | | | 95 th Percentile | 55 | 23 | 20 | - |
| Dibromochloropropane (DBCP) | ug/L | 0.2 | Avg | 0.17 | 0.10 | 0.19 | - |
| | | | Range | <0.01-0.55 | <0.01-0.23 | <0.01-0.53 | - |
| | | | 95 th Percentile | 0.36 | 0.18 | 0.27 | - |
| Hardness as CaCO ₃ | mg/L as CaCO ₃ | - | Avg | 160 | 142 | 224 | 220 |
| | | | Range | 100-250 | 97-200 | 120-460 | 220-220 |
| | | | 95 th Percentile | 238 | 200 | 240 | 220 |
| Iron | ug/L | 300 | Avg | < 100 | < 100 | < 100 | - |
| | | | Range | < 100 | 0-360 | < 100 | - |
| | | | 95 th Percentile | < 100 | 269 | < 100 | - |
| Magnesium | mg/L as Mg | - | Avg | 15 | 12 | 17 | 17 |
| | | | Range | 11-20 | 9-15 | 14-19 | 17-17 |
| | | | 95 th Percentile | 20 | 15 | 19 | 17 |
| Manganese | ug/L | 50 | Avg | < 20 | < 20 | < 20 | < 20 |
| | | | Range | < 20 | < 20 | < 20 | < 20 |
| | | | 95 th Percentile | < 20 | < 20 | < 20 | < 20 |
| Nitrate | mg/L as N | 10 | Avg | 12 | 12.2 | 16 | 1 |
| | | | Range | <0.4-20 | <0.4-19 | <0.4-19 | <0.4-8.1 |
| | | | 95 th Percentile | 19 | 17 | 18 | 5.1 |
| Perchlorate | ug/L | 6 | Avg | 4.0 | 3.1 | 6.1 | 0.7 |
| | | | Range | <4-6.5 | <4-7 | <4-8.3 | <4-6.1 |
| | | | 95 th Percentile | 6.4 | 6.5 | 7.5 | 4.0 |
| Sulfate | mg/L | - | Avg | 45 | 34 | 38 | - |
| | | | Range | 39-52 | 31-38 | 37-40 | - |
| | | | 95 th Percentile | 52 | 37 | 40 | - |
| Total Dissolved Solids (TDS) | mg/L | 1000 | Avg | 395 | 305 | 320 | - |
| | | | Range | 250-990 | 250-350 | 280-340 | - |
| | | | 95 th Percentile | 742 | 346 | 340 | - |

Notes: Data covered sample results from 09/2004 through 06/2018 reported to California Drink Water Branch Drink Water Watch by the district.

Treated Water Quality

The Plant 30 water treatment facility will produce finished water that complies with all State and Federal drinking water standards. The plant will remove 1,2,3-TCP to below the 0.005 ug/L Detection Limit for the Purpose of Reporting (DLR), nitrate to below 5 mg/L as N (50% of the MCL), and perchlorate to below 4.8 ug/L (80% of the MCL).

MVWD will develop this centralized treatment facility in two phases:

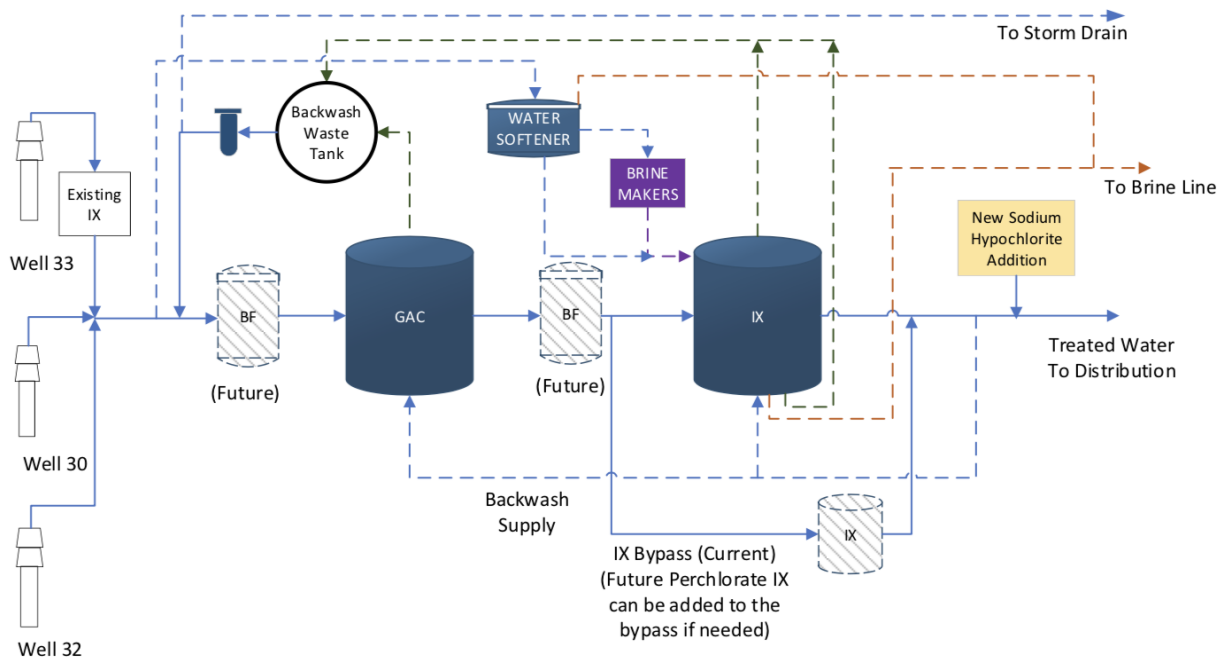
- Phase 1: treatment capacity of 4,000 gpm (treatment of any two groundwater wells)
- Phase 2 (future): acquire additional 2,000 gpm treatment capacity to accommodate total of 6,000 gpm (treatment of the three groundwater wells)

Water from Plant 33 (treated and bypassed water combined) will be re-routed to Plant 30 centralized treatment. A raw water pipeline will be constructed to bring Well 32 untreated groundwater to this site.

Treatment Process

The proposed treatment process includes GAC for 1,2,3-TCP adsorption, bag filtration (future bag filters upstream of GAC if needed, future bag filters between GAC and IX if needed), and IX for nitrate and perchlorate removal. A new chemical building will be constructed to house the sodium hypochlorite storage and feed system and future caustic storage and feed system for the treated water pH adjustment if found to be necessary.

**Exhibit 1
 GAC AND ION EXCHANGE PROCESS FLOW SCHEMATIC**



The entire flow will be treated through GAC for 1,2,3-TCP to achieve the DLR. Nitrate will be partially treated by IX with a bypass to achieve a treatment target of 5 mg/L as N or less at the blended plant effluent. A nitrate mass balance for various well operations is shown in Table 2 below.

**Table 2
 PLANT 30 INFLUENT WATER QUALITY FOR VARIOUS TREATMENT SCENARIOS
 BASED ON A NITRATE MASS BALANCE**

| | Wells 30 &32 | | Wells 30 &33 | | Wells 32 &33 | | Wells 30,32 &33 (Future) | |
|----------------|--------------|---------------------|--------------|---------------------|--------------|---------------------|--------------------------|---------------------|
| | Flow (gpm) | Nitrate (mg/L as N) | Flow (gpm) | Nitrate (mg/L as N) | Flow (gpm) | Nitrate (mg/L as N) | Flow (gpm) | Nitrate (mg/L as N) |
| Well 30 | 2,000 | 19 | 2,000 | 19 | - | - | 2,000 | 19 |
| Well 32 | 2,000 | 17 | - | - | 2,000 | 17 | 2,000 | 17 |
| Well 33 | - | - | 2,000 | 5 | 2,000 | 5 | 2,000 | 5 |
| IX In | 3,240 | 18 | 2,800 | 12 | 2,680 | 11 | 4,400 | 13.7 |
| IX Out | 3,240 | 2 | 2,800 | 2 | 2,680 | 2 | 4,400 | 2 |
| IX Bypass | 760 | 18 | 1,200 | 12 | 1,320 | 11 | 1,560 | 13.7 |
| Plant Effluent | 4,000 | 5 | 4,000 | 5 | 4,000 | 5 | 6,000 | 5 |

Notes: 95th percentile nitrate concentrations are used for the mass balance. Well 33 is treated for nitrate prior to entering the centralized treatment system at Plant 30, and an IX effluent nitrate concentration of 5 mg/L-N (95 percentile value) was used for the mass balance.

Perchlorate is present in all three wells and exceeds the MCL at times. The current design basis includes a partial IX bypass to maintain 4.8 ug/L or less of perchlorate, which requires DDW confirmation. This approach is consistent with the way IX at Plant 33 currently operates. If the perchlorate MCL is decreased in the future, space is available to provide perchlorate ion exchange treatment, in lead-lag configuration, on the bypass line.

Pretreatment

Pretreatment is a physical process that removes particles that can interfere with downstream processes and/or affect final water quality. MVWD opted to forgo both GAC and IX pretreatment to avoid the associated headloss that may result in the need for a well pump upgrade; however, connections will be provided for the future bag filtration systems if pretreatment is determined to be needed, including upstream of GAC and between GAC and IX. The design criteria for the future bag filter is provided in Appendix 1.

Liquid Phase Granular Activated Carbon

GAC is an adsorbent material that removes a variety of natural organic compounds, taste and odor compounds, and synthetic organic compounds. Adsorption removes contaminants from the bulk liquid through the accumulation of contaminants at the interface of the liquid and the media surface. GAC is the only BAT approved by DDW for 1,2,3-TCP treatment, which is the reason it was selected for water treatment.

For Phase 1, the GAC contactor system will consist of six trains for a total treatment capacity of 4,000 GPM. Each train will contain two contactors operating in lead/lag configuration. Treatment flow in the common feed header is evenly distributed through six trains, and the flow will be monitored for each train. For Phase 2 (future), three additional lead/lag trains will be added to expand the treatment capacity to 6,000 GPM. The design criteria for the GAC contactor system is outlined in Appendix 1.

When virgin GAC media is installed, GAC media must be backwashed for proper GAC stratification and GAC fines removal. The backwash system will be sized based on media type and bed expansion requirements. Distribution system water may be used as backwash water supply. The target bed expansion is 20% to 30% for the initial backwash. Backwash waste water will be sent to an onsite backwash water recovery tank for reuse. The supernatant from the backwash recovery tank will be filtered through a bag filtration system and pumped to the upstream of the GAC system. The supernatant flow rate will be metered to maintain less than 10% of the plant feed flow.

Ion Exchange

IX is a contaminant removal process that exchanges one set of ions for another. Anion exchange can remove nitrate, perchlorate, hexavalent chromium, and other anions. Since IX is only effective with ionic compounds, IX will not remove nonionized compounds. Ion exchange is one of the approved BATs for nitrate treatment, which is the reason it was selected for water treatment.

For Phase 1, the IX system will consist of four vessels with a nitrate selective resin. Treatment flow in the common feed header will be evenly distributed, and the flow will be monitored for each train. For Phase 2, an additional vessel will be added to expand the treatment capacity. The IX system design incorporates the required empty bed contact time and vendor recommended hydraulic loading rate. The briner system (brine maker) will consist of three 60-ton brine makers for Phase 1. For Phase 2, an additional briner will be added. The design criteria for the IX system is outlined in Appendix 1.

Softener System

The softener system is designed to provide softened water for brine make up water and also to provide slow rinse water for the IX system. Slow rinse with soft water will minimize scaling during the regeneration sequence. A skidded pre-packaged duplex system is proposed for this facility that has the capacity to meet the additional softened water demand for Phase 2. Based on the estimated salt usage in Phase 1, one softener vessel will be regenerated every two days. The water softener system design criteria is detailed in Appendix 1.

Waste Holding Tank

An aboveground welded steel tank will be utilized to store and recover GAC backwash, IX backwash, and IX fast rinse waste. MVWD selected a welded steel tank to minimize leaks and lengthen useful life of the tank. The recovered water would be filtered through a bag filtration system and pumped to the upstream of the GAC for reuse with the option to send water to the storm drain. The waste holding tank is detailed in Appendix 1.

Residuals Handling (Brine Line and Sewer Connection)

The treatment facility is designed for a water recovery rate above 99%. The waste streams that require disposal include:

- Storm water disposal: During GAC changeout, GAC backwash water will be filtered through bag filters and sent to the existing onsite storm drain connection.
- Brine line disposal: IX brine waste and slow rinse, along with waste from the IX softener system will be sent to the brine line.

A new brine connection line will be constructed to connect to the Inland Empire Brine Line Santa Ana Regional Interceptor (SARI). IX brine regeneration waste (84 gpm) and slow rinse (84 gpm), as well as all waste from the water softening operation (backwash, brine regeneration,

slow rinse and fast rinse with flow rate ranging from 12 to 108 gpm) will be directly sent to the brine line for disposal. The waste streams that will be sent to the brine line are summarized in Table 3 below.

**Table 3
WASTE STREAMS CONNECTED TO BRINE LINE**

| Parameter | Units | Value |
|---------------------------------|-------|--------|
| IX Vessel Brine Waste Flow | gpm | 84 |
| IX Vessel Slow Rinse Waste Flow | gpm | 84 |
| Softener System Waste Flow | gpm | 12-108 |
| Brine Line Diameter | in | 4 |

An existing storm drain connection is available on site. A new line will be constructed to discharge the water from the backwash recovery tank into the storm drain if needed.

Bulk Sodium Hypochlorite Storage and Feed

Bulk sodium hypochlorite will be used for free chlorine disinfection of the treated water. MVWD has an existing sodium hypochlorite storage and feed system that will be removed and replaced to accommodate up to a 6,000 gpm flow with a target chlorine dose of 1.5 mg/L. The chlorine injection point will be relocated to post-IX treatment.

To determine the expected chlorine demand for Plant 30, chlorine demand tests were performed for Wells 30 and 33. Results from Well 33 indicated a chlorine demand of 0.5 mg/L after 24 hours. Results from Well 30 indicated a significant chlorine demand (greater than 5 mg/L). Discussion with MVWD revealed that chlorinated water is injected into Well 30 for aquifer recharge, and that the anomalous demand may be associated with breakpoint chlorination of ammonia.

Operations reported that Plant 33 typically doses 1.5 mg/L of chlorine with an average demand of 0.5 mg/L, resulting in a free chlorine residual of 1.0 mg/L. The design dose of 1.5 mg/L has been selected. If higher demand is observed, the usage rate will be higher; as such, the pumps that will be selected would accommodate the potential higher dose, but storage volume would not be sufficient for a two weeks supply. Design criteria is provided in Appendix 1.

Bulk sodium hypochlorite requires a small tank volume for 14 days of storage at 12.5% trade strength. A new chemical feed building will be constructed. MVWD will install multiple smaller tanks; therefore, three 500 gallon storage tanks (two installed and one future) will be installed with a design basis of 14 days storage at 6,000 gpm. Bulk sodium hypochlorite will be installed because it would minimize tank volume and simplify operations. Two diaphragm metering pumps (one duty and one standby) will be provided for chlorine feed.

If higher chlorine doses are required, the delivery frequency or storage volume will need to be increased accordingly. For example, with a chlorine dose of 8 mg/L (demand test for Well 30), bulk deliveries would be required every two to three days with a total tank capacity of approximately 1,500 gallons.

Caustic Chemical Storage and Feed System

The requirement for a caustic feed system was evaluated due to the potential for IX removal of alkalinity (bicarbonate) for approximately 80 bed volumes following regeneration. A caustic chemical storage and feed system may be required under certain water conditions (pH < 8), and therefore space will be provided for a caustic storage tank and feed system located in the chemical feed/disinfection building. Assuming a desired dose of 2.0 mg/L and 14 days of storage, an 800 gallon tank will be required at the build out capacity. The groundwater is currently a pH of approximately 8, which would not necessitate caustic. However, ASR wells may be impacting this pH value and groundwater should be monitored after ASR water is flushed out. MVWD has not noted any negative corrosion impacts from operation of the Plant 33 IX facility, which does not have caustic feed.

MSWD Monitoring

Table 4 provides an overview of the recommended probes and analyzers for MVWD.

**Table 4
 PROBES AND ANALYZERS RECOMMENDED FOR MVWD**

| Probe | Purpose | Recommended Units | Location(s) |
|---------------|-------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------|
| Nitrate | Control blending, monitor individual IX effluent, and ensure MCL compliance for treated water nitrate | 1 (measuring 6 sample points) | IX bypass line, individual IX vessel effluent, and combined treated water line |
| pH | Monitor pH for caustic requirements and dosing | 1 | Combined blend and treated water line |
| Free chlorine | Measure free chlorine residual and monitor disinfection | 1 | Treated water line |
| Conductivity | Used to monitor IX regeneration | 5 | Brine tanks supply line (1), IX regeneration process (4) |

Ancillaries

Safety showers will be provided in the process area near the chemical storage and feed building. In addition, fire sprinklers will be installed in all rooms in the office space. These facilities will be supplied with potable water from the existing water main.

Hydraulics

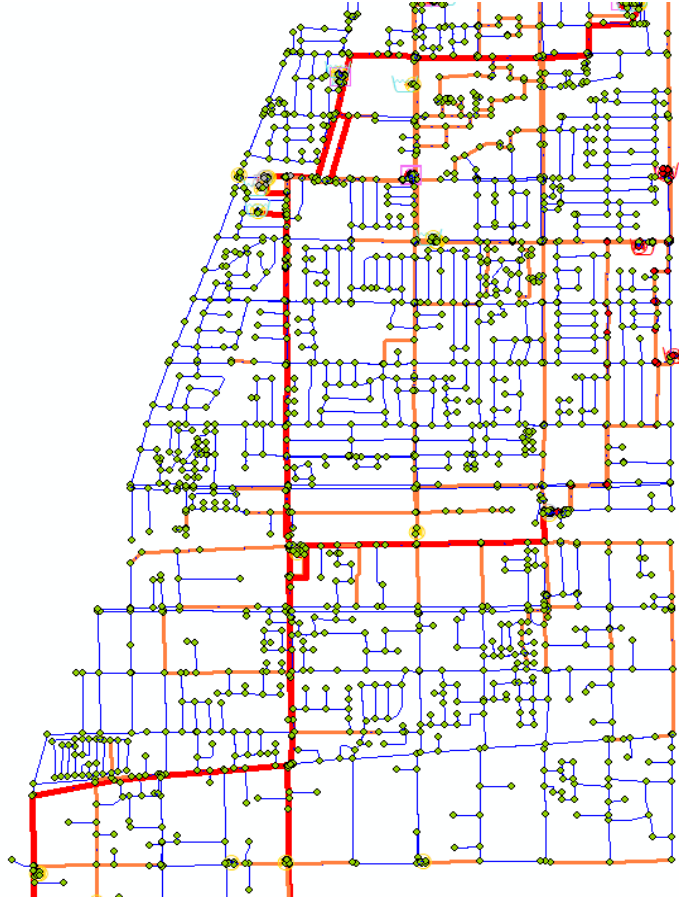
Benson Feeder Overview

MVWD conveys flow to Chino Hills through a system of large diameter transmission mains. Beginning at the WFA Agua de Lejos Treatment Plant, a 30-inch transmission main extends south into MVWD's service area near Arrow Highway and Benson Avenue, where it splits into two transmission mains: the Ramona Feeder, a 30-inch main that heads west and then south in Ramona Avenue, and the Benson Feeder, which continues south down Benson Avenue. These two feeders convey WFA and MVWD well water and eventually rejoin at the State Street Metering Facility, located at the southeast intersection of State Street and Ramona Avenue. From this point, the flow again splits into two transmission mains that connect to the Chino Hills distribution system: a 42-inch main that heads west then south down End Avenue, and a 30-inch main that continues down Ramona Avenue.

While the Benson Feeder begins as a 20-inch main where Well 33 is connected, it splits into parallel 12-inch and 18-inch mains before rejoining into a 24-inch main upstream of the State

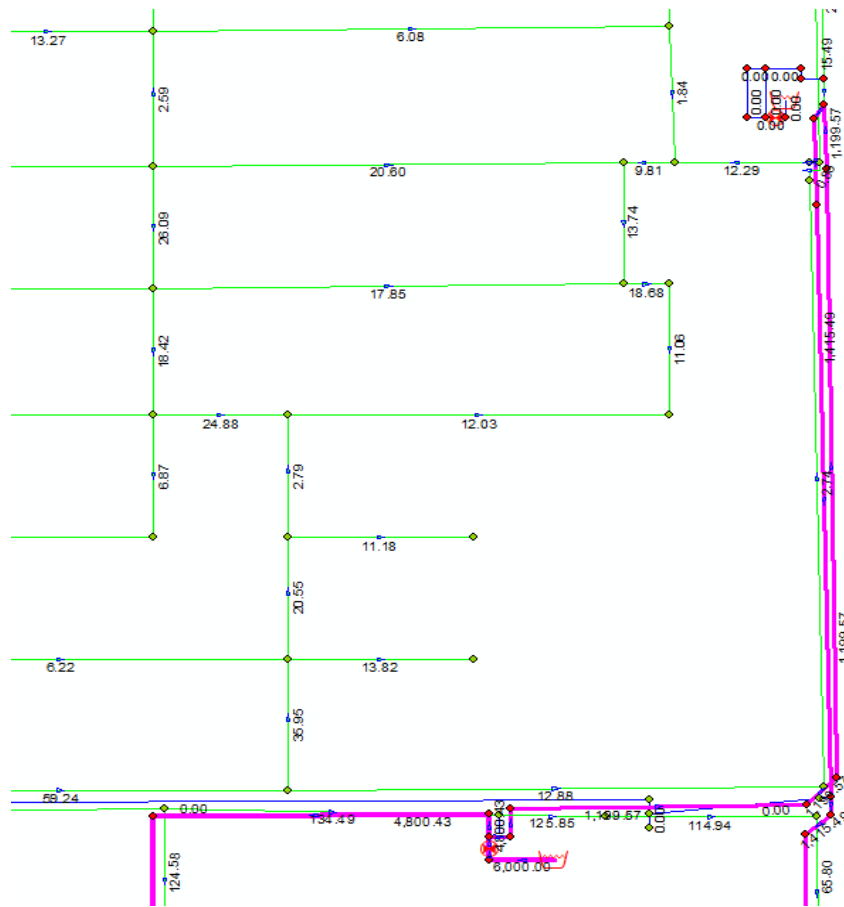
Street Metering Facility. Well 30 currently pumps into the 18-inch main, while Well 32 currently pumps into the 12-inch main (Exhibit 2).

**Exhibit 2
MVWD FEEDER SYSTEM**



When the Well 32 and 33 supplies are relocated from their current Benson Feeder connection points to the proposed connection point at Well 30, it will change the dynamics of the Benson Feeder. Under proposed conditions, flows delivered from Plant 30 into the Benson Feeder in excess of 4,000 GPM will tend to cause reverse flow in the 18-inch portion of the Benson Feeder between Well 30 and Well 33, flowing north instead of south (Exhibit 3). Pressures in the Benson Feeder are also expected to be increased by approximately 5 psi under future conditions in which all three wells are flowing.

**Exhibit 3
 BENSON FEEDER IMPACTS**



Well Pump Impacts

Well 33 currently pumps through an existing treatment system while Wells 30 and 32 pump directly into the Benson Feeder as described in the previous section. The proposed clustering of wells and addition of treatment will increase the total dynamic head (TDH) requirement of each pump. Increasing the TDH required of existing pumps will cause them to pump further to the left on their pump curves at reduced capacity and efficiency. In general, MVWD Wells 30, 32, and 33 are medium capacity wells that are high horsepower and deep set. All well pumps have been installed fairly recently, between 9 and 13 years ago.

Improvements are recommended for Well 30, potentially including the following: retrofitting to increase impeller diameter and machining bowls to increase available lateral, or replacing the pump with a reduced capacity pump. If existing pump capacity must be maintained, MVWD must determine if the existing electrical infrastructure is adequate for the increase in load, or otherwise improve the electrical infrastructure. MVWD will confirm Well 33 existing treatment system head losses and confirm if the bowl lateral is sufficient. As such, it is assumed that Well 33 may require pump upgrades as part of this project.

Pump Operational Impacts

The American National Standard Institute (ANSI) / Hydraulic Institute (HI) Standard 9.6.3 specifies a preferred operating region (POR) between 70 percent and 120 percent of the best

efficiency point (BEP) for pumps with specific speeds less than 4500. This standard will be used to determine the appropriate pump improvements, if required.

Pump Shaft Stretch and Available Lateral

In addition to whether the pumps are operating within the POR, an analysis of whether the pumps have sufficient lateral clearance to operate at the higher discharge pressures was performed. To maintain the recommended running clearance of 0.125" for Well 30 and 32, Well 30 cannot operate at less than 1,665 GPM and Well 32 cannot operate at less than 1,585 GPM. To operate either pump at lower flow rates requires the lateral settings to be increased. However, both pumps appear to be set near the maximum lateral available in the bowls, and the bowls would need to be machined to increase the setting. Adjusting the current lateral setting to the maximum available setting would allow a pumping rate down to 1,600 gpm for Well 30 and 1,500 gpm for Well 32. To maintain the recommended running clearance of 0.25", Well 33 cannot operate at less than 1,500 gpm; however, it has sufficient available lateral to operate at shutoff without the impellers contacting the bowls.

Well Pump Summary and Recommendations

The following recommendations are made:

- MVWD should confirm that the well pump capacity reductions are acceptable in terms of their commitments to deliver water to the City of Chino Hills
- MVWD should confirm the actual lateral as installed for Well 30, 32, and 33\
- MVWD should confirm the actual headloss across the existing Well 33 treatment system, if possible.
- No improvements are recommended for Well 32 and 33; however, the pump lateral should be reset to ensure proper running clearance for the proposed pumping conditions. MVWD should conduct a separate analysis to identify the necessary improvements for Well 30 to ensure that it is operating within the POR and has sufficient lateral. Potential options may include installing larger impellers, installing a new bowl assembly with increased TDH, replacing the pump with the same motor size and reduced capacity, or replacing the pump with a larger motor and same capacity as originally designed. For any increase in motor size, the electrical infrastructure capacity should also be evaluated.

Project Overview (Site work, On- and Off-Site)

On-site improvements include demolition of portions of the existing site, site civil improvements including paving and grading, and yard piping. Off-site pipelines include raw water pipelines from Well 32 and 33, the treated water pipeline (plant effluent), brine pipeline, and waste pipeline to the sewer.

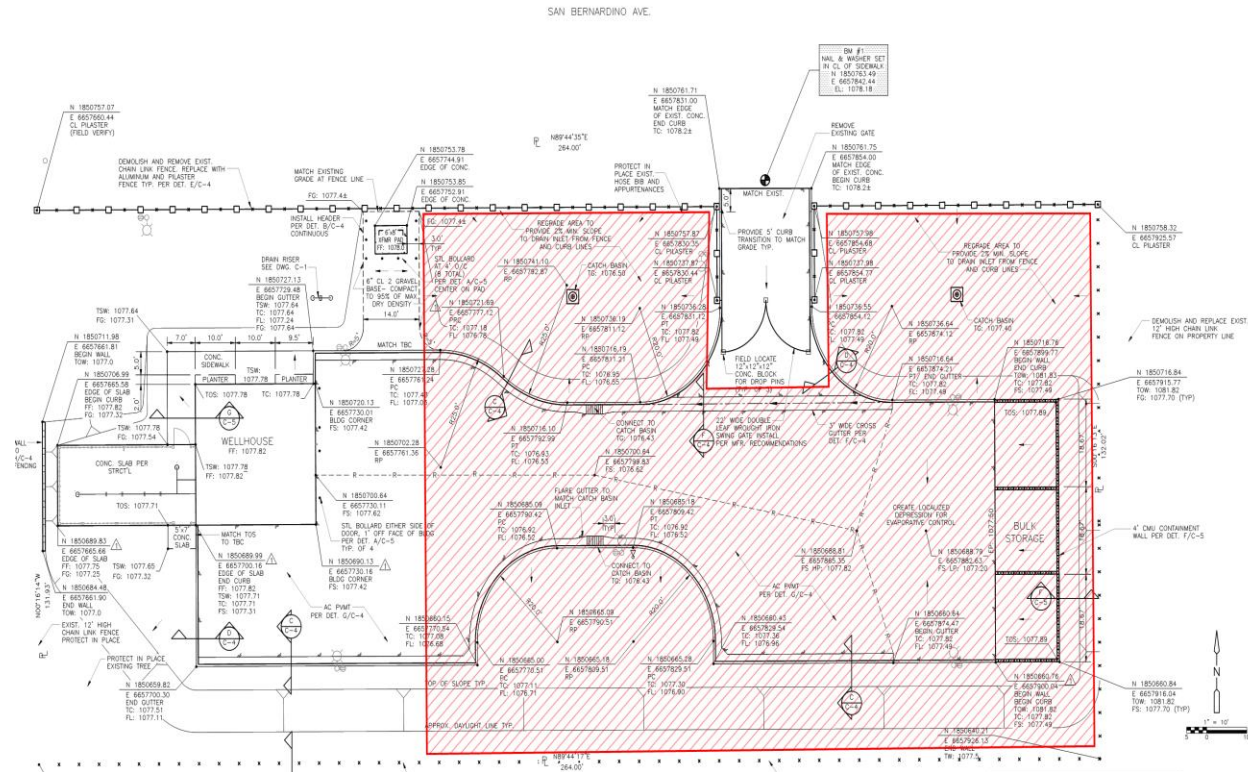
Demolition

Demolition of portions of the site are required to provide space for the proposed treatment improvements. The existing perimeter fencing and access entrance from San Bernardino Avenue will be protected, but the majority of the remaining roughly eastern portion of the site will be cleared and demolished for the proposed improvements.

Existing components being removed that will require replacement include the catch basin and drainage piping that parallels San Bernardino Avenue on the northerly portion of the site, as well as the catch basins and drain piping that runs down the middle of the existing pavement. These systems drain to the air gap catch basin between the wellhouse and transformer, where they flow to the existing 66" storm drain in San Bernardino Avenue. There is also an existing yard

hydrant on the southerly side of the site that will require relocation. The approximate limits of demolition are shown on Exhibit 4. Additional demolition may be required for yard piping and other ancillary site improvements beyond these proposed limits.

**Exhibit 4
 DEMOLITION LIMITS**



On-Site Improvements

Site civil improvements primarily consist of paving and grading. New asphalt concrete pavement will be specified throughout the site to provide adequate access to all treatment facilities. The pavement section will follow the recommendations from the geotechnical report. The access entrance from San Bernardino Avenue will remain.

A combination of surface and below grade drainage systems will be provided. The overall grade of the site from east to west will be maintained. The existing discharge structure that receives the pump-to-waste discharge will be the primary on-site collection point, with the existing connection to the 66" storm drain in San Bernardino Avenue being protected.

From the southerly edge of the existing pavement, the existing grade slopes down to the perimeter wall. In order to grade this area to be relatively flat to accommodate the proposed treatment facilities (GAC treatment), a new retaining wall will be required that parallels the southerly perimeter wall. The retaining wall will run the length of the GAC pad. Beyond the retaining wall, the grading will transition to match the existing grades.

On-Site Pipelines

Yard piping includes all on-site pipelines outside of the individual treatment processes including raw water pipelines, the treated water pipelines, and the brine pipeline. Pipe size recommendations are based on a hydraulic pipe sizing analysis. Below-grade piping will be installed in a trench per MVWD Standards and recommendations from the geotechnical report. Below-grade ductile iron pipe will be encased in polyethylene. Above grade piping will be epoxy coated or painted.

Yard piping is shown graphically on the site plan exhibit (Exhibit 4 above). Note, locations are approximate, the primary purpose is to show how each treatment process is located and interconnected with the process pipelines. Final design layout of yard piping will prioritize an efficient layout to minimize unnecessary crossings and maximize clearance for future maintenance.

**Table 5
 YARD PIPING SUMMARY**

| Pipe Description | Nominal Diameter (in) | Pipe Type | Pressure Class |
|----------------------------|------------------------------|------------------|-----------------------|
| Well 33 | 12 | DIP | 350 |
| Well 32 + Well 33 | 16 | DIP | 350 |
| GAC In | 20 | DIP | 350 |
| GAC Out | 20 | DIP | 350 |
| IX In | 16 | DIP | 350 |
| IX Out | 16 | DIP | 350 |
| IX Bypass | 12 | DIP | 350 |
| Plant Effluent | 20 | DIP | 350 |
| GAC Backwash Supply | 10 | DIP | 350 |
| IX Backwash | 4 | DIP | 350 |
| Brine Waste/Slow Rinse | 4 | PVC | 165 |
| Fast Rinse | 6 | PVC | 165 |
| Recovered Water | 3 | PVC | 165 |
| Waste Water to Storm Drain | 8 | PVC | SDR 35 |
| Slow Rinse Waste | 3 | PVC | 165 |

Off-Site Pipelines

The off-site pipelines include the raw water pipelines from Well 32 and Well 33, treated water pipeline (plant effluent), and the extension of the brine line from the Plant 30 site to their respective connection points in San Bernardino Avenue. A summary of the off-site pipelines is included in Table 6 below and is shown graphically in Figure 4.

**Table 6
 OFF-SITE PIPELINE SUMMARY**

| Pipe Description | Nominal Diameter (in) | Pipe Type | Pressure Class | From | To | Pipeline Length Lineal Feet (LF) |
|--------------------------|-----------------------|-----------|----------------|--------------|--------------------------------------------------|----------------------------------|
| Well 33 | 12 | DIP | 350 | Well 33 | Plant 30 | 1,500 LF |
| Well 32 | 12 | DIP | 350 | Well 32 | Plant 30 | 2,700 LF |
| Plant Effluent | 20 | DIP | 350 | Plant 30 | Benson Feeder (San Bernardino Ave) | 100 LF |
| Plant Effluent | 12 | DIP | 350 | Plant 30 | City of Chino 20" Transmission Main (Benson Ave) | 900 LF |
| Brine Waste / Slow Rinse | 4 | PVC | 165 | Plant 30 | IEUA Brine Line (Palo Verde St) | 2,000 LF |
| Pipeline | 16 | DIP | - | N Benson Ave | Well 30 | 900 LF |

Off-Site Pipelines: City Requirements

The City of Montclair was initially contacted regarding this project and they provided initial requirements, particularly for work in San Bernardino Avenue since street rehabilitation was recently completed. The initial requirements provided by the City include:

- 1-1/2" grind and cap for the full width of San Bernardino from Plant 30 site through the Benson Avenue intersection
- Replace all striping
- Adjust all sewer and storm drain manholes to grade

Final requirements from the City of Montclair and the City of Ontario will be confirmed through coordination during final design.

Off-Site Pipelines: Well 32 Raw Water Pipeline

Well 32 is located at the northeast corner of Benson Avenue and G Street/Orchard Street. The existing well discharge line heads southwest from the site across the intersection in a steel casing 12 feet below grade and connects to the existing City pipeline at Orchard Street and Del Mar Avenue. This existing pipeline will be isolated by closing the existing valve at Del Mar Avenue.

The proposed raw water pipeline will intercept the existing discharge pipeline on site and run north to Plant 30. In the vicinity of Well 32, Benson Avenue has a multitude of existing utilities in the street. There appears to be a small corridor on the western side of the street. The final recommended alignment will be confirmed in final design.

Off-Site Pipelines: Well 33 Raw Water Pipeline

Well 33 is located at the northwest corner of Benson Avenue and Palo Verde Street. The existing well discharge line splits into two lines and connects to both a City of Chino transmission main and MVWD transmission main (20" Benson Feeder). Both of those connections will be isolated by closing existing valves near their connections.

The proposed raw water pipeline will connect to the existing discharge line that is currently connected to the MVWD transmission main and run south to Plant 30. In the vicinity of Well 33, Benson Avenue has a multitude of existing utilities in the street. The new raw water pipeline will

most likely be located on the eastern side of the street. The final recommended alignment will be confirmed in final design.

Off-Site Pipelines: Treated Water Pipeline (Plant Effluent)

The treated water pipeline (plant effluent) will connect to the existing 18" Benson Feeder pipeline in San Bernardino Avenue. Due to the size and material (CML&C welded steel), a hot-tap connection is not preferred. A cut-in tee connection is proposed due to the size and material of the existing pipeline; however, this requires this portion of the line to be isolated by closing a valve. If there is not a nearby existing valve to isolate the line, a line stop will be required on the existing 18" Benson Feeder. Isolation valves will be provided on-site and above grade for easier access, rather than locating valves in the street.

A treated water pipeline (plant effluent) may also connect to the existing City of Chino 20" diameter transmission main at Benson Avenue and San Bernardino Street.

Off-Site Pipelines: Brine Line

A new brine line is required from the Plant 30 ion exchange system to the existing 21" brine line at Palo Verde Street and Benson Avenue near Well 33. The brine line is owned and maintained by IEUA. The line will flow by pressure from the Plant 30 site to the connection point. Conditions for the connection will follow IEUA requirements.

Electrical

All work for the new enhanced Well No. 30 (treatment system location), 32, and 33 shall be routed to the Well 30 site for treatment and blending for final potable water. The Plant 30 project will be done in accordance with the following codes and standards:

- National Electrical Code (NEC), 2014 Edition.
- State Department of Industrial Safety (CAL/OSHA).
- Local authorities having lawful jurisdiction pertaining to the work
- American Society of Testing and Materials (ASTM)
- National Electrical Manufacturers Association (NEMA)
- National Fire Protection Association (NFPA)
- American National Standards Institute (ANSI)
- Institute of Electrical and Electronic Engineers (IEEE)
- Insulated power Cable Engineers Association (IPCEA).

The existing electrical services are provided by Southern California Edison (SCE) and the primary service is routed underground from a utility pole to a pad mounted utility transformer, which steps down the voltage to 3 phase, 480/277 VAC. The pad mounted transformer is in the northwest corner of the well site and the electrical system incorporates an indoor service entrance section (SES) with utility metering, 1000A main circuit breaker and attached motor control center sections including a 3 phase 208Y/120 VAC lighting panel with an associated 45kva transformer. This SES has the capacity to add 100Amps at 480VAC assuming the main breaker is 100% rated for continuous loads.

Standby Power Generation

A new 3 phase 1000Amp, 480vac, NEMA 3R or 4 non-fused disconnect switch shall be installed, location TBD in detailed design, with the load side of the switch having 2-4" C with parallel 3-500MCM & GND wire/cable terminated into the electrical buss of the main switch board. A standard operating procedure shall be prepared for the use and operation of the portable generator connection and service.

Power Distribution

The Main Switchboard (MCC/SES) will supply a new 3 phase, 100A, power panel (PP-1) located in the electrical room. The panel will distribute power to the various new equipment and loads throughout the proposed treatment system. The power panel will be provided with surge protection and lock out features.

The panel will supply 480 volt, 3-phase, 3-wire power to motor operated valves as well as other small 480 volt loads. If required, a new 25kva transformer will be added along with a potential Lighting Panel LA. This panel will distribute 120/208-volt power to loads such as lighting, receptacles, chemical feed pumps, and instruments.

Lighting

General Lighting should be provided for general illumination throughout the added facility including but not limited to the following:

- General treatment areas
- Electrical and control room (if required)
- Walkways

Task lighting should be provided at the following areas where additional lumens are required:

- Control panels
- Testing/sampling locations
- Instrument readout locations

Additional lights will be installed at strategically located areas around the site to provide sufficient lumens for security and safety. Light fixtures will utilize LED technology for long life and energy efficiency. Exterior light fixtures will be equipped with photo cells for dusk to dawn operation.

Summary of Project Scope & Construction Scenario

The general scope is listed as follows:

- GAC – 12 vessels, slab-on-grade
- IX – 4 vessels, slab-on-grade, waste metering pump
- Chemical Systems – CMU block building, slab-on-grade, 2 double-wall storage tanks, pump
- skid, recirculation pump, fill station
- Water Softening – 2 units, slab-on-grade
- Brine Storage – 3 storage tanks, 2 brine feed pumps, 2 transfer pumps, slab-on-grade
- Backwash Water and Fast Rinse Storage – 1 storage tank, slab-on-grade
 - A 50,000-gallon welded steel tank will be used to store GAC backwash water and IX fast rinse waste
- Site Civil and Yard Piping
- Site prep/grading
 - Excavation and installation of yard pipes
 - Removal and replacement of pavement for piping excavation
 - Site finishing (landscaping, misc. curb/cutter, etc.)
- Electrical and Instrumentation
- Pipeline from Well 32 to San Bernardino Street – 2,700 lineal feet (LF) of 12-inch diameter pipeline
- Pipeline from Well 33 to San Bernardino Street – 1,500 LF of 12-inch diameter pipeline
- Pipeline from N Benson Avenue to Well 30 – 900 LF of 16-inch diameter pipeline

- Brine Line to Palo Verde Street – 2,000 LF of 4-inch diameter pipeline
- Effluent Line from Well 30 to San Bernardino Street – 100 LF of 20" diameter pipeline
- Plant Effluent from Plant 30 to City of Chino 20" Transmission Main – 900 LF of 12" pipeline.

Construction Scenario

Please refer to Appendix 1 for specifics regarding foundation and design.

Construction is anticipated to begin in the November 2019 over a period of approximately 10 months. This project will only consider the development of Phase 1 of the proposed.

Wellhead Treatment Site Construction

Construction at the Well 30 site will involve site demolition; site paving; site prep/grading; excavation and installation of yard pipes including the following: GAC Influent pipeline, GAC to IX pipeline, Brine supply pipeline, IX and backwash waste pipeline, Well 32/33 Influent pipeline (within site only), Well 30 Influent pipeline (within site only), pipeline To Chino Hills (within site only), Brine waste pipeline (within site only), pipeline to sewer (within site only), and, chemical piping (double-contained); removal and replacement of pavement for piping excavation; site finishing (landscaping, misc curb/cutter, etc); site drainage (above and below grade); and, relocating/replacing the existing yard hydrant and piping.

It is anticipated that the maximum number of construction personnel on the Wellhead Treatment project site on any given day will be 15. The maximum number of truck deliveries, which would likely occur during pouring of concrete for facilities, is forecasted at 10 per day.

Demolition at the project site will result in about 100 to 200 CYs of material; the project will recycle 50% or about 50 to 100 CYs. The effort to recycle or dispose of demolished material is anticipated to require about 10 trips to accomplish with no more than 5 round trips occurring within one work day.

Pipeline Construction

Construction of the various pipelines would involve trenching using a conventional cut and cover technique, and jacking and boring where necessary. The trenching technique would include saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and re-surfacing to the original condition. The trench would be approximately 5 feet deep and 3 feet wide. The pipeline would be installed a minimum of 3 feet below ground surface (bgs). Construction staging areas would be identified by the contractor for pipe lay-down, soil stockpiling, and equipment storage. On average, 100 to 150 linear feet of pipeline may be installed per day. It is assumed that the pipeline installation will require about 10 employees per day. It is assumed that 10 Dump/delivery trucks (100 miles round trip distance) would be required for this effort.

Trenches would be temporarily closed at the end of each workday, by covering with steel trench plates and installing barricades to restrict access to staging areas. The construction equipment needed for pipeline installation would include: backhoe, excavator, bracing, welding equipment, boom lift truck, steamroller, plate compactor. Minimal off-site disposal would include construction related debris and spoils. The final activity associated with the pipeline installation is repaving of roads disturbed by the construction.

9. Surrounding land uses and setting: (Briefly describe the project’s surroundings)

The Land Use Map for the City of Montclair is provided as Figure 5. The Land Use Map for the City of Ontario is provided as Figure 6.

Wellhead Treatment Plant Site:

- North: Single Family Residential (City of Montclair)
- East: Public/Quasi – Public (City of Montclair); further east is the City of Ontario
- South: Single Family Residential (City of Montclair)
- West: Single Family Residential (City of Montclair)

The project site currently contains an MVWD well (Well 30), and is located adjacent to Vernon Middle School and Soft Ball Fields. The surrounding setting is generally residential in nature and has been built-out with little to no vacant area in the project vicinity.

Pipeline Alignment:

The land uses surrounding the proposed pipeline alignments are as follows (note: Well 33 is located within the City of Ontario, and the entirety of the land uses to the east of the pipeline alignment along Benson Avenue are within the City of Ontario):

- City of Montclair: Single Family Residential; Public/Quasi – Public; and, Water Storage / Transfer
- City of Ontario: Low Density Residential; Open Space – Non Recreation; and, Public School

Well 33 is located within the City of Ontario on land designated as Open Space – Non Recreation.

Well 32 is located within the City of Montclair on land designated as Public/Quasi – Public.

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

| Governing Organization | Permit |
|-------------------------------------|---------------------------------------------------------------------------------------------|
| State | |
| State Water Resources Control Board | NPDES General Construction Permit |
| | NPDES Stormwater Permit (existing) |
| | Operating Permit Amendments – DDW (Amendment) |
| | California Regional Water Quality Control Board, Colorado River Basin Region |
| Cal OSHA | Trenching and Excavation Permit |
| Regional | |
| Montclair | Planning Permit: Administrative Approval or Site Approval or Special Conditional Use Permit |
| | Building Permit |
| | Industrial Waste Discharge to Sewers |
| | Grading Permit |
| | Water Quality Management Plan |

| Governing Organization | Permit |
|--------------------------------|----------------------------------------------|
| Montclair Fire Department | Montclair Plan Review Application |
| | Montclair Fire District Permit |
| Inland Empire Utilities Agency | Sewer Connection Permit |
| | Joint Industrial Wastewater Discharge Permit |

11. Have California Native American tribes traditionally and cultural affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? Yes. AB-52 was initiated on March 19, 2019 by sending letters to the Gabrieleño Band of Mission Indians – Kizh Nation (Tribe). The Tribe sent responded requesting mitigation measures to be included in this Initial Study on March 20, 2017. The Tribe and MVWD concluded consultation on April 17, 2019 by mutually agreeing to include mitigation to protect Tribal Cultural Resources.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission’s Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

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" as indicated by the checklist on the following pages.

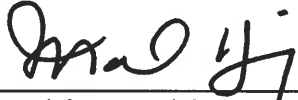
- | | | |
|-----------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology / Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input checked="" type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

| | |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. |
| <input checked="" type="checkbox"/> | Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. |
| <input type="checkbox"/> | The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. |
| <input type="checkbox"/> | The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact 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. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. |
| <input type="checkbox"/> | Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION , including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. |

Tom Dodson & Associates
Prepared by _____


Lead Agency (signature) _____

June 2019
Date _____


Date _____

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

a. *Less Than Significant Impact* – Adverse impacts to scenic vistas can occur in one of two ways. First, an area itself may contain existing scenic vistas that would be altered by new development. The proposed project extends from Well 33 located just north of Palo Verde Street along Benson Avenue in the City of Montclair to Well 32 just north of G Street along Benson Avenue in the City of Ontario. Well 30, the site at which the new Wellhead Treatment Plant will be installed, is located just east of Benson Avenue at San Bernardino Street. The majority of the project will be installed below ground within existing road rights of way, including 5,100 LF of raw water pipeline from Wells 32 and 33; 2,000 LF of brine pipeline; 900 LF of effluent pipeline to the City of Chino transmission main; and, 100 LF of pipeline to the Benson feeder pipeline. A review of the project area determined that there are no scenic vistas located internally within the project footprint of the pipeline alignments. The pipeline installation may impact views temporarily during construction; however, once constructed the pipelines will be located underground and there will be no potential to impact scenic vistas within the project footprint. Given that the proposed Wellhead Treatment Plant site is located at the Well 30 site which contains an existing well, it is anticipated that the addition of the Wellhead Treatment Plant at the Well 30 site would be consistent with the surrounding use.

A scenic vista impact can also occur when a scenic vista can be viewed from the project area or immediate vicinity and a proposed project may interfere with the view to a scenic vista. The installation of the pipeline alignments would be constructed belowground within existing roadways. Once constructed, the roadways will be returned to their original condition, and repaved. Given that the project would not degrade views to nearby scenic vistas and that the visual effects of pipeline installation and repaved sections of roadway would not substantially alter the views in the Project footprint in the long-term, implementation of the pipeline alignments is not expected to cause any substantial adverse effects on any important scenic vistas. At the proposed Wellhead Treatment Plant site, though the San Gabriel Mountains are north of the project site, views are limited due to surrounding development. As such, development of the Wellhead Treatment Plant at this site is not anticipated to obstruct any scenic vistas, particularly given that the project site is currently developed and contains an the existing Well 30, which will remain in place as part of this project. Therefore, implementation of the proposed project is not expected to cause any substantial adverse

effects on any important scenic vistas. This potential impact is considered a less than significant adverse aesthetic impact. No mitigation is required.

- b. *Less Than Significant Impact* – The project footprint does not contain any significant scenic resources. The pipeline alignment will be installed within existing roadways, none of which are located within an Officially Designated Scenic Highway¹. None of the proposed activities will impact any scenic resources or views of scenic resources in the area. According to the City of Montclair General Plan, there are no state scenic highways located within the City, and therefore none will be impacted by the development of the proposed Wellhead Treatment Plant. The Wellhead Treatment Plant site contains several trees, which are anticipated to be retained on site. However, in the event that any of these trees must be removed, they will be replaced at a ratio of at least a 1:1 ratio. None of the trees at the Wellhead Treatment Plant site would be considered mature trees, and therefore are not protected by the City of Montclair’s Municipal Code. Additionally, the proposed project does not contain any rock outcroppings or other significant scenic features because the entirety of the project footprint has been developed. Based on the site condition and immediate surroundings, the Wellhead Treatment site itself does not contain any significant scenic resources. The pipeline alignments would be located within existing roadways; therefore, no trees, rock outcroppings, historic building, or other scenic resources will be impacted as the pipeline footprint is limited to within existing roadways. Therefore, no damage to a scenic resource will occur and any impacts under this issue are considered less than significant.
- c. *Less Than Significant Impact* – Please refer to the discussion under issue I(a) above. The proposed project would develop a Wellhead Treatment Plant at a site containing an existing well, and would develop pipeline associated with this development on site and within existing roadways. Given that the proposed project is a water infrastructure project, which are land use independent, the development of the Wellhead Treatment Plant and associated infrastructure would not conflict with applicable zoning or other regulations governing scenic quality. Furthermore, the proposed project would install the Wellhead Treatment Plant at the existing Well 30 site, and therefore will blend in with the existing visual character of the site. The proposed pipeline alignments will occur within existing roadways; as each segment of pipeline is installed, the roadway will be repaved with new asphalt, and will again function as a roadway. Given that construction of each segment of replacement pipeline is temporary, and that the roadways in which the pipeline shall be installed will be repaved once each segment of pipeline has been replaced, the visual character of the project footprint and surrounding area will remain effectively unchanged. Therefore, impacts from implementation of the proposed Plant 30 Wellhead Treatment Project are considered less than significant under this issue.
- d. *Less Than Significant With Mitigation Incorporated* – Implementation of the proposed project will create new locations of light sources during the operational phases of the project. There are residences nearby the Wellhead Treatment Plant site, and adjacent to the pipeline alignments at several locations. The proposed Wellhead Treatment Plant will have additional lighting beyond that which currently exists at the project site, and therefore to protect nearby light sensitive land uses from direct light and glare from new lighting, the following mitigation measure will be implemented:

AES-1 *A facilities lighting plan shall be prepared and shall demonstrate that glare from operating and safety night lights that may create light and glare affecting adjacent occupied property are sufficiently shielded to prevent light and glare from spilling into occupied structures. This plan shall specifically indicate that the lighting doesn’t exceed 1.0 lumen at the nearest residence to any lighting site within the project footprint. This plan shall be implemented by the MVWD to minimize light or glare intrusion onto adjacent properties.*

The pipeline alignments will be constructed underground within existing roadways. No reflective materials or coatings are associated with the pipeline installation. The construction activities are

¹ http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/

limited to daylight hours unless an emergency occurs, and the amount of security lighting needed during construction will be minimal. Therefore, the pipeline alignment is not anticipated that the site would create any new permanent sources of light or glare. With implementation of the above measure potential light and glare from the Wellhead Treatment Plant can be controlled to a less than significant impact level.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| II. AGRICULTURE AND FORESTRY 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION

- a. No Impact – According to the California Department of Conservation California Important Farm Finder map depicting the proposed project site and surrounding area (Figure II-1), the proposed project is located within Urban and Built-Up Land, with no farmland of any kind surrounding the area immediately adjacent to the project footprint. Additionally, the proposed Wellhead Treatment Plant is located within a site that both contains an existing well, and is designated for Public/Quasi

Public use by the Montclair General Plan, and the zoning classification is Single Family Residential, and as such is not planned for agricultural use. Therefore, the development of the Plant 30 Wellhead Treatment Project will not pose any significant adverse impact to agricultural resources or values. No mitigation is required.

- b. *No Impact* – Implementation of the proposed project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. As stated above, the Wellhead Treatment Plant site is designated for Public/Quasi Public use by the Montclair General Plan, and the zoning classification is Single Family Residential. The Wellhead Treatment Plant site is currently developed with an existing well (Well 30), and the project will install pipeline within existing road rights-of-way; the site does not currently contain any agricultural uses. Based on this information, the proposed project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. No impacts are anticipated and no mitigation is required.
- c. *No Impact* – The project footprint is not located within forest land, timberland or timberland zoned for Timberland Production. Therefore, the proposed project will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). No impacts are anticipated and no mitigation is required.
- d. *No Impact* – The project footprint is not located within forest land and has no commercial trees on the property; therefore, the project will not result in the loss of forest land or conversion of forest land to non-forest production use. No impacts are anticipated and no mitigation is required.
- e. *No Impact* – Implementation of the proposed project will not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of valuable farmland to non-agricultural use or forest to non-forest uses. No agricultural or forest resources or uses occur within the general vicinity of the proposed project site. Therefore, no adverse impacts to agricultural, forest or timberland resources will result from project implementation and no mitigation is required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| III. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION: The following information utilized in this section of the Initial Study was obtained from the *Air Quality and GHG Impact Analysis, Monte Vista Water District Plant 30 Wellhead Treatment Project, City of Montclair, California* prepared by Giroux and Associates dated April 9, 2019. This document is provided as Appendix 2 to this document.

Background

Climate

The climate of western San Bernardino County, as with all of Southern California, is governed largely by the strength and location of the semi-permanent high-pressure center over the Pacific Ocean and the moderating effects of the nearby vast oceanic heat reservoir. Local climatic conditions are characterized by very warm summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes, and comfortable humidity levels. Unfortunately, the same climatic conditions that create such a desirable living climate combine to severely restrict the ability of the local atmosphere to disperse the large volumes of air pollution generated by the population and industry attracted in part by the climate.

The project will be situated in an area where the pollutants generated in coastal portions of the Los Angeles basin undergo photochemical reactions and then move inland across the project site during the daily sea breeze cycle. The resulting smog at times gives San Bernardino County some of the worst air quality in all of California. Fortunately, significant air quality improvement in the last decade suggests that healthful air quality may someday be attained despite the limited regional meteorological dispersion potential. The combination of winds and inversions are thus critical determinants in leading to the degraded air quality in summer, and the generally good air quality in winter in the project area.

Air Quality Standards

Existing air quality is measured at established Southern California Air Quality Management District (SCAQMD) air quality monitoring stations. Monitored air quality is evaluated and in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table III-1. Because the State of California had established Ambient Air Quality Standards (AAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air

standards. Those standards currently in effect in California are shown in Table III-1. Sources and health effects of various pollutants are shown in Table III-2.

**Table III-1
AMBIENT AIR QUALITY STANDARDS**

| Pollutant | Average Time | California Standards ¹ | | National Standards ² | | |
|------------------------------------------------------------------|------------------------------|---------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------|
| | | Concentration ³ | Method ⁴ | Primary ^{3,5} | Secondary ^{3,6} | Method ⁷ |
| Ozone (O3) ⁸ | 1 Hour | 0.09 ppm (180 µg/m ³) | Ultraviolet Photometry | – | Same as Primary Standard | Ultraviolet Photometry |
| | 8 Hour | 0.070 ppm (137 µg/m ³) | | 0.070 ppm (137 µg/m ³) | | |
| Respirable Particulate Matter (PM10) ⁹ | 24 Hour | 50 µg/m ³ | Gravimetric or Beta Attenuation | 150 µg/m ³ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 µg/m ³ | | – | | |
| Fine Particulate Matter (PM2.5) ⁹ | 24 Hour | – | – | 35 µg/m ³ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 12 µg/m ³ | Gravimetric or Beta Attenuation | 12.0 µg/m ³ | 15.0 µg/m ³ | |
| Carbon Monoxide (CO) | 1 Hour | 20 ppm (23 mg/m ³) | Non-Dispersive Infrared Photometry (NDIR) | 35 ppm (40 mg/m ³) | – | Non-Dispersive Infrared Photometry (NDIR) |
| | 8 Hour | 9 ppm (10 mg/m ³) | | 9 ppm (10 mg/m ³) | – | |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/m ³) | | – | – | |
| Nitrogen Dioxide (NO2) ¹⁰ | 1 Hour | 0.18 ppm (339 µg/m ³) | Gas Phase Chemiluminescence | 100 ppb (188 µg/m ³) | – | Gas Phase Chemiluminescence |
| | Annual Arithmetic Mean | 0.030 ppm (57 µg/m ³) | | 0.053 ppm (100 µg/m ³) | Same as Primary Standard | |
| Sulfur Dioxide (SO2) ¹¹ | 1 Hour | 0.25 ppm (655 µg/m ³) | Ultraviolet Fluorescence | 75 ppb (196 µg/m ³) | – | Ultraviolet Fluorescence; Spectrophotometry (Paraosaniline Method) |
| | 3 Hour | – | | – | 0.5 ppm (1300 µg/m ³) | |
| | 24 Hour | 0.04 ppm (105 µg/m ³) | | 0.14 ppm (for certain areas) ¹¹ | – | |
| | Annual Arithmetic Mean | – | | 0.030 ppm (for certain areas) ¹¹ | – | |
| Lead 8 ^{12,13} | 30-Day Average | 1.5 µg/m ³ | Atomic Absorption | – | – | – |
| | Calendar Quarter | – | | 1.5 µg/m ³ (for certain areas) ¹² | Same as Primary Standard | High Volume Sampler and Atomic Absorption |
| | Rolling 3-Month Avg | – | | 0.15 µg/m ³ | | |
| Visibility Reducing Particles ¹⁴ | 8 Hour | See footnote 14 | Beta Attenuation and Transmittance through Filter Tape | No Federal Standards | | |
| Sulfates | 24 Hour | 25 µg/m ³ | Ion Chromatography | | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/m ³) | Ultraviolet Fluorescence | | | |
| Vinyl Chloride ¹² | 24 Hour | 0.01 ppm (26 µg/m ³) | Gas Chromatography | | | |

Footnotes

1 California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM10, PM2.5, 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.

- 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. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$, is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
- 3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4 Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7 Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
- 8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- 9 On December 14, 2012, the national PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 10 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 11 On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- 12 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 14 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

**Table III-2
 HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS**

| Pollutants | Sources | Primary Effects |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Carbon Monoxide (CO) | <ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. | <ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina). |
| Nitrogen Dioxide (NO ₂) | <ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. | <ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain. |
| Ozone (O ₃) | <ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. | <ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury. |
| Lead (Pb) | <ul style="list-style-type: none"> • Contaminated soil. | <ul style="list-style-type: none"> • Impairment of blood function and nerve construction. • Behavioral and hearing problems in children. |
| Fine Particulate Matter (PM-10) | <ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. | <ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility. |
| Fine Particulate Matter (PM-2.5) | <ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. | <ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling. |
| Sulfur Dioxide (SO ₂) | <ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. | <ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc. |

Source: California Air Resources Board, 2002.

Baseline Air Quality

Existing and probable future levels of air quality around the proposed project area can best be best inferred from ambient air quality measurements conducted by the SCAQMD at the Upland monitoring station. This station measures both regional pollution levels such as smog, as well as primary vehicular pollution levels near busy roadways such as carbon monoxide and nitrogen oxides as well as large particulates (PM-10). However smaller particulates (PM-2.5) data is only available at the nearby Ontario station. Table III-3 provides a 3-year summary of the monitoring data for the major air pollutants compiled from these air monitoring stations. From these data the following conclusions can be drawn:

1. Photochemical smog (ozone) levels frequently exceed standards. The 1-hour state standard was violated an average of 15 percent of all days in the last three years near Upland. The federal 8-hour standard has been exceeded an average of 17 percent of all days within the same period and the state 8-hour standard has been exceeded approximately 22 percent of all days. While ozone levels are still high, they are much lower than 10 to 20 years ago. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade.
2. PM-10 levels have exceeded the state 24-hour standard on approximately four percent of all measurement days. The three times less stringent federal 24 hour-standard has not been exceeded once in the last three years.
3. A substantial fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). Both the frequency of violations of particulate standards, as well as high percentage of PM-2.5, are air quality concerns in the project area. However, PM-2.5 readings very infrequently exceed the federal 24-hour PM-2.5 ambient standard with less than one percent of the measured days.
4. More localized pollutants such as carbon monoxide, nitrogen oxides, etc. are very low near the project site because background levels throughout western San Bernardino County, never exceed allowable levels. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants such as NOx or CO without any threat of violating applicable AAQS.

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.

**Table III-3
 PROJECT AREA AIR QUALITY MONITORING SUMMARY – 2015-2017
 (DAYS STANDARDS WERE EXCEEDED AND MAXIMUM OBSERVED LEVELS)**

| Pollutant/Standard | 2015 | 2016 | 2017 |
|---------------------------|-------------|-------------|-------------|
| Ozone | | | |
| 1-Hour > 0.09 ppm (S) | 49 | 53 | 66 |
| 8-Hour > 0.07 ppm (S) | 69 | 88 | 87 |
| 8- Hour > 0.075 ppm (F) | 53 | 65 | 72 |
| Max. 1-Hour Conc. (ppm) | 0.136 | 0.156 | 0.150 |
| Max. 8-Hour Conc. (ppm) | 0.110 | 0.116 | 0.127 |
| Carbon Monoxide | | | |
| 1-Hour > 20. ppm (S) | 0 | 0 | 0 |
| 8-Hour > 9. ppm (S, F) | 0 | 0 | 0 |
| Max 8-Hour Conc. (ppm) | 1.3 | 1.3 | 1.7 |
| Nitrogen Dioxide | | | |
| 1-Hour > 0.18 ppm (S) | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.07 | 0.07 | 0.06 |

| Pollutant/Standard | 2015 | 2016 | 2017 |
|------------------------------------------------|--------|-------|--------|
| Respirable Particulates (PM-10) | | | |
| 24-Hour > 50 µg/m ³ (S) | 12/336 | 5/363 | 26/320 |
| 24-Hour > 150 µg/m ³ (F) | 0/336 | 0/363 | 0/320 |
| Max. 24-Hr. Conc. (µg/m ³) | 77. | 72. | 106. |
| Fine Particulates (PM-2.5) ¹ | | | |
| 24-Hour > 35 µg/m ³ (F) | 1/58 | 0/55 | 0/49 |
| Max. 24-Hr. Conc. (µg/m ³) | 39.4 | 28.4 | 23.5 |

S=State Standard
 F=Federal Standard
 Source: South Coast AQMD
 Upland Monitoring Station (5175) ,¹ Ontario 1408 Francis Street (5817)

Air Quality Planning

The U.S. EPA is responsible for setting and enforcing the NAAQS for O₃, CO, NO_x, SO₂, PM₁₀, PM_{2.5}, and lead (7). The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955, and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (14). The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. Substantial reductions in emissions of ROG, NO_x and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air “blueprint” in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. The attainment date was to “slip” from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard. Because projected attainment by 2021 required control technologies that did not exist yet, the SCAQMD requested a voluntary “bump-up” from a “severe non-attainment” area to an “extreme non-attainment” designation for ozone. The extreme designation was to allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on “black-box” measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from “severe-17” to “extreme.” This reclassification set a later attainment deadline (2024), but also required the air basin to adopt even more stringent emissions controls.

**Table III-4
 SOUTH COAST AIR BASIN EMISSIONS FORECASTS (EMISSIONS IN TONS/DAY)**

| Pollutant | 2015 ^a | 2020 ^b | 2025 ^b | 2030 ^b |
|-----------|-------------------|-------------------|-------------------|-------------------|
| NOx | 357 | 289 | 266 | 257 |
| VOC | 400 | 393 | 393 | 391 |
| PM-10 | 161 | 165 | 170 | 172 |
| PM-2.5 | 67 | 68 | 70 | 71 |

^a2015 Base Year.

^bWith current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, 2013 Almanac of Air Quality

AQMPs are required to be updated every three years. The 2012 AQMP was adopted in early 2013. An updated AQMP was required for completion in 2016. The 2016 AQMP was adopted by the SCAQMD Board in March, 2017, and has been submitted the California Air Resources Board for forwarding to the EPA. The 2016 AQMP acknowledges that motor vehicle emissions have been effectively controlled and that reductions in NOx, the continuing ozone problem pollutant, may need to come from major stationary sources (power plants, refineries, landfill flares, etc.). The current attainment deadlines for all federal non-attainment pollutants are now as follows:

| | |
|----------------------------------------|---------------------------|
| 8-hour ozone (70 ppb) | 2032 |
| Annual PM-2.5 (12 µg/m ³) | 2025 |
| 8-hour ozone (75 ppb) | 2024 (former standard) |
| 1-hour ozone (120 ppb) | 2023 (rescinded standard) |
| 24-hour PM-2.5 (35 µg/m ³) | 2019 |

The key challenge is that NOx emission levels, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the above deadlines to be met. Unless additional stringent NOx control measures are adopted and implemented, ozone attainment goals may not be met.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing water improvement projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

Significance Thresholds Used in This Document

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following four tests of air quality impact significance. A project would have a potentially significant impact if it:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) 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?
- c) Expose sensitive receptors to substantial pollutant concentrations?
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects with daily emissions that exceed any of the following emission thresholds are recommended by the SCAQMD to be considered significant under CEQA guidelines.

**Table III-5
 DAILY EMISSIONS THRESHOLDS**

| Pollutant | Construction | Operations |
|------------------|---------------------|-------------------|
| ROG | 75 | 55 |
| NOx | 100 | 55 |
| CO | 550 | 550 |
| PM-10 | 150 | 150 |
| PM-2.5 | 55 | 55 |
| SOx | 150 | 150 |
| Lead | 3 | 3 |

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation

- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
- Project could generate vehicle trips that cause a CO hot spot.

Impact Analysis

- a. *Less Than Significant Impact* – Projects such as the proposed Plant 30 Wellhead Treatment Project do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis. The City requires compliance with the Municipal Code for project such as this, and MVWD intends to meet these standards. The Plant 30 Wellhead Treatment Project will be fully consistent with both the General Plan designation and Zone classification for the project site, mainly because the project involves water treatment, and such projects are considered land use independent. Thus, the proposed project is consistent with regional planning forecasts maintained by the Southern California Association of Governments (SCAG) regional plans. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant only because of consistency with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis. As the analysis of project-related emissions provided below indicates, the proposed project will not cause or be exposed to significant air pollution, and is, therefore, consistent with the applicable air quality plan.
- b. *Less Than Significant With Mitigation Incorporated* – Air pollution emissions associated with the proposed project would occur over both a short and long-term time period. Short-term emissions include fugitive dust from construction activities (i.e., site prep, demolition, grading, and exhaust emission) at the proposed Project site. Long-term emissions generated by future operation of the proposed project primarily include energy consumption required to operate the Plant 30 facility and employee/visitor truck trips to the Plant 30 Wellhead Treatment facility.

Construction Emissions

The proposed project consists of development of a Wellhead Treatment Plant within the existing Well 30 site, to treat water from Wells 30, 32, and Well 33. On-site improvements include demolition of portions of the existing site, site civil improvements including paving and grading, and yard piping. Off-site construction include installation of pipelines such as a raw water pipelines from Well 32 and 33, the treated water pipeline (plant effluent), brine pipeline, and waste pipeline to the sewer. In total installation of approximately 8,100 linear feet of pipeline between 4-20 inch diameter will be required. The pipeline will on-average be installed in 3-foot wide trenches. The project is estimated to require 10 months of construction beginning in November 2019. The Wellhead treatment project will require 15 daily workers and the off-site pipeline will require 10 daily workers. With the off-site pipeline progress rate of 100-150 linear feet per day the total duration is expected to be approximately 80 days. Although exhaust emissions will result from on and off-site equipment, the exact types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. The CalEEMod.2016.3.2 computer model was used to calculate emissions from the prototype construction equipment fleet and schedule as indicated in Table III-6.

**Table III-6
 CalEEMod CONSTRUCTION ACTIVITY EQUIPMENT FLEET AND WORKDAYS**

| WELLHEAD SITE | |
|-----------------------------------------------------|----------------------|
| Phase Name and Duration | Equipment |
| Demolition (1 month) 100 CY demo export | 1 Concrete Saw |
| | 1 Dozer |
| | 1 Loader/Backhoe |
| | 2 Skid Steer Loaders |
| Grade (1 month) | 1 Loader/Backhoe |
| | 1 Dozer |
| | 1 Excavator |
| | 1 Grader |
| Pave/Pour Concrete Slabs (3 months) | 1 Paver |
| | 1 Roller |
| | 1 Loader/Backhoe |
| | 4 Mixers |
| | 1 Compactor |
| Construction and Yard Piping/Drainage (5 months) | 1 Trencher |
| | 2 Forklifts |
| | 1 Crane |
| | 2 Skid Steer Loaders |

| OFF-SITE PIPELINE INSTALLATION | |
|------------------------------------------|----------------------|
| Phase Name and Duration | Equipment |
| Prep and Concrete Removal (20 days) | 1 Concrete Saw |
| | 2 Skid Steer Loaders |
| | 2 Loader/Backhoes |
| Trenching and Pipeline Install (40 days) | 2 Trenchers |
| | 1 Excavator |
| | 2 Forklifts |
| | 1 Loader/Backhoes |
| Backfill and Paving (20 days) | 4 Mixers |
| | 1 Paver |
| | 1 Rollers |
| | 1 Loader/Backhoes |
| | 2 Compactors |

Utilizing the indicated equipment fleet shown in Tables III-6 the following worst-case daily construction emissions are calculated by CalEEMod and are listed in Table III-7.

**Table III-7
 CONSTRUCTION ACTIVITY EMISSIONS
 MAXIMUM DAILY EMISSIONS (POUNDS/DAY)**

| Maximal Construction Emissions per Calendar Year | ROG | NOx | CO | SO ₂ | PM-10 | PM-2.5 |
|--------------------------------------------------|------------|-------------|-------------|-----------------|------------|------------|
| Plant 30 | | | | | | |
| 2019 | 1.5 | 14.8 | 11.1 | 0.0 | 1.8 | 1.1 |
| 2020 | 1.4 | 13.9 | 8.8 | 0.0 | 1.7 | 1.1 |
| Off-Site Piping | | | | | | |
| 2020 | 1.4 | 12.1 | 11.2 | 0.0 | 1.5 | 0.9 |
| Yearly Totals | | | | | | |
| 2019 | 1.5 | 14.8 | 11.1 | 0.0 | 1.8 | 1.1 |
| 2020 | 2.8 | 26.0 | 20.0 | 0.0 | 3.2 | 2.0 |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |

Source: CalEEMod.2016.3.2 output in appendix

Peak daily construction activity emissions are below their respective SCAQMD CEQA significance thresholds, even if activities overlapped, without the need for any additional mitigation.

Peak daily construction activity emissions are below their respective SCAQMD CEQA significance thresholds without the need for any additional mitigation. However, though construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air basin. As such, the following mitigation measure shall be implemented:

AIR-1 Fugitive Dust Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- **Apply soil stabilizers or moisten inactive areas.**
- **Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).**
- **Cover all stock piles with tarps at the end of each day or as needed.**
- **Provide water spray during loading and unloading of earthen materials.**
- **Minimize in-out traffic from construction zone.**
- **Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard.**
- **Sweep streets daily if visible soil material is carried out from the construction site.**

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options include:

AIR-2 Exhaust Emissions Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- **Utilize well-tuned off-road construction equipment.**
- **Establish a preference for contractors using Tier 3 or better heavy equipment.**
- **Enforce 5-minute idling limits for both on-road trucks and off-road equipment.**

With the above mitigation measures, any impacts related to construction emissions are considered less than significant. No further mitigation is required.

Operational Emissions

Operational air pollution emissions will be minimal. Electrical generation of power will be used for pumping and treatment. Electrical consumption has no single uniquely related air pollution emissions source because power is supplied to and drawn from a regional grid. Electrical power is generated regionally by a combination of non-combustion (nuclear, hydroelectric, solar, wind, geothermal, etc.) and fossil fuel combustion sources. There is no direct nexus between consumption and the type of power source or the air basin where the source is located. Operational air pollution emissions from electrical generation are therefore not attributable on a project-specific basis.

Conclusion

With the incorporation of mitigation measures **AIR-1** and **AIR-2**, the development of the Plant 30 Wellhead Treatment Project would have a less than significant potential to 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.

- c. *Less Than Significant Impact* – The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board’s Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD’s Mobile Source Committee in February 2005.

For the proposed project, the primary source of possible LST impact would be during construction. LST screening tables are available various source-receptor distances. For this project the most stringent thresholds for a 1-acre site and a 25-meter source-receptor distance was used to compare to emissions as shown in Table III-8.

**Table III-8
 LST AND PROJECT EMISSIONS (POUNDS/DAY)**

| LST 1 acre/25 meters Northwest San Bernardino Valley | CO | NOx | PM-10 | PM-2.5 |
|-----------------------------------------------------------------|-----------|------------|--------------|---------------|
| LST Thresholds | 863 | 118 | 5 | 4 |
| Max On-Site Emissions | | | | |
| Plant 30 Wellhead | 11 | 15 | 2 | 1 |
| Off-Site Pipeline | 11 | 12 | 2 | 1 |

LSTs were compared to the maximum daily construction activities. As seen in Table III-8, even without use of mitigation, emissions easily meet the LST for construction thresholds. LST impacts are less than significant. As such, the proposed project would have a less than significant potential to expose sensitive receptors to substantial pollutant concentrations.

- d. *Less Than Significant Impact* – Project operations (pumping and treatment, and distribution) are an essentially closed system with negligible odor potential. Groundwater contains minimal organic matter capable of odor generation. Chlorine storage and dispensing is prevented from being released to the atmosphere by a required containment system.

The site uses low concentrations of chlorine for water disinfection, but it will be injected into the water stream and have no airborne pathways. The solution will be stored in tanks and the solution will be pumped to the inline mixer. The dosing is controlled by a metering pump installed close to the storage tank. The quality of the disinfected water coming out of the online mixer will be analyzed by a Chlorine Analyzer. Chemical levels will be diluted to below their odor threshold. Therefore, the potential for objectionable odors posing a health risk to humans on- or off-site is considered a less than significant impact.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| IV. 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 Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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 Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION: The following information utilized in this Section of the Initial Study was obtained from a Biological Resources Assessment prepared by Jericho Systems titled “CEQA Plus Biological Evaluation, Monte Vista Water District Plant 30 Wellhead Treatment Project, Montclair, CA” dated May 3, 2019, which is provided as Appendix 3 to this document.

Background

The City of Montclair General Plan states the following in regards to biological resources:

- (1) *wildlife populations no longer exist in the study area due to the elimination of wildlife habitat.*
- (2) *Both the City and its Sphere of Influence are highly urbanized and few undisturbed areas now exist within the planning area.*
- (3) *The Department has been unable to identify any information indicating the presence or suspected presence of any protected plant or animal species or sensitive plant communities and habitats within the planning area that may be impacted by the proposed project.*

CEQA Plus Biological Evaluation Conclusion

The proposed Project will not affect any State or federally listed endangered, threatened, or species of special concern, because there is no habitat to support these species within, adjacent to, or in the broader vicinity of the Project area. In addition, the proposed Project will not adversely affect Critical Habitat as none exists within the Project area.

The Project area supports ornamental trees that have the potential to provide nestable habitat to migratory birds protected under the Migratory Birds Treaty Act (MBTA). Therefore, pre-construction surveys are warranted and recommended should project implementation occur during the bird nesting season.

- a. *No Impact* – Vegetation at each well site consists of mature landscaping with planted ornamental and native trees (sycamores, olive, rosemary shrubs, etc.). Residential urban development surrounds each well site. The pipeline alignments along Benson Avenue and San Bernardino Street are paved with either concrete or asphalt and are completely surrounded by urban residential development with other related development such as schools and churches. The habitat conditions within and adjacent to the Project area are not suitable to support for any sensitive habitat and/or any species listed or proposed for listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), or species designated as sensitive by the California Department of Fish and Wildlife (CDFW), or California Native Plant Society (CNPS). With no habitat or species of concern located within the project area, the development of the MVWD Plant 30 Wellhead Treatment Project has no potential for impact to any native biological resources. No impacts are anticipated. No mitigation is required.
- b. *No Impact* – Neither the project footprint or surrounding area contain any riparian habitat or other sensitive natural community resources. Therefore, no adverse impact to riparian habitat or any native biological resources would occur from implementing the proposed project. No mitigation is required.
- c. *No Impact* – According to the IPaC Trust Resources Report (Appendix 3), the project site does not contain any wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.), or any other sensitive natural community resource. Therefore, with no habitat or species of concern located within the project area, no impacts are anticipated to occur from the implementation of the MVWD Plant 30 Wellhead Treatment Project. No mitigation is required.
- d. *Less Than Significant With Mitigation Incorporated* – According to the CEQA Plus Biological Evaluation (Appendix 3), there are species of migratory birds that could potentially be affected by construction activities in the area. With no native habitat, and no wildlife corridors that traverse the project site, implementation of the proposed project is not anticipated to interfere with the movement of native animals of any kind, or to impede the use of any native wildlife nursery sites. However, the project may require removal and replacement of trees on site that may be used for nesting birds. Therefore, the following mitigation measure is provided as a contingency in the event that any nesting birds are found at the site location:

BIO-1 *The State of California prohibits the “take” of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the the State identified nesting season (Raptor nesting season is February 15 through July 31; and migratory bird nesting season is March 15 through September 1). Alternatively, the site shall be evaluated by a qualified biologist prior to the initiation of ground disturbance to determine the presence or absence of nesting birds. Active bird nests MUST be avoided during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot avoidance buffer placed around it. No activity shall occur within the 300-foot buffer until the young have fledged the nest.*

With implementation of the above mitigation measure, any impacts under this issue are considered less than significant.

- e. *Less Than Significant Impact* – The proposed project footprint is highly disturbed as the Wellhead Treatment Plant site currently contains an existing well (Well 30), and the pipeline alignments will

be located within existing road rights-of-way. The Wellhead Treatment Plant site contains several trees that will be retained on site; however, some trees at this site may be removed and replaced at a ratio of at least a 1:1 ratio. None of these trees would be considered mature trees, and therefore are not protected by the City of Montclair's Municipal Code. No other local policies or ordinances protecting biological resources would apply to the proposed project, as no native biological resources exist within the project footprint. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

- f. *No Impact* – The footprint of the entirety of the Plant 30 Wellhead Treatment Project is 100% developed, and as stated under Background above, the City of Montclair General Plan concluded that the City is urbanized and has little or no area that could support native wildlife. As such, there are no adopted plans to protect native habitats or natural communities. Therefore, the proposed project does not have a potential conflict with any such plans.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|---------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-----------------------------|
| V. CULTURAL RESOURCES: Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION: A cultural resources report has been prepared to evaluate the potential for cultural resources to occur within the project area of potential effect entitled "Identification and Evaluation of Historic Properties Plant 30 Wellhead Treatment Plant and Pipeline Project, City of Montclair, San Bernardino County, California," prepared by CRM TECH dated May 10, 2019 (Appendix 4). The following summary information has been abstracted from this report. It provides an overview and findings regarding the cultural resources found within the project area.

Background

The purpose of the study is to provide MVWD and SWRCB with the necessary information and analysis to determine whether the proposed undertaking would have an effect on any "historic properties" or "historical resources," as defined by the pertinent federal and state statutes and regulations, that may exist in or near the area of potential effect (APE). In order to accomplish this objective, CRM TECH conducted a cultural resources records search, pursued historical and geoaerchaeological background research, contacted Native American representatives, and carried out a systematic field survey of the entire APE.

Throughout the course of the study, no "historic properties" or "historical resources" were encountered within the APE, and the heavily disturbed subsurface sediments in the vertical APE appear to be relatively low in archaeological sensitivity. Therefore, pursuant to 36 CFR 800.4(d)(1) and Calif. PRC §21084.1, CRM TECH recommends to MVWD and SWRCB a finding that *no "historic properties" or "historical resources" will be affected by the proposed undertaking.*

No further cultural resources investigation is recommended for the undertaking unless project plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are inadvertently discovered during earth-moving operations associated with the undertaking, all work in

the immediate area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

Impact Analysis

a&b. *Less Than Significant With Mitigation Incorporated* – CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

Per the above discussion and definition, no archaeological sites or isolates were recorded within the Project boundaries; thus, none of them requires further consideration during this study. In light of this information and pursuant to PRC §21084.1, the following conclusions have been reached for the Project:

- No historical resources within or adjacent to the Project area have any potential to be disturbed as they are not within the proposed area in which the facilities will be constructed and developed, and thus, the Project as it is currently proposed will not cause a substantial adverse change to any known historical resources.
- No further cultural resources investigation is necessary for the proposed project unless construction plans undergo such changes as to include areas not covered by this study.

However, if buried cultural materials are accidentally discovered during any earth-moving operations associated with the Project, the following mitigation measure shall be implemented:

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with MVWD's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

With the above mitigation incorporation, as well as the mitigation identified under Tribal Cultural Resources below, the potential for impacts to cultural resources will be reduced to a less than significant level. No additional mitigation is required.

c. *Less Than Significant With Mitigation Incorporated* – As noted in the discussion above, no available information suggests that human remains may occur within the APE and the potential for such an occurrence is considered very low. State law (Section 7050.5 of the Health and Safety Code) as well as local laws requires that the Police Department, County Sheriff and Coroner's Office receive notification if human remains are encountered. However, the following mitigation measure shall be implemented to ensure that construction related activities protect such findings:

CUL-2 Should human remains or funerary objects be encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

With the implementation of the above mitigation measure, any impacts under this issue are considered less than significant.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| VI. ENERGY: Would the project: | | | | |
| a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

a&b. *Less Than Significant Impact* – Please refer to the Project Description above and to Appendix 1 to this document for specific details regarding the energy requirements for the proposed Wellhead Treatment Plant Project. The existing Well 30, at the Wellhead Treatment Plant site is connected to SCW service routed underground from a utility pole mounted transformer. The Main Switchboard will supply a new 3 phase, 100A, power panel (PP-1) located in the electrical room. The panel will distribute power to the various new equipment and loads throughout the proposed treatment system. The power panel will be provided with surge protection and lock out features.

As stated in Section III, Air Quality, the construction of the proposed Plant 30 Wellhead Treatment Project would require mitigation measures to minimize emissions impacts from construction equipment use. These mitigation measures also apply to energy resources as they require equipment not in use for 5 minutes to be turned off, and for electrical construction equipment to be used where available. These measures would prevent a significant impact during construction due to wasteful, inefficient, or unnecessary consumption of energy resources, and would also conform to the CARB regulations regarding energy efficiency.

California Code of Regulations Title 24, Part 6, California’s Energy Efficiency Standards for Residential and Nonresidential Buildings was established in 1978 in response to a legislative mandate to reduce California’s energy consumption. New standards were adopted by the Commission in 2008 as mandated by Assembly Bill 970 to reduce California’s electricity demand. The proposed project is required to include energy efficient equipment such as lighting to minimize energy impacts. SCE will be the primary provider for electricity. According to SCE’s website², SCE is committed to delivering power reliably and to meet demand; SCE is expanding and upgrading the transmission and distribution networks to meet the region’s growing demand for electricity, and improve grid performance, while meeting California’s ambitious renewable-power goals. As such, it is anticipated that SCE would have ample power supply to serve the project without the need for additional electrical capacity.

²<https://www.sce.com/about-us/reliability/meeting-demand>

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| VII. GEOLOGY AND SOILS: Would the project: | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

a. Ground Rupture

Less Than Significant Impact – According to the California Department of Conservation California Geologic Survey Map of the project area (Figure VII-1) the proposed project is not located within an Alquist-Priolo Fault Zone. The City of Montclair General Plan Regional Fault Map, provided as Figure VII-2, depicts the faults that are located within and surrounding the City. The Chino Fault is located within the vicinity of the proposed project to the south; additionally, the San Andreas Fault is located approximately 15 miles north of the proposed project footprint. There is a potential for the proposed Wellhead Treatment Plant and associated infrastructure to be subject to relatively strong ground motions. However, based on this information, the risk for ground rupture at the site location is low; therefore, it is not likely that employees servicing the Wellhead Treatment Plant would be subject to seismic hazards from rupture of a known earthquake fault. Furthermore, the project

would be constructed to meet current California Building Code, which includes seismic safety standards. Therefore, any impacts under this issue are considered less than significant; no mitigation is required.

Strong Seismic Ground Shaking

Less Than Significant Impact – As stated in the discussion above, several faults run through the southern California region in which the proposed project is located. The City of Montclair General Plan Regional Fault Map (Figure VI-2) shows the surrounding faults which include the Chino Fault, the Sierra Madre Fault, the San Jacinto Fault, the Cucamonga Fault, and the San Andreas Fault. Like all other development projects in the City and throughout the Southern California Region, the proposed project will be required to comply with all applicable seismic design standards contained in the 2016 California Building Code (CBC), including Section 1613 Earthquake Loads. Compliance with the CBC will ensure that structural integrity will be maintained in the event of an earthquake. Additionally, underground pipelines are not typically susceptible to severe damage from ground shaking. Many such facilities exist and function within areas susceptible to strong ground shaking effects. Therefore, there is a less than significant potential for people or structures to be exposed to strong seismic ground shaking. No mitigation is required.

Seismic-related Ground Failure Including Liquefaction

No Impact – The Wellhead Treatment Plant site is entirely developed and contains an existing well; the pipeline alignments will occur within existing roadways or within the existing Well 30, 32, and 33 sites. The California Geologic Survey Earthquake Zones of Required Investigation Ontario Quadrangle Map, provided as Figure VI-3, depicts the project area. Based on the Seismic Hazard Zones identified within Figure VI-3, the proposed project is not located within an identified Liquefaction Zone. Therefore, the Project will not expose people or structures to potential substantial adverse liquefaction hazards, including the risk of loss, injury, or death involving landslides. No impacts under this issue are anticipated and no mitigation is required. No mitigation is required.

Landslides

No Impact – According to the map prepared by the California Geologic Survey depicting Earthquake Zones of Required Investigation Ontario Quadrangle Map (Figure VI-3), the proposed project is not located in an area with any known earthquake induced landslide hazards. Based on a site reconnaissance the project area is generally flat and is completely developed. Therefore, the Project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. No impacts under this issue are anticipated and no mitigation is required.

- b. *Less Than Significant With Mitigation Incorporated* – The entirety of the project area has been developed or has been graded, compacted, and paved with asphalt because the whole of the project area has been developed. As a result, the potential for soil erosion, loss of topsoil, and/or placing structures on unstable soils is generally considered less than significant. City grading standards, best management practices and the Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) are required to control the potential significant erosion hazards. The pipeline alignments will result in land disturbance in the areas that will require removal of roadway to accommodate the trenching required to install the various segments of pipeline. Adequate drainage facilities exist to accommodate existing drainage flows, and no change will result once the roadways are repaved and the pipelines are in place belowground. Additionally, the Wellhead Treatment Plant site is entirely developed and will require removal of existing concrete to modify the site to include the Wellhead Treatment Plant on-site infrastructure. This Project will result in the disturbance of more than one acre of land and will require filing a Notice of Intent (NOI), securing a National Pollutant Discharge Elimination System (NPDES), general construction stormwater discharge permit, and preparation and implementation of a Stormwater

Pollution Prevention Plan (SWPPP) that is reviewed and approved by DWP. The SWPPP will include but not be limited to the following measures to mitigate potential impacts associated with erosion and surface water quality degradation during construction:

- GEO-1** *Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of the material. If covering is not feasible, then measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the project site for future cleanup.*
- GEO-2** *Excavated areas shall be properly backfilled and compacted. Paved areas disturbed by this project will be repaved in such a manner that roadways and other disturbed areas are returned to as near the pre-project condition as is feasible.*
- GEO-3** *All exposed, disturbed soil (trenches, stored backfill, etc.) will be sprayed with water or soil binders twice a day or more frequently if fugitive dust is observed migrating from the site within which the pipelines are being installed.*
- GEO-4** *The length of trench which can be left open at any given time will be limited to that needed to reasonably perform construction activities. This will serve to reduce the amount of backfill stored onsite at any given time.*

With implementation of the above mitigation measures, any impacts are considered less than significant. No further mitigation is necessary.

- c. *Less Than Significant Impact* – Refer to the discussion under VII(a) above. Potential instability associated with slope stability and liquefaction related to the project was determined to be less than significant, as outlined under discussion a(iii) and a(iv) above. The potential for shrinkage or subsidence at the site was determined to be limited as the project is not identified by the California Geologic Survey Earthquake Zones of Required Investigation Ontario Quadrangle Map (Figure VII-3) as being located within a liquefaction hazard zone. Additionally, the proposed project footprint is currently fully developed, which minimizes the potential for subsidence to occur at the project site. Therefore, implementation of the proposed project will not 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Impacts are considered less than significant and no mitigation is required.
- d. *No Impact* – According to the United States Department of Agriculture (USDA) Web Soil Survey Soil map prepared for the project site (Appendix 5), the proposed project is located on Tujunga loamy sand, 0 to 5 percent slopes and Tujunga gravelly loamy sand 0 to 9 percent slopes. Expansive soils are generally of a clay type soil, not a loamy sand such as the Tujunga series soils that underlay the project site. Thus, based on the absence of clay-type soils on site, the proposed project would not 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. No impacts are anticipated and no mitigation is required.
- e. *No Impact* – This project will develop an above ground bolted steel tank will be utilized to store GAC backwash waste, IX backwash, and IX fast rinse waste. The waste would be metered into a new sewer connection line be require a new connection to the regional wastewater collection system and it will not utilize any subsurface septic tank or leach system. Therefore, no impact to underlying soil from wastewater disposal can occur and no mitigation is required.
- f. *Less Than Significant With Mitigation Incorporated* – No unique geologic features exist within the project footprint, and no unique geologic features are known or suspected to occur beneath the

sites. The potential for discovering paleontological resources during development of the Project is considered highly unlikely based on the fact that the footprint has been previously engineered and disturbed at depth. However, because the Project area has not been surveyed in recent history, and the fact that these resources are located beneath the surface and can only be discovered as a result of ground disturbance activities, the following measure shall be implemented:

GEO-5 Should any paleontological or unique geological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist or geologist depending on the type of resource discovered. Responsibility for making this determination shall be with the MVWD's onsite inspector. The paleontological or geological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

With the implementation of the above mitigation measure, the project would have a less than significant potential to 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 or Does Not Apply |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| VIII. GREENHOUSE GAS EMISSIONS: Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION: The following information utilized in this section of the Initial Study was obtained from the *Air Quality and GHG Impact Analysis, Monte Vista Water District Plant 30 Wellhead Treatment Project, City of Montclair, California* prepared by Giroux and Associates dated April 9, 2019. This document is provided as Appendix 2 to this document.

a&b. Less Than Significant Impact –

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. Many scientists believe that the climate shift taking place since the industrial revolution (1900) is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth’s atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

An individual project like the Project evaluated in this GHGA cannot generate enough greenhouse gas emissions to effect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of greenhouse gasses combined with the cumulative increase of all other sources of greenhouse gases, which when taken together constitute potential influences on GCC.

Significance Thresholds

In response to the requirements of SB97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of project-related GHG emissions, deciding significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

Emissions identification may be quantitative, qualitative or based on performance standards. CEQA guidelines allow the lead agency to “select the model or methodology it considers most appropriate.” The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO₂ equivalent/year. In September 2010, the Working Group released revisions which recommended a threshold of 3,000 MT CO₂e for all land use types. This 3,000 MT/year recommendation has been used as a guideline for this analysis.

Project Related GHG Emissions Generated

Construction Activity GHG Emissions

The project is assumed to require 10 months for construction starting in November of 2019 and continuing September 2020. During project construction, the CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual CO₂e emissions identified in Table VIII-1.

**Table VIII-1
 CONSTRUCTION EMISSIONS (METRIC TONS CO₂(e))**

| | |
|---------------------------|--------------|
| Year 2019 Wellhead | 38.1 |
| Year 2020 Wellhead | 116.0 |
| Year 2020 Off-Site Piping | 57.3 |
| Total | 211.4 |
| Amortized | 7.0 |
| Significance Threshold | 3,000 |

*CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less than significant.

Operational GHG Emissions

Operational air pollution emissions will be minimal. Electrical generation of power will be used for pumping and treatment. Electrical consumption has no single uniquely related GHG pollution emissions source because power is supplied to and drawn from a regional grid. Electrical power is generated regionally by a combination of non-combustion (nuclear, hydroelectric, solar, wind, geothermal, etc.) and fossil fuel combustion sources. There is no direct nexus between consumption and the type of power source or the air basin where the source is located. Operational air pollution emissions from electrical generation are therefore not attributable on a project-specific basis.

Consistency with GHG Plans, Programs and Policies

The City of Montclair participated in preparation of the San Bernardino County Regional Greenhouse Gas Reduction Plan in March 2014. In this document, the City of Montclair selected a goal to reduce its GHG emissions to a level that is 20% below its 2008 GHG emissions by 2020. The City plans for these reductions to stem from building energy alternatives, wastewater reuse, smartbus technologies and other performance standard for new development.

Water conveyance and treatment is a very small component of the total City of Montclair GHG emissions inventory. However, it is likely that this project would be considered GHG positive as it provides a localized water source and distribution system.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| IX. 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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 or excessive noise for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – The project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or may 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. During construction there is a potential for accidental release of petroleum products in sufficient quantity to pose a significant hazard to people and the environment. The following mitigation measure will be incorporated into the Storm Water Pollution Prevent Plan (SWPPP) prepared for the project and implementation of this measure can reduce this potential hazard to a less than significant level.

HAZ-1 *All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure will be incorporated into the SWPPP prepared for the Project development.*

The project will consist of a new Wellhead Treatment Plant and supporting onsite infrastructure at MVWD Well 30; 5,100 LF of raw water pipeline from Wells 32 and 33; 2,000 LF of brine pipeline; 100 LF of pipeline to the Benson feeder pipeline; a 900 LF effluent pipeline to the City of Chino transmission main and, infrastructure to connect Wells 32 and 33 to the new Wellhead Treatment Plant at MVWD Well 30. The proposed water treatment process will require a holding tank containing sodium hypochlorite. The process will also require storage of Cl₂ (chlorine gas). Additionally, the proposed water treatment process will include GAC, which will remove 1,2,3-TCP from the Wells 30, 32, and 33 water, and is an adsorbent material that removes a variety of natural organic compounds, taste and odor compounds, and synthetic organic compounds. In order to remove nitrate from the source water, IX will be utilized, which is a contaminant removal process that exchanges one set of ions for another. MVWD will develop safety standards and operational procedures for safe transport and use of its operational and maintenance materials that are potentially hazardous. These procedures will comply with all federal, state and local regulations will ensure that the Project operates in a manner that poses no substantial hazards to the public or the environment. No additional mitigation is necessary to ensure the impact of managing these chemicals result in a less than significant impact on the environment. The activities associated with remaining facilities within the proposed Plant 30 Wellhead Treatment Project will not involve significant potential for routine transport or use of substantial volumes of hazardous materials or routine generation of hazardous wastes.

- c. *Less Than Significant Impact* – The Project will not emit hazardous emissions or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The proposed Wellhead Treatment Plant is located within the site containing the existing Well 30 site, which is located adjacent to Vernon Middle School. The existing Well 30 does not currently utilize chlorine to treat the water extracted from the well. However, the proposed project will include the development of a Wellhead Treatment Plant that will require use of several materials that are potentially hazardous when not handled according to Federal, State, and local regulations. These materials will be enclosed within a container that can control accidental release. The pipeline alignments, which will not involve the use of hazardous materials and will be located underground, would be located within one quarter mile of El Camino Elementary School. As previously stated, the Project will comply with all federal, state and local regulations, which will ensure that no existing or proposed schools will be impacted by the use of these materials as part of the proposed project. Substantial hazards to the public or the environment involving the use of petroleum products and exhaust emissions with construction activities are will be minimal, as stated under the Air Quality Section of this document. All hazardous or potentially hazardous materials would comply with all applicable federal, state, and local agencies and regulations pertaining to the handling and use of hazardous materials. Adherence to these policies and regulations, as well as the implementation of the above mitigation measures will ensure that the Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school during either construction or operations of the Project. Any impacts under this issue are considered less than significant, and no mitigation is required.
- d. *Less Than Significant Impact* – According to the California State Water Board's GEOTRACKER site, which provides information regarding Leaking Underground Storage Tanks (LUST), there are no active LUST locations within or around the project alignment (Figure IX-1). There are 6 LUST Cleanup sites adjacent to the overall project footprint (Figure IX-2 through IX-7); the source of contamination has been remediated at these LUST Cleanup sites. Therefore, these remediated LUST Cleanup sites will have no potential to pose a hazard to the public or the environment. Given

that there are no open LUST cases within the vicinity of the proposed project, impacts under this issue are considered less than significant and

- e. *No Impact* – There nearest public airport is the Ontario International Airport, located approximately 6 miles east of the project. According to the LA/Ontario International Airport Land Use Compatibility Plan, Compatibility Policy Map: Safety Zones (Figure IX-8), the proposed project is not located within any identified safety zone. Brackett Field is located approximately 5 miles northwest of the project site in the City of La Verne, however at this distance, the project has no potential to cause or experience any adverse impact related to public airport operations at either Brackett Field or Ontario International Airport. There are no private airstrips located within two miles of the Project site. Therefore, the project area has no potential to cause or experience any adverse impact related to private airstrip operations. No impacts will occur as a result of project implementation. No mitigation is required.
- f. *Less Than Significant With Mitigation Incorporated* – According to the City's General Plan, no evacuation routes have been identified, though effectively the I-10 could be considered an evacuation route within the City. The proposed project would not disrupt traffic to the I-10, though the project would require lane closure and traffic management along the roadways in which pipeline will be installed during construction only. Refer to the Transportation/Traffic Section of this document, Section XVI. Mitigation to address any potential short-term traffic disruption and emergency access issues are included in this section. Impacts are reduced to a less than significant level with mitigation incorporated. No additional mitigation is required.
- g. *No Impact* – According to the San Bernardino County Land Use Plan General Plan Hazard Overlay for the project area, the proposed project is not located within the fire safety overlay district (Figure VIII-9). The proposed project area is located in an urban area removed from the high fire hazard areas that are located adjacent to the San Gabriel Mountains. Therefore, project implementation would not result and a potential to expose people or structures to fire hazards. Potential project-related impacts are less than significant; no mitigation measures are required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| X. HYDROLOGY AND WATER QUALITY: Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (i) result in substantial erosion or siltation onsite or offsite? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (iii) 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?; or, | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (iv) impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

a. *Less Than Significant With Mitigation Incorporated* – The proposed Plant 30 Wellhead Treatment Project is located within the Cities of Montclair and Ontario. The project in and of itself will result in construction of new water treatment systems that would allow MVWD to reduce levels of 1,2,3-TCP, perchlorate, and nitrate to acceptable DDW levels. For a developed area, the only three sources of potential violation of water quality standards or waste discharge requirements are from generation of municipal wastewater; from stormwater runoff; and potential discharges of pollutants, such as accidental spills. The City of Montclair implements National Pollutant Discharge Elimination System (NPDES) requirements for surface discharge for all qualified Projects. The Project site is beyond one acre in size, therefore, it is required to obtain coverage under an NPDES permit. To address stormwater and accidental spills within this environment, any new project must ensure that site development implements a Storm Water Pollution Prevention Plan (SWPPP) to control potential sources of water pollution that could violate any standards or discharge requirements during construction. Also, a Water Quality Management Plan (WQMP) must be prepared and implemented to ensure that project-related surface runoff meets discharge requirements over the long term. The SWPPP would specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that

all potential pollutants of concern are controlled, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property as stormwater runoff. Compliance with the terms and conditions of the NPDES and the SWPPP is mandatory and is judged adequate mitigation by the regulatory agencies for potential impacts to stormwater during construction activities. Implementation of the following mitigation measure is also considered adequate to reduce potential impacts to stormwater runoff to a less than significant level.

HYD-1 *MVWD shall require that the construction contractor prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. The SWPPP shall include a Spill Prevention and Cleanup Plan that identifies the methods of containing, cleanup, transport and proper disposal of hazardous chemicals or materials released during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented in the SWPPP may include but not be limited to:*

- *The use of silt fences;*
- *The use of temporary stormwater desilting or retention basins;*
- *The use of water bars to reduce the velocity of stormwater runoff;*
- *The use of wheel washers on construction equipment leaving the site;*
- *The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;*
- *The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and*
- *Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.*

With implementation of these mandatory Plans and their BMPs, as well as mitigation measure HAZ-1 and HYD-1 above, the development of the MVWD Plant 30 Wellhead Treatment site will not cause a violation of any water quality standards or waste discharge.

- b. *Less Than Significant Impact* – The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The proposed project will not increase the amount of water available to MVWD or City of Chino customers, but it will expand the infrastructure from Wells 32 and 33 to reach the Well 30 site where the raw water will be treated by a new Wellhead Treatment Plant to reduce levels of 1,2,3-TCP, perchlorate, and nitrate to acceptable DDW levels. In effect, the treatment program will expand the available groundwater from the Chino Basin aquifer. According to MVWD's 2015 Urban Water Management Plan (UWMP), MVWD currently has 12 active groundwater wells with a combined capacity of approximately 28.2 million gallons per day (MGD).³ The proposed project would not create a greater area of impervious surface than that which exists within the project footprint, and also would not require greater water supplies from the aquifer in order to operate, particularly because the proposed project would treat a comparable amount of water for potable use to that which MVWD and the City of Chino supply at present. Thus, the Plant 30 Wellhead Treatment Project is not forecast to cause a significant demand for new groundwater supplies. The potential impact under this proposed project is considered less than significant; no mitigation measures are required.

³<http://www.mvwd.org/download.cfm?ID=1716>

- c.(i) *Less Than Significant Impact* – The proposed project is not anticipated to significantly change the volume of flows downstream of the project site, and would not be anticipated to change the amount of surface water in any water body in an amount that could initiate a new cycle of erosion or sedimentation downstream of the project site. The onsite drainage will capture the incremental increase in runoff from the project site associated with project development. Furthermore, once installed, the roadways within which the pipeline alignments will be located would be returned to their original condition or better and as such would not create any potential for greater erosion on or offsite. The new Wellhead Treatment Plant site will incorporate infiltration mechanisms throughout the site to minimize runoff from leaving the project site. The downstream drainage system will not be altered and given the control of future surface runoff from the Wellhead Treatment Plant site, thus, the potential for downstream erosion or sedimentation will be controlled to a less than significant impact level.
- c.(ii) *Less Than Significant Impact* – The proposed project will alter the existing drainage courses or patterns onsite but will maintain the existing offsite downstream drainage system through control of future discharges from the site, which would prevent flooding onsite or offsite from occurring. The proposed onsite drainage improvements include replacing an existing catch basin at the Wellhead Treatment Plant. This system will be designed to capture incremental onsite runoff, and prevent additional runoff from leaving the site. Thus, the implementation of onsite drainage improvements and applicable requirements will ensure that drainage and stormwater will not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. Impacts under this issue are considered less than significant with no mitigation required.
- c.(iii) *Less Than Significant Impact* –The proposed project will alter the site such that drainage within the site will be altered, but will maintain the existing offsite downstream drainage system through control of future discharges from the site, which would prevent the project from exceeding the capacity of existing or planned stormwater drainage systems and from providing substantial additional sources of polluted runoff. The Wellhead Treatment Plant site will be designed to include combination of surface and below grade drainage systems will be provided. The overall grade of the site from east to west and towards the existing catch basins will be maintained. The existing pump-to- waste discharge structure and catch basin will be the primary on-site collection point, with the existing connection to the 66" storm drain in San Bernardino Street being protected. The pipeline alignment will be installed within existing roadways that would be returned to their original or better condition once the pipeline has been installed, and therefore no changes to the stormwater drainage system within these roadways are anticipated. Thus, the implementation of onsite drainage improvements at the Wellhead Treatment Plant site and applicable requirements throughout the project footprint will ensure that that drainage and stormwater will not create or contribute runoff that would exceed the capacity of existing or planned offsite stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts under this issue are considered less than significant with no mitigation required.
- c.(iv) *Less Than Significant Impact* – According to the San Bernardino County Land Use Plan General Plan Hazard Overlays (Figure X-1), the proposed project footprint is not located in an area that contains any flood hazards. Furthermore, development of this site is not anticipated to redirect or impede flood flow at the project site, particularly given that drainage on site will be directed to the onsite drainage systems, which will be capable of intercepting the future flow rate from the project site. Therefore, impacts under this issue are considered less than significant and no mitigation is required.
- d. *No Impact* – According to the San Bernardino County Land Use Plan General Plan Hazard Overlay Map depicting the project area, the proposed project is not located in an area susceptible to dam inundation (Figure X-1). Therefore, dam inundation is not likely, and implementation of the proposed Project would not expose people or structures to any significant risk of releasing pollutants due involving flooding as a result of a levee or dam to risk than that which presently exists within the project footprint. No mitigation is required.

- e. *Less Than Significant Impact* – The purpose of the proposed project is to reduce levels of 1,2,3-TCP, perchlorate, and nitrate to acceptable DDW levels within MVWD and the City of Chino’s respective service areas by developing a Wellhead Treatment Plant that would treat water from Wells 30, 32, and 33. Water quality results for MVWD Wells 30 and 32, and MVWD and City of Chino co-owned Well 33 show concentrations of 1,2,3-TCP, nitrate, and perchlorate at levels above the respective DLRs/MCLs for these constituents. The proposed project would ensure that the water quality from these three wells improves to a level that is below the DLRs/MCLs for each constituent. As such, the proposed project would result in MVWD conforming to DDW standards, and therefore, the proposed project would have a less than significant potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| XI. LAND USE AND PLANNING: Would the project: | | | | |
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

- a. *No Impact* – The project consists of development of a Wellhead Treatment Plant at the existing Well 30 site, and the installation of various pipeline alignments as supporting infrastructure. The pipeline alignments have no General Plan Land Use Designation because pipelines and the roadways in which the pipeline will be installed are considered essential infrastructure. The Wellhead Treatment Plant site (Well 30 site) has a City of Montclair General Plan land use designation of Public Quasi Public and the zoning classification is Single Family Residential. Furthermore, the proposed Wellhead Treatment Plant site contains the existing Well 30, and therefore, development of this project site would not physically divide an established community, particularly given that the addition of the Wellhead Treatment Plant is a complimentary use to that which exists on site. The development of the pipeline alignments would not result in physically dividing an established community, particularly because this action will occur within existing road rights-of-way and once constructed, the roadways will continue to function as they do at present. No impacts are anticipated and no mitigation is required.
- b. *Less Than Significant Impact* – Please refer to the discussion under issue XI(a) above. The proposed project is zoned for Single Family Residential and has a City of Montclair General Plan land use designation of Public Quasi Public. The types of improvements proposed by this project are considered land use independent, and can be constructed within any land use district. Additionally, several features of the proposed project, such as the water transmission pipelines, will be constructed below ground within existing roadway rights-of-way, and will have no permanent effect on the efficiency of the surrounding roadway systems. Therefore, implementation will not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Any impacts are considered less than significant. No mitigation is required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| XII. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION:

a&b. *No Impact* – The proposed project will occur within sites containing existing development including Well 30, Well 32, and Well 33, as well as existing paved roadways in which the proposed pipeline alignments would be installed. No mineral resources are known to be located within the project footprint and no mining operations exist within the project footprint. According to the City of Montclair General Plan, there are no active mining activities within the City. Past mining activities have left several large pits in Montclair and Upland, which are now being used for flood control and water conservation purposes. Future utilization of sand and gravel resources is unlikely due to the extensive urban development within the City. Based on the developed nature of the project site and surrounding area, as well as the existing land use designation (Public / Quasi Public), the development proposed by the project will not cause any loss of mineral resource values to the region or residents of the state, nor would it result in the loss of any locally important mineral resources identified in the City of Montclair General Plan. No impacts would occur under this issue. No mitigation is required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| XIII. NOISE: Would the project result in: | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) For a project located within the vicinity of a private airstrip or 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

Background

Noise is generally described as unwanted sound. The proposed Plant 30 Wellhead Treatment Project will occur within sites and areas containing existing development. The Well 30, 32, and 33 sites contain existing wells and connecting infrastructure, while the roadways in which the proposed pipeline alignments will be installed function as roadways connecting the communities within the Cities of Montclair and Ontario with surrounding development. The project site is located in an area surrounded by the following land uses: Single Family Residential (City of Montclair), Public/Quasi – Public (City of Montclair), Water Storage / Transfer (City of Montclair), Low Density Residential (City of Ontario), Open Space – Non Recreation (City of Ontario), and Public School (City of Ontario). The Wellhead Treatment Plant site itself is designated for Public/Quasi Public, and contains the existing Well 30.

The City of Montclair General Plan Noise Element states that the primary source of noise is generated from vehicular traffic on the I-10 freeway and arterial roadways such as Central Avenue. Additional noise impacts are produced by the four separate rail lines, which exist both north of Arrow Highway and south of Holt Boulevard. The proposed project is located on and around Benson Avenue between Palo Verde Street and Orchard Street generally within the City of Montclair, though the Well 33 site is located within the City of Ontario. The project site is less than one mile north of the rail line that is located south of Holt Boulevard.

The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by over one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is therefore used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from around 500 to 2,000 cycles per second are factored more heavily into sound descriptions in a process called “A-weighting,” written as “dBA.”

Leq is a time-averaged sound level; a single-number value that expresses the time-varying sound level for the specified period as though it were a constant sound level with the same total sound energy as the time-varying level. Its unit is the decibel (dB). The most common averaging period for Leq is hourly.

Because community receptors are more sensitive to unwanted noise intrusion during more sensitive evening and nighttime hours, state law requires that an artificial dBA increment be added to quiet time

noise levels. The State of California has established guidelines for acceptable community noise levels that are based on the Community Noise Equivalent Level (CNEL) rating scale (a 24-hour integrated noise measurement scale). The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. The State Guidelines, Land Use Compatibility for Community Noise Exposure, single-family homes are "normally acceptable" in exterior noise environments up to 60 dB CNEL and "conditionally acceptable" up to 70 dB CNEL based on this scale. Multiple family residential uses are "normally acceptable" up to 65 dB CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries and churches are "normally acceptable" up to 70 dB CNEL, as are office buildings and business, commercial and professional uses with some structural noise attenuation.

- a. *Less Than Significant With Mitigation Incorporated* – The proposed project footprint is located in areas with moderate-to-high background noise given the proximity to the local roadway system at any point within the project area. City’s General Plan Noise Contour Map under both existing (Figure XIII-1) and buildout (Figure XIII-2), the project is located within an area with a general noise level of 70 dBA CNEL in most locations due to the proximity of the proposed project footprint to adjacent roadways, which would indicate that the background noise environment in the general project vicinity sometimes exceeds the normally acceptable exterior noise environment. The proposed project would develop a Wellhead Treatment Plant at the existing Well 30 site, which is located approximately 125 feet from the nearest residential sensitive receptor when measured from the boundary of the Well 30 site, though the proposed project is also located adjacent to a school. The proposed project would also construct the proposed pipeline alignments within existing road rights of way, which traverse through areas containing residences adjacent to the roadways, and, as such, the exteriors of the nearest residences, which contain sensitive receptors, are located between 25 and 50 from the pipeline alignments at several points within the project footprint. The City of Montclair Noise Standards are as follows in Table XIII-1 below:

**Table XIII-1
 CITY OF MONTCLAIR NOISE STANDARDS**

| Zone | Time | Decibels |
|-------------|--------------|-----------------|
| Residential | 10 PM – 7 AM | 45 dBA |
| Residential | 7 AM – 10 PM | 55 dBA |
| Commercial | 10 PM – 7 AM | 55 dBA |
| Zone | Time | Decibels |
| Commercial | 7 AM – 10 PM | 65 dBA |
| Industrial | 10 PM – 7 AM | 60 dBA |
| Industrial | 7 AM – 10 PM | 70 dBA |

Short Term Noise

Exterior noise-generating construction activities will be restricted to the hours identified in Section 6.12.060 of the City of Montclair Noise Ordinance, which prohibits noise generated by construction activities between the hours of 8:00 PM and 7:00 AM on any given day. The City of Montclair General Plan states that, since construction noise is of a temporary nature, the City does not require noise mitigation. Section 5-4.07. of the Noise Ordinance provides an exemption for noise sources associated with construction; however, the ordinance requires operational considerations (i.e., hours of construction, mufflers on construction equipment) to minimize noise impacts during the construction process.

Construction equipment generates noise that ranges between approximately 75 and 90 dBA at a distance of 50 feet. Refer to Table XIII-2, which shows construction equipment noise levels at 25, 50 and 100 feet from the noise source.

**Table XII-2
 NOISE LEVELS OF CONSTRUCTION EQUIPMENT AT
 25, 50 AND 100 FEET (in dBA Leq) FROM THE SOURCE**

| Equipment | Noise Levels at 25 feet | Noise Levels at 50 feet | Noise Levels at 100 feet |
|---------------------------|-------------------------|-------------------------|--------------------------|
| Earthmoving | | | |
| Front Loader | 85 | 79 | 73 |
| Backhoes | 86 | 80 | 74 |
| Dozers | 86 | 80 | 74 |
| Tractors | 86 | 80 | 74 |
| Scrapers | 91 | 85 | 79 |
| Trucks | 91 | 85 | 79 |
| Material Handling | | | |
| Concrete Mixer | 91 | 85 | 79 |
| Concrete Pump | 88 | 82 | 76 |
| Crane | 89 | 83 | 77 |
| Derrick | 94 | 88 | 82 |
| Stationary Sources | | | |
| Pumps | 82 | 79 | 70 |
| Generator | 84 | 78 | 72 |
| Compressors | 87 | 81 | 75 |
| Other | | | |
| Saws | 84 | 78 | 72 |
| Vibrators | 82 | 76 | 70 |

Source: U.S. Environmental Protection Agency "Noise"

Receptors located adjacent to the roadways in which the proposed pipeline alignment will be installed may experience increased noise levels during construction, but the proposed project will comply with the City's restrictions on night-time construction activity. Therefore, through compliance with the City's noise standards, construction of the proposed project would not result in the generation of a substantial temporary or permanent noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. However, contingency mitigation is provided below to reduce noise levels at residences and/or minimize or address complaints from local sensitive noise receptors. The short-term noise impacts associated with Project construction activities are forecast to be less than significant through implementing the following measures. As construction activities may be a nuisance to nearby residents, the following mitigation is recommended:

NOI-1 *No construction activities shall occur during the hours of 8 PM through 7 AM, on any given day; at no time shall construction activities occur on Sundays or holidays, unless a declared emergency exists.*

NOI-2 *MVWD shall establish a noise complaint response program and shall respond to any noise complaints received for this Project by measuring noise levels at the affected receptor site. If the noise level exceeds an Ldn of 60 dBA exterior or an Ldn of 45 dBA interior at the receptor, MVWD will implement adequate measures (which may include portable sound attenuation walls, use of quieter equipment, shift of construction schedule to avoid*

the presence of sensitive receptors, etc.) to reduce noise levels to the greatest extent feasible.

NOI-3 *MVWD will require that all construction equipment be operated with mandated noise control equipment (mufflers or silencers). Enforcement will be accomplished by random field inspections by applicant personnel during construction activities.*

NOI-4 *Equipment not in use for five minutes shall be shut off.*

NOI-5 *Equipment shall be maintained and operated such that loads are secured from rattling or banging.*

NOI-6 *Construction employees shall be trained in the proper operation and use of equipment consistent with these mitigation measures, including no unnecessary revving of equipment.*

NOI-7 *No radios or other sound equipment shall be used at this site unless required for emergency response by the contractor.*

Long Term

The long term or permanent change in noise from the proposed Wellhead Development Project would be minimal, though it would vary between the different project components. Generally, pipelines are located below-ground and do not generate noise in and of themselves; therefore, development of the pipeline alignments will not generate any routine noise in the long-term. The proposed Wellhead Treatment Plant will introduce a new noise source at the Well 30 site; however, this new noise would not be greater such that the nearest sensitive receptor would experience an increase in noise as a result of the proposed project, particularly given that the nearest residential sensitive receptor from the Wellhead Treatment Plant is located 125 feet from boundary of the project site. The proposed project is also located adjacent to a school; however, as stated above, the increase in noise compared to that which exists at the project site at present as a result of the pump at Well 30 is minimal and would not exceed City thresholds for exterior (or interior) noise. This is due to the fact that the noise generating activities that would result from the proposed Wellhead Treatment Plant would be enclosed within a structure or noise attenuation features that would minimize noise generation from operations of the Project. Additionally, as stated above, the Wellhead Treatment Plant is located within an area with a general noise level of 70 dBA CNEL due to the proximity of the adjacent roadway. Based on the existing noise levels in the area surrounding the project from nearby traffic, and due to the fact that the new noise generating activities will occur within an enclosed setting, operation of the proposed project would not result in the generation of a substantial temporary or permanent noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

- b. *Less Than Significant Impact* – Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by vibration of room surfaces is called structure borne noises. Sources of groundborne vibrations include natural phenomena (e.g. earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g. explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous or transient. Vibration is often described in units of velocity (inches per second), and discussed in decibel (VdB) units in order to compress the range of numbers required to describe vibration. Vibration impacts related to human development are generally associated with activities such as train operations, construction, and heavy truck movements.

The FTA assessment states that in contrast to airborne noise, ground-borne vibration is not a common environmental problem. Although the motion of the ground may be noticeable to people outside structures, without the effects associated with the shaking of a structure, the motion does not provoke the same adverse human reaction to people outside. Within structures, the effects of

ground-borne vibration include noticeable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. FTA assessment further states that it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. However, some common sources of vibration are trains, trucks on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment. The Federal Transit Association (FTA) guidelines identify a level of 80 VdB for sensitive land uses. This threshold provides a basis for determining the relative significance of potential Project related vibration impacts.

Due to the location of the Wellhead Treatment Plant site, and the lack of any sensitive receptors within a reasonable distance of the project site, construction and operations at this site will not expose people to generation of excessive groundborne vibration or groundborne noise levels.

Background vibration within the project footprint that traverses through the City Montclair and a small portion of the City of Ontario would generally result from cars and trucks travelling along the roadways in which the proposed pipeline alignments would be installed. These roadways are generally moderate-to-heavily travelled given that they are major north-south, and east-west roadways within the Cities. Groundborne vibration is normally perceptible to humans at approximately 65 VdB, while 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible. Construction activity can result in varying degrees of groundborne vibration; in the short term, construction from installing the pipelines has the potential to create some groundborne vibration to the nearest sensitive receptors at some sites within the project footprint. However, any short-term impacts to the nearest sensitive receptors would be considered less than significant through implementing the following mitigation measure:

NOI-8 During future initiation of construction activities with heavy equipment within 300 feet of occupied residences, vibration field tests shall be conducted at the nearest occupied residences upon receipt. To the extent feasible, if vibrations exceed 72 VdB, the construction activities shall be revised (smaller equipment, reduced activity) to reduce vibration below this threshold.

With implementation of the above mitigation measure, the project would comply with the Cities of Montclair and Ontario Municipal Codes, and would prevent significant impacts from occurring as a result of the pipeline installation component of the proposed project. Therefore, impacts from project related vibration would be considered less than significant with implementation of mitigation. No further mitigation is required.

- c. *Less Than Significant Impact* – The nearest public airport is the Ontario International Airport, located approximately 5 miles east of the project. According to the LA/Ontario International Airport Land Use Compatibility Plan, Compatibility Policy Map: Noise Impact Zone (Figure XIII-3), the proposed project is not located within the boundaries of the any CNEL Noise Impact Zone, though it is located within the Airport Influence Area. Based on this information, the Project will have a less than significant potential to expose people residing or working in the project area to excessive noise levels generated by nearby aircraft or airport operations. No private airstrips are located within the vicinity of the proposed project. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| XIV. 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION

- a. *Less Than Significant Impact* – Implementation of the Project will not induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). The Project is considered a vital infrastructure project because it proposes to improve the water quality of Wells 30, 32, and 33, which are currently in have observed 1,2,3-TCP concentrations above the DDW DLR/MCL and have observed elevated nitrate levels that exceed the 10 mg/L-N DDW MCL. It is anticipated that construction will require a temporary work force; however, this is short-term and with a maximum of about 30 employees will not induce substantial population growth. It is not anticipated that MVWD would require many additional permanent employees as a result of the installation of the Wellhead Treatment Plant. Should MVWD employ any new persons as a result of this project, the amount would not exceed 5 persons. It is unknown whether the new employees will be drawn from the general area or will bring new residents to the project area. Relative to the total number residents of Montclair—approximately 38,686 as of 2016 according to the Southern California Association of Governments— an increase of the maximum 5 employees as new residents represents a minor increase in the area population. According to the City of Montclair General Plan, the buildout population (in which all available land within Montclair will be occupied, serving as the land uses identified within the General Plan) is 45,000 residents. The potential for a minor increase of 5 individuals is not considered a substantial growth in population. Furthermore, though the proposed project is considered an infrastructure project, the purpose of the proposed project is not to expand the MVWD service area, it is to respond to the elevated concentrations of 1,2,3-TCP and nitrate within MVWD and the City of Chino’s existing water supply. Thus, based on the type of project and the small increment of potential population the population generation associated with project implementation, the proposed project will not induce substantial population growth either directly or indirectly.
- b. *No Impact* – The proposed project will occur within sites containing existing wells or within existing road rights of way, neither of which contain housing or persons. No occupied residential homes are located within the project footprint; therefore, implementation of the proposed project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. No impacts will occur; therefore, no mitigation is required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| XV. PUBLIC SERVICES: 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: | | | | |
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

- a. *Less Than Significant Impact* – The proposed project area is generally served by the Montclair Fire Department, though Well 33 and portions of the pipeline alignments located on Benson Avenue are located within the City of Ontario which is served by the City of Ontario Fire Department. The proposed project is located less than one mile east from Ontario Fire Department Station 4, located at 1005 N Mountain Ave in Ontario. Though the only permanent above ground operational feature is located within the City of Montclair at Well 30. The Ontario Fire Department provides fire protection and emergency medical services to the City of Ontario. It currently has eight stations, which are comprised of eight 4-man paramedic engine companies and two 4-man truck companies. The department responds to more than 15,000 calls per year, serving and protecting a city population of approximately 173,000.⁴

The Montclair Fire Department responds to a wide variety of service call types. These include fires, ruptures/explosions, emergency medical incidents, rescues, hazardous conditions, public service assistance calls, good intent calls, false calls, severe weather incidents, and natural disasters. The proposed project footprint is located in proximity (by two or three miles) to Montclair Fire Station 151 at 8901 Monte Vista Avenue (located just north of I-10) and to Montclair Fire Station 152 at 10825 Monte Vista Avenue (located just south of Holt Boulevard). The Montclair Fire Department responded to 5,349 calls for service in 2015 and 5,515 in 2016.⁵ According to the City of Montclair General Plan, there is a maximum three-minute response time is available throughout the planning area. The project site is within a distance where any future calls can be responded to within the Fire Department’s target response time. Additionally, the City of Montclair requires the Fire Department to review the project as part of the application process. Further, as stated under the Hazards and Hazardous Materials discussion, the project site is located outside of the wildland fire hazard zone. The proposed Well 30 site is currently served by adequate fire protection services. Therefore, the project will add minimal new demand for fire protection services because the proposed Wellhead Treatment Plant will not require a permanent on site staff to operate, and the use is not of a type that would create a substantial fire risk. The Citys’ (of both Montclair and Ontario) General Fund covers operational expenses, and the proposed project will continue to contribute to the general fund to offset this incremental demand for fire protection services. Any impacts are considered less than significant and no mitigation is required.

⁴ <http://www.ontarioca.gov/fire>

⁵ <https://www.cityofmontclair.org/city-government/fire-department/calls-for-service>

- b. *Less Than Significant Impact* – The proposed project area is generally served by the Montclair Police Department (MPD), which is a municipal law enforcement agency responsible for the delivery of a full range of law enforcement services. The MPD services a 5.5 square-mile community of roughly 37,000 residents. The MPD has evolved into a community-oriented organization employing 60 sworn officers today, with the police headquarters located at 4870 Arrow Highway, Montclair, CA 91763, approximately 2.7 miles northwest of the project site. The Ontario Police Department (OPD) serves the City of Ontario. OPD Headquarters are located at 2500 S. Archibald Avenue in Ontario, CA 91761, about 5 miles east of the project area. OPD enforces local, state, and federal laws; performs investigations and makes arrests; and responds to City emergencies. The project footprint is located within existing patrol routes for both MPD and OPD and future calls can be responded to within the identified priority call target response times. Given that the proposed project only has one above ground component at a site that is fenced (Well 30 site), a less than significant potential exists for demand for police protection or expansion of police infrastructure. The Cities (of both Montclair and Ontario) General Fund covers operational expenses. The Project will continue to contribute to the applicable City General Fund to offset this incremental demand for police protection services. Any impacts are considered less than significant and no mitigation is required.
- c. *Less Than Significant Impact* – The proposed project will utilize the existing Well 30 site to develop a Wellhead Treatment Plant. The associated infrastructure that will be developed as part of this project will be installed below ground or at existing Well 32 and 33 sites. The project is not anticipated to generate any new direct demand for the area schools. The proposed project may place additional demand on school facilities, but such demand would be indirect and speculative. The City of Montclair is served by the Ontario-Montclair School District. The State of California requires a portion of the cost of construction of public schools to be paid through a fee collected on residential, commercial, and industrial developments. The development impact fee mitigation program of the Ontario-Montclair School District adequately provides for mitigating the impacts of the proposed project in accordance with current state law, though the proposed project is exempt from such fees because it is a water supply project that would extend vital infrastructure to customers within its service area. As such, no mitigation is required. Furthermore, given that the proposed project is not anticipated to permanently employ more than 5 persons as part of this project, the demand on school services would be minimal and well within the Ontario-Montclair School District's capacity for additional students.
- d. *Less Than Significant Impact* – The proposed project will utilize the existing Well 30 site to develop a Wellhead Treatment Plant. The associated infrastructure that will be developed as part of this project will be installed below ground or at existing Well 32 and 33 sites. The project is not anticipated to generate any new direct demand for parks within the City, as project would have a minimal potential to induce substantial population growth within the City. According to the City of Montclair Engineering Department Fee Schedule, the City does not impose their Park Development Impact Fees (DIF) on Public-Quasi Public land uses, therefore the project is not required to contribute DIF designated for park development. Furthermore, given that the proposed project is not anticipated to permanently employ more than 5 persons as part of this project, the increased demand for area parks would be minimal. Therefore, the proposed project will have a less than significant impact to parks and recreation facilities.
- e. *Less Than Significant Impact* – Other public facilities include library and general municipal services. Since the Project will not directly induce substantial population growth, it is not forecast that the use of such facilities will substantially increase as a result of the proposed project. According to the City of Montclair Engineering Department Fee Schedule, the City does not impose their Development Impact Fees (DIF) on Public-Quasi Public land uses, therefore the project is not required to contribute DIF designated for library and municipal services. Furthermore, given that the proposed project is not anticipated to permanently employ more than 5 persons as part of this project, the increased demand for library service would be minimal. Therefore, the proposed project will have a less than significant impact to other public services.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| XVI. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION

- a. *Less Than Significant Impact* – As addressed in the discussion under XIII and XV(d) above, the proposed Project does not include a use that would substantially induce population growth; as stated in the discussion under Population and Housing, the proposed project is not anticipated to employ new MVWD personnel in an amount greater than 5 persons; however, it is unknown what portion of the employees will be new residents. The City’s General Plan states that construction of new facilities contributes to the City’s ability to provide needed public services and enhance public access to those same service and systems. The proposed project will contribute to the City’s General Fund through payment of property tax. Given that the proposed project consists of a Wellhead Treatment Plant within an existing well site, and associated infrastructure within existing uses and within roadways, the Plant 30 Wellhead Treatment Project is not anticipated to result in a substantial increase in the use of existing park and recreation facilities. Therefore, any impacts under this issue are considered less than significant. No mitigation is required.

- b. *No Impact* – The proposed project would develop a Wellhead Treatment Plant at the existing Well 30 site and would develop associated pipeline alignments within adjacent roadways, as well as on site infrastructure at Well 32 and 33. The only new above ground feature of the proposed project will be located at Well 30, which is currently in use as a site containing a well. Though the proposed project is adjacent to a school and to recreational fields, the proposed project has no potential to include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Thus, no impacts are anticipated under this issue. No mitigation is required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| XVII. TRANSPORTATION: Would the project: | | | | |
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Result in inadequate emergency access? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

- a. *Less Than Significant With Mitigation Incorporated* – The proposed project is located within the Cities of Montclair and Ontario. Though above ground component—the Wellhead Treatment Plant—is located within the City of Montclair at the existing Well 30 site. The City of Montclair does not have specific traffic study guidelines, therefore, the County of San Bernardino Congestion Management Program (CMP) Traffic Study Guidelines have been utilized in the following analysis. The County’s traffic study guidelines indicate that if a project generates fewer than 100 to 250 peak hour trips and contributes less than 50 peak hour trips to a CMP intersection, a formal traffic study is typically not required as off-site improvements are assumed to be nominal for low traffic generating uses. As such, the proposed project is not anticipated to violate the County’s Traffic Study Guidelines due to the limited number of trips required to implement the proposed project (below the County’s Traffic Study Guidelines).

In the short-term, the proposed project will require the installation of pipelines within existing road rights-of-way. The roadways within which the pipelines will be installed (San Bernardino Street and Benson Avenue) are major roadways that are important to circulation within the area. The pipeline installation will require one lane to be closed to complete the installation of the various pipeline alignments; this will ensure that each roadway can still operate during construction. However, the project will require implementation of a traffic management plan in order to comply with the Cities of Montclair and Ontario and the County of San Bernardino Master Plan of Roads and Circulation Plans, which will ensure adequate circulation within the area.

During construction, an estimated 25 roundtrips from construction workers would occur per day. A maximum of 25 roundtrips per day will occur to support construction efforts (i.e. delivery or removal of construction materials, etc.). Implementation of the Project has the potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. However, with implementation of the following mitigation measure requiring a construction traffic management plan, the impacts of implementing the Project would be considered less than significant.

TRAF-1 The construction contractor will provide adequate traffic management resources, as determined by the County of San Bernardino, City of Montclair, and, if required, the City of Ontario. MVWD shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. The traffic management plan shall be prepared and approved by the City(s) and County

prior to initiation of excavation or pipeline construction. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

TRAF-2 MVWD shall require that all disturbances to public roadways be repaired in a manner that complies with the Standard Specifications for Public Works Construction (green book) or other applicable County of San Bernardino, City of Montclair, and, where required, the City of Ontario standard design requirements.

During operation of the proposed project, trips to the Wellhead Treatment Plant site are anticipated to be minimal given that it is anticipated that the Wellhead Treatment Plant would not require on-site monitoring each day. As such, operation of the proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Therefore, with implementation of the above mitigation measures, implementation of the project has a less than significant potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

- b. ***Less Than Significant Impact*** – The proposed project would develop a Wellhead Treatment Plant and associated infrastructure within the City of Montclair and adjacent to the City of Ontario. Neither the City of Montclair or the City of Ontario has developed a threshold for vehicle miles travelled; however, the proposed project will require minimal vehicle miles traveled to accomplish once constructed. Construction of the proposed project will require a maximum of about 25 trips to and from the site each day as a result of employee and construction related trips. Given that these trips are temporary, and are not anticipated to exceed 100 miles round trip per day during the 225 days of construction, construction related vehicle miles traveled impacts are considered less than significant. Furthermore, the proposed project would not generate a significant number of trips once in operation, and the MVWD Main Office site is location less than 2 miles from the proposed project site. Generally, personnel that would service the Wellhead Treatment Plant would travel from the MVWD Main Office site. As such, development of the Plant 30 Wellhead Treatment Project is not anticipated to result in significant impact related to vehicle miles travelled, and thus would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts under this issue are considered less than significant.
- c. ***Less Than Significant With Mitigation Incorporated*** – The project will temporarily alter existing roadways during construction of the proposed pipeline. However, this alteration will not create any hazards due to design features of incompatible uses. The project will consist of a new Wellhead Treatment Plant and supporting onsite infrastructure at MVWD Well 30; 5,100 LF of raw water pipeline from Wells 32 and 33; 2,000 LF of brine pipeline; 900 LF of effluent pipeline to the City of Chino transmission main; and, 100 LF of pipeline to the Benson feeder pipeline. This effort will occur within existing rights-of-way within Benson Avenue and San Bernardino Street. As stated under issue XVII(a) above, the with the implementation of mitigation measures **TRAF-1** and **TRAF-2** above, which require implementation of a construction traffic management plan, any potential increase in hazards due to design features or incompatible use will be considered less than significant in the short term. In the long term, no impacts to any hazards or incompatible uses in

existing roadways are anticipated because once the pipeline is constructed, the roadway will be returned to its original condition, or better and the proposed Wellhead Treatment Plant will be confined to the existing Well 30 site. Thus, any impacts are considered less than significant with implementation of mitigation. No additional mitigation is required.

- d. *Less Than Significant With Mitigation Incorporated* – Please refer to the discussion under issue XVII(a) above. The proposed project will require closure of one lane within the roadway in which each pipeline segment will be installed. The proposed Plant 30 Wellhead Treatment Project would install 5,100 LF of raw water pipeline from Wells 32 and 33; 2,000 LF of brine pipeline; 900 LF of effluent pipeline to the City of Chino transmission main; and, 100 LF of pipeline to the Benson feeder pipeline. This effort will occur within existing rights-of-way within Benson Avenue and San Bernardino Street. During construction, a potential exists for short-term hazards and constraints on both normal and emergency access within the affected area, especially due to the construction of the proposed pipeline alignment, as it will require partial lane closure within existing rights-of-way. There are no emergency access roadways located within the project footprint. However, adequate emergency access will be provided along these routes throughout construction. Though closure of one lane will have a short term impact on traffic, the implementation of mitigation measures **TRAF-1** and **TRAF-2** will ensure that impacts are reduced to a level of less than significant. No additional mitigation is required.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-----------------------------|
| XVIII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial change in the significance of tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to the California Native American tribe, and that is: | | | | |
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

A Tribal Resources is defined in the Public Resources Code section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1;
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purpose of this paragraph, the lead agency shall consider the significance of the resources to a California American tribe;
- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape;
- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “non-unique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal resource if it conforms with the criteria of subdivision (a).

a&b. *Less Than Significant With Mitigation Incorporated* – Monte Vista Water District initiated AB 52 consultation with the tribe who previously notified the District: the Kizh Gabrieleño Band of Mission Indians. Notification was provided to the tribe via an AB 52 consultation letter which was initiated on March 19, 2019. The tribe responded by letter on March 25, 2019 and requested that MVWD implement several mitigation measures. Van Jew, on behalf of MVWD, responded to the Tribe by requesting minor modifications to the language of the mitigation measures, which the Gabrieleño approved via email on May 3rd, which concluded the AB 52 consultation period.

TRC-1 Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal

monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

- TRC-2** *Unanticipated Discovery of Tribal Cultural and Archaeological Resources:* *Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, should be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources.*
- TRC-3** *Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.*
- TRC-4** *Unanticipated Discovery of Human Remains and Associated Funerary Objects:* *Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe*

that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

- TRC-5** *Resource Assessment & Continuation of Work Protocol:* *Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).*
- TRC-6** *Kizh-Gabrieleno Procedures for burials and funerary remains:* *If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.*
- TRC-7** *Treatment Measures:* *Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall*

be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

TRC-8 Professional Standards: *Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.*

With the incorporation of these mitigation measures, as well as the mitigation identified under Cultural Resources, any impacts under these issues are considered less than significant.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-----------------------------|
| XIX. UTILITIES AND SERVICE SYSTEMS: Would the project: | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

a. Water

Less Than Significant Impact – The proposed Plant 30 Wellhead Treatment Project is located within the Cities of Montclair and Ontario. The project in and of itself will result in construction of new water systems that would allow MVWD to reduce levels of 1,2,3-TCP, perchlorate, and nitrate to acceptable DDW levels. The entirety of the project would not result in any significant environmental effects. The project will not increase the amount of water available to MVWD customers, but it will expand the infrastructure from Wells 32 and 33 to reach the Well 30 site where the raw water will be treated by a new Wellhead Treatment Plant to reduce levels of 1,2,3-TCP, perchlorate, and nitrate to acceptable DDW levels. The proposed project is considered a vital infrastructure project that would provide MVWD’s customers with water containing contaminant levels acceptable to the DDW. Therefore, development of the Plant 30 Wellhead Treatment Project would not result in a significant environmental effect related to the relocation or construction of new or expanded water facilities. Impacts are less than significant.

Wastewater

Less Than Significant Impact – The proposed Plant 30 Wellhead Treatment Project would develop a Wellhead Treatment Plant and associated infrastructure that would reduce levels of 1,2,3-TCP, perchlorate, and nitrate to acceptable DDW levels. The pipeline alignments associated with the proposed project would be located below ground, and would not require access to restroom facilities; nor will the Wellhead Treatment Plant. However, the proposed project will require installation of brine line (pipeline). IX brine waste and slow rinse, along with waste from the IX softener system will be sent to the brine line. IX brine regeneration waste (84 gpm) and slow rinse (84 gpm), as well as all waste from the water softening operation (backwash, brine regeneration, slow rinse and fast rinse with flow rate ranging from 12 to 108 gpm) will be directly sent to the brine line for disposal. The Inland Empire Brine Line is a pipeline that was constructed to protect the

Santa Ana River Watershed from desalter concentrate and various saline wastes. Organizations whose processes create high-saline waste that does not qualify for use, reclamation or return to the region through the municipal sewer system domestic-treatment plants, but does qualify for ocean discharge, can use the brine line to transport the waste. The brine pipeline carries the waste directly to specially equipped treatment plants operated by the Orange County Sanitation District. After treatment, the waste is discharged to the Pacific Ocean.⁶ The Inland Empire Brine Line and Orange County Sanitation District have enough capacity to accommodate the additional flows. As such, the installation of the brine pipeline as well as the entirety of the proposed project would not result in a significant impact as a result of implementation of the proposed project.

Stormwater

Less Than Significant Impact – The surface runoff from the site, nonpoint source storm water runoff, will be managed in accordance with the WQMP as discussed in the Hydrology and Water Quality Section (Section X) of this Initial Study. The onsite drainage will capture the incremental increase in runoff from the project site associated with project development. Runoff will be managed onsite through a stormwater management system. During GAC changeout, GAC backwash water will be filtered through bag filters and sent to the existing onsite storm drain connection. The roadways within which the pipeline will be installed will be returned to their original condition upon completion of the placement of each section of pipeline. Therefore, surface water will be adequately managed on the Wellhead Treatment Plant site. The roadways will generate essentially the same amount of stormwater as they do at present because no expansion of roadway or change in drainage patterns are anticipated. Conveyance of stormwater to drainage alignments and storm drains within these roadways will remain intact and unchanged once construction has been completed. Therefore, development of the Plant 30 Wellhead Treatment Project would not result in a significant environmental effect related to the relocation or construction of new or expanded stormwater facilities. Impacts are less than significant.

Electric Power

Less Than Significant Impact – The existing electrical services are by Southern California Edison (SCE) and the primary service is routed underground from a utility pole to a pad mounted utility transformer, which steps down the voltage to 3 phase, 480/277 VAC. Additional capacity is not anticipated to be required; however, the project will develop a new 3 phase, 100A, power panel (PP-1) at the Main Switchboard (MCC/SES), which will distribute power to various new equipment and loads throughout the proposed treatment system. The panel will supply a 480 volt, 3-phase, 3-wire power which will supply power to motor operated valves as well as other small 480 volt loads. If required, a new 25kva transformer will be added along with a potential Panel LA. This panel will distribute 120/208-volt power to loads such as lighting, receptacles, chemical feed pumps, and instruments. As such, though the proposed project will install new electrical power facilities on site, development of the Plant 30 Wellhead Treatment Project would not result in a significant environmental effect. Impacts under this issue are considered less than significant.

Natural Gas

No Impact – Development of the Wellhead Treatment Plant would not require installation of natural gas. Therefore, the project would not result in a significant environmental effect related to the relocation or construction of new or expanded natural gas facilities. No impacts are anticipated.

Telecommunications

No Impact – Development of the Wellhead Treatment Plant would not installation of wireless internet service or phone serve. Therefore, the project would not result in a significant environmental effect related to the relocation or construction of new or expanded telecommunication facilities. No impacts are anticipated.

- b. *Less Than Significant Impact* – Please refer to issue X(b), Hydrology and Water Quality, above. The project will be supplied with water by MVWD. The proposed project would not require the

⁶<https://www.wmwd.com/183/Inland-Empire-Brine-Line-SAR/>

provision of expanded water supply to operate the proposed Wellhead Treatment Plant, though construction of the site and of the pipeline alignment would require a temporary supply of water. The project proponent, MVWD, supplies water to the area. MVWD's water supply comes from groundwater produced from the Chino Groundwater Basin, Imported State Water Project surface water received from the Metropolitan Water District of Southern California (MWD) through the Inland Empire Utilities Agency (IEUA), and the Water Facilities Authority (WFA). The proposed project may require approximately 10,000 GPD of water for a period of about 100 days during construction. This temporary increase in water demand for construction purposes is considered less than significant because the project will be conducted within the existing MVWD entitlements to potable water. Based on the limited and short-term demand for potable water during construction of the proposed pipeline replacement project, sufficient water supplies are available to serve the project, as indicated in the 2015 Urban Water Management Plan (UWMP) for MVWD. Impacts under this issue are considered less than significant and no mitigation is required.

- c. *Less Than Significant Impact* – Please refer to the discussion under XIX(a) above. Neither the Wellhead Treatment Plant site and the pipeline alignments associated with the proposed project require installation of restroom facilities; construction will require portable toilets that will be handled by the provider of such facilities. However, the proposed project will require installation of brine line (pipeline). IX brine waste and slow rinse, along with waste from the IX softener system will be sent to the brine line. IX brine regeneration waste (84 gpm) and slow rinse (84 gpm), as well as all waste from the water softening operation (backwash, brine regeneration, slow rinse and fast rinse with flow rate ranging from 12 to 108 gpm) will be directly sent to the brine line for disposal. Santa Ana Watershed Project Authority (SAWPA) was formed in 1968 to develop a long-range plan for managing, preserving, and protecting the quality of water supplies in the Santa Ana Basin. SAWPA has a wastewater discharge ordinance applicable to the Brine Line. SAWPA owns and operates the Brine Line above the Orange County line and has purchased 17 MGD of treatment and disposal capacity rights at OCSd's treatment facilities Between July 1, 2016 through December 31, 2016, the total flow to the Inland Empire Brine Line was 10.712 MG.⁷ As such, given the ample available capacity that SAWPA has reserved for the Inland Empire Brine Line, the addition of the brine waste from the proposed project is anticipated to be less than significant. No mitigation is required.
- d. *Less Than Significant Impact* – The City of Montclair is served by Burrtec Waste Industries, which provides trash, recycling, and some street sweeping/bulky item pickup services to its customers. The nearest landfill to the Project area is the Mid-Valley Sanitary Landfill. According to the CalRecycle, the maximum permitted capacity of Mid-Valley Sanitary Landfill is 101,300,000 Cubic Yards (CY), while its remaining capacity is 67,520,000 CY, and the Landfill can handle 7,500 tons of material per day.⁸ The proposed project will remove concrete and material from the Wellhead Treatment Plant site to install the new infrastructure related to the Wellhead Treatment Plant facility. The project will also result in construction waste from the removal of asphalt, concrete, and similar materials within the roadways in which the pipeline alignment will be installed. Based on the scale of the materials requiring removal, which will occur over a period several days or weeks, the waste that developing the Wellhead Treatment Plant would generate would not exceed either the daily permitted capacity or overall permitted capacities of nearby landfills. There is adequate capacity at the nearest landfill as well as in other landfills that serve the area (Mid Valley Sanitary Landfill, etc.). Any hazardous materials collected on the project site during construction of the Project will be transported and disposed of by a permitted and licensed hazardous materials service provider.

The proposed project is anticipated to generate minimal solid waste during operation because it will not require the presence of employees on a day to day basis to operate). Considering the availability of landfill capacity and the minimal amount of solid waste generation from the proposed project during both construction and operations, project solid waste disposal needs can be adequately met without a significant impact on the capacity of the nearest landfills. It is expected that the renovation of the MVWD Main Office project will be served by landfills with sufficient

⁷ <https://www.ocsd.com/Home/ShowDocument?id=19279>

⁸ <http://www.calrecycle.ca.gov/SWFacilities/Directory/36-AA-0055/Detail/>

permitted capacity to accommodate the project's solid waste disposal needs. Any impacts under this issue are considered less than significant. No mitigation is required.

- e. *Less Than Significant With Mitigation Incorporated* – All collection, transportation, and disposal of any solid waste generated by the proposed project is required to comply with all applicable federal, state, and local regulations. As previously stated, solid waste produced in the City of Montclair where the proposed project is located is collected and transported by Burrtec Waste Industries. The area is served by several nearby landfills, though the closest is the Mid Valley Landfill in Rialto, which, as stated under issue XVIII(f) above, has adequate capacity to serve the project. Additionally, any hazardous materials collected on the project site during either construction or operation of the Project will be transported and disposed of by a permitted and licensed hazardous materials service provider, as stated under issue VIII, Hazards and Hazardous Materials above. The contract for this project will require that concrete, asphalt and base material be recycled by grinding, which allows reuse of these materials. All metals, woods and equipment that are reusable shall be salvaged and recycled.

Thus, due to the small size of this project and the limited amount of wastes that will be generated, potential impacts to the waste disposal systems are considered less than significant. To further reduce potential less than significant impacts, the following mitigation measure shall be implemented:

UTIL-1 The contract with demolition and construction contractors shall include the requirement that all materials that can feasibly be recycled shall be salvaged and recycled. This includes but not limited to wood, metals, concrete, road base and asphalt. The contractors shall submit a recycling plan to MVWD for review and approval prior to the construction of demolition/construction activities.

Therefore, with the above mitigation measure, the project is expected to comply with all regulations related to solid waste under federal, state, and local statutes. No further mitigation is necessary.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

SUBSTANTIATION

a-d. *No Impact* – The proposed project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zone, therefore the proposed project can have no impacts to any wildfire issues. As stated in previous sections, according to the San Bernardino County Land Use Plan General Plan Hazard Overlay for the project area, the proposed project is not located within the fire safety overlay district (Figure VIII-9). The proposed project area is located in an urban area removed from the high fire hazard areas that are located adjacent to the San Gabriel Mountains. As such, no impacts under these issues are anticipated.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact or Does Not Apply |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-----------------------------|
| XXI. MANDATORY FINDINGS OF SIGNIFICANCE: | | | | |
| a) Does the project have the potential to substantially 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, substantially 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SUBSTANTIATION

The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulatively considerable unavoidable significant adverse environmental impacts. Mitigation is required to control potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis of the Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized following this section.

- a. *Less Than Significant With Mitigation Incorporated* – The Project has no potential to cause a significant impact to any biological or cultural resources. The project has been identified as having no potential to degrade the quality of the natural environment, substantially reduce 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, or reduce the number or restrict the range of a rare or endangered plant or animal. Based on the historic disturbance of the project footprint, especially given that the Wellhead Treatment Plant site currently contains the existing Well 30 and that the remainder of the project will occur within existing road rights-of-way and well sites, the potential for impacting biological resources is low; however, mitigation has been identified to protect nesting birds. The cultural resources evaluation concluded that the Project footprint does not contain historic resources, and as such, no impacts are anticipated. To ensure that any accidentally exposed subsurface cultural resources are properly handled, contingency mitigation measures will be implemented. With incorporation of Project mitigation measures all biology and cultural resource impacts will be reduced to a less than significant level.

- b. *Less Than Significant With Mitigation Incorporated* – The Project has ten (10) potential impacts that are individually limited, but may be cumulatively considerable. These are: Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Resources, and Utilities and Service Systems. The Project is not considered growth-inducing, as defined by *State CEQA Guidelines*. These issues require the implementation of mitigation measures to reduce impacts to a less than significant level

and ensure that cumulative effects are not cumulatively considerable. All other environmental issues were found to have no significant impacts without implementation of mitigation. The potential cumulative environmental effects of implementing the proposed project have been determined to be less than considerable and thus, would have a less than significant cumulative impact.

- c. *Less Than Significant With Mitigation Incorporated* – The Project will achieve long-term community goals by providing a potable water with reduced 1,2,3-TCP, perchlorate, and nitrate at levels acceptable to DDW. The short-term impacts associated with the Project, which are mainly construction-related impacts, are less than significant with mitigation, and the proposed Project is compatible with long-term environmental protection. The issues of Air Quality, Geology and Soils, Hazards and Hazardous Materials, and Noise require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant.

Conclusion

This document evaluated all CEQA issues contained in the latest Initial Study Checklist form. The evaluation determined that either no impact or less than significant impacts would be associated with the issues of Aesthetics, Agricultural and Forestry Resources, Energy, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Population/Housing, Public Services, and Recreation. The issues of Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Resources, and Utilities and Service Systems require the implementation of mitigation measures to reduce impacts to a less than significant level. The required mitigation has been proposed in this Initial Study to reduce impacts for these issues to a less than significant impact.

Based on the findings in this Initial Study, Monte Vista Water District proposes to adopt a Mitigated Negative Declaration (MND) for the Monte Vista Water District Plant 30 Wellhead Treatment Project. A Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) will be issued for this project by MVWD. The Initial Study and NOI will be circulated for 30 days of public comment because this project does involve state agencies as either a responsible or trustee agency. At the end of the 30-day review period, a final MND package will be prepared and it will be reviewed by Monte Vista Water District. MVWD will hold a future hearing for project adoption at the MVWD Main Office, the date for which has not yet been determined. If you or your agency comments on the MND/NOI for this project, you will be notified about the meeting date in accordance with the requirements in Section 21092.5 of CEQA (statute).

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Revised 2019

Authority: Public Resources Code sections 21083 and 21083.09

Reference: Public Resources Code sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3/ 21084.2 and 21084.3

SUMMARY OF MITIGATION MEASURES

Aesthetics

AES-1 A facilities lighting plan shall be prepared and shall demonstrate that glare from operating and safety night lights that may create light and glare affecting adjacent occupied property are sufficiently shielded to prevent light and glare from spilling into occupied structures. This plan shall specifically indicate that the lighting doesn't exceed 1.0 lumen at the nearest residence to any lighting site within the project footprint. This plan shall be implemented by the MVWD to minimize light or glare intrusion onto adjacent properties.

Air Quality

AIR-1 Fugitive Dust Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- Apply soil stabilizers or moisten inactive areas.
- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone.
- Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard.
- Sweep streets daily if visible soil material is carried out from the construction site.

AIR-2 Exhaust Emissions Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

Biological Resources

BIO-1 The State of California prohibits the "take" of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the the State identified nesting season (Raptor nesting season is February 15 through July 31; and migratory bird nesting season is March 15 through September 1). Alternatively, the site shall be evaluated by a qualified biologist prior to the initiation of ground disturbance to determine the presence or absence of nesting birds. Active bird nests MUST be avoided during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot avoidance buffer placed around it. No activity shall occur within the 300-foot buffer until the young have fledged the nest.

Cultural Resources

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with MVWD's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

CUL-2 Should human remains or funerary objects be encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

Geology and Soils

GEO-1 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of the material. If covering is not feasible, then measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the project site for future cleanup.

GEO-2 Excavated areas shall be properly backfilled and compacted. Paved areas disturbed by this project will be repaved in such a manner that roadways and other disturbed areas are returned to as near the pre-project condition as is feasible.

GEO-3 All exposed, disturbed soil (trenches, stored backfill, etc.) will be sprayed with water or soil binders twice a day or more frequently if fugitive dust is observed migrating from the site within which the pipelines are being installed.

GEO-4 The length of trench which can be left open at any given time will be limited to that needed to reasonably perform construction activities. This will serve to reduce the amount of backfill stored onsite at any given time.

GEO-5 Should any paleontological or unique geological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist or geologist depending on the type of resource discovered. Responsibility for making this determination shall be with the MVWD's onsite inspector. The paleontological or geological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

Hazards and Hazardous Materials

HAZ-1 All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure will be incorporated into the SWPPP prepared for the Project development.

Hydrology and Water Quality

HYD-1 MVWD shall require that the construction contractor prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. The SWPPP shall include a Spill Prevention and Cleanup Plan that identifies the methods of containing, cleanup, transport and proper disposal of hazardous chemicals or materials released during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented in the SWPPP may include but not be limited to:

- The use of silt fences;
- The use of temporary stormwater desilting or retention basins;
- The use of water bars to reduce the velocity of stormwater runoff;
- The use of wheel washers on construction equipment leaving the site;

- The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;
- The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and
- Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.

Noise

- NOI-1 No construction activities shall occur during the hours of 8 PM through 7 AM, on any given day; at no time shall construction activities occur on Sundays or holidays, unless a declared emergency exists.
- NOI-2 MVWD shall establish a noise complaint response program and shall respond to any noise complaints received for this Project by measuring noise levels at the affected receptor site. If the noise level exceeds an Ldn of 60 dBA exterior or an Ldn of 45 dBA interior at the receptor, MVWD will implement adequate measures (which may include portable sound attenuation walls, use of quieter equipment, shift of construction schedule to avoid the presence of sensitive receptors, etc.) to reduce noise levels to the greatest extent feasible.
- NOI-3 MVWD will require that all construction equipment be operated with mandated noise control equipment (mufflers or silencers). Enforcement will be accomplished by random field inspections by applicant personnel during construction activities.
- NOI-4 Equipment not in use for five minutes shall be shut off.
- NOI-5 Equipment shall be maintained and operated such that loads are secured from rattling or banging.
- NOI-6 Construction employees shall be trained in the proper operation and use of equipment consistent with these mitigation measures, including no unnecessary revving of equipment.
- NOI-7 No radios or other sound equipment shall be used at this site unless required for emergency response by the contractor.
- NOI-8 During future initiation of construction activities with heavy equipment within 300 feet of occupied residences, vibration field tests shall be conducted at the nearest occupied residences upon receipt. To the extent feasible, if vibrations exceed 72 VdB, the construction activities shall be revised (smaller equipment, reduced activity) to reduce vibration below this threshold.

Transportation

- TRAF-1 The construction contractor will provide adequate traffic management resources, as determined by the County of San Bernardino, City of Montclair, and, if required, the City of Ontario. MVWD shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. The traffic management plan shall be prepared and approved by the City(s) and County prior to initiation of excavation or pipeline construction. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet

the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

- TRAF-2 MVWD shall require that all disturbances to public roadways be repaired in a manner that complies with the Standard Specifications for Public Works Construction (green book) or other applicable County of San Bernardino, City of Montclair, and, where required, the City of Ontario standard design requirements.

Tribal Cultural Resources

- TRC-1 Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.
- TRC-2 Unanticipated Discovery of Tribal Cultural and Archaeological Resources: Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, should be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources.
- TRC-3 Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.
- TRC-4 Unanticipated Discovery of Human Remains and Associated Funerary Objects: Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health

and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

- TRC-5 Resource Assessment & Continuation of Work Protocol: Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).
- TRC-6 Kizh-Gabrieleno Procedures for burials and funerary remains: If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.
- TRC-7 Treatment Measures: Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.
- TRC-8 Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human

remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

Utilities and Service Systems

UTIL-1 The contract with demolition and construction contractors shall include the requirement that all materials that can feasibly be recycled shall be salvaged and recycled. This includes but not limited to wood, metals, concrete, road base and asphalt. The contractors shall submit a recycling plan to MVWD for review and approval prior to the construction of demolition/construction activities.

REFERENCES

CRM TECH, "*Identification and Evaluation of Historic Properties Plant 30 Wellhead Treatment Plant and Pipeline Project, City of Montclair, San Bernardino County, California*" dated May 10, 2019

Giroux & Associates, "*Air Quality and GHG Impact Analysis, Monte Vista Water District Plant 30 Wellhead Treatment Project, City of Montclair, California*" dated April 9, 2019

Jericho Systems, Inc., "*CEQA Plus Biological Evaluation, Monte Vista Water District Plant 30 Wellhead Treatment Project, Montclair, CA*" dated May 3, 2019

Hazen and Sayer, "*Monte Vista Water District Plant 30 Wellhead Treatment Project, Final Basis of Design Report (BODR)*" dated February 26, 2019

City of Montclair General Plan

City of Montclair's Municipal Code

County of San Bernardino Congestion Management Program (CMP) Traffic Study Guidelines

Uniform Building Code (1994)

Websites

http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/

<https://www.sce.com/about-us/reliability/meeting-demand>

<http://www.mvwd.org/download.cfm?ID=1716>

<http://www.ontarioca.gov/fire>

<https://www.cityofmontclair.org/city-government/fire-department/calls-for-service>

<https://www.wmwd.com/183/Inland-Empire-Brine-Line-SAR1>

<https://www.ocsd.com/Home/ShowDocument?id=19279>

<http://www.calrecycle.ca.gov/SWFacilities/Directory/36-AA-0055/Detail/>

FIGURES

APPENDIX 1

APPENDIX 2

APPENDIX 3

APPENDIX 5

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