South Coast
Air Quality Management District
South Coast AQMD
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 · www.aqmd.gov

SUBJECT: **NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT AND OPPORTUNITY FOR PUBLIC COMMENT**

PROJECT TITLE: **PROPOSED RULE 1179.1 – NOX EMISSION REDUCTIONS FROM COMBUSTION EQUIPMENT AT PUBLICLY OWNED TREATMENT WORKS FACILITIES**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (South Coast AQMD) is the Lead Agency and has prepared a Draft Environmental Assessment (EA) to analyze environmental impacts from the project identified above pursuant to its certified regulatory program (Public Resources Code Section 21080.5, CEQA Guidelines Section 15251(l), and South Coast AQMD Rule 110). The Draft EA includes a project description and analysis of potential adverse environmental impacts that could be generated from the proposed project. The purpose of this letter, the attached Notice of Completion (NOC), and the attached Draft EA, is to allow public agencies and the public the opportunity to review and comment on the environmental analysis in the Draft EA.

This letter, the attached NOC and the attached Draft EA are not South Coast AQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary. The Draft EA and other relevant documents may be obtained by calling South Coast AQMD's Public Information Center at (909) 396-2039 or accessing the South Coast AQMD's website at: http://www.aqmd.gov/home/research/documents-reports/lead-agency-scaqmd-projects.

Comments focusing on your area of expertise, your agency's area of jurisdiction, if applicable, or issues relative to the environmental analysis for the proposed project will be accepted during a 30-day public review and comment period beginning Wednesday, August 12, 2020 and ending at 5:00 p.m. on Friday, September 11, 2020. **Please send any comments relative to the CEQA analysis in the Draft EA to Ms. Kendra Reif (c/o CEQA) at the address shown above.** Comments can also be sent via email to kreif@aqmd.gov or via facsimile to (909) 396-3982. Please include the name and phone number of the contact person for your organization. Questions regarding the proposed rule language should be directed to Ms. Melissa Gamoning at (909) 396-3115 or by email to mgamoning@aqmd.gov.

The public is invited to attend the following meetings, subject to change, for the proposed project which will be conducted remotely via video conferencing and by telephone: 1) Stationary Source Committee on August 21, 2020 at 10:30 a.m.; and 2) Governing Board Meeting (Public Hearing) on October 2, 2020 at 9:00 a.m. Meeting agendas, which include details on how the public can participate electronically, are posted at least 72 hours prior to the meeting and are available from South Coast AQMD's website at: http://www.aqmd.gov/home/news-events/meeting-agendas-minutes.

Date: August 7, 2020 **Signature:** Barbara Radlein

Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development, and Area Sources

Reference: California Code of Regulations, Title 14, Sections 15070, 15071, 15072, 15073, 15105, 15251, 15252, 15371, and 15372

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4182

NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT AND OPPORTUNITY FOR PUBLIC COMMENT

Project Title: Draft Environmental Assessment (EA) for Proposed Rule (PR) 1179.1 – NOx Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

Project Location: The project location is the portion within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties) as defined in the California Code of Regulations, Title 17, Section 60104, and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB).

Description of Nature, Purpose, and Beneficiaries of Project: PR 1179.1 proposes to establish Best Available Retrofit Control Technology (BARCT) requirements for combustion equipment operated at Publicly Owned Treatment Works (POTW) facilities to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 British thermal units (Btu) per hour fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 megawatt (MW) fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines rated at greater than 50 brake horsepower (bhp) fueled by digester gas or a digester gas blend. In addition, PR 1179.1 establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions. The Draft EA did not result in the identification of any environmental topic areas that would be significantly adversely affected by PR 1179.1. Two facilities affected by PR 1179.1 were identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5.

Lead Agency:	**Division:**
South Coast Air Quality Management District	Planning, Rule Development and Area Sources

The Draft EA is available from South Coast AQMD's website at:	**or by calling:**	**PR 1179.1 and all supporting documentation are available from South Coast AQMD's website at:**
http://www.aqmd.gov/home/research/documents-reports/lead-agency-scaqmd-projects	(909) 396-2039 **or by emailing:** PICrequests@aqmd.gov	http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules#1179.1

The Notice of Completion is provided to the public through the following:

☑ Los Angeles Times (August 12, 2020)
☑ South Coast AQMD Mailing List & Interested Parties
☑ South Coast AQMD Website
☑ South Coast AQMD Public Information Center

Draft EA Review Period (30 days): August 12, 2020 – September 11, 2020

Scheduled Public Meeting Date(s) (subject to change): The public is invited to attend the following meetings for the proposed project which will be conducted remotely via video conferencing and by telephone: 1) Stationary Source Committee on August 21, 2020 at 10:30 a.m.; and 2) Governing Board Meeting (Public Hearing) on October 2, 2020 at 9:00 a.m. Meeting agendas, which include details on how the public can participate electronically, are posted at least 72 hours prior to the meeting and are available from South Coast AQMD's website at: http://www.aqmd.gov/home/news-events/meeting-agendas-minutes.

The proposed project will have no statewide, regional or areawide significance; therefore, no CEQA scoping meeting is required for the proposed project pursuant to Public Resources Code Section 21083.9(a)(2).

Send CEQA Comments to:	**Phone:**	**Email:**	**Fax:**
Ms. Kendra Reif	(909) 396-2492	kreif@aqmd.gov	(909) 396-3982
Direct Questions on PR 1179.1 to:	**Phone:**	**Email:**	**Fax:**
Ms. Melissa Gamoning	(909) 396-3115	mgamoning@aqmd.gov	(909) 396-3982

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Environmental Assessment for Proposed Rule 1179.1 – NOx Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

August 2020

South Coast AQMD Number: 08122020KR
State Clearinghouse Number: TBD

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CHAPTER 1

PROJECT DESCRIPTION

INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (South Coast AQMD) in 1977[1] as the agency responsible for developing and enforcing emission control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. In 1977, amendments to the federal Clean Air Act (CAA) included requirements for submitting State Implementation Plans (SIPs) for nonattainment areas that fail to meet all federal ambient air quality standards (CAA Section 172), and similar requirements exist in state law (Health and Safety Code Section 40462). The federal CAA was amended in 1990 to specify attainment dates and SIP requirements for ozone, carbon monoxide (CO), nitrogen dioxide (NO2), and particulate matter with an aerodynamic diameter of less than 10 microns (PM10). In 1997, the United States Environmental Protection Agency (U.S. EPA) promulgated ambient air quality standards for particulate matter with an aerodynamic diameter less than 2.5 microns (PM2.5). The U.S. EPA is required to periodically update the national ambient air quality standards (NAAQS).

In addition, the California Clean Air Act (CCAA), adopted in 1988, requires the South Coast AQMD to achieve and maintain state ambient air quality standards for ozone, CO, sulfur dioxide (SO2), and NO2 by the earliest practicable date. [Health and Safety Code Section 40910]. The CCAA also requires a three-year plan review, and, if necessary, an update to the SIP. The CCAA requires air districts to achieve and maintain state standards by the earliest practicable date and for extreme non-attainment areas, to include all feasible measures pursuant to Health and Safety Code Sections 40913, 40914, and 40920.5. The term "feasible" is defined in the California Environmental Quality Act (CEQA) Guidelines[2] Section 15364, as a measure "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

By statute, the South Coast AQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the areas under the jurisdiction of the South Coast AQMD[3]. Furthermore, the South Coast AQMD must adopt rules and regulations that carry out the AQMP[4]. The AQMP is a regional blueprint for how the South Coast AQMD will achieve air quality standards and healthful air and the 2016 AQMP[5] contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases (GHGs), and toxic air contaminants (TACs). In particular, the 2016 AQMP states that both oxides of nitrogen (NOx) and volatile organic compounds (VOC) emissions need to be addressed, with the emphasis that NOx emission reductions are more effective to reduce the formation of ozone and PM2.5. Ozone is a criteria pollutant shown to adversely affect human health and is formed when VOCs react with NOx in the atmosphere. NOx is a precursor to the formation of ozone and PM2.5, and NOx emission reductions are necessary to achieve the ozone standard attainment. NOx emission reductions also contribute to attainment of PM2.5 standards.

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1 The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch. 324 (codified at Health and Safety Code Section 40400-40540).
2 The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*
3 Health and Safety Code Section 40460(a).
4 Health and Safety Code Section 40440(a).
5 South Coast AQMD, Final 2016 Air Quality Management Plan, March 2017. https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp

During the rulemaking for the December 2018 amendments for Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146), Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146.1), and Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters (Rule 1146.2), the South Coast AQMD received comments describing unique challenges faced by operators of publicly owned treatment works (POTW) facilities that treat municipal wastewater, especially regarding the combustion of digester gas or digester gas blends and the manner in which POTWs provide essential public services. In addition, Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Rule 1134) previously contained emission limits for all fuels combusted in turbines that were in operation at POTWs prior to 1989. Further, NOx, VOC, and CO emissions from engines combusting all gaseous and liquid fuels, including digester gas, are regulated by Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines (Rule 1110.2). To streamline and update the multiple rule requirements applicable to POTWs, South Coast AQMD recommended developing a separate rule to specifically address combustion equipment operating at POTWs. As such, Proposed Rule (PR) 1179.1 – NOx Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities was developed to establish Best Available Retrofit Control Technology (BARCT) requirements for combustion equipment operated at POTWs and to consolidate and migrate applicable requirements from Rules 1146, 1146.1 and 1146.2, Rule 1134, and 1110.2.

Specifically, PR 1179.1 is designed to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 British thermal units (Btu) per hour and fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 megawatt (MW) fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines rated at greater than 50 brake horsepower (bhp) fueled by digester gas or a digester gas blend. In addition, PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA), California Public Resources Code Section 21000 *et seq.*, requires environmental impacts of proposed projects to be evaluated and feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects to be identified and implemented. The lead agency is the "public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment." [Public Resources Code Section 21067]. Since PR 1179.1 is a South Coast AQMD-proposed rule, the South Coast AQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency. [CEQA Guidelines[6] Section 15051(b)].

CEQA requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these

[6] The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*

projects be implemented if feasible. The purpose of the CEQA process is to inform the lead agency, responsible agencies, decision makers and the general public of potential adverse environmental impacts that could result from implementing PR 1179.1 (the proposed project) and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The South Coast AQMD's regulatory program was certified by the Secretary of Resources Agency on March 1, 1989 per CEQA Guidelines Section 15251(l), and has been adopted as South Coast AQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment.

Because PR 1179.1 requires discretionary approval by a public agency, it is a "project" as defined by CEQA[7]. The proposed project will reduce NOx, CO, and VOC emissions for engines; and NOx and CO emissions for boilers and turbines located at POTWs; and will provide an overall environmental benefit to air quality. However, South Coast AQMD's review of the proposed project also shows that the activities that facility operators may undertake to comply with PR 1179.1 may also create secondary adverse environmental impacts that would not result in significant impacts for any environmental topic area. Thus, the analysis of PR 1179.1 indicates that the type of CEQA document appropriate for the proposed project is an Environmental Assessment (EA). The EA is a substitute CEQA document, which the South Coast AQMD, as lead agency for the proposed project, prepared in lieu of a Negative Declaration with no significant impacts (CEQA Guidelines Section 15252), pursuant to the South Coast AQMD's Certified Regulatory Program (Public Resources Code Section 21080.5, CEQA Guidelines Section 15251(l); South Coast AQMD Rule 110). The EA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and, 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

The Draft EA includes a project description in Chapter 1 and an Environmental Checklist in Chapter 2. The Environmental Checklist provides a standard tool to identify and evaluate a project's adverse environmental impacts and the analysis concluded that no significant adverse impacts would be expected to occur if PR 1179.1 is implemented. Because PR 1179.1 will have no statewide, regional or areawide significance, no CEQA scoping meeting is required to be held for the proposed project pursuant to Public Resources Code Section 21083.9(a)(2). Further, pursuant to CEQA Guidelines Section 15252, since no significant adverse impacts were identified, no alternatives or mitigation measures are required.

The Draft EA is being released for a 30-day public review and comment period from August 12, 2020 to September 11, 2020. All comments received during the public comment period on the analysis presented in the Draft EA will be responded to and included in an Appendix to the Final EA.

[7] CEQA Guidelines Section 15378

Prior to making a decision on the adoption of PR 1179.1, the South Coast AQMD Governing Board must review and certify the Final EA as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PR 1179.1.

PROJECT LOCATION

PR 1179.1 applies to certain combustion equipment (e.g, boilers, steam generators, process heaters, turbines, and engines) operated at POTWs located within the South Coast AQMD jurisdiction which covers an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Basin) as defined in the California Code of Regulations, Title 17, Section 60104, and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of South Coast AQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. A federal non-attainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (see Figure 1-1).

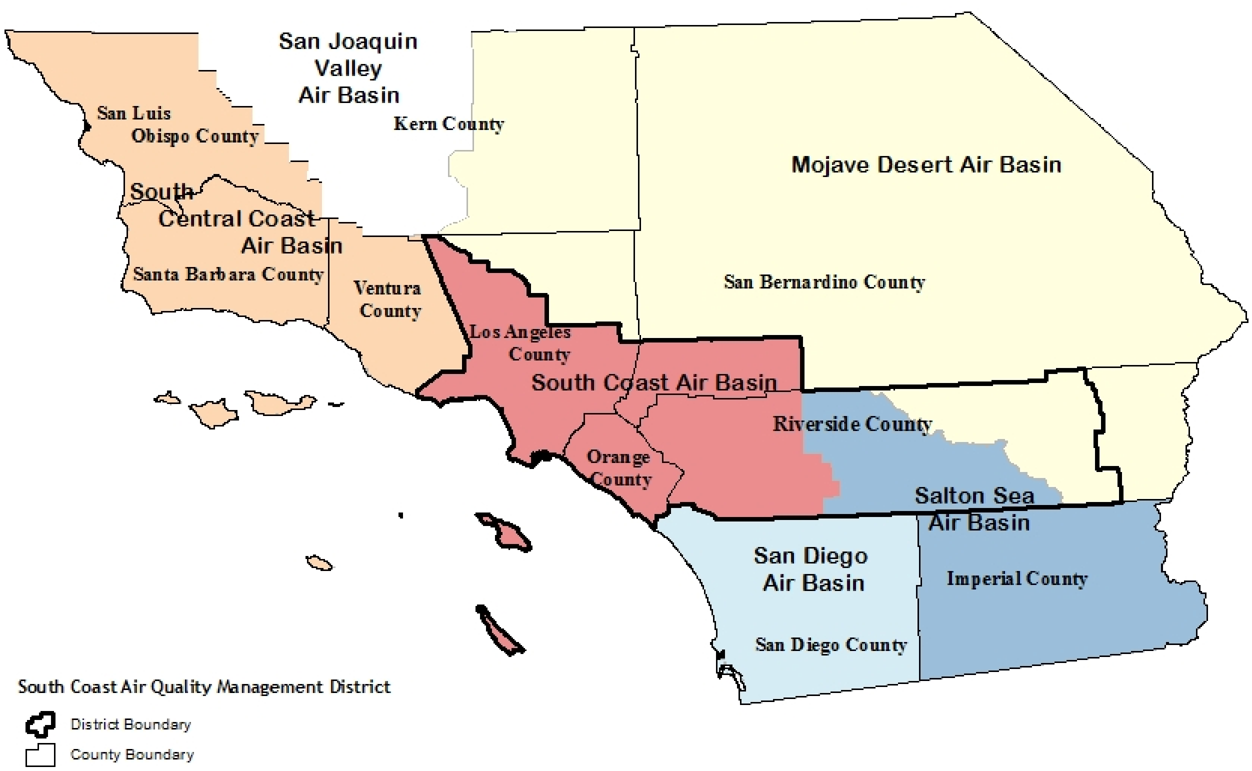

Figure 1-1
Southern California Air Basins

PROJECT BACKGROUND

POTWs, also known as wastewater treatment or reclamation plants, process and treat municipal wastewater and sewage, and are either owned or operated by a public entity. POTWs treat sewage and wastewater via a multi-stage process before discharging treated water from the facility. The multi-staged treatment process involves anaerobic digestion during which micro-organisms decompose organic solids in the absence of oxygen to produce a by-product, referred to as digester gas or biogas, which can be used as a viable source of fuel. Digester gas is typically utilized by combustion equipment to provide heat or power for multiple processes at the POTW. In the event excess digester gas is produced at the POTW and equipment that ordinarily utilizes digester gas is either operating at its maximum capacity or is otherwise unavailable, the excess digester gas is routed to and combusted in a flare. Due to a potential cost savings, utilizing digester gas that is produced on-site as a fuel source for combustion equipment is considered a beneficial use and is preferred over flaring, especially if relying on purchased natural gas provided by a local a utility to provide fuel for POTW combustion equipment could potentially be avoided.

Combustion equipment operated at POTWs include boilers, steam generators, process heaters, engines and turbines which are currently regulated by source-specific South Coast AQMD rules or by permit conditions. For example, NOx and CO emissions from the combustion of all fuel types, including digester gas, in boilers, process heaters and steam generators are regulated by Rules 1146 and 1146.1.

In addition, Rule 1134 previously contained emission limits for all fuels combusted in turbines that were in operation at POTWs prior to 1989. However, while there are six turbines currently operated at POTWs, none were operating prior to 1989. Rule 1134 was amended on April 5, 2019 to specifically exclude turbines located at POTWs because PR 1179.1 was undergoing rule development. Also, NOx, VOC, and CO emissions from engines combusting all gaseous and liquid fuels, including digester gas, are regulated by Rule 1110.2.

During the rule development for the December 2018 amendments to Rules 1146, 1146.1, and 1146.2, the South Coast AQMD received comments describing unique challenges faced by POTW operators that treat municipal wastewater, especially regarding the combustion of digester gas and the manner in which POTWs provide essential public services. In response to these comments, South Coast AQMD recommended developing a separate rule to specifically address combustion equipment operating at POTWs. As such, PR 1179.1 was developed to establish BARCT requirements for combustion equipment operated at POTWs and to consolidate and migrate applicable requirements from Rules 1146, 1146.1 and 1146.2, Rule 1134, and Rule 1110.2. Specifically, PR 1179.1 is designed to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 Btu per hour and fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 MW fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines rated at greater than 50 bhp fueled by digester gas or a digester gas blend. In addition, PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions.

TECHNOLOGY OVERVIEW

Combustion is a high temperature chemical reaction resulting from burning a gas, liquid, or solid fuel (e.g., natural gas, digester gas, diesel, fuel oil, gasoline, propane, and coal) in the presence of air (oxygen and nitrogen) to produce: 1) heat energy; and 2) water vapor or steam. An ideal combustion reaction is when the entire amount of fuel needed is completely combusted in the presence of air so that only carbon dioxide (CO2) and water are produced as by-products. However, since fuel contains other components such as nitrogen and sulfur and the amount of air mixed with the fuel can vary, in practice, fuel is not completely combusted whereby smog-forming by-products such as NOx, oxides of sulfur (SOx), CO, and soot (solid carbon) are produced and discharged into the atmosphere.

Of the total NOx emissions that can be generated during combustion, there are two types of NOx formed: 1) thermal NOx; and 2) fuel NOx. Thermal NOx is produced from the reaction between the nitrogen and oxygen from air in the combustion chamber at high temperatures while fuel NOx is formed during the reaction between the nitrogen contained in the fuel and the available oxygen from air in the combustion chamber. The amount of fuel NOx generated is dependent on fuel type and not the equipment per se; boilers, steam generators, process heaters, engines, and gas turbines all generate thermal NOx during combustion.

The following describes the various types of existing combustion equipment that may be affected by PR 1179.1 and the type of NOx emission control techniques that are typically employed.

Boilers, Steam Generators and Process Heaters

Boilers and steam generators use energy from a fuel source to heat water into steam which is then directed for usable work. There are two main types of boilers: water-tube and fire-tube. Water-tube boilers circulate water through a series of tubes, the tubes are heated externally by the combustion gas, and the surrounding hot gases heat the water in the steam-generating tubes. Fire-tube boilers pass combustion gases inside a series of tubes that are surrounded by a closed vessel of water that is heated to produce steam. Process heaters use liquid or gaseous fuel (including landfill and digester gas) and/or solid fossil fuel to transfer heat from the combustion gases to water or process streams.

NOx emissions from boilers fitted with low NOx burners typically minimize the amount of NOx emissions generated during combustion. Low NOx burners differ from traditional burners by controlling the fuel-to-air mixing ratio in the combustion chamber at each burner in order to lower the peak flame temperature and reduce the amount of NOx created. All boilers that use digester gas as a fuel currently have South Coast AQMD permits. In addition, Rules 1146 and 1146.1 require that boilers rated greater than two million Btu per hour are required to achieve a NOx emission limit of either 15 ppm (corrected to three percent oxygen on a dry basis) when fueled by digester gas or 9 ppm (corrected to three percent oxygen on a dry basis) when fueled by natural gas. All the existing boilers subject to PR 1179.1 have South Coast AQMD Permits to Operate which contain the applicable NOx emission limits, so no physical modifications to the boilers are expected to be necessary in order to comply with the requirements in PR 1179.1.

Turbines

Gas turbines combust either gaseous fuel (e.g., natural gas, digester gas or a blend) or liquid fuel (e.g., diesel) to produce electricity. Turbines can be used in combined-cycle and simple-cycle arrangements. Combined-cycle turbines are cogeneration units designed to generate electricity and heat at the same time as they are able to recover heat from the exhaust to heat up water or to produce steam. Combined-cycle turbines are typically used for very large systems such as POTWs. Simple-cycle gas turbines produce electricity but do not recover heat from the exhaust. Controlling NOx emissions from turbines can be accomplished pre-combustion with lean pre-mix emission combustors (dry-low NOx) or injecting water or steam in the combustion chamber of the turbine. Controlling NOx emissions post-combustion can be accomplished with selective catalytic reduction (SCR) technology and requires a fuel gas treatment system to remove contaminants from gas streams prior to combustion. Newly manufactured turbines available on the market are capable of achieving low NOx emission levels without the need for post-combustion control technology such as SCR. The following provides a brief summary of each of these NOx control methods:

Fuel Gas Treatment

Fuel Gas Treatment can be employed to remove undesirable compounds from gaseous fuel supplies prior to combustion. For example, digester gas, contains contaminants such as siloxanes and sulfur compounds such as hydrogen sulfide (H2S), which, if combusted, can cause mechanical problems in the equipment, limit the effectiveness of other NOx control equipment, as well as produce contaminants in the exhaust stream. The following three types of fuel gas treatment approaches can be utilized for removing contaminants in the fuel gas and can be applied individually or in combination: consumable media, regenerative media and chiller/adsorption refrigeration.

The effectiveness of contaminant removal depends on the contaminants in the fuel and the selection of media appropriate for the contaminants. The three most common types of media that are used in the South Coast AQMD at POTWs are activated carbon, molecular sieves, and silica gel. Activated carbon is a versatile adsorbent because it is highly porous, suitable to adsorb organic contaminants. A molecular sieve has pores of uniform size and is capable of performing selective removal of contaminants at low concentrations. Silica gel is a shapeless and porous adsorbent that has a greater capacity than activated carbon to adsorb siloxanes and has a high affinity for water that aids in moisture removal.

Consumable media systems are commonly used with activated carbon. This type of removal system requires saturated media to be changed out with fresh media.

Regenerative media systems are commonly used with molecular sieve, silica gel, clay and zeolite. These systems consist of at least two media canisters. One canister filled with fresh media processes the gaseous fuel while the other canister regenerates the spent media by purging with hot air. Regenerative media types require smaller canisters and less quantities of media when compared to consumable media systems. Regenerative media function can be enhanced by applying polymeric resins which increase service life, increase adsorbent capacity, and remove contaminants quicker and at a lower temperature during the regeneration process.

Chiller/adsorption refrigeration is capable of removing contaminants by reducing the temperature of the gaseous fuel such as digester gas to remove moisture and contaminants via condensation. Chiller/adsorption refrigeration can also be used in combination with consumable media whereby the consumable media step serves as a polishing stage to remove trace amounts of siloxanes or other contaminants. Wastewater treatment facilities have reported 50 percent removal efficiency of siloxanes and 32 percent long-term removal efficiency of siloxanes, via chiller/adsorption refrigeration.

Lean Pre-mixed Combustion or Dry Low Emissions
Prior to combustion, gaseous fuel and compressed air are pre-mixed, minimizing localized hot spots or spikes that produce elevated combustion temperatures and in turn, minimize the formation of NOx. Atmospheric nitrogen from the combustion air is mixed with additional excess air upstream of the combustor at deliberately fuel-lean conditions. By supplying approximately twice as much air as what is actually needed to burn the limited amount of fuel in the combustion chamber, the amount of NOx that can be formed is limited since very lean fuel conditions cannot produce the high temperatures that create thermal NOx. By utilizing this technology, NOx emissions have been demonstrated at less than nine parts per million by volume (ppmv), corrected to 15% oxygen, dry basis. The technology is engineered into the combustor as an intrinsic part of the turbine design. Fuel staging or air staging is utilized to keep the flame within its operating temperature range. It is not available as a "retrofit" technology and must be designed for each turbine application.

Water or Steam Injection
Water or steam injection is when demineralized water is injected into the combustor through the fuel nozzles to cool the flame temperature and thereby, reduce the amount of NOx produced. For example, NOx emission levels from natural gas turbines can be reduced via water or steam injection by 80%, corrected to 15% oxygen on a dry basis. Addition of water or steam increases mass flow through the turbine and creates a small amount of additional power. The addition of water or steam increases CO emissions. and there is added cost to demineralize the water. Turbines using water or steam injection have increased maintenance due to erosion and wear.

Selective Catalytic Reduction
Selective Catalytic Reduction (SCR) technology is widely used for gas turbines as the primary post-combustion approach for achieving additional NOx reductions because it is capable of reducing NOx emissions from the turbine exhaust by 90 to 95 percent.

With SCRs, ammonia is injected into the flue gas and reacts with NOx to form nitrogen and water in the presence of catalyst. SCR catalysts are made from ceramic materials and active catalytic components of base metals, zeolites, or precious metals. The catalyst may be configured into plates but many new systems are configured into honeycomb structure to ensure uniform dispersion and to reduce ammonia slip emissions to less than five ppmv. The reductant, ammonia, is available as anhydrous ammonia, aqueous ammonia, or urea. However, because anhydrous ammonia is an acutely hazardous material which poses safety risks, South Coast AQMD does not permit new installations of anhydrous ammonia storage tanks for air pollution control purposes. Urea pellets is a safer alternative to anhydrous ammonia but requires conversion to aqueous ammonia in order to be used in SCRs. Most new SCRs installations utilize aqueous ammonia in a 19 percent solution.

To perform optimally, the temperature of the exhaust gas as it is routed through the SCR needs to be between 400 degrees Fahrenheit and 800 degrees Fahrenheit in order for the SCR catalyst to be fully activated. During start-up and shutdown of the turbine, the temperature of the exhaust will be below optimal range greatly reducing the effectiveness of the SCR's ability to reduce NOx emissions. For this reason, NOx concentration limits are generally not applicable during start-up or shutdown.

The catalyst is susceptible to "poisoning" if the flue gas contains contaminants including sulfur compounds, particulates, reagent salts, or siloxanes. Because these contaminants are readily found in digester gas, and other biogas, gas treatment of the fuel to remove these contaminants may be necessary to prevent the poisoning catalysts requiring the unit to be shut down for cleaning or replacement.

Replacement with New Turbines
Newer gas turbines are capable of achieving low NOx emission levels between four and 25 ppm when firing natural gas without SCR. Achievable NOx emission levels while firing digester gas vary and depend on the chemical composition of the digester gas. Dry low NOx systems are incompatible with digester gas due to the low Wobbe index number for digester gas, but there is one commercially available 4.6 MW recuperative turbine that incorporates a dry low NOx system compatible with biogas. There is one turbine on the market whose manufacturer guarantees NOx emission levels at 25 ppm, corrected at 15 percent oxygen on a dry basis, for digester gas. Two other turbine manufacturers produce turbines with estimated NOx emission levels of 15 ppm and 25 ppm when firing digester gas with the latter for the larger sized turbines in the 10 MW range. Another turbine manufacturer has claimed to be able to guarantee NOx emissions levels of 15 ppm and 25 ppm, corrected at 15 percent oxygen on a dry basis, depending on the model, for turbines fueled by digester gas, without requiring SCR technology.

Internal Combustion Engines using Gaseous Fuel
Internal combustion engines create power by mixing fuel in a cylinder controlled by valves in a timed cycle. The cylinder contains a piston which compresses the fuel igniting it by either a spark (spark ignition) or until the fuel ignites from pressure (compression ignition). The expansive force created by the ignited fuel is transferred by the piston through a connecting rod to a crankshaft which transfers the resulting power to useable work. The power created can generate electricity or, by an external shaft, propulsion. The extreme heat created by the combustion of the fuel exits the engine through the exhaust system at a temperature sufficient to create undesirable pollutants such as NOx and greenhouse gases such as CO2, methane and nitrous oxide (N2O). The emissions are often controlled by complex catalyst systems for compression ignition engines, or a single simple catalyst for spark ignited engines.

PR 1179.1 applies to engines at POTWs, but these engines will continue to be subject to the same permitted emission limits as contained in Rule 1110.2.

PROJECT DESCRIPTION
This section provides a general summary of the key elements contained in PR 1179.1. A preliminary draft of PR 1179.1 can be found in Appendix A.

PR 1179.1 establishes emission limits for boilers (which include steam generators and process heaters) rated greater than 400,000 Btu per hour, turbines rated at less than 0.3 MW, and engines operated at POTWs, that either use digester gas or a blend of digester gas and natural gas as fuel, and turbines rated at 0.3 MW and larger. PR 1179.1 excludes boilers (as well as steam generators and process heaters) that use natural gas as the exclusive fuel type because these equipment categories are subject to the requirements in Rule 1146 series. PR 1179.1 also excludes engines that use exclusively natural gas or diesel fuel because these equipment categories are subject to the requirements in Rule 1110.2. Lastly, PR 1179.1 establishes BARCT for all turbines rated at greater than or equal to 0.3 MW operated at POTWs, irrespective of whether digester gas, natural gas, or digester gas that is blended with natural gas is used as a fuel, since Rule 1134 (which regulates turbines) specifically excludes turbines located at POTW facilities in the rule applicability. Table 1-1 summarizes the emission limits for the affected equipment.

The applicable emission limits in PR 1179.1 for engines, boilers and turbines operated at POTWs will go into effect the date the rule is adopted.

In addition, the proposed project also includes source testing, as well as monitoring, recordkeeping, and reporting requirements. Further, PR 1179.1 provides the following limited exemptions from the emission limits in Table 1-1 for the following equipment categories: 1) low-use boilers subject applicable requirements in Rule 1146; 2) special use turbines such as for the purpose of flood control and providing emergency backup power; 3) natural gas boilers and engines subject to the requirements in either the Rule 1146 series or Rule 1110.2, as applicable; 4) low-use engines that operate less than 200 hours or less per year; 5) turbines rated less than 0.3 MW and in operation prior to May 3, 2013; and 6) existing small boilers rated at less than or equal to two million Btu per hour without NOx concentration limits specified in the permits.

Implementation of the proposed project is expected to reduce NOx emissions by 0.05 ton per day and will provide an overall environmental benefit to air quality.

Table 1-1
PR 1179.1 Concentration Limits

<table>
<tr><th colspan="5">BOILERS, STEAM GENERATORS, AND PROCESS HEATERS
FIRED ON DIGESTER GAS OR DIGESTER GAS BLEND</th></tr>
<tr><td>EQUIPMENT CATEGORY</td><td>NOx (ppm)[1]</td><td>CO (ppm)[1]</td><td>VOC (ppm)</td><td>COMPLIANCE DATE</td></tr>
<tr><td>Rated heat input capacity > 2 MMBtu/hr</td><td>15</td><td rowspan="2">400</td><td rowspan="2">N/A</td><td>On or before [Date of Adoption]</td></tr>
<tr><td>Rated heat input capacity ≤ 2 MMBtu/hr</td><td>30</td><td>On or before [Date of Adoption]</td></tr>
<tr><th colspan="5">TURBINES FIRED ON DIGESTER GAS, DIGESTER GAS BLEND, OR NATURAL GAS</th></tr>
<tr><td>EQUIPMENT CATEGORY</td><td>NOx (ppm)[2]</td><td>CO (ppm)[2]</td><td>VOC (ppm)</td><td>COMPLIANCE DATE</td></tr>
<tr><td>Rating ≥ 0.3 MW firing 40% natural gas or less</td><td>18.8</td><td rowspan="4">130</td><td rowspan="4">N/A</td><td>On or before [Date of Adoption]</td></tr>
<tr><td>Simple cycle with rating ≥ 0.3 MW firing more than 40% natural gas</td><td>5</td><td>On or before [Date of Adoption]</td></tr>
<tr><td>Combined cycle with rating ≥ 0.3 MW firing more than 40% natural gas</td><td>2</td><td>On or before [Date of Adoption]</td></tr>
<tr><td>Rating < 0.3 MW firing digester gas or digester gas with natural gas</td><td>9</td><td>On or before [Date of Adoption]</td></tr>
<tr><th colspan="5">ENGINES FIRED ON DIGESTER GAS OR DIGESTER GAS BLEND</th></tr>
<tr><td>EQUIPMENT CATEGORY</td><td>NOx (ppm)[2]</td><td>CO (ppm)[2]</td><td>VOC (ppm)[3]</td><td>COMPLIANCE DATE</td></tr>
<tr><td>Engines > 50 bhp</td><td>11</td><td>250</td><td>30</td><td>On or before [Date of Adoption]</td></tr>
</table>

1 All parts per million (ppm) emission limits are referenced at 3% volume stack gas oxygen on a dry basis.
2 All parts per million (ppm) emission limits are referenced at 15% volume stack gas oxygen on a dry basis.
3 Parts per million (ppm) by volume, measured as carbon, corrected to 15% oxygen on a dry basis.

SUMMARY OF AFFECTED FACILITIES AND EQUIPMENT

Implementation of PR 1179.1 will apply to 30 POTW facilities operating 82 pieces of equipment that include boilers, turbines, and engines. A list of these facilities is provided in Appendix B of this EA. Each facility subject to PR 1179.1 is classified by the North American Industry Classification System (NAICS) code, as 221320 – Sewage Treatment Facilities.

Of the 30 facilities in South Coast AQMD's jurisdiction that are subject to PR 1179.1, no physical modifications to any combustion equipment are anticipated to be necessary in order to comply with the proposed emission limits in PR 1179.1. Most turbines subject to PR 1179.1 currently operate pursuant to South Coast AQMD permits which contain the emission limits proposed in PR 1179.1. Only one POTW facility that operates three turbines that are each rated greater than 0.3 MW would be expected to make some operational changes in order to achieve the proposed NOx emission limit proposed in PR 1179.1. That facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure and this operational change can be accomplished without the need to either install additional NOx emission control equipment such as SCR or replace their turbines. The facility estimated that an additional 8,000 gallons per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Because this is an operational change that does not require any physical modifications to existing piping to supply the additional water, no construction activities are expected to occur at this facility.

The remaining POTW boilers, turbines, and engines are not expected to undergo any physical modifications because they are currently achieving the applicable emission limits that are being migrated from Rules 1146, 1146.1 and 1146.2, Rule 1110.2 or existing permit limits for incorporation into PR 1179.1. Table 1-2 identifies the POTW with the potentially affected turbines.

Table 1-2
Potentially Affected Turbines

Facility ID	Facility Name	Type of Equipment	Number of Affected Equipment
800236	LA County Joint Water Pollution Control Plant	Digester Gas-Fired Turbine	3

CHAPTER 2

ENVIRONMENTAL CHECKLIST

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Proposed Rule 1179.1 – NOx Emissions Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Ms. Kendra Reif, (909) 396-2492
PR 1179.1 Contact Person:	Ms. Melissa Gamoning, (909) 396-3115
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PR 1179.1 proposes to establish BARCT requirements for combustion equipment operated at POTW facilities to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 Btu per hour fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 MW fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO, and VOC from engines rated at greater than 50 bhp fueled by digester gas or a digester gas blend. In addition, PR 1179.1 establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions. The Draft EA did not result in the identification of any environmental topic areas that would be significantly adversely affected by PR 1179.1. Two facilities affected by PR 1179.1 were identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5.
Surrounding Land Uses and Setting:	Various
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓"involve at least one impact that is a “Potentially Significant Impact”. An explanation relative to the determination of impacts can be found following the checklist for each area.

☐	Aesthetics	☐	Geology and Soils	☐	Population and Housing
☐	Agriculture and Forestry Resources	☐	Hazards and Hazardous Materials	☐	Public Services
☐	Air Quality and Greenhouse Gas Emissions	☐	Hydrology and Water Quality	☐	Recreation
☐	Biological Resources	☐	Land Use and Planning	☐	Solid and Hazardous Waste
☐	Cultural and Tribal Cultural Resources	☐	Mineral Resources	☐	Transportation
☐	Energy	☐	Noise	☐	Wildfire
☐	Mandatory Findings of Significance				

DETERMINATION

On the basis of this initial evaluation:

☑ I find the proposed project, in accordance with those findings made pursuant to CEQA Guidelines Section 15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.

☐ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.

☐ I find that the proposed project MAY have a "potentially significant 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 ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: 1) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards; and, 2) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: August 7, 2020 **Signature:** ______________________

Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development and Area Sources

ENVIRONMENTAL CHECKLIST AND DISCUSSION

As explained in Chapter 1, the main focus of PR 1179.1 is to establish BARCT requirements for combustion equipment operated at POTWs and to consolidate and migrate all POTW-applicable requirements from Rules 1146, 1146.1 and 1146.2, Rule 1134, and Rule 1110.2 in order to consolidate all of these requirements into one rule. Specifically, the BARCT requirements are designed to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 Btu per hour and fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 MW fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines greater than 50 bhp fueled by digester gas or a digester gas blend. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports.

Of the 30 facilities in South Coast AQMD's jurisdiction that are subject to PR 1179.1, no physical modifications to any combustion equipment are anticipated to be necessary in order to comply with the proposed emission limits in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain the applicable emission limits. Only one POTW facility that operates three turbines that are each rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure and this operational change can be accomplished without the need to either install additional NOx emission control equipment such as SCR or replace their turbines. The facility estimated that an additional 8,000 gallons per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Because this is an operational change that does not require any physical modifications to existing piping to supply the additional water, no construction activities are expected to occur at this facility. The following components of PR 1179.1 are administrative or procedural in nature and as such, would not be expected to cause any physical modifications at affected facilities: conducting monitoring, keeping records, and preparing reports. As such, these components of PR 1179.1 would not be expected to create any secondary adverse environmental impacts.

Also, PR 1179.1 contains requirements for POTW facilities to conduct source tests. Wastewater treatment plants are already required by other existing rules to conduct periodic source tests for most combustion equipment subject to this rule. However, POTW operators of turbines rated at less than 0.3 MW are not currently subject to any existing South Coast AQMD rule, but would be required to conduct source tests under PR 1179.1.

PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions, as a result of one facility increasing the quantity of water injected into the three turbines in order to achieve NOx emissions at a concentration of less than 18.8 ppm. For these reasons, the analysis in this EA focuses on the potential secondary adverse environmental impacts associated with the increased amount of water injection. The effects of the potential increased water usage have been evaluated relative to the environmental topics identified in the following environmental checklist (e.g., aesthetics, agriculture and forestry resources, biological resources, etc.).

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
I.	**AESTHETICS.** Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c)	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(s).) If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?	☐	☐	☐	☑
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

I. a), b), c) & d) No Impact. Of the 30 facilities in South Coast AQMD's jurisdiction that are subject to PR 1179.1, none of the facilities will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at the facility would be expected.

Because the increased water injection activities will occur within the boundaries of the affected facility and none of the affected facilities will be expected to make physical modifications in order to comply with PR 1179.1, views of any scenic vistas or state scenic highways will not be obstructed. For the same reasons, implementation of PR 1179.1 would have no substantial adverse effect on scenic vistas or other scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Similarly, PR 1179.1 would not require the alteration of buildings or other equipment. The potential increased quantity of water injection that may occur at one POTW would not require any approvals from the local city or county planning departments. Therefore, PR 1179.1 would not be expected to conflict with applicable zoning or other regulations governing scenic quality.

Since PR 1179.1 does not include any components that would involve construction activities or additional physical modifications to the facility requiring supplemental lighting, no additional temporary construction lighting or permanent lighting at any of the facilities subject to PR 1179.1 would be expected. For these reasons, the proposed project would not create a new source of substantial light or glare.

Conclusion

Based upon these considerations, significant adverse aesthetics impacts are not expected from implementing PR 1179.1. Since no significant aesthetics impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES.** Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☑
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	☐	☐	☐	☑
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑
e)	Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☑

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources

Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g)).

- The proposed project would involve 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.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

II. a), b), c), d), & e) No Impact. No locations of the 30 facilities subject to PR 1179.1 or their immediately surrounding areas are on or near areas zoned for agricultural use, 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. Further, the proposed project would not require any construction or alterations to any of the facilities subject to PR 1179.1 and it would not require the conversion of farmland to non-agricultural use or conflict with zoning for agriculture use or a Williamson Act contract.

The locations of the facilities subject to PR 1179.1 are sited in industrial use zones in urbanized areas that are not located near forest land. Therefore, the proposed project is not expected to 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)) or result in the loss of forest land or conversion of forest land to non-forest use.

Conclusion

Based upon these considerations, significant adverse agriculture and forestry resources impacts are not expected from implementing PR 1179.1. Since no significant agriculture and forestry resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS. Would the project:				
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) Create objectionable odors affecting a substantial number of people?	☐	☐	☑	☐
e) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☑	☐
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

Significance Criteria

To determine whether or not air quality and greenhouse gas impacts from implementing PR 1179.1 are significant, impacts will be evaluated and compared to the criteria in Table 2-1 PR 1179.1 will be considered to have significant adverse impacts if any one of the thresholds in Table 2-1 are equaled or exceeded.

Table 2-1
South Coast AQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction [b]**	**Operation [c]**
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	
GHG	10,000 MT/yr CO_2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants [d]		
NO_2 1-hour average annual arithmetic mean	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average annual average	10.4 $\mu g/m^3$ (construction)[e] & 2.5 $\mu g/m^3$ (operation) 1.0 $\mu g/m^3$	
$PM_{2.5}$ 24-hour average	10.4 $\mu g/m^3$ (construction)[e] & 2.5 $\mu g/m^3$ (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 $\mu g/m^3$ (state)	
CO 1-hour average 8-hour average	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average	1.5 $\mu g/m^3$ (state) 0.15 $\mu g/m^3$ (federal)	

[a] Source: South Coast AQMD CEQA Handbook (South Coast AQMD, 1993)
[b] Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).
[c] For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.
[d] Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.
[e] Ambient air quality threshold based on South Coast AQMD Rule 403.

KEY: lbs/day = pounds per day; ppm = parts per million; $\mu g/m^3$ = microgram per cubic meter; ≥ = greater than or equal to; MT/yr CO_2eq = metric tons per year of CO_2 equivalents; > = greater than

Revision: April 2019

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. Two facilities that contain five turbines less than 0.3 MW each are expected to require new periodic source testing pursuant to subdivision (e) of the proposed rule. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

a) No Impact. The South Coast AQMD is required by law to prepare a comprehensive district-wide Air Quality Management Plan (AQMP) which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards, and to ensure that new sources of emissions are planned and operated to be consistent with the SCAQMD's air quality goals. The AQMP's air pollution reduction strategies include control measures which target stationary, area, mobile and indirect sources. These control measures are based on feasible methods of attaining ambient air quality standards. Pursuant to the provisions of both the state and federal Clean Air Acts, the South Coast AQMD is also required to attain the state and federal ambient air quality standards for all criteria pollutants.

The most recent regional blueprint for how the South Coast will achieve air quality standards and healthful air is outlined in the 2016 AQMP[8] which contains multiple goals of promoting reductions of criteria air pollutants, greenhouse gases, and toxics. In particular, the 2016 AQMP includes control measure CMB-05 which committed to additional NOx emission reductions of five tons per day to occur by 2025. PR 1179.1 proposes to establish BARCT limits for equipment operated at POTWs to reduce NOx and CO from certain boilers, steam generators and process heaters, turbines and engines. In addition, PR 1179.1 will regulate emissions of VOC from certain engines.

For these reasons, PR 1179.1 is not expected to obstruct or conflict with the implementation of the 2016 AQMP because the emission reductions from implementing PR 1179.1 are in accordance with the overall emission reduction goals in the 2016 AQMP. Thus, implementing PR 1179.1 to reduce emissions from equipment located at POTWs would not conflict with or obstruct implementation of the applicable air quality plans.

[8] South Coast AQMD, Final 2016 Air Quality Management Plan, March, 2017. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf

b) and e) Less Than Significant Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make an operational change related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. The facility estimated that an additional 8,000 gallons per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Increasing the amount of demineralized water needed for water injection purposes is not change that would require physical modifications to the existing plumbing. Thus, no construction activities are expected to occur.

Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has provided the following additional information regarding the anticipated increase in water injected into the turbines:

- The facility has its own supply of water and the increase in water injection can be employed immediately by adjusting the water input flow rate;
- Negligible changes to CO emissions from the turbines are expected based on monitoring data; and
- Injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed.

Two facilities, each with five turbines (less than 0.3 MW), will be required to conduct source tests on each turbine. Owners/operators of affected facilities would be expected to hire a contractor to conduct the source tests. Since the turbines are relatively small, one crew (comprised of two workers) is capable of source testing all turbines at one facility on a single day.

For a worst-case scenario, this analysis assumes that both facilities will be conducting source tests on the same day. Each source testing crew is assumed to drive one light-duty gasoline-fueled truck with a fuel economy rating averaging 21 miles per gallon (mpg) and one medium-duty diesel-fueled maintenance truck with a fuel economy rating averaging 10 mpg. Each vehicle is assumed to drive approximately 40 miles round trip to conduct the source tests at each facility.

Operational Impacts

Total operational emissions were estimated using emission factors for on-road vehicles from CARB's EMFAC2017[1] for the following mobile sources: medium-duty diesel fueled trucks used to provide source testing support; light duty gasoline-fueled passenger vehicles used for transporting workers to facilities in order to conduct source tests.

Table 2-2 summarizes the peak daily emissions associated with operation. A peak day of operation is assumed to consist of source testing at two facilities on the same day. Additional details of the assumptions and calculations can be found in Appendix B.

Table 2-2
Peak Daily Operational Emissions by Pollutant (lb/day)

Activity	VOC	NOx	CO	SOx	PM10	PM2.5
One Light Duty Auto Worker Trip to Conduct Source Testing	0.02	0.19	0.10	0.00	0.02	0.01
One Medium Duty Truck Trip to Conduct Source Testing	0.02	0.01	0.15	0.00	0.00	0.00
One Source Test	**0.03**	**0.20**	**0.24**	**0.00**	**0.02**	**0.01**
Two Source Tests	**0.07**	**0.40**	**0.49**	**0.00**	**0.04**	**0.02**
Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Assumptions: Though unlikely, a peak day is assumed to include source testing at two facilities. See Appendix B for additional assumptions and calculations.

The air quality analysis indicates that the peak daily emissions do not exceed the South Coast AQMD's air quality significance thresholds for any pollutant during operation; Therefore, the physical activities that are expected to occur as a result of implementing PR 1179.1 are not expected to cause any air quality impacts either during construction or operation.

Construction and Operational Impacts
In conclusion, the air quality analysis indicates that no increase in peak daily emissions during construction is expected to occur and a less than significant increase in peak daily emissions during operation is expected to occur; thus, the proposed project is not expected to result in significant adverse air quality impacts.

Cumulatively Considerable Impacts
Based on the foregoing analysis, there will be no criteria pollutant project-specific air quality impacts from implementing PR 1179.1 during construction or operation. Therefore, cumulative air quality impacts are also not expected to occur since South Coast AQMD's cumulative significance thresholds are the same as project-specific significance thresholds. Potential adverse impacts from implementing PR 1179.1 would not be "cumulatively considerable" as defined by CEQA Guidelines Section 15064(h)(1) for air quality impacts. Per CEQA Guidelines Section 15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

The South Coast AQMD's guidance on addressing cumulative impacts for air quality is as follows: "As Lead Agency, the South Coast AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR." "Projects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."[9]

This approach was upheld by the Court in Citizens for Responsible Equitable Environmental Development v. City of Chula Vista (2011) 197 Cal. App. 4th 327, 334. The Court determined that where it can be found that a project did not exceed the South Coast AQMD's established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines Section 15064.7, stating, "The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect." The court found that, "Although the project will contribute additional air pollutants to an existing non-attainment area, these increases are below the significance criteria…" "Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact." As in Chula Vista, here the South Coast AQMD has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established South Coast AQMD significance thresholds. See also, Rialto Citizens for Responsible Growth v. City of Rialto (2012) 208 Cal. App. 4th 899. Here again the court upheld the South Coast AQMD's approach to utilizing the established air quality significance thresholds to determine whether the impacts of a project would be cumulatively considerable. Thus, it may be concluded that the proposed project will not contribute to a significant unavoidable cumulative air quality impact.

c) Less than Significant Impact. Since no physical modifications are expected to occur as a result of compliance with PR 1179.1 that would cause construction or operation air quality emission impacts, the effects of implementing PR 1179.1 would not be expected to adversely affect sensitive receptors located near any of the facilities subject to PR 1179.1. Further, the proposed project will require equipment located at POTW facilities to achieve BARCT emission levels which will result in NOx emission reductions, an air quality benefit. Therefore, PR 1179.1 is not expected to expose sensitive receptors to substantial pollutant concentrations.

d) Less Than Significant Impact. Odor problems depend on individual circumstances. For example, individuals can differ quite markedly from the populated average in their sensitivity to odor due to any variety of innate, chronic or acute physiological conditions. This includes olfactory adaptation or smell fatigue (i.e., continuing exposure to an odor usually results in a gradual diminution or even disappearance of the small sensation).

Implementation of PR 1179.1 will only require a physical change at one POTW to inject increased amounts of demineralized water into the three existing turbines and demineralized water does not have a perceptible odor. Further, no additional worker or vendor trips are expected to be needed during maintenance or source testing activities that would require the additional use of diesel-fueled vehicles capable of generating diesel exhaust odor greater than what is already typically present at the affected facilities. Thus, PR 1179.1 is not expected to create significant adverse

9 South Coast AQMD Cumulative Impacts Working Group White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, August 2003, Appendix D, Cumulative Impact Analysis Requirements Pursuant to CEQA, at D-3. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf

objectionable odors during construction or operation. Since no significant air quality impacts were identified for odors, no mitigation measures for odors are necessary or required.

III. f) and g) Less Than Significant Impact. Significant changes in global climate patterns have recently been associated contributing to an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon) in conjunction with other human activities, appears to be closely associated with global warming. State law defines GHG to include the following: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) (Health and Safety Code Section 38505(g)). The most common GHG that results from human activity is CO2, followed by CH4 and N2O.

As previously explained in Section III. b) and e), implementation of PR 1179.1 is not expected to cause an adverse increase of criteria air pollutants, including CO2, which is a GHG. Table 2-3 summarizes the GHG analysis which shows that PR 1179.1 may result in the generation of 0.10 MT per year of CO2eq, which is less than the South Coast AQMD's air quality significance threshold for GHGs. The detailed calculations of project GHG emissions can be found in Appendix B.

Summary of GHG Emissions from Affected Facilities

Phase	**Activity**	**CO2 Emissions (MT/yr)**
Operation	Source Test Trips	0.10
	Subtotal	0.10
	Total Emissions	**0.10**
	Significance Threshold	10,000
	Significant?	**No**

As shown in Table 2-3, the South Coast AQMD air quality significance threshold for GHGs would not be exceeded. For this reason, implementing the proposed project would not be expected to generate significant adverse cumulative GHG air quality impacts. Further, as noted in Section III. a), implementation of PR 1179.1 would not be expected to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing criteria pollutants and the same is true for GHG emissions since GHG emissions would not be impacted in any way by PR 1179.1. Therefore, GHG impacts are not considered significant. Since no significant air quality impacts were identified for GHGs, no mitigation measures are necessary or required

Conclusion

Based upon these considerations, significant air quality and GHG emissions impacts are not expected from implementing PR 1179.1. Since no significant air quality and GHG emissions impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f)	Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Significance Criteria
Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18.8 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

IV. a), b), c), & d) No Impact. All 30 POTWs are existing facilities located industrial areas and none will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines which are each rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at the facility would be expected. Further, because the increased water injection activities will occur within the boundaries of the affected facility and no other facilities will be expected to make physical modifications in order to comply with PR 1179.1, the proposed project is not expected to adversely affect in any way habitats that support riparian habitat, federally protected wetlands, or migratory corridors. Similarly, special status plants, animals, or natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service are not expected to disturb if PR 1179.1 is implemented. Therefore, PR 1179.1 would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely. PR 1179.1 does not require the acquisition of additional land or further conversions of riparian habitats or sensitive natural communities where endangered or sensitive species may be found. In addition, the implementation of PR 1179.1 does not require any construction therefore, it would not affect any wetlands or impact the path of migratory bird species.

IV. e) & f) No Impact. The proposed project is not expected to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans, because land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by implementation of PR 1179.1. Additionally, PR 1179.1 would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because compliance with PR 1179.1 would occur at an existing facility in a previously disturbed area which are not typically subject to Habitat or Natural Community Conservation Plans.

Conclusion

Based upon these considerations, significant biological resource impacts are not expected from implementing PR 1179.1. Since no significant biological resource impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
V.	**CULTURAL AND TRIBAL CULTURAL RESOURCES.** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☑
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☑
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☑
d)	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §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 a California Native American Tribe, and that is either:				
	• 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 §5020.1(k)?	☐	☐	☐	☑
	• A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code §5024.1(c)? (In applying the criteria set forth in Public Resources Code §5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.)	☐	☐	☐	☑

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18.8 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

V. a), b), c), & d) No Impact. There are existing laws in place that are designed to protect and mitigate potential impacts to cultural resources. For example, CEQA Guidelines state that generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources, which include the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possesses high artistic values;
- Has yielded or may be likely to yield information important in prehistory or history (CEQA Guidelines Section 15064.5).

Buildings, structures, and other potential culturally significant resources that are less than 50 years old are generally excluded from listing in the National Register of Historic Places, unless they are shown to be exceptionally important. The implementation of the proposed project would not lead to construction or the alteration of buildings located at any of the POTW facilities subject to PR 1179.1 requirements. Therefore, PR 1179.1 has no potential to cause a substantial adverse change to a historical or archaeological resource, directly or indirectly to destroy a unique paleontological resource or site or unique geologic feature, or to disturb any human remains, including those interred outside formal cemeteries. Implementing PR 1179.1 is, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources.

For the same reasons, PR 1179.1 is not expected to require physical modifications that would contribute to changes at a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, PR 1179.1 is not expected to result in a physical modification that would affect a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. Similarly, PR 1179.1 is not expected to result in a physical change to a resource determined by the South Coast AQMD to be significant to any tribe. For these reasons, PR 1179.1 is not expected to cause any substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.

As part of releasing this CEQA document for public review and comment, the South Coast AQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code Section 21080.3.1(b)(1). The NAHC notification list provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed project.

In the event that a Tribe submits a written request for consultation during this 30-day period, the South Coast AQMD will initiate a consultation with the Tribe within 30 days of receiving the request in accordance with Public Resources Code Section 21080.3.1(b). Consultation ends when either: 1) both parties agree to measures to avoid or mitigate a significant effect on a Tribal Cultural Resource and agreed upon mitigation measures shall be recommended for inclusion in the environmental document [see Public Resources Code Section 21082.3(a)]; or, 2) either party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. [Public Resources Code Section 21080.3.2(b)(1)-(2) and Section 21080.3.1(b)(1)].

Conclusion

Based upon these considerations, significant adverse cultural and tribal cultural resources impacts are not expected from implementing PR 1179.1. Since no significant cultural and tribal cultural resources impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VI.	**ENERGY.** Would the project:				
a)	Conflict with or obstruct adopted energy conservation plans, a state or local plan for renewable energy, or energy efficiency?	☐	☐	☐	☑
b)	Result in the need for new or substantially altered power or natural gas utility systems?	☐	☐	☑	☐
c)	Create any significant effects on local or regional energy supplies and on requirements for additional energy?	☐	☐	☑	☐
d)	Create any significant effects on peak and base period demands for electricity and other forms of energy?	☐	☐	☑	☐
e)	Comply with existing energy standards?	☐	☐	☐	☑
f)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☑
g)	Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☑

Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses energy resources in a wasteful and/or inefficient manner.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

VI. a), e) f) & g) No Impact. All 30 POTW facilities subject to PR 1179 utilize digester gas or a blend of digester gas as fuel for operating various combustion equipment. The digester gas is produced from processing decomposing organic solids in sewage and wastewater. In the event excess digester gas is produced at the POTW and equipment that ordinarily utilizes digester gas is either operating at its maximum capacity or is otherwise unavailable, the excess digester gas is routed to and combusted in a flare. Due to a potential cost savings, utilizing digester gas that is produced on-site as a fuel source for combustion equipment is considered a beneficial use and is preferred over flaring, especially if relying on purchased natural gas provided by a local utility to provide fuel for POTW combustion equipment could potentially be avoided. Implementation of PR 1179.1 would not change the existing use of digester gas or digester gas blends as an energy source to fuel the various combustion equipment operating at POTW facilities. Further, PR 1179.1 will not change how facilities process and handle excess digester gas. For these reasons, PR 1179.1 is not expected to conflict with any adopted energy conservation plans or violate any energy conservation standards because the 30 POTW facilities subject to PR 1179.1 would be expected to continue implementing any existing energy conservation plans that are currently in place regardless of whether PR 1179.1 is implemented. For these reasons, PR 1179.1 is not expected to conflict with energy conservation plans or existing energy standards, or use non-renewable resources in a wasteful manner.

None of the POTW facilities subject to PR 1179.1 will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. Since the facility has its own supply of water and the increase in water injection can be employed immediately by adjusting the water input flow rate, additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at this facility would be expected. For these reasons, implementation of PR 1179.1 would not require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects.

VI. b), c), & d) Less than Significant. Of the 30 POTW facilities subject to PR 1179.1, none will need additional electricity or other forms of energy in order to implement the proposed project. Thus, PR 1179.1 will not be expected to create any significant effects on peak and base period demands for electricity and other forms of energy.

One POTW facility intends to increase the quantity of water injected into its three large turbines in order to meet the proposed NOx emission limit, and this will slightly reduce the energy output of the three turbines by 400 kilowatts (kW) per year. The average gross energy output from the existing turbines is 20.4 megawatts, but after injecting water, it'll reduce to 20.0 megawatts which would result in a 2% decrease in efficiency over the course of one year. Because the digester fuel combusted in the three large turbines is produced on-site and the turbines produce electricity which provide on-site power elsewhere within the facility, this minimal energy penalty would not trigger the need for a utility to provide additional electricity to the affected facility or require new or substantially altered power systems since any additional energy needed can be provided from existing supplies. Thus, implementation of PR 1179.1 would be expected to result in less than significant energy impacts.

Diesel-fueled source testing support trucks and gasoline-fueled source testing worker vehicles will travel to two facilities to conduct 10 source tests with a frequency pursuant to subdivision (e) in the proposed rule. The analysis assumes that on a peak day there will be two gasoline-fueled light duty work vehicles and two diesel-fueled medium duty support vehicles used to conduct source testing. The analysis assumes that each source testing trip will be 40 miles round trip. The analysis assumes an average fuel economy of 21 mpg for gasoline-fueled passenger vehicles and 10 mpg for diesel-fueled source testing trucks. The projected fuel demand during operation is presented in Table 2-4.

Table 2-4
Annual Total Projected Fuel Usage for Operation Activities

	Diesel	Gasoline
Projected Operational Energy Use (gal/yr)[a]	8	4
Year 2017 South Coast AQMD Jurisdiction Estimated Fuel Demand (gal/yr)[b]	775,000,000	7,086,000,000
Total Increase Above Baseline	0.00000%	0.000000%
Significance Threshold	1%	1%
Significant?	**No**	**No**

Notes:

a) Estimated peak fuel usage from operational activities. Diesel usage estimates are based on source test trips. Gasoline usage estimates are derived from source test trips.

b) California Annual Retail Fuel Outlet Report Results (CEC-A15) Spreadsheets, 2017 California Energy Commission (http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html). [Accessed June 21, 2019.]

Operational gasoline truck usage is only expected to consume about 4 gallons of gasoline, approximately 0.00000% of the annual gasoline supply. Diesel operated heavy duty truck usage could consume 8 gallons of diesel, which is only 0.00000% of the annual diesel supply. The projected increased use of gasoline and diesel fuels as a result of implementing PR 1179.1 are well below the South Coast AQMD significance threshold for fuel supply. Thus, no significant adverse impact on fuel supplies would be expected during operation.

Further, since minimal amounts of fuels such as natural gas, gasoline, and diesel would be needed to implement the operational changes that may occur as part of implementing PR 1179.1, no change to existing local or regional natural gas, gasoline, and diesel supplies and usage would be expected to occur and there would be no need for new or substantially altered natural gas utility systems.

Conclusion

Based upon these considerations, significant adverse energy impacts are not expected from implementing PR 1179.1. Since no significant energy impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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:				
• 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?	☐	☐	☐	☑
• Strong seismic ground shaking?	☐	☐	☐	☑
• Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
• Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☑
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?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☑

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.
- Unique paleontological resources or sites or unique geologic features are present that could be directly or indirectly destroyed by the proposed project.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

VII. a), b), c) and f) No Impact. All 30 POTWs are existing facilities located industrial areas and none will need to make any physical modifications changes to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at the facility would be expected. Further, because the increased water injection activities will occur within equipment piping, all within the boundaries of the affected facility, and no other facilities will be expected to make any physical modifications or operational changes in order to comply with PR 1179.1, implementation of the proposed project is not expected to disturb any soil or geological formations. Therefore, PR 1179.1 would not directly or indirectly cause potential adverse effects or result in the substantial erosion or loss of topsoil. Also, since implementation of PR 1179.1 will have no effect on the soil types present at the affected facilities, the existing soils will not be made further susceptible to expansion or liquefaction. Furthermore, PR 1179.1 will not create any new conditions that would cause subsidence landslides, or alter unique geologic features at any of the 30 POTW facilities. Thus, the proposed project would not be expected to increase or exacerbate any existing risks associated with soils at the affected facility locations. Implementation of PR 1179.1 would not involve re-locating any facility onto a geologic unit or soil that is unstable or that would become unstable as a result of the project; therefore, it would not be expected to potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Finally, because PR 1179.1 is not expected to require soil to be disturbed, implementation of the proposed project is not expected to directly or indirectly destroy a unique paleontological resource or site or unique geological feature. No impacts are anticipated.

VII. d) & e) No Impact. The 30 facilities subject to PR 1179.1 are POTWs which treat sewage and wastewater and implementation of PR 1179.1 would not alter how these facilities conduct their existing operations. Further, PR 1179.1 does not contain any provision that would require the installation of septic tanks or other alternative wastewater disposal systems since all 30 facilities have existing sanitary systems that are connected to the local sewer systems. Therefore, no persons or property will be exposed to new impacts related to expansive soils or soils incapable of supporting water disposal. Thus, the implementation of PR 1179.1 will not adversely affect soils associated with a installing a new septic system or alternative wastewater disposal system or modifying an existing sewer.

Conclusion

Based upon these considerations, significant adverse geology and soils impacts are not expected from the implementation of PR 1179.1. Since no significant geology and soils impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VIII.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
c)	Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☐	☑
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
g)	Significantly increased fire hazard in areas with flammable materials?	☐	☐	☑	☐

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

VIII. a) & b) No Impact. All 30 POTWs subject to PR 1179.1 are existing facilities located industrial areas and none will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems and the water does not utilize any hazardous materials. Thus, no additional construction at the facility would be expected. Further, while the affected facilities may currently have existing activities that involve the routine transport, use, or disposal of hazardous materials, implementation of PR 1179.1 would not alter these existing activities or create a new significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

VIII. c) No Impact. As explained in Section VIII. a) and b), while the affected facilities may currently have existing activities that involve the routine transport, use, or disposal of hazardous materials, implementation of PR 1179.1 would not alter these existing activities or create a new significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Thus, even though some of the affected facilities may be located within one-quarter mile of an existing or newly proposed school, PR 1179.1 does not include new requirements that would cause any of the affected facilities to generate new hazardous emissions, or change how hazardous or acutely hazardous materials, substances, or waste is currently handled.

VIII. d) No Impact. Government Code Section 65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). While two of the 30 facilities, presented in Appendix B are identified on lists of California Department of Toxics Substances Control hazardous waste facilities per Government Code Section 65962.5, PR 1179.1 contains no requirements that interfere with existing hazardous waste management programs since facilities handling hazardous waste would be expected to continue to manage any and all hazardous materials and hazardous waste, in accordance with applicable federal, state, and local rules and regulations. Therefore, compliance with PR 1179.1 would neither change any existing hazards to public or environment nor create any new significant hazards to the public or environment.

VIII. e) No Impact. Federal Aviation Administration regulation, 14 CFR Part 77 **–** Safe, Efficient Use and Preservation of the Navigable Airspace, provide information regarding the types of projects that may affect navigable airspace. Projects may adversely affect navigable airspace if they involve construction or alteration of structures greater than 200 feet above ground level within a specified distance from the nearest runway or objects within 20,000 feet of an airport or seaplane base with at least one runway more than 3,200 feet in length and the object would exceed a slope of 100:1 horizontally (100 feet horizontally for each one foot vertically from the nearest point of the runway). Even if any of the affected facilities are located within an airport land use plan or, within two miles of a public airport or public use airport, PR 1179.1 will not result in the alteration of any buildings or structures. Therefore, implementation of PR 1179.1 is not expected to increase or create any new safety hazards to peoples working or residing in the vicinity of public/private airports.

VIII. f) No Impact. Health and Safety Code Section 25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

- Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
- Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
- Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
- Procedures to notify the necessary persons who can respond to an emergency within the facility;
- Details of evacuation plans and procedures;
- Descriptions of the emergency equipment available in the facility;

- Identification of local emergency medical assistance; and,
- Training (initial and refresher) programs for employees in:
  1. The safe handling of hazardous materials used by the business;
  2. Methods of working with the local public emergency response agencies;
  3. The use of emergency response resources under control of the handler;
  4. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area.

Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of not only the public (surrounding local communities), but the facility employees as well. The proposed project would not impair the implementation of, or physically interfere with any adopted emergency response plans or emergency evacuation plans that may be in place at the existing facility because PR 1179.1 does not require the new or altered use of hazardous materials and would not involve any alterations to buildings or structures.

VIII. g) Less Than Significant Impact. The Uniform Fire Code and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations. Further, businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against the potential risk of upset. PR 1179.1 would not change the existing requirements and permit conditions for the proper handling of flammable materials at the affected facility. Further, PR 1179.1 does not contain any requirements that would prompt facility owners/operators to begin using new flammable materials. In addition, the National Fire Protection Association has special designations for deflagrations (e.g., explosion prevention) when using materials that may be explosive and PR 1179.1 would not alter how the affected facilities fire prevention plans.

Conclusion

Based upon these considerations, significant adverse hazards and hazardous materials impacts are not expected from implementing PR 1179.1. Since no significant hazards and hazardous materials impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☑
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☑
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:				
• Result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☑
• Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☑
• Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
• Impede or redirect flood flows?	☐	☐	☐	☑
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☑
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☑

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, facilities or new storm water drainage facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☑
g)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☑	☐
h)	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?	☐	☐	☐	☑

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

<u>Water Demand:</u>

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

<u>Water Quality:</u>

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

IX. a), b), e), f), & h) No Impact. Of the 30 facilities that will be subject to PR 1179.1, only one facility that operates three large turbines which utilize water injection as a NOx emission control method will need to use additional water in order to achieve the 18.8 ppm NOx emission limit. The type of water that is used for water injection in the turbines is deionized water. Since the POTW is by design, a wastewater treatment facility, the facility has sufficient supplies of water that it is capable of treating and deionizing to remove contaminants prior to injecting it into the turbines to prevent build-up of calcium and other minerals. The facility estimated that an additional 8,000 gallons of deionized water per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities.

Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has provided the following additional information regarding the anticipated increase in water injected into the turbines:

- The facility has its own supply of water and the increase in water injection can be employed immediately by adjusting the water input flow rate;
- No groundwater is used by this facility for the purposes of water injection into turbines because groundwater contains sand and other particles or debris which is not suitable; and
- Due to the high temperature in the combustion chamber, all of the injected water is vaporized such that there is no wastewater stream.

Since no wastewater stream is generated from the water injection process, the proposed project would not be expected to: 1) violate any water quality standards, waste discharge requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade surface or ground water quality; 2) require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, facilities or new storm water drainage facilities; and 3) give any cause for the POTW, which is the wastewater treatment provider, to question or evaluate whether adequate wastewater capacity exists post-project.

Further, since no groundwater will be utilized to satisfy the increased demand of water for injection purposes, PR 1179.1 will not: 1) substantially decrease groundwater supplies or interfere substantially with groundwater recharge or impede sustainable groundwater management of the basin; and 2) conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

IX. g) Less than Significant Impact. Of the 30 facilities that will be subject to PR 1179.1, only one facility that operates three large turbines which utilize water injection as a NOx emission control method will need to use additional water in order to achieve the 18.8 ppm NOx emission limit. The type of water that is used for water injection in the turbines is deionized water. Since the POTW is by design, a wastewater treatment facility, the facility has sufficient supplies of water that it is capable of treating and deionizing to remove contaminants prior to injecting it into the turbines to prevent build-up of calcium and other minerals. The facility estimated that an additional 8,000 gallons of deionized water per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Since an increased use of 24,000 gallons of water per day is less than the significance threshold of 262,820 gallons per day for potable water and 5,000,000 gallons per day of total water, the proposed project will result in less than significant water demand impacts. The water demand is relatively minor when compared to the significance thresholds for water usage, and is expected to be well within the facility's existing supporting infrastructure to process, treat, and supply large quantities of water. Similarly, because the POTW has existing water supplies which are sufficient to support the implementation of additional water injection for NOx emission control purposes, the availability of sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years is not expected to be significantly impacted by PR 1179.1. Further, PR 1179.1 is a rule aimed to reduce emissions from combustion equipment located at existing wastewater treatment facilities and the affected facility has the adequate capacity to serve the proposed project's demand in addition to the provider's existing commitments.

IX. c) No Impact. Implementation of PR 1179.1 would not be expected to substantially alter the existing drainage patterns of any POTW facility or areas beyond what currently exists at each site. Because all of the POTW facilities are sited in urban industrial areas, PR 1179.1 will not cause any changes where streams or rivers would flow through any of the POTW facilities. Thus, PR 1179.1 would not cause an alteration to the course or flow of a stream or river. In addition, PR 1179.1 would not create new or contribute to existing runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff, because PR 1179.1 does not contain any requirements that would change existing drainage patterns or the procedures for how surface runoff is handled.

IX. d) No Impact. As previously explained in Section IV – Biological Resources, PR 1179.1 would not require new development to occur. The implementation of PR 1179.1 would not require construction, therefore, PR 1179.1 would not be expected to expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow because any flood event of this nature would be part of the existing setting or topography that is present for reasons unrelated to PR 1179.1. Similarly, there is no risk of release of pollutants due to inundation as a result of PR 1179.1.

Conclusion
Based upon these considerations, significant adverse hydrology and water quality impacts are not expected from implementing PR 1179.1. Since no significant hydrology and water quality impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

X. a) & b) No Impact. PR 1179.1 does not require the construction of new buildings or the alteration of existing buildings. For this reason, implementation of PR 1179.1 is not expected to physically divide an established community. Therefore, no impacts are anticipated.

Further, land use and other planning considerations are determined by local governments and PR 1179.1 does not alter any land use or planning requirements. PR 1179.1 would regulate emissions from combustion equipment operating at existing POTW facilities without requiring any alterations to existing buildings or structures. Thus, implementation of PR 1179.1 would not be expected to affect or conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Conclusion

Based upon these considerations, significant adverse land use and planning impacts are not expected from implementing PR 1179.1. Since no significant land use and planning impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XI.	**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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Significance Criteria
Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would 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.
- The proposed project results 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.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XI. a) & b) No Impact. There are no provisions in PR 1179.1 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plant, or other land use plant. The proposed project would not require construction activities or place new demand on mineral resources in order to reduce emissions from combustion equipment operating at POTW facilities. Therefore, no significant adverse mineral resources impacts are expected from implementing PR 1179.1 are anticipated.

Conclusion

Based upon these considerations, significant adverse mineral resource impacts are not expected from implementing PR 1179.1. Since no significant mineral resource impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Significance Criteria

Noise impact will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.

- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XII. a), b) & c) No Impact. All of the 30 facilities affected by PR 1179.1 are located in urbanized, industrial areas and the existing noise environment at these facilities is typically dominated by noise from existing equipment on-site, vehicular traffic around the facilities, and trucks entering and exiting facility premises. Further, none of the facilities and their various existing combustion equipment will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. Thus, no additional construction and associated noise-producing construction equipment and vehicles would be needed at any of the affected facilities. As such, no changes to the existing overall noise profiles of the affected facilities are expected to occur and noise levels would be expected to stay within existing baseline noise levels from day-to-day operations at each facility.

Finally, as explained in Section VIII. e), even if any of the affected facilities are located within an airport land use plan or, within two miles of a public airport or public use airport, PR 1179.1 will not result in the alteration of any buildings or structures requiring construction and associated noise-producing construction equipment and vehicles. Thus, persons residing or working within two miles of a public airport or private airstrip would not be exposed to excessive noise levels if PR 1179.1 is implemented.

Conclusion

Based upon these considerations, significant adverse noise impacts are not expected from the implementing PR 1179.1. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XIII. a) & b) No Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications changes to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace their turbines. Thus, no construction activities are expected to occur. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed. Thus, PR 1179.1 is not expected to involve the relocation of individuals, require new housing or commercial facilities, or change the distribution of the population. Maintenance activities resulting from PR 1179.1 would also not be expected to result in the need for additional employees because existing personnel are available to perform the required day-to-day maintenance. PR 1179.1 is not anticipated to not result in changes in population densities, population distribution, or induce significant growth in population.

Conclusion

Based upon these considerations, significant adverse population and housing impacts are not expected from implementing PR 1179.1. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIV. 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 following public services:				
a) Fire protection?	☐	☐	☐	☑
b) Police protection?	☐	☐	☐	☑
c) Schools?	☐	☐	☐	☑
d) Parks?	☐	☐	☐	☑
e) Other public facilities?	☐	☐	☐	☑

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time, or other performance objectives.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XIV. a) & b) No Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make some relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. Thus, no construction activities are expected to occur. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed. Further, injecting additional water is not expected to pose a safety issue requiring the support of public service personnel. Thus, implementation of PR 1179.1 is not expected to substantially alter or increase the need or demand for additional public services (e.g., fire and police departments and related emergency services, etc.) above current levels, so no significant impact to these existing services is anticipated.

XIV. c), d), & e) No Impact. As explained in Section XIII. a) and b), PR 1179.1 is not anticipated to generate any significant effects, either direct or indirect, on the population or population distribution within South Coast AQMD's jurisdiction as no additional workers are anticipated to be needed in order to comply with PR 1179.1. Because PR 1179.1 is not expected to induce substantial population growth in any way, and because the local labor pool (e.g., workforce) would remain the same since PR 1179.1 would not trigger changes to current employment levels, no additional schools would need to be constructed as a result of implementing PR 1179.1. Therefore, since no substantial increase in local population would be anticipated as a result of implementing PR 1179.1, there would be no corresponding impacts to local schools or parks and there would be no corresponding need for new or physically altered public facilities in order to maintain acceptable service ratios, response times, or other performance objectives. Therefore, no impacts would be expected to schools, parks, or other public facilities.

Conclusion

Based upon these considerations, significant adverse public services impacts are not expected from implementing PR 1179.1. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XV.	**RECREATION.**				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	☐	☐	☐	☑

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XV. a) & b) No Impact. As previously explained in Section XIII – Population and Housing, PR 1179.1 is not expected to affect population growth or distribution within the South Coast AQMD's jurisdiction because no additional workers are needed to implement PR 1179.1 at the affected facilities. Thus, PR 1179.1 will have no effect on the existing labor pool supply in the local Southern California area. As such, PR 1179.1 is not anticipated to generate any significant adverse effects, either indirectly or directly on population growth within the South Coast AQMD's jurisdiction or population distribution, thus no additional demand for recreational facilities would be expected. PR 1179.1 would not be expected to affect recreation in any way because PR 1179.1 would not increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical modification or effect on the environment because it would not directly or indirectly increase or redistribute population.

Conclusion

Based upon these considerations, significant adverse recreation impacts are not expected from implementing PR 1179.1. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVI. SOLID AND HAZARDOUS WASTE. Would the project:				
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☑	☐
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	☐	☐	☐	☑

Significance Criteria

The proposed project impacts on solid and hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XVI. a) Less Than Significant Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications to their various combustion equipment comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits.

Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make some relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. Thus, no construction activities are expected to occur, which means no construction waste will be generated. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed. Further, injecting additional water is not expected to generate any solid or hazardous waste requiring disposal.

Further, PR 1179.1 will not alter the quantities generated or the manner in which the existing affected facilities currently handle and dispose of their solid and hazardous waste. Thus, the existing solid and hazardous waste generation at each of the affected facilities will remain unchanged such that PR 1179.1 will have no impacts on existing permitted landfill capacities.

XVI. b) No Impact. Operators of all affected facilities subject to PR 1179.1 are required to comply with all applicable local, state, or federal waste disposal regulations, and PR 1179.1 does not contain any provisions that would weaken or alter current practices. Further, as explained in Section XVI. a), PR 1179.1 does not have any provision that would increase the disposal of solid or hazardous waste. Thus, implementation of PR 1179.1 is not expected to interfere with any affected facility's ability to comply with applicable local, state, or federal waste disposal regulations in a manner that would cause a significant adverse solid and hazardous waste impact.

Conclusion

Based upon these considerations, significant adverse solid and hazardous waste impacts are not expected from implementing PR 1179.1. Since no significant solid and hazardous waste impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b)?	☐	☐	☐	☑
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
d) Result in inadequate emergency access?	☐	☐	☐	☑

Significance Criteria

Impacts on transportation and traffic will be considered significant if any of the following criteria apply:

- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans, or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists, or pedestrians are substantially increased.
- The need for more than 350 employees.
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- Increase customer traffic by more than 700 visits per day.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XVII. a) & b) No Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. Thus, no construction activities are expected to occur. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. As previously discussed in Section III – Air Quality and Greenhouse Gas Emissions, the facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors, and in turn, no additional vehicle trips will be needed.

In accordance with the promulgation of SB 743 which requires analyses of transportation impacts in CEQA documents to consider a project's vehicle miles traveled (VMT) in lieu of applying a Level of Service (LOS) metric when determining significance for transportation impacts, CEQA Guidelines Section 15064.3(b)(4) gives a lead agency to use discretion to choose the most appropriate methodology to evaluate a project's VMT, allowing the metric to be expressed as a change in absolute terms, per capita, per household, or in any other measure.

No additional need for vehicle trips means that PR 1179.1 would not increase construction or operational VMT. Further, since PR 1179.1 will not create a need for additional vehicle trips, the proposed project will not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b). Similarly, because implementation of PR 1179.1 will not alter any transportation plans, PR 1179.1 will also not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

XVII. c) & d) No Impact. PR 1179.1 does not involve or require the construction of new roadways, because the focus of PR 1179.1 is to control emissions from certain combustion equipment operating at POTW facilities. Thus, no changes to current public roadway designs including a geometric design feature that could increase traffic hazards are expected. Further, PR 1179.1 is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the affected facilities, or alter the existing long-term circulation patterns within the area of each affected facility. Further, impacts to existing emergency access at the affected facilities would also not be affected because PR 1179.1 does not contain any requirements specific to emergency access points and each affected facility would be expected to continue to maintain their existing emergency access. As a result, PR 1179.1 is not expected to result in inadequate emergency access.

Conclusion

Based upon these considerations, significant adverse transportation and traffic impacts are not expected from implementing PR 1179.1. Since no significant transportation and traffic impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVIII. 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?	☐	☐	☐	☑
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 a wildfire?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
e) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfires?	☐	☐	☐	☑

Significance Criteria

A project's ability to contribute to a wildfire will be considered significant if the project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and any of the following conditions are met:

- The project would substantially impair an adopted emergency response plan or emergency evacuation plan.
- The project may exacerbate wildfire risks by exposing the project's occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors.
- The project may exacerbate wildfire risks or may result in temporary or ongoing impacts to the environment because the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) are required.
- The project would expose people or structures to significant risks such as downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

- The project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfires.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XVIII. a), b), c), d), & e) No Impact. Of the 30 facilities subject to PR 1179.1, none are located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Further, as explained in Section VIII. f), the proposed project would not impair the implementation of, or physically interfere with any adopted emergency response plans or emergency evacuation plans that may be in place at the existing facilities because PR 1179.1 does not require the new or altered use of hazardous materials and would not involve any alterations to buildings or structures. In addition, implementation of PR 1179.1 will not require the construction of any new buildings or structures. Thus, PR 1179.1 is not expected to substantially impair an adopted emergency response plan or emergency evacuation plan in effect at any of the facilities subject to PR 1179.1. In the event of a wildfire, no exacerbation of wildfire risks, and no consequential exposure of pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, or other factors would be expected to occur. Thus, PR 1179.1 would neither expose people or structures to new significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, nor would it expose people or structures, either directly or indirectly, to a new significant risk of loss, injury, or death involving wildfires. Finally, PR 1179.1 does not require new or alter existing maintenance of associated infrastructure at or surrounding affected facilities (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. Thus, PR 1179.1 is not expected to have any influence on the occurrence of wildfires or any facility's ability to combat or prepare for wildfires.

Conclusion

Based upon these considerations, significant adverse wildfire risks are not expected from implementing PR 1179.1. Since no significant wildfire risks were identified, no mitigation measures are necessary or required

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

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XIX. a) No Impact. The 30 existing facilities that are subject to PR 1179.1 are located within existing developed areas that have been greatly disturbed and that currently do not support any species of concern or the habitat on which they rely. Further, as explained in Section IV - Biological Resources, PR 1179.1 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because the proposed project will not lead to any activities that will reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

XIX. b) Less Than Significant Impact. Based on the foregoing analyses, PR 1179.1 would not result in significant adverse project-specific environmental impacts. Potential adverse impacts from implementing PR 1179.1 would not be "cumulatively considerable" as defined by CEQA Guidelines Section 15064(h)(1) for any environmental topic because there are no, or only minor incremental project-specific impacts that were concluded to be less than significant. Per CEQA Guidelines Section 15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable. South Coast AQMD cumulative significant thresholds are the same as project-specific significance thresholds.

Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by PR 1179.1 for any environmental topic area.

XIX. c) Less Than Significant Impact. Based on the foregoing analyses, PR 1179.1 is not expected to cause adverse effects on human beings for any environmental topic, either directly or indirectly because: 1) the reduction of NOx emissions is an air quality benefit and no adverse air quality or GHG impacts were identified in Section III – Air Quality and Greenhouse Gases; 2) energy impacts were determined to be less than significant as analyzed in Section VI – Energy; and 3) the increased water usage and wastewater was determined to be less than significant as analyzed in Section IX – Hydrology and Water Quality.; . In addition, the analysis concluded that there would be no significant environmental impacts for the remaining environmental impact topic areas: aesthetics, agriculture and forestry resources, biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials land use and planning, mineral resources, noise, population and housing, public services, recreation, solid and hazardous waste, transportation, and wildfire.

Conclusion

As previously discussed in environmental topics I through XIX, the proposed project has no potential to cause significant adverse environmental effects. Since no significant impacts were identified, no mitigation measures are necessary or required.

APPENDICES

Appendix A: Proposed Rule 1179.1 – NOx Emissions Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

Appendix B: Operational Emissions Assumptions and Calculations

Appendix C: PR 1179.1 List of Affected Facilities and Affected Industry

APPENDIX A

Proposed Rule 1179.1 – NOx Emissions Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

PROPOSED RULE 1179.1 NOX EMISSION REDUCTIONS FROM COMBUSTION EQUIPMENT AT PUBLICLY OWNED TREATMENT WORKS FACILITIES

(a) Purpose

The purpose of this rule is to reduce emissions of Oxides of Nitrogen (NO_x) and Carbon Monoxide (CO) from boilers and turbines, and emissions of NOx, CO, and Volatile Organic Compounds (VOCs) from engines, located at publicly owned treatment works (POTW) facilities.

(b) Applicability

This rule applies to the following equipment located at a POTW facility:

(1) Boilers, steam generators and process heaters over 400,000 Btu/hr fueled by digester gas or a digester gas blend;

(2) Turbines less than 0.3 MW fueled by digester gas or a digester gas blend and turbines greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and

(3) Engines over 50 rated brake horsepower fueled by digester gas or a digester gas blend.

(c) Definitions

(1) ANNUAL HEAT INPUT is the total heat input to a unit during a calendar year.

(2) BOILER or STEAM GENERATOR is any combustion equipment fired with a liquid or gaseous fuel and used to produce steam or to heat water, and that is not used exclusively to produce electricity for sale. Boiler or Steam Generator does not include any open heated tank, adsorption chiller unit, or waste heat combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

(3) COMBINED CYCLE TURBINE is a turbine that recovers heat from the gas turbine exhaust.

(4) CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) is the total combined unit and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a

source effluent (as applicable). The CEMS consist of three major subsystems: sampling interface, analyzer and data acquisition system.

(5) DIGESTER GAS is gas that is produced by anaerobic decomposition of organic material.

(6) ENGINE is any internal combustion equipment that is spark- or compression ignited and burns liquid and/or gaseous fuel to create heat that move pistons to do work.

(7) LEAN-BURN ENGINE is an engine that operates with high levels of excess air and an exhaust oxygen concentration of greater than 4 percent.

(8) NATURAL GAS is a mixture of gaseous hydrocarbons, with at least 80 percent methane by volume, and of pipeline quality, such as the gas sold or distributed by any utility company regulated by the California Public Utilities Commission.

(9) OXIDES OF NITROGEN (NOx) EMISSIONS is the sum of nitric oxides and nitrogen dioxides emitted, collectively expressed as nitrogen dioxide emissions.

(10) POST-COMBUSTION CONTROL is any air pollution control equipment which eliminates, reduces, or controls the issuance of air contaminants after combustion.

(11) PROTOCOL is the written documentation of source test procedures which includes; specified test conditions, test methods, specifications for test equipment, data collection/reporting, and quality assurance procedures.

(12) PUBLICLY OWNED TREATMENT WORKS FACILITY OR POTW FACILITY is a wastewater treatment or reclamation plant owned or operated by a public entity, including all operations within the boundaries of the wastewater or sludge treatment plant.

(13) RATED BRAKE HORSEPOWER (bhp) is the rating specified by the manufacturer, without regard to any derating, and listed on the engine nameplate.

(14) RATING OF A TURBINE is the continuous MW (megawatt) rating or mechanical equivalent by a manufacturer for a turbine without including the increase in the turbine shaft output and/or the decrease in turbine fuel consumption by the addition of energy recovered from exhaust heat.

(15) RICH-BURN ENGINE is an engine designed to operate near stoichiometric conditions.

(16) SELECTIVE CATALYTIC REDUCTION (SCR) is a post-combustion control that reduces NOx with catalyst and a reducing agent.

(17) SHUTDOWN is the time period that begins when an operator with the intent to shut down a unit reduces load and which ends in a period of zero fuel flow, unless otherwise defined in the South Coast AQMD permit to operate.

(18) SIMPLE CYCLE TURBINE is a turbine that does not recover heat from the combustion turbine exhaust gases to heat water or generate steam.

(19) STARTUP is the time period that begins when a unit combusts fuel after a period of zero fuel flow and which ends when the unit reaches stable operating conditions. Startup includes the commissioning of a new engine.

(20) TUNING is adjusting, optimizing, rebalancing, or other similar operations to a unit or an associated control device or otherwise as defined in the South Coast AQMD permit to operate. Tuning does not include normal operations to meet load fluctuations.

(21) TURBINE is any internal combustion equipment that burns liquid and/or gaseous fuel to create hot gas that expands to move a rotor assembly, with vanes or blades, to do work.

(22) UNIT is a boiler, turbine, or engine subject to this rule.

(d) Emission Limits

(1) On and after the compliance date specified in Table 1, an owner or operator shall not operate a unit in a manner that discharges NOx, CO, or VOC into the atmosphere in excess of the limits specified in Table 1, excluding start-up and shutdown periods as specified pursuant to paragraph (d)(4). Compliance shall be demonstrated with a source test conducted pursuant to subdivision (e), CEMS under subdivision (f), or a diagnostic emission check conducted pursuant to subdivision (h), if required.

TABLE 1 CONCENTRATION LIMITS				
BOILERS, STEAM GENERATORS, AND PROCESS HEATERS FIRED ON DIGESTER GAS OR DIGESTER GAS BLEND				
EQUIPMENT CATEGORY	NOx (ppm)[1]	CO (ppm)[1]	VOC (ppm)	COMPLIANCE DATE
Rated heat input capacity > 2 MMBtu/hr	15	400	N/A	On or before [*Date of Adoption*]

Rated heat input capacity ≤ 2 MMBtu/hr	30			On or before [*Date of Adoption*]
TURBINES FIRED ON DIGESTER GAS, DIGESTER GAS BLEND, OR NATURAL GAS				
EQUIPMENT CATEGORY	NOx (ppm)[2]	CO (ppm)[2]	VOC (ppm)	COMPLIANCE DATE
Rating ≥ 0.3 MW firing 40% natural gas or less	18.8	130	N/A	On or before [*Date of Adoption*]
Simple cycle with rating ≥ 0.3 MW firing more than 40% natural gas	5			On or before [*Date of Adoption*]
Combined cycle with rating ≥ 0.3 MW firing more than 40% natural gas	2			On or before [*Date of Adoption*]
Rating < 0.3 MW firing digester gas or digester gas with natural gas	9			On or before [*Date of Adoption*]
ENGINES FIRED ON DIGESTER GAS OR DIGESTER GAS BLEND				
EQUIPMENT CATEGORY	NOx (ppm)[2]	CO (ppm)[2]	VOC (ppm)[3]	COMPLIANCE DATE
Engines > 50 bhp	11	250	30	On or before [*Date of Adoption*]

1 All parts per million (ppm) emission limits are referenced at 3% volume stack gas oxygen on a dry basis.

2 All parts per million (ppm) emission limits are referenced at 15% volume stack gas oxygen on a dry basis.

3 Parts per million (ppm) by volume, measured as carbon, corrected to 15% oxygen on a dry basis.

(2) An owner or operator of a boiler firing digester gas and natural gas simultaneously shall comply with the digester gas emission limit specified in Table 1 when firing 10% natural gas or less. The natural gas percentage shall be calculated with the monthly natural gas and digester gas usage in the boiler, based on the higher heating values of the two fuels. If more than 10% natural gas is used , an owner or operator shall comply with the natural gas emission limits in Rule 1146 and Rule 1146.1, or a weighted average emission limit calculated by Equation 1 provided a non-resettable totalizing fuel flow meter is installed to measure the flow of each fuel used as approved by the Executive Officer.

$$\text{Weighted Average Limit} = \frac{(CL_A\ x\ Q_A)\ +\ (CL_B\ x\ Q_B)}{Q_{A+}\ Q_B} \quad \text{(Equation 1)}$$

Where: CL_A = compliance limit for digester gas
Q_A = heat input from digester gas
CL_B = compliance limit for natural gas pursuant to Rule 1146 and Rule 1146.1
Q_B = heat input from natural gas

(3) Averaging Times for Units with CEMS

(A) An owner or operator of a boiler shall meet the emission limits specified in Table 1 and paragraph (d)(2), if applicable, averaged over a fixed interval of 1 hour.

(B) An owner or operator of a turbine shall meet emission limits specified in Table 1 averaged over a rolling period of 1 hour.

(C) An owner or operator of an engine shall meet the emission limits specified in Table 1 averaged over one of the following interval periods:

(i) A fixed interval of 1 hour;

(ii) A fixed interval of 24 hours when meeting the emission limits at or below 11 ppmvd for NOx and 250 ppmvd for CO (if CO is selected for averaging), each corrected to 15% oxygen, with the emission limits and averaging time specified in the permit to operate for the engine that was established on or before November 1, 2019; or

(iii) A fixed interval of 48 hours when meeting the emission limits at or below 9.9 ppmvd for NOx and 225 ppmvd for CO (if CO is selected for averaging), each corrected to 15% oxygen, with emission limits and averaging time specified in the permit to operate for the engine.

(4) Startup and Shutdown

An owner or operator of a unit shall meet the following startup and shutdown requirements for that unit, if NOx, CO, or VOC is discharged into the atmosphere in excess of the limits specified in Table 1:

(A) An owner or operator shall not startup a boiler for a time period longer than is necessary for the proper operation of the emission control equipment. Startup or shutdown shall not exceed 6 six hours.

(B) An owner or operator shall not startup a turbine for a time period longer than is necessary for the proper operation of the emission control equipment. Startup or shutdown shall not exceed 30 minutes for turbines without SCR and shall not exceed 1 hour for turbines with SCR.

(C) An owner or operator of an engine shall meet the following startup and shutdown requirements:

(i) Startup shall not last longer than is necessary for the tuning of the engine or the proper operation of the emission control equipment. Startup or shutdown shall not exceed 30 minutes, unless the Executive Officer approves in writing a longer period, not exceeding 2 hours, and that period is specified by permit conditions;

(ii) Startup after an engine overhaul or major repair requiring removal of a cylinder head or for the installation or the replacement of catalytic emission control equipment shall not last longer than 4 operating hours; and

(iii) The commissioning of a new engine shall not exceed 150 operating hours.

(iv) The emission limits in Table 1 do not apply to the initial commissioning of a new engine for the period specified by permit conditions.

(5) An owner or operator of any turbine shall not burn liquid fuel.

(e) Source Testing

An owner or operator of a unit without CEMS, or an alternative monitoring system, shall meet the following source test requirements:

(1) An owner or operator of a unit shall conduct source tests for the following equipment and applicable pollutants in accordance with the schedule in Table 2.

TABLE 2
SOURCE TESTING SCHEDULE

Equipment Category	Frequency	Pollutant	Required Operating Time Prior to Conducting Source Test[1]
Boilers ≥ 10 MMBtu/hr	Every 3 years from the date the previous source test was required	NOx, CO	At least 250 operating hours or at least 30 days
Boilers < 10 MMBtu/hr and > 2 MMBtu/hr	Every 5 years from the date the previous source test was required		
Turbines emitting ≥ 25 tons NOx per year	Once every calendar year		None
Turbines emitting < 25 tons of NOx per year	Every 3 years from the date the previous source test was required		
Engines	Every 2 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due, or every 8,760 operating hours, whichever occurs first.[2]	NOx, CO, and VOC reported as carbon	At least 40 operating hours or at least 1 week

[1] Time that a unit must be in operation subsequent to any tuning or servicing, unless tuning or servicing is due to an unscheduled repair.

[2] Frequency may be reduced once every 3 years if the engine has operated less than 2,000 hours since the last source test. If the engine has not been operated before the date a source test is due, the source test shall be conducted by the end of 7 consecutive days or

15 cumulative days of resumed operation. An owner or operator of the engine shall keep sufficient operating records to demonstrate that it meets the requirements for extension of the source testing deadlines.

(2) No later than 60 days prior to a scheduled source test date, an owner or operator shall submit a source test protocol and receive written approval by the Executive Officer before conducting the test.

(A) If the scheduled source test cannot be conducted due to a delay in the approval of the source test protocol by the Executive Officer, the owner or operator shall conduct the source test within 90 days of the approval.

(B) An owner or operator shall submit subsequent protocols if an equipment alteration has resulted in a permit modification or emission limits have changed since the last source test, or at the request of the Executive Officer.

(3) An owner or operator shall include in the protocol the name, address and phone number of the unit operator and the South Coast AQMD-approved source testing contractor that will conduct the test, the application and permit number(s), emission limits, a description of the unit(s) to be tested, the test methods and procedures to be used, the number of tests to be conducted and under what loads.

(A) For engines, an owner or operator shall also include in the protocol the required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels, and a description of the parameters to be measured in accordance with the I&M plan.

(4) No later than 30 days prior to conducting a source test, an owner or operator shall notify the Executive Officer of the scheduled source test date. If a scheduled source test is delayed, an owner or operator shall notify the Executive Officer within 24 hours from the time that an owner or operator knew of the delay and provide a rescheduled date.

(5) An owner or operator shall conduct the source testing using a South Coast AQMD approved contractor under the Laboratory Approval Program according to the procedures in Table 3.

TABLE 3 SOURCE TESTING METHODS	
Pollutant	**Test Methods**

NOx	South Coast AQMD Test Methods 100.1 or 7.1
CO	South Coast AQMD Test Methods 100.1 or 10.1, or EPA Test Method 10
CO_2 and O_2	South Coast AQMD Test Method 3.1 or 100.1
VOC	South Coast AQMD Test Methods 25.1 or 25.3, excluding ethane and methane
Particulate Matter (PM)	South Coast AQMD Test Method 5.1, 5.2, or 5.3

(6) The approved contractor conducting the source test shall make emissions determinations in the as-found operating condition, except no compliance determination shall be made during startup, shutdown, or under breakdown conditions.

(A) For engines, the approved contractor shall conduct source testing for at least 30 minutes during normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is the normal operation. In addition, the approved contractor shall conduct source testing for NOx and CO emissions for at least 15 minutes at: an engine’s actual peak load, or the maximum load that can be practically achieved during the test; and at actual minimum load, excluding idle, or the minimum load that can be practically achieved during the test. These additional two tests are not required if the permit limits the engine to operating at one defined load, ±10 percent. The approved contractor shall not conduct any pre-tests for compliance. If an emission exceedance is found during any of the three phases of the test, that phase shall be completed and reported. An operator shall correct the exceedance, and the source test shall be immediately resumed.

(7) An owner or operator shall submit the completed source test to the Executive Officer within 60 days of completion.

(8) In lieu of conducting a source test, an owner or operator of boilers shall conduct periodic monitoring or testing as required in a Title V permit pursuant to Regulation XXX.

(f) CEMS

An owner or operator of the following equipment shall install, operate, and maintain in calibration a CEMS, or an equivalent verification system, that complies with Rules 218 and 218.1, or any applicable South Coast AQMD Rule for CEMS certification, operation, monitoring, reporting, and notification.

TABLE 4
UNITS REQUIRING CEMS

Equipment Type	Threshold	Pollutant(s)
Boilers	Rated heat input capacity > 40 MMBtu/hr and an annual heat input > 200 x 10^9 Btu per year	NOx
Turbines	Output capacity rating ≥ 2.9 MW	NOx
Engines	Output capacity rating ≥ 1000 bhp and operating more than 2 million bhp-hr per calendar year	NOx, CO
	Combined output capacity rating ≥1500 bhp and a combined fuel usage of >16 x 10^9 Btu per year (higher heating value) of engines at the same location[1]	

[1] Engines as of October 1, 2007, located within 75 feet of another engine (measured from engine block to engine block) are considered at the same location.

(1) For turbines, the CEMS shall measure the flowrate of gases and the ratio of water or steam to fuel added to the combustion chamber or to the exhaust for the reduction of NOx emissions, elapsed time of operation, and turbine output in MW.

(2) Engines

(A) A CO CEMS shall not be required for lean-burn engines.

(B) The following engines shall not be counted towards the combined rating of 1500 bhp or greater and combined fuel usage of more than 16 x 10^9 Btu per year (higher heating value) of engines at the same location:

(i) Engines rated at less than 500 bhp;

(ii) Standby engines that are limited by permit conditions to only operate when other primary engines are not operable;

(iii) Engines that are limited by and in compliance with permit conditions to operate less than 1000 hours per year or a fuel usage of less than 8×10^9 Btu per year (higher heating value of all fuels used);

(iv) Engines with an output capacity rating ≥1000 bhp and operating more than 2 million bhp-hr per calendar year required to have a CEMS; and

(v) Engines in compliance with permit conditions that limit the simultaneous use of the engines at the same location in a manner to limit the combined rating of all engines in simultaneous operation to less than 1500 bhp.

(C) In lieu of complying with the requirements in Table 4, an owner or operator of an engine 1000 bhp and greater and less than 1200 bhp, may alternatively comply with the Inspection and Monitoring (I&M) Plan requirements, pursuant to subdivision (g), provided an owner or operator conducts diagnostic emission checks at least weekly or every 150 operating hours, whichever occurs later.

(i) Upon written approval by the Executive Officer, an owner or operator shall implement the I&M plan as approved.

(ii) If the engine is found to exceed an applicable NOx or CO limit by a source test or a diagnostic emission check on 3 or more occasions in any 12-month period, an owner or operator shall comply with the CEMS requirements and shall submit a CEMS application to the Executive Officer within 6 months of the third exceedance and obtain final approval of the CEMS within 1 year of the initial approval.

(D) If an engine was initially exempt from CEMS by the thresholds in Table 4, and later exceeds that threshold, an owner or operator shall install CEMS on that engine. An owner or operator shall submit an application 6 months after the conclusion of the first 12-month period for which the engines exceeded 2 million bhp-hr per year, and shall obtain final approval for the CEMS within 1 year from the initial approval.

(E) An owner or operator may take an existing NOx CEMS out of service for up to two weeks (cumulative) in order to modify the CEMS to add CO monitoring.

(F) Notwithstanding the requirements of Rules 218 and 218.1, an owner or operator of an engine required to install a CEMS may:

(i) Store data electronically without a strip chart recorder, but there shall be redundant data storage capability for at least 15 days of data. An operator shall demonstrate that both sets of data are equivalent.

(ii) Conduct relative accuracy testing, as required by Rule 218.1 or 40 CFR Part 75 Subpart E, on the same schedule for source testing, as specified in Table 2, instead of annually. The minimum sampling time for each test is 15 minutes.

(G) An owner or operator of a new engine shall not install an engine farther than 75 feet from another engine unless the owner or operator demonstrates to the Executive Officer that operational needs or space limitations require it.

(H) An owner or operator of any new stationary engine issued a permit to construct after [*Date of Adoption*] shall comply with the applicable CEMS requirements of this subdivision or I&M plan requirements of subdivision (g) when operation commences. If applicable, an owner or operator shall provide the required information in the I&M plan to the Executive Officer prior to the issuance of the permit to construct so that the I&M procedures can be included. A separate I&M plan application is not required.

(g) An owner or operator of an engine shall comply with the following requirements for submitting Inspection and Monitoring (I&M) plans:

(1) An owner or operator of an engine without a NOx or CO CEMS shall submit to the Executive Officer an I&M plan for approval. One plan application is required for each facility that does not have a NOx and CO CEMS for each engine. If an engine has a NOx CEMS and does not have a CO CEMS, it is subject to this subdivision as it pertains to CO only. The I&M plan shall include all items listed in Attachment 1. An owner or operator may request an alternative item(s) in Attachment 1 that is determined by the Executive Officer to be equivalent in meeting the same objectives.

(A) Upon written approval by the Executive Officer, an owner or operator shall implement the I&M plan as approved.

(B) An owner or operator shall submit an I&M plan for approval to the Executive Officer for a plan revision before any change in I&M plan operations can be implemented. The operator shall apply for a plan revision prior to any change in emission limits or control equipment.

(C) An owner or operator of an engine subject to this rule shall submit an I&M plan within 3 months from [*Date of Adoption*].

(h) Diagnostic Emission Checks for Boilers and Engines

An owner or operator shall perform diagnostic emissions checks of NOx and CO emissions for pollutants not monitored by a CEMS, with a portable NOx, CO, and oxygen analyzer that is calibrated, maintained and operated in accordance with manufacturers specifications and recommendations and the South Coast AQMD Combustion Gas Periodic Monitoring Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Combustion Sources Subject to Rules 1110.2, 1146 and 1146.1. The portable analyzer diagnostic emission checks shall only be conducted by a person who has completed an appropriate South Coast AQMD-approved training program in the operation of portable analyzers and has received a certification issued by South Coast AQMD.

(1) Boilers

(A) For boilers greater than or equal to 5 MMBtu/hr, an owner or operator shall perform checks at least monthly or every 750 boiler operating hours, whichever occurs later. If a boiler is in compliance for 3 consecutive diagnostic emission checks, without any adjustments to the oxygen sensor set points, then the boiler may be checked quarterly or every 2,000 boiler operating hours, whichever occurs later, until the resulting diagnostic emission check exceeds the applicable limit.

(B) For boilers less than 5 MMBtu/hr and greater than 2 MMBtu/hr, an owner or operator shall perform checks at least quarterly or every 2,000 boiler operating hours, whichever occurs later. If a boiler is in compliance for 4 consecutive required diagnostic emission checks, without any adjustments to the oxygen sensor set points, then the boiler may be checked semi-annually or every 4,000 unit operating hours, whichever occurs later, until the diagnostic emission check exceeds the applicable limit.

(C) A diagnostic emission check that finds the emissions in excess of those allowed by this rule or a permit condition shall not constitute a violation of this rule if an owner or operator corrects the problem and demonstrates compliance with another emission check within 72 hours from the time an owner or operator knew of excess emissions, or reasonably should have known, or shutdown the boiler by the end of an operating cycle, whichever is sooner. Any diagnostic emission check conducted by South Coast AQMD staff that finds emissions in excess of those allowed by this rule or a permit condition is a violation.

(2) Engines

An owner or operator shall perform diagnostic emission checks at least weekly or every 150 hours, whichever occurs later. No engine or control system, maintenance or tuning, may be conducted within 72 hours prior to the diagnostic emission check, unless it is an unscheduled, required repair.

(A) If an engine is in compliance for 3 consecutive diagnostic emission checks, without any adjustments to the oxygen sensor set points, then the engine may be checked monthly or every 750 engine operating hours, whichever occurs later, until there is a noncompliant diagnostic emission check or, for rich-burn engines with a catalytic control device that simultaneously reduces emissions of NOx, CO, and VOC, until the oxygen sensor is replaced. When making adjustments to the oxygen sensor set points that are not within 72 hours prior to the diagnostic emission check, returning to a more frequent diagnostic emission check schedule is not required if the engine is in compliance with the applicable emission limits prior to and after the set point adjustments.

(B) For lean-burn engines that have a NOx CEMS, and that are subject to a CO limit more stringent than the 2000 ppmvd limit of Table 1, an owner or operator shall perform a CO diagnostic emission check at least quarterly, or every 2,000 engine operating hours, whichever occurs later.

(C) For lean-burn engines that have a NOx CEMS and that are not subject to a CO limit more stringent than the 2000 ppmvd limit of Table 1, diagnostic emission checks are not required.

(D) A diagnostic emission check that finds the emissions in excess of those allowed by this rule or a permit condition shall meet the requirements in subparagraph (k)(1)(A).

(i) Recordkeeping

An owner or operator shall keep all data monitoring records, including CEMS, source tests, and diagnostic emission checks, and all maintenance, service and tuning records on-site for 5 years. Records shall be made available to the Executive Officer upon request.

(1) Boilers

(A) An owner or operator shall maintain a daily operating log of the total hours of operation.

(B) An owner or operator of a boiler and using a weighted average emission limit as specified in paragraph (d)(2) shall maintain an operating log of the non-resettable totalizing fuel meter readings of digester gas and natural gas (cubic feet of gas). Records shall include the percentage of digester gas and natural gas usage, based on the higher heating value of the fuels used, on a monthly basis.

(2) Turbines

(A) An owner or operator shall maintain an operating log that includes total hours of operation, type of fuel used, fuel consumption (cubic feet of gas), cumulative hours of operation to date for the calendar year, and the actual start-up and shut-down times on a daily basis.

(B) For emission control systems used to comply with this rule, an owner or operator shall maintain daily records of system operation and maintenance that demonstrates continuous operation and compliance of an emission control device during periods of emission producing activities.

(3) An owner or operator of any engine shall maintain a monthly operating log that includes total hours of operation, type of fuel used, fuel consumption (cubic feet of gas), and cumulative hours of operation since the last source test.

(j) Other Requirements for Boilers

(1) An owner or operator shall not lower the rated heat input capacity of a boiler to less than or equal to 2 MMBtu/hr. The lowered rated heat input capacity

shall be based on manufacturer's identification or rating plate or permit condition.

(2) Boilers ≤ 2 MMBtu/hr

(A) An owner or operator shall perform maintenance in accordance with the manufacturer's schedule and specifications as identified in a manual and other written materials supplied by the manufacturer or distributor. The owner or operator shall maintain on site a copy of the manufacturer's and/or distributor's written instructions and retain a record of the maintenance activity for a period of 3 years.

(B) An owner or operator shall maintain on site a copy of all documents identifying the boiler's rated heat input capacity. The rated heat input capacity shall be identified by a manufacturer's or distributor's manual or invoice. The documentation of rated heat input capacity for modified boilers shall include a description of all modifications, the dates the boiler was modified and calculation of rated heat input capacity. All documentation shall be signed by the licensed person modifying the boiler.

(i) If a boiler is modified, the rated heat input capacity is the gross heat input, calculated by the maximum fuel input corrected for fuel heat content, temperature, and pressure.

(k) Other Requirements for Engines

(1) Requirements for responding to, diagnosing and correcting breakdowns, faults, malfunctions, alarms, diagnostic emission checks finding emissions in excess of rule or permit limits, and parameters out-of-range.

(A) For any diagnostic emission check or breakdown that results in emissions in excess of those allowed by this rule or a permit condition, an owner or operator shall correct the problem as soon as possible and demonstrate compliance with another diagnostic emission check, or shutdown an engine by the end of an operating cycle, or within 24 hours from the time the owner or operator knew of the breakdown or excess emissions, or reasonably should have known, whichever is sooner.

(B) For excess emissions due to breakdowns that result in NOx or CO emissions greater than the concentrations specified in Table 5, an owner or operator shall not be considered in violation of this rule if the operator demonstrates the all of the following: (1) compliance with subparagraph (k)(1)(A), (2) compliance with the reporting requirements of paragraph (k)(3), and (3) the engine with excess emissions has no more than 3 incidences of breakdowns with emissions exceeding Table 5 limits in the calendar quarter.

TABLE 5
EXCESS EMISSION CONCENTRATION THRESHOLDS FOR BREAKDOWNS

Equipment Category	NOx (ppmvd)[1]	CO (ppmvd)[1]
Lean-Burn Engines	45	250
Rich-Burn Engines	150	2000
Biogas Engines[2]	185	2000

[1] Corrected to 15% oxygen

[2] Effective up to the time of compliance with the limits specified in Table 1, after which the thresholds revert to the applicable lean- or rich-burn engine limits.

(C) Any emission check conducted by South Coast AQMD staff that finds excess emissions will be treated as a violation.

(D) For other problems, such as parameters out-of-range, an owner or operator shall correct the problem and demonstrate compliance with another diagnostic emission check within 48 hours of the owner or operator first knowing of the problem.

(2) An owner or operator shall maintain an operational non-resettable totalizing time meter to determine the engine elapsed operating time.

(3) An owner or operator of a spark-ignited engine without a Rule 218-approved CEMS shall maintain the air-to-fuel ratio controller and oxygen sensor and feedback control system, or other equivalent technology approved by the Executive Officer, CARB, and EPA.

(4) Reporting Requirements

(A) An owner or operator shall report to the Executive Officer, by telephone (1-800-CUT-SMOG or 1-800-288-7664) or other South

Coast AQMD-approved method, any breakdown resulting in emissions in excess of rule or permit emission limits within 1 hour of such noncompliance or within 1 hour of the time the owner or operator knew or reasonably should have known of its occurrence. Such report shall identify the time, specific location, equipment involved, responsible party to contact for further information, and to the extent known, the causes of the noncompliance, and the estimated time for repairs. In the case of emergencies that prevent a person from reporting all required information within the 1-hour limit, the Executive Officer may extend the time for the reporting of required information provided the owner or operator has notified the Executive Officer of the noncompliance within the 1-hour limit.

(B) Within 7 calendar days after the reported breakdown has been corrected, but no later than 30 calendar days from the initial date of the breakdown, unless an extension has been approved in writing by the Executive Officer, an owner or operator shall submit a written breakdown report to the Executive Officer which includes:

(i) An identification of the equipment involved in causing, or suspected of having caused, or having been affected by the breakdown;

(ii) The duration of the breakdown;

(iii) The date of correction and information demonstrating that compliance is achieved;

(iv) An identification of the types of excess emissions, if any, resulting from the breakdown;

(v) A quantification of the excess emissions, if any, resulting from the breakdown and the basis used to quantify the emissions;

(vi) Information substantiating whether the breakdown resulted from operator error, neglect or improper operation or maintenance procedures;

(vii) Information substantiating that steps were immediately taken to correct the condition causing the breakdown, and to minimize the emissions, if any, resulting from the breakdown;

(viii) A description of the corrective measures undertaken and/or to be undertaken to avoid such a breakdown in the future; and

(ix) Pictures of any equipment which failed, if available.

(C) Within 15 days of the end of each calendar quarter, an owner or operator shall submit to the Executive Officer a report that lists each occurrence of a breakdown, fault, malfunction, alarm, engine or control system operating parameter out of the acceptable range established by an I&M plan or permit condition, or a diagnostic emission check that finds excess emissions. Such report shall be in a South Coast AQMD-approved format, and for each incident shall identify the time of the incident, the time the operator learned of the incident, specific location, equipment involved, responsible party to contact for further information, to the extent known the causes of the event, the time and description of corrective actions, including shutting an engine down, and the results of all portable analyzer NOx and CO emissions checks done before or after the corrective actions. An owner or operator shall also report if no incidents occurred.

(l) Exemptions

(1) The emission limits in Table 1 of this rule do not apply to any boiler 5 MMBtu/hr or greater in operation prior to September 5, 2008 with an annual heat input of less than or equal to 9.0×10^9 Btu per year. An owner or operator of such boiler shall comply with the applicable provisions in Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters.

(2) An owner or operator of any turbine $\geq$ 0.3 MW claiming any of the following exemptions shall provide verification of meeting the applicable criteria. All records shall be kept on-site for 5 years and made available to South Coast AQMD staff upon request.

(A) The provisions of this rule shall not apply to turbines operated exclusively for firefighting and/or flood control.

(B) A turbine that operates only as a power source for a facility when the primary power source has been rendered inoperable, except it may not be used for power interruption pursuant to an interruptible power supply agreement, shall not be subject to the provisions of this rule, provided that an owner or operator:

(i) Installs and maintains in proper operation a non-resettable engine hour meter;

(ii) Maintains an operating log that includes, on a daily basis, the total hours of operation, type and quantity of fuel used, cumulative hours of operation to date for the calendar year, and the actual startup and shutdown times; and

(iii) Demonstrates a usage of less than 200 hours of operation per calendar year.

(C) If the hour-per-year limit in clause (l)(2)(B)(iii) is exceeded, the exemption shall be automatically and permanently withdrawn, and the owner or operator shall:

(i) Notify the Executive Officer within 7 days of the date the hour-per-year limit is exceeded; and

(ii) Within 30 days after the date the hour-per-year limit is exceeded, submit a permit application for modification to equipment to meet the applicable compliance limit within 24 months of the date the hour-per-year limit is exceeded. Included with this permit application, an owner or operator shall submit an emission control plan including a schedule of increments of progress for the installation of the required control equipment. This plan shall be subject to the review and approval of the Executive Officer.

(3) An owner or operator of a boiler or engine firing 100 percent natural gas, shall comply with the following rules:

(A) For boilers, Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters, Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, and Rule 1146.2 – Emission of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters.

(B) For engines, Rule 1110.2 – Emission from Gaseous- and Liquid-Fueled Engines

(4) This rule does not apply to engines that operate 200 hours or less per year provided that an owner or operator:

(A) Installs and maintains in proper operation a non-resettable engine hour meter; and

(B) Maintains an operating log that includes cumulative hours of operation to date for the calendar year.

(5) This rule does not apply to any turbine < 0.3 MW that was in operation prior to May 3, 2013.

(6) The emission limits in Table 1 do not apply to any boiler ≤ 2 MMBtu/hr without a NOx concentration limitation specified in the permit.

ATTACHMENT 1

An I&M Plan submitted to the Executive Officer for approval and implementation shall include:

A. Identification of engine and control equipment operating parameters necessary to maintain pollutant concentrations within the rule and permit limits. This shall include, but not be limited to:

1. Procedures for using a portable NOx, CO and oxygen analyzer to establish the set points of the air-to-fuel ratio controller (AFRC) at 25%, 60%and 95% load (or fuel flow rate), ± 5%, or the minimum, midpoint and maximum loads that actually occur during normal operation, ± 5%, or at any one load within the ± 10% range that an engine permit is limited to in accordance with (h)(2)(C)(ii) of the rule;
2. Procedures for verifying that the AFRC is controlling the engine to the set point during the daily monitoring required by subdivision D of this attachment;
3. Procedures for reestablishing all AFRC set points with a portable NOx, CO and oxygen analyzer whenever a set point must be readjusted, within 24 hours of an oxygen sensor replacement, and, for rich-burn engines with a catalytic control device that simultaneously reduces emissions of NOx, CO, and VOC, between 100 and 150 engine operating hours after an oxygen sensor replacement;
4. For engines with catalysts, the maximum allowed exhaust temperature at the catalyst inlet, based on catalyst manufacturer specifications;
5. For lean-burn engines with SCR, the minimum exhaust temperature at the catalyst inlet required for reactant flow (ammonia or urea), and procedures for using portable NOx and oxygen analyzer to establish the acceptable range of reactant flow rate, as a function of load.

Parameter monitoring is not required for diesel engines without exhaust gas recirculation and catalytic exhaust control devices.

B. Procedures for alerting the operator to emission control malfunctions. Engine control systems, such as air-to-fuel ratio controllers, shall have a malfunction indicator light and audible alarm.

C. Procedures for diagnostic emission checks conducted by a portable NOx, CO, and oxygen analyzer per the requirements of clause (h)(2)(D)(ii) of the rule.

D. Procedures for at least daily monitoring, inspection and recordkeeping of:

   1. engine load or fuel flow rate;
   2. the set point, maximums and acceptable ranges of the parameters identified by subdivision A of this attachment, and the actual values of the same parameters;
   3. the engine elapsed time meter operating hours;
   4. the operating hours since the last diagnostic emission check required by clause (h)(2)(D)(ii) of the rule;
   5. for rich-burn engines with three-way catalysts, the difference of the exhaust temperatures (ΔT) at the inlet and outlet of the catalyst (changes in the ΔT can indicate changes in the effectiveness of the catalyst);
   6. engine control system and AFRC system faults or alarms that affect emissions.

   The daily monitoring and recordkeeping may be done in person by the operator, or by remote monitoring.

E. Procedures for responding to, diagnosing and correcting breakdowns, faults, malfunctions, alarms, diagnostic emission checks finding emissions in excess of rule or permit limits, and parameters out-of-range, per the requirements of clause (h)(2)(D)(iii) of the rule.

F. Procedures and schedules for preventative and corrective maintenance.

G. Procedures for reporting noncompliance to the Executive Officer in accordance with subparagraph (h)(2)(H) of the rule.

H. Procedures and format for the recordkeeping of monitoring and other actions required by the plan.

APPENDIX B

Operational Emissions Assumptions and Calculations

Operational Emissions Assumptions and Calculations

Mobile Source Emissions for Operation

Activity	Trip Distance (miles)	CO2 Emissions (lb/mile)	Number Trips/yr	CO2 Emissions (lb/yr)	CO2 Emissions (MT/yr)
Source Test Trips - Passenger Auto	40	1.93	2.00	154.40	0.07
Source Test Trips - Medium Duty Truck	40	0.79	2.00	63.20	0.03
Total				217.60	0.10

CO2 emission factors obtained from EMFAC 2017

Onroad Vehicles, VMT + Fuel Usage

Phase	Activity	Description	Trip Distance (miles)	Number Trips/yr	VMT	Fuel Type	MPG	Gallons Fuel	Peak Day Trips
	Source Test Trips - Passenger Auto	10 Source Tests (5 per facility)	40	2.0	80.0	Gas	21	4	2
	Source Test Trips - Medium Duty Truck	10 Source Tests (5 per facility)	40	2.0	80.0	Diesel	10	8	2
	Total VMT				160				4

Fuel Usage = VMT / MPG

EMFAC 2017 Emission Factors (lbs/mile)

Vehicle Type	-	VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4
Light Duty Auto	-	0.000440	0.004682	0.002427	0.000019	0.000388	0.000244	1.927986	0.000042
Medium Duty/ Delivery	-	0.000392	0.000299	0.003638	0.000008	0.000104	0.000044	0.789383	0.000041

Mobile Emissions (lbs/trip)

Trip Type	Miles	VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	CO2e
One Light Duty Auto Worker Trip - Source Testing	40	0.018	0.187	0.097	0.001	0.016	0.010	77.119	0.002	77.161
One Medium Duty Source Testing Trip	40	0.016	0.012	0.146	0.000	0.004	0.002	31.575	0.002	31.617

Calculations
Mobile Emissions = Emission Factor * Miles
CO2e = CO2 + 25*CH4

APPENDIX C

PR 1179.1 List of Affected Facilities

Appendix C: PR 1179.1 List of Affected Facilities

Facility ID	Facility Name	Facility Address	On List per Government Code 65962.5	Distance from School (meters)	Distance from Sensitive Receptor (meters)	Located Within Two Miles of an Airport?
1179	Inland Empire Utilities Agency Water Reclamation Facility Regional Plant #2	16400 El Prado Rd, Chino 91710	No	1370	694	Yes
1703	Eastern Municipal Water District	42565 Avenida Alvarado, Temecula 92590	No	2090	928	No
2537	Corona City, Department of Water & Power	2205 Railroad St, Corona 92880	No	1870	1190	Yes
3513	Irvine Ranch Water District	3512 Michelson Dr., Irvine 92612	No	1530	649	Yes
3866	South Orange County Wastewater Authority	34156 Del Obispo St., Dana Point 92629	No	410	45	No
5756	Redlands Wastewater Treatment Plant	1950 Nevada St., Redlands 92373	No	1450	1800	Yes
7417	Eastern Municipal Water District	1301 Case Rd., Perris 92570	No	1770	896	Yes
9163	Inland Empire Utilities Agency	2662 E. Walnut St., Ontario 91761	Yes	419	5	Yes
9961	Riverside Water Quality Control Plant	5950 Acorn St., Riverside 92504	No	812	589	Yes
10198	Valley Sanitary District	45-500 Van Buren St., Indio 92201	No	882	587	No
10245	Terminal Island Water Reclamation Plant	445 Ferry St., San Pedro 90731	Yes	2010	1260	No
11301	San Bernardino Water Reclamation Facility	399 Chandler Pl., San Bernardino 92408	No	1620	344	Yes
12923	Rialto City	501 E Santa Ana Ave., Bloomington 92316	No	2690	1740	No
13088	Eastern Municipal Water District	17140 Kitching St., Moreno Valley 92551	No	686	72	Yes
13433	South Orange County Wastewater Authority-Regional Treatment Plant	29200-01 La Paz Rd., Laguna Niguel 92677	No	622	255	No
17301	Orange County Sanitation District	10844 Ellis Ave., Fountain Valley 92708	No	413	234	No
19159	Eastern Municipal Water District	770 N Sanderson Ave., San Jacinto 92582	No	1090	648	No
20237	San Clemente City, Wastewater Division	380 Avenida Pico, San Clemente 92672	No	593	53	No
20252	Banning City Waste Water Treatment Plant	2242 E Charles St., Banning 92220	No	2180	378	Yes
22674	Los Angeles County Sanitation District Valencia Plant	28185 The Old Rd., Valencia 91355	No	2650	1430	No
29110	Orange County Sanitation District	22212 Brookhurst St., Huntington Beach 92646	No	598	38	No
50402	Yucaipa Valley Water District	880 W County Line Rd., Yucaipa 92399	No	2230	698	No
51304	Santa Margarita Water District	26111 Antonio Pkwy., Rancho Santa Margarita, 92688	No	800	800	No
94009	Las Virgenes	3700 Las Virgenes Rd., Calabasas 91302	No	730	185	No
111176	Western Riverside County Regional Wastewater Authority	14634 River Rd., Corona 92880	No	747	37	Yes
118526	Western Municipal Water District	22751 Nandina Ave., Riverside 92518	No	2550	1020	Yes
147371	Inland Empire Utilities Agency	6063 Kimball Ave., Chino 91710	No	1020	410	Yes
181040	Santa Margarita Water District - 3A Treatment Plant	26801 Camino Capistrano, Laguna Niguel, 92677	No	2800	370	No
800214	Hyperion Water Reclamation Plant	12000 Vista Del Mar, Playa Del Rey 90293	No	668	100	Yes
800236	Los Angeles County Joint Water Pollution Control Plant	24501 S. Figueroa St., Carson 90745	No	822	232	No

Appendix C: NAICS Codes for PR 1179.1 Affected Industry

NAICS Code	Description of Industry
221320	Sewage Treatment Facilities