Ventura County
Air Pollution
Control District

4567 Telephone Rd
Ventura, California 93003

tel 805/303-4005
fax 805/456-7797
www.vcapcd.org

Ali Reza Ghasemi, PE
Air Pollution Control Officer

# Permit to Operate 01137 - R08



Valid: 10/01/2023 to 09/30/2024

THIS PERMIT HAS BEEN ISSUED TO THE FOLLOWING:

COMPANY NAME AND ADDRESS:

c/o City of Oxnard - Wastewater Division
6001 S. PERKINS RD
OXNARD, CA 93033

FACILITY NAME AND ADDRESS:

Oxnard Wastewater Treatment Plant
6001 S. PERKINS RD
OXNARD, CA 93033

EQUIPMENT DESCRIPTION:

Permission is hereby granted to operate the equipment listed at the end of this permit in Table A.

1. THIS PERMIT HAS BEEN ISSUED SUBJECT TO THE FOLLOWING PERMITTED EMISSIONS (PURSUANT TO RULE 29.B):

| Permitted Emission | Tons/Year | Pounds/Hour |
|---|---|---|
| Reactive Organics | 9.76 | 6.75 |
| Nitrogen Oxides | 15.23 | 27.48 |
| Particulate Matter | 1.13 | 1.56 |
| Sulfur Oxides | 2.54 | 1.73 |
| Carbon Monoxide | 140.99 | 68.14 |
| Chlorine | 0.75 | 0.52 |
| Hydrogen Sulfide | 9.47 | 2.16 |

Note: Because of rounding, values in these tables shown as 0.00 are less than 0.005, but greater than zero.

THIS PERMIT HAS BEEN ISSUED SUBJECT TO THE FOLLOWING CONDITIONS:

2. Annual fuel consumption in the Caterpillar internal combustion engine , the Waukesha internal combustion engines, and the Varec Waste Gas Burners shall not exceed the following:

   a) Total natural gas consumption in the 500 HP Caterpillar internal combustion engine (Engine No. 3) shall not exceed 2.5million cubic feet per year.



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City of Oxnard Wastewater
6001 S. Perkins Rd. Oxnard, CA 93033-9047

Final Issue Date: 10/20/2023

b) Total digester waste gas consumption in the three (3) 800 HP Waukesha internal combustion engines (Engine Nos. E7610.00, E7710.00, & E7810.00) shall not exceed 155.00 million cubic feet per year.

c) Incineration of digester gas in the Varec Waste Gas Burners shall not exceed 146.0 million cubic feet per year.

In order to comply with this condition, permittee shall maintain and operate meters to measure and record gas consumption. The meters shall be operated and calibrated according to manufacturer's specifications. The gas meter records shall be summed on a monthly basis. The monthly totals shall be summed for the previous twelve calendar (12) months. Gas consumption totals for any twelve (12) calendar month rolling period in excess of the above limits shall be considered a violation of this condition.

3. Prior to exceeding any of the above limits, permittee shall submit an application to the APCD to increase those limits. Any request to increase fuel use in the 500 HP Caterpillar internal combustion engine (Engines No. 3) shall be subject to APCD Rule 26.

4. Permittee shall comply with APCD Rule 74.9, "Stationary Internal Combustion Engines". This includes, but is not limited to, the following permit conditions.

5. Pursuant to Rule 74.9.F, Reporting Requirements, within 45 days of the end date of each permit renewal period, the operator of a permitted engine subject to the provisions of the rule shall provide the District with the following information:

   a) Engine manufacturer, model number, operator identification number and location of each engine.

   b) A summary of maintenance reports during the renewal period, including quarterly screening data if applicable.

   For each engine exempt pursuant to Subsection D.2, total annual operating hours shall be reported annually. For each engine exempt pursuant to subsection D.3, total annual hours of maintenance operaton shall be reported annually. Reports shall be provided to the District after every calendar year by February 15.

6. Emissions of oxides of nitrogen (NOx) from the 500 HP Caterpillar internal combustion engine (Engines No. 3) shall not exceed 25 parts per million (ppmv) as corrected to 15% oxygen.

7. Emissions of oxides of nitrogen (NOx) from each of the three (3) 800 HP Waukesha internal combustion engines (Engines Nos. E7610.00, E7710.00, & E7810.00) shall not exceed 50 parts per million (ppmv) as corrected to 15% oxygen. This condition is applied for APCD Rule 74.9.B.1 compliance. As of January 1, 1997, the NOx limits are 25 parts per million (ppmv) as corrected to 15% oxygen for rich burn engines fired on natural gas and 50 parts per million (ppmv) as corrected to 15% oxygen for rich burn engines fired on waste gas. As detailed in VCAPCD Rule 74.9.I.11, waste gas is defined as fuel gas produced at either waste water/sewage treatment facilities or landfills containing no more than 25 percent by volume supplemental gas.

8. Emissions from each engine shall not exceed 4500 ppm carbon monoxide, as corrected to 15% oxygen, pursuant to APCD Rule 74.9.B.1.

9. Emissions from each engine shall not exceed 250 ppm reactive organic compounds, as corrected to 15% oxygen, pursuant to APCD Rule 74.9.B.1.

10. In order to comply with the engine emission Conditions, permittee shall perform a source test every 24 months as required by VCAPCD Rule 74.9. In addition, the NSCR system on the Caterpillar engines shall be maintained and operated with a minimum temperature rise across the catalyst of 15 degrees Fahrenheit.

11. Hydrogen Sulfide emissions from the Odor Reduction Tower shall not exceed 5 ppm by volume at the solids thickener as measured by a continuous Hydrogen Sulfide analyzer.

12. Hydrogen Sulfide emissions from the Odor Reduction Station shall not exceed 4 ppm by volume at the Solids Processing Building as measured by a continuous Hydrogen Sulfide analyzer.

13. Hydrogen sulfide emissions from the 25,000 CFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities shall not exceed 3 ppm by volume. The chlorine concentration at the outlet of the 25,000 CFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities shall not exceed 0.1 ppm by volume. This condition is applied pursuant to Rule 51, "Nuisance"; and Rule 54, "Sulfur Compounds".

    In order to comply with this condition, permittee shall maintain the control system parameters (i.e., pH of scrubbing solution, ORP of the scrubbing solution, pressure drop across the control system, and space velocity through the control system) at values that ensure that the above hydrogen sulfide and chlorine concentrations are not exceeded.

    Permittee shall be granted up to 14 calendar days per year to conduct scheduled repair and maintenance on the 25,000 CFM US Filter LO/PRO Odor control system as allowed in the original equipment manufacturer maintenance specifications. During scheduled repair and maintenance, Permittee shall reduce any excess emissions to the maximum extent feasible and will not exceed toxic concentrations (OSHA allowed exposure Level for H2S is 10 ppm over an 8-hour exposure). Permittee will schedule annual repair and maintenance during the most favorable ambient weather conditions for the prevention of odors and public nuisance. Permittee shall notify the APCD if any unforeseen issues or repairs that are necessary. Permittee shall be exempt from continuous H2S emissions monitoring in the LO/PRO Odor control system (i.e. Scrubber) throughout the duration of the scheduled repair and maintenance, however Permittee shall retain the obligation to comply with Rule 51, "Nuisance" and all other local, state and federal regulations not specifically referenced in this permit. Permittee shall provide the following information:

    a) Seventy-two hours prior to the start of the scheduled repair and maintenance project, Permittee shall notify the District via phone (805) 303-3700 or email notifications@vcapcd.org. Please

provide date/time of scheduled repair and maintenance, subject permit number, list of emission units involved and provide facility contact information.

b) Permittee will be required to maintain recordkeeping that includes dates and times of scheduled repair and maintenance. This recordkeeping shall be maintained for two years and provided to the District upon request.

Permittee, upon request of the District, shall conduct testing to ascertain the hydrogen sulfide and chlorine emissions from the 25,000 CFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities, using APCD approved methods.

14. Permittee shall install and maintain a continuous hydrogen sulfide analyzer at the outlet of the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities to monitor the hydrogen sulfide concentration in ppm by volume at the outlet of the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities. The analyzer shall be installed, operated, and calibrated according to the manufacturer's specifications. This condition is applied to ensure compliance with Rule 51, "Nuisance"; and Rule 54, "Sulfur Compounds".

15. Permittee shall install and maintain pH and ORP (oxidation reduction potential) measuring and monitoring devices to measure and record the pH and ORP of the scrubbing solution in the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities. Permittee shall also install and maintain pressure monitoring devices to monitor the pressure drop across the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks. All devices shall be installed, operated, and calibrated according to the manufacturer's specifications. This condition is applied to ensure compliance with the requirements of Rule 51, "Nuisance"; and Rule 54, "Sulfur Compounds".

16. The stack height of the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities shall be no less than 9 meters (29.5 feet). The stack diameter of at the outlet of the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities shall not exceed 0.9 meters (2.95 feet). The stack gas exit velocity from the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities shall be no less than 18.5 meters per second (60.7 feet per second). This condition is applied pursuant to Rule 51, "Nuisance"; and pursuant to Rule 54, "Sulfur Compounds".

17. All operations shall comply with the requirements of Rule 51, "Nuisance".

18. All equipment shall be maintained and operated in a manner that ensures compliance with all applicable Rule and permit conditions.

19. Permittee shall maintain records showing, for the 25,000 SCFM US Filter LO/PRO Odor Control System three-stage absorption system controlling the Headworks Facilities, on a monthly basis, a log of operating time for the control system, and monitoring equipment; records of the readings from the

monitoring equipment showing the pressure drop across the control system; records of the readings from the monitoring equipment showing the hydrogen sulfide concentrations, pH of the scrubbing solution in the control system, and ORP of the scrubbing solution in the control system; and a log for the control system and monitoring equipment detailing all routine and non-routine maintenance performed. All records shall be compiled into monthly reports and shall be made available to APCD personnel upon request. All records shall be retained for at least two years and shall be made available to APCD personnel upon request.

20. The Hydrogen Sulfide analyzers shall comply with APCD Rule 103, "Continuous Monitoring Systems". The Hydrogen Sulfide analyzers shall be maintained in good working order at all times.

    Violations of the Hydrogen Sulfide emissions limits and malfunctions are subject to the recordkeeping and reporting requirements of Sections B.1, B.2, and B.4 of APCD Rule 103; and are subject to the requirements of APCD Rule 32, "Breakdowns", as are all other air pollution related breakdowns at the plant.

    Analyzer outputs shall be continuously recorded on strip charts, or shall be recorded using an electronic data acquisition/storage system. Records or strip charts shall be maintained on site for at least two years and shall be made available to APCD personnel upon request.

21. When sodium hypochlorite is used, chlorine emissions from the Odor Reduction Station (Solids Processing Building Odor Reduction Station) shall not exceed 2 ppm by volume. Scrubber drain pH shall be maintained between 8.0 and 9.0 to ensure compliance with this requirement. Operation of the Solids Processing Building Odor Reduction Station using sodium hypochlorite shall be limited to 2562 hours per year. In order to demonstrate compliance with this condition, the permittee shall maintain records of the hours of operation when using sodium hypochlorite and upon the request of the District, shall measure the chlorine emissions from the Odor Reduction Station (Solids Processing Building Odor Reduction Station).

22. Under no circumstances shall raw digester gas be vented to the atmosphere without prior approval from the APCD. All digester gas produced at the plant shall be flared, or disposed of in an alternative manner approved by the APCD.

23. Hydrogen Sulfide content of produced digester gas shall not exceed 100 ppm.

24. Hydrogen Sulfide content and heat content of the produced digester gas (in grains/100 cu. ft.) shall be determined by analytical means every 6 months, by an independent laboratory or the laboratory at the City of Oxnard Wastewater Treatment Facility, with results kept on file for inspection by APCD personnel for at least 2 years.

25. Annual hours of operation for maintenance and testing of each emergency engine shall not exceed 20 hours per year, except for the 2172 BHP and 636 BHP Caterpillar Emergency Engines, which shall not exceed 50 hours per year. This limit does not include emergency operation when electrical line service has failed. When not being operated for maintenance or testing, the emergency engine shall only be used during a failure or loss of all or part of normal electrical power service to the facility.

This condition is applied pursuant to the California ARB Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines.

In order to comply with this condition, the engine shall be equipped with a non-resettable hour meter and the permittee shall maintain a log that differentiates operation during maintenance and testing from emergency operation. These records shall be compiled into a monthly total. The monthly operating hour records shall be summed for the previous 12 months. Total operating hours for any of these 12 month periods, excluding emergency operation, in excess of the specified annual limit shall be considered a violation of this condition.

26. The emergency diesel engine(s) shall be operated in compliance with all applicable requirements of the California ARB Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines, Section 93115 through 93115.15, Title 17, California Code of Regulations. This includes, but is not limited to, the following permit conditions.

27. Pursuant to Section 93115.5(b) of the ATCM for Stationary Compression Ignition Engines, effective January 1, 2006, no owner or operator of an in-use emergency standby stationary diesel-fueled engine shall add to the engine or any fuel tank directly attached to the engine any fuel unless the fuel is CARB diesel fuel or another fuel that meets the requirements of Section 93115.5(b) of the ATCM.

28. The 431 BHP John Deere Emergency Standby Diesel Engine (portable - used within facility) shall comply with all applicable requirements of the California Air Resources Board's "Airborne Toxic Control Measure For Diesel Particulate Matter From Portable Engines Rated At 50 Horsepower And Greater." This ATCM regulation requires that all portable in-use diesel-fueled engines shall be certified to meet a federal or California standard for newly manufactured nonroad engines pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulations (that is, certified to Tier 1, 2, 3, or 4 nonroad engine standards).

29. Pursuant to Rule 74.9.D.3, an emergency engine is exempt from Rule 74.9, "Stationary Internal Combustion Engines", provided that it is operated during either an emergency or maintenance operation. Maintenance operation is limited to 50 hours per calendar year and is defined as "the use of an emergency standby engine and fuel system during testing, repair, and routine maintenance to verify its readiness for emergency standby use".

30. Permittee shall maintain records for the Hydrogen Sulfide analyzers on the Odor Reduction Tower and the Odor Reduction Station. Permittee shall maintain records of the hours of operation of the Solids Processing Building Odor Reduction Station when using sodium hypochlorite. Such records shall include the date and time. These records shall be compiled on a monthly basis. The compiled records shall be maintained for at least two years and shall be made available to APCD personnel upon request.

31. Permittee shall maintain records as required by VCAPCD Rule 74.9.E, and the monthly fuel consumption and hours of operation (when applicable) of the internal combustion engines. Permittee shall also maintain records showing the amount of digester gas produced and the disposition of this

gas (amount expended to engines; amount expended to flare). All records shall be compiled into monthly reports and shall be maintained for at least two years.

32. A log of engine operation for the emergency engine shall be maintained based on readings from a non-resettable hour meter. The log shall differentiate operation during maintenance and testing from operation during an emergency. The hours of operation shall be totaled on a monthly basis and shall be summed for the previous 12 months.

    This data shall be maintained for a minimum of three (3) years from the date of each entry and shall be made available to the APCD upon request.

33. On and after October 19, 2013, the 500 BHP Caterpillar Effluent Pump Natural Gas Engine shall comply with 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP). This includes, but is not limited to, the following requirements for non-emergency 4 stroke rich burn spark ignited engines rated at less than or equal to 500 BHP that commenced construction before June 12, 2006:

    Pursuant to 40 CFR Part 63.6603, Table 2d, the permittee shall meet the following requirements:

    a) Change oil and filter every 1,440 hours of operation, or annually, whichever comes first. Permittee shall have the option to utilize an oil analysis program as described in 40 CFR Part 63.6625(i) in order to extend the specified oil change requirement; and

    b) Inspect spark plugs every 1,440 hours of operation, or annually, whichever comes first, and replace as necessary; andInspect all hoses and belts every 1,440 hours of operation, or annually, whichever comes first, and replace as necessary.

    During periods of startup, the permittee shall minimize the RICE time spent at idle and minimize the RICE startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. The permittee shall operate and maintain the RICE and after-treatment control device (if any) according to the manufacturer's emission related instructions, or the permittee's own operation and maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

    The permittee shall keep the records of RICE maintenance (oil, spark plugs, hoses and belts) required by the RICE operation and maintenance plan. The hours of operation records and maintenance records shall be maintained for 5 years following the date of each occurrence and shall be made available to the APCD upon request.

34. On and after October 19, 2013, the three 800 BHP Waukesha Electrical Generator Waste Gas Engines shall comply with 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP). This includes, but is not limited to, the following requirements for non-emergency spark ignited engines fired on landfill gas or digester gas that commenced construction before June 12, 2006:

Pursuant to 40 CFR Part 63.6603, Table 2d, the permittee shall meet the following requirements:

Change oil and filter every 1,440 hours of operation, or annually, whichever comes first. Permittee shall have the option to utilize an oil analysis program as described in 40 CFR Part 63.6625(i) in order to extend the specified oil change requirement; and

Inspect spark plugs every 1,440 hours of operation, or annually, whichever comes first, and replace as necessary; and

Inspect all hoses and belts every 1,440 hours of operation, or annually, whichever comes first, and replace as necessary.

During periods of startup, the permittee shall minimize the RICE time spent at idle and minimize the RICE startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. The permittee shall operate and maintain the RICE and after-treatment control device (if any) according to the manufacturer's emission related instructions, or the permittee's own operation and maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

The permittee shall keep the records of RICE maintenance (oil, spark plugs, hoses and belts) required by the RICE operation and maintenance plan. The hours of operation records and maintenance records shall be maintained for 5 years following the date of each occurrence and shall be made available to the APCD upon request.

Note that for the purposes of the RICE NESHAP, the subject engine(s) shall combust no less than 10% landfill gas or digester gas of the gross heat input on an annual basis.

35. The following condition regarding the RICE NESHAP applies to the following "existing" emergency diesel engines:

    a) Two 2250 General Motors

    b) 2172 BHP Caterpillar

    c) 263 BHP Caterpillar

    d) 139 BHP John Deere

    On and after May 3, 2013, these engines shall comply with 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP). This includes, but is not limited to, the following requirements for emergency compression ignition engines that commenced construction before June 12, 2006:

    Pursuant to 40 CFR Part 63.6603, Table 2d, the permittee shall meet the following requirements:

Change oil and filter every 500 hours of operation, or annually, whichever comes first. Permittee shall have the option to utilize an oil analysis program as described in 40 CFR Part 63.6625(i) in order to extend the specified oil change requirement; and

Inspect air cleaner every 1,000 hours of operation, or annually, whichever comes first, and replace as necessary; and

Inspect all hoses and belts every 500 hours of operation, or annually, whichever comes first, and replace as necessary.

If an emergency RICE is operating during an emergency and it is not possible to perform the above maintenance, or if performing the maintenance would otherwise pose an unacceptable risk under federal, state, or local law, the maintenance can be delayed and should be performed as soon as practicable after the emergency has ended or the unacceptable risk has abated. All such maintenance delays shall be reported to the APCD Compliance Division.

During periods of startup, the permittee shall minimize the RICE time spent at idle and minimize the RICE startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. The permittee shall operate and maintain the RICE and after-treatment control device (if any) according to the manufacturer's emission related instructions, or the permittee's own operation and maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Pursuant to 40 CFR Parts 63.6640(f) and 63.6675, the RICE cannot be used for peak shaving, as part of a financial arrangement to supply power into the grid, or as a part of a demand response program, unless specifically allowed by this permit. There is no time limit on the use of emergency RICE in emergency situations.

Pursuant to 40 CFR Parts 63.6655 and 63.6660, the RICE shall be equipped and operated with a non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation, including operation for maintenance and testing. In addition, the permittee shall keep the records of RICE maintenance (oil, air cleaner, hoses and belts) required by the RICE operation and maintenance plan. The hours of operation records and maintenance records shall be maintained for 5 years following the date of each occurrence and shall be made available to the APCD upon request.

36. The 636 BHP Caterpillar, three 431 BHP John Deere emergency diesel engines is / are exempt from 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) because they were constructed on or after June 12, 2006.

Within 30 days after receipt of this permit, the permittee may petition the Hearing Board to review any new or modified condition (Rule 22). This permit, or a copy, shall be posted reasonably close to the subject equipment and shall be accessible to inspection personnel (Rule 19). This permit is not transferrable from one location to another unless the equipment is specifically listed as being portable (Rule 20).

The granting of this Permit to Operate shall not be construed as an endorsement by the District and shall not guarantee compliance with the rules of the District. This Permit to Operate shall not be construed to allow any emission unit to operate in violation of any state or federal emission standard or any rule of the District.
This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

Ali R. Ghasemi
Air Pollution Control Officer

Attachments:

- Table A - Permit Equipment List(s)

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# PERMIT EQUIPMENT LIST - TABLE A

Renewal 01137 R08 / FID: 01137 Oxnard Wastewater Treatment Plant / SSID: 01137

## A PERMITTED EQUIPMENT

### 1 Caterpillar Effluent Pump Natural Gas Engine

| *Quantity* | *Description* |
|---|---|
| 1 | 500 MMBTU/hr Caterpillar Effluent Pump Natural Gas Engine , Model G-398, Rich Burn (as defined in VCAPCD Rule 74.9), each equipped with NSCR 3-Way Catalytic Converter, Oxygen Sensor, and Air/Fuel Ratio Controller, for Rule 74.9 compliance, (Engine No. 1). |

### 2 Waukesha Electrical Generator Waste Gas Engines.

| *Quantity* | *Description* |
|---|---|
| 3 | 800 MMBTU/hr Waukesha Electrical Generator Waste Gas Engine (as defined in VCAPCD Rule 74.9), Model P9390G, Rich Burn, equipped with Pre-Stratified Charge for Rule 74.9 compliance (Engines Nos. E7610.00, E7710.00 & E7810.00). |

### 3 Varec, Model 239, Waste Gas Burners

| *Quantity* | *Description* |
|---|---|
| 2 | 24000 Cubic Feet Per Hour Varec, Model 239, Waste Gas Burners Not Reviewed |

### 4 Air Capacity Odor Reduction Tower

| *Quantity* | *Description* |
|---|---|

| | |
|---|---|
| 1 | 48000 Cubic Feet Per Minute Air Capacity Odor Reduction Tower , B.F. Goodrich/Media Koro-Z, for odor reduction and H2S control, equipped with a hydrogen sulfide (H2S) analyzer |

## 5 Headworks Facilities

| *Quantity* | *Description* |
|---|---|
| 1 | Headworks Facilities controlled by a 25,000 SCFM US Filter LO/Pro Odor Control System consisting of a three-stage absorption system using Sodium Hydroxide and Sodium Hypochlorite for hydrogen sulfide removal; and equipped with a hydrogen sulfide analyzer. |

## 6 Odor Reduction Station

| *Quantity* | *Description* |
|---|---|
| 1 | Odor Reduction Station (Solids Processing Building), Calvert FRP Fine Mist Tower, 10 Feet Diameter x 37 Feet High, 22,000 CFM Capacity, equipped with an Interscan Model LD-17 H2S Analyzer |

## 7 Emergency Standby Diesel Engines For Electricity Generators

### 7.1 General Motors Emergency Standby Diesel Engine

| *Quantity* | *Description* |
|---|---|
| 1 | 2250 BHP General Motors Emergency Standby Diesel Engine , Model 16-567-E4, Serial No. 66-HI-1082, no EPA Family Name, Model Year 1966, Tier 0 |

### 7.2 General Motors Emergency Standby Diesel Engine

| *Quantity* | *Description* |
|---|---|
| 1 | 2250 BHP General Motors Emergency Standby Diesel Engine , Model 16-567-E-4, Serial No. 66-HI-1161, no EPA Family Name, Model Year 1966, Tier 0 |

### 7.3 Caterpillar Emergency Standby Diesel Engine

| *Quantity* | *Description* |
|---|---|
| 1 | 2172 BHP Caterpillar Emergency Standby Diesel Engine , Model 3512B TA, Serial No. 1GZ02501, EPA Family Name 5CPXL58-6ERK, Model Year 2005 |

### 7.4 Caterpillar Emergency Standby Diesel Engine

| *Quantity* | *Description* |
|---|---|
| 1 | 636 BHP Caterpillar Emergency Standby Diesel Engine , Model C15, Serial No. FSE00892, EPA Family Name 7CPXL15.2ESK, ARB Executive Order U-R-001-0308 |

### 7.5 John Deere Emergency Standby Diesel Engine (portable - used within facility)

| *Quantity* | *Description* |
|---|---|
| 1 | 431 BHP John Deere Emergency Standby Diesel Engine (Portable) , Model No. 6090HFG06, Serial No. 9110457, EPA Family Name MJDXL09.0313, Tier 4, Model Year 2020, Effluent Pump Station and other locations within WWTP as needed |

### 7.6 John Deere Emergency Standby Diesel Engine, Model 6090HFG06

| *Quantity* | *Description* |
|---|---|
| 1 | 431 BHP John Deere Emergency Standby Diesel Engine, Model 6090HFG06 , Serial No. RG60904063955, EPA Family Name KJDXL09.0313, Model Year 2019, Tier 4-Final, ISG-1 Interstage Pump Station |

### 7.7 John Deere Emergency Standby Diesel Engine, Model 6090HFG06

| *Quantity* | *Description* |
|---|---|
| 1 | 431 BHP John Deere Emergency Standby Diesel Engine, Model 6090HFG06 , Serial No. RG60904068212, EPA Family Name KJDXL09.0313, Model Year 2019, Tier 4-Final, ISG-2 Interstage Pump Station |

### 7.8 Caterpillar Emergency Standby Diesel Engine

| *Quantity* | *Description* |
|---|---|
| 1 | 263 BHP Caterpillar Emergency Standby Diesel Engine , Model 3208, Serial No. 5YF00565, no EPA family Name, Model Year 1989 |

## 8 Emergency Standby Diesel Engine For Air Compressor

### 8.1 (104 KW) John Deere Emergency Diesel Engine

| *Quantity* | *Description* |
|---|---|
| 1 | 139 BHP (104 KW) John Deere Emergency Diesel Engine , Model 4045HF275C, Serial No. PE 4045H376314, EPA Family Name 5JDXL06.8078, Model Year 2005 |