

# Notice of Construction (NOC) Worksheet



<b>Applicant:</b> King Co Ntrl Res Wastewater Treatment West Point	<b>NOC Number:</b> 10107
<b>Project Location:</b> 1400 Utah St W, Seattle WA 98199	<b>Registration Number:</b> 10088
<b>Applicant Name and Phone:</b> Chapin Brackett (206) 477-3347	<b>NAICS:</b> 221320
<b>Engineer:</b> Carole Cenci	<b>Inspector:</b> Gerard Van Der Jagt

## A. DESCRIPTION

### For the Order of Approval:

Addition of air-to-fuel ratio controls and 3-way catalysts for each of four Waukesha L5790G- 600 HP raw sewage pump internal combustion engines, Nos. 401, 402, 403 and 404, fueled with biogas pre-scrubbed for hydrogen sulfide and siloxane, with propane as backup emergency fuel. This Order also includes a change in the units of measure from g/bhp-hr to ppm at 15% O<sub>2</sub> for emissions of NO<sub>x</sub> and CO.

### Additional Information:

On February 23, 2012, King County Department of Natural Resources Wastewater Treatment Division and PSCAA finalized a settlement agreement addressing violations of NO<sub>x</sub> and CO emission limits from the four RSP engines. The agreement required King County to install air-to-fuel ratio controls and 3-way catalysts to control CO and NO<sub>x</sub> from these engines. The addition of this control equipment was determined to be BACT by the Agency and is included as BACT in the Order of Approval.

In conjunction with the addition of the NO<sub>x</sub> and CO controls, King County installed a bio-gas cleaning system on the incoming digester gas that removes contaminants. This system is not subject to new source review, but was necessary to accommodate the upgrades to the emission control equipment for the four engines.

This Order of Approval also includes changes to the units in which emissions of NO<sub>x</sub> and CO are measured at the exhaust, calculated and reported. The previous emission limits for NO<sub>x</sub> and CO were in units of g/bhp-hr and have been changed to units of PPM @ 15% O<sub>2</sub>. Measuring emissions in terms in ppm at a set percentage of oxygen is easier, more robust and more accurate than determining emissions in g/bhp-hr.

### **Facility**

The West Point Wastewater Treatment Plant is a municipal wastewater treatment system with an average annual design flow capacity of 143 million gallons per day of wastewater. The facility has a primary treatment system; a high purity oxygen biological secondary treatment system; anaerobic primary and secondary solids digestion with capture of digester gas for use as fuel; and digester gas and propane combustion sources, including internal combustion engines, boilers, and flares for combusting excess digester gas. The facility was originally constructed in the mid-1960s as a primary treatment plant

and was upgraded to provide secondary treatment in 1995. As part of the facility upgrade, a system of scrubbers was installed to control odors.

### Previous Orders of Approval for RSP Engines

This NOC application and proposed Order of Approval for 4- Waukesha Model L5790G raw sewage pump engines (engines 401, 402, 403, and 404) will cancel and supersede two previously issued Orders of Approval (OA), 4655 and 5125.

OA 4655 was issued in 1992 for one Waukesha Model L5790G raw sewage pump engine identified by the facility as engine 404. The engine primarily burns digester gas with propane as backup fuel.

OA 5125 was issued in 1997 for three additional Waukesha Model L5790G raw sewage pump engines, identified by the facility as engines 401, 402, and 403. These primarily burn digester gas with propane as backup fuel.

### B. DATABASE INFORMATION

New NSPS due to this NOCOA?	No	Applicable NSPS: None related to this NOC	Delegated? NA
New NESHAP due to this NOCOA?	Yes	Applicable NESHAP: 40 CFR 63 Subpart ZZZZ	Delegated? Yes
New Synthetic Minor due to this NOCOA?	No		

The raw sewage pump engines, 401-404 are subject to NESHAP ZZZZ for Stationary Reciprocating Internal Combustion Engines. Specific requirements from this rule are included in the facility's AOP.

### C. NOC AND AOP FEES

#### NOC Fees:

Paid \$1,000 10/5/09. Paid \$1,000 5/18/10. No additional NOC review fees due.

#### Air Operating Permit Fees:

AOP fees are assessed to the facility for the issuance of the AOP and will be paid prior to final issuance of the AOP. Ongoing AOP fees are assessed on an annual basis in accordance with Agency Regulation I, Section 7.07.

#### **D. STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW**

State Environmental Policy Act (SEPA) review was conducted in accordance with Regulation I, Article 2. The SEPA review is undertaken to identify and help government decision-makers, applicants, and the public to understand how a project will affect the environment. A review under SEPA is required for projects that are not categorically exempt in WAC 197-11-800 through WAC 197-11-890. A new source review action which requires a NOC application submittal to the Agency is not categorically exempt.

A new SEPA determination is not required because the potential impacts from this project were reviewed under Order of Approval No. 5125, issued on May 12, 1994, for engines 401, 402 and 403. SEPA was previously satisfied for engine 404 under Order of Approval No. 4655, issued on August 25, 1992. King County acted as lead agency for the existing Environmental Documents on August 10, 2009.

#### **E. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REVIEW & NOCOA APPLICATION HISTORY**

The original application for this NOCOA did not include a BACT analysis, a required element of the Agency's review and approval process. However the applicant proposed that no additional controls were needed and requested that the Agency establish emission limits that would have allowed significantly more emissions of NO<sub>x</sub> and CO to be emitted. The application also lacked emission estimates and ambient analyses for HAP/TAP, CO and NO<sub>x</sub>. The Agency sent an incompleteness letter to the applicant on January 27, 2010 (see below). The letter stated that the application was incomplete and the Agency needed this additional information.

King County responded to the first incompleteness letter on March 23, 2010 but did not include all of the required information to complete the application. The Agency sent a second incompleteness letter on April 19, 2010 (see below). This second incompleteness letter stated that the response on March 23 was inadequate and reiterated the needed information. In subsequent meetings King County agreed to submit a BACT analysis that included all of the required information. After the submittal and the Agency's review of the two BACT analyses the application was determined to be complete.

See below for the two incompleteness letters to King County,



Working together for clean air

January 27, 2010

Eugene Sugita  
King County DNRP  
1400 Utah Street W., M.S. WTP-NR-0100  
Seattle, WA 98199

Dear Mr. Sugita:

Registration No. 10088  
Raw Sewage Pump Engines at West Point WWTP  
Notice of Construction (NOC) Application No. 10107 – Incomplete

EXECUTIVE DIRECTOR  
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The Puget Sound Clean Air Agency has received your (NOC) application for a modification to the emission limits in NOC No. 5125 (Waukesha L5790G Raw Sewage Pump Engines) installed at West Point WWTP. The application is incomplete and additional information is needed with respect to the emission estimates, the BACT analysis, and an impact analysis for the requested emission increases. Specific information needed to complete the application is identified below.

1. Emission Estimates

- The application requests an increase in allowable NO<sub>x</sub> and CO emissions from the 3 engines included in Order of Approval No. 5125 (RSP 401, 402, and 403). That order of approval was processed on the basis of the application information which stated the engines were replacements for the existing engines and that actual emissions would not increase as a result of that proposal. As the current application indicates, there was an increase in the emissions associated with the engine replacements. Thus, an estimate of all emission increases (criteria pollutants and toxic air contaminants) associated with the engine replacement needs to be identified in this application. Additionally, clarify if the emission estimates identified for these three engines are also representative for RSP 404, which was reviewed and approved in Order of Approval No. 4655. Provide citations and assumptions for all emission estimates submitted.
- The application provides data from an April 15, 1994 test by AM Test Air Quality on RSP 404, and states the engine tested was a Waukesha L5788G. Please provide a copy of that test report and clarify that RSP 404 is an L5790G model, as approved in 1992.

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King County DNRP  
January 27, 2010  
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- Please explain the relationship West Point sees between the requested CO emission limits for the pump engines and the site-wide CO emission limit established in Order of Approval 8914. This application states that anticipated actual CO emissions are estimated to be 139.2 tons/yr (Table 9 of the application). In the permit review documents for the cogeneration engines (NOC 8914), those engines were projected to emit 177.4 tons/yr. These combined totals would exceed the limit of 249 tons/yr, established in Condition No. 4 of Order of Approval 8914. Have the plans for the cogeneration engines changed? Would this requested emission increase, if approved, consume CO emission allowances approved for the cogeneration engines?

## 2. **BACT Analysis**

The BACT Analysis submitted was incomplete for various technical elements as follows:

- What Happened? – The County initially believed that the newer L5790G engines would perform at least as well as the 20 year old Waukesha L5788G engines. How were the units ordered different from those that were being replaced? Identify all of the engine option/carburetor settings which were available from Waukesha at the time of purchase (e.g. lowest manifold or best power, equal NO<sub>x</sub> & CO, catalytic converter input, normal or best economy, lean combustion) that would have met the dimensional and mechanical requirements and the expected emission performance associated with each option? Identify which of the available options was actually installed and the basis for that selection?
- Engine Tuning & Maintenance – The application suggests that the testing on the original pump engines in 1991 is not representative for future considerations because of “engine tuning” prior to each test. The application also discusses maintenance work as a “state of tune”. Please submit information that identifies what specific actions the operators have available to “tune” the engine operations during each fuel and what the emission effects are for these activities. Please submit information which may illustrate the rate of emission performance degradation between “recent overhaul”, “recent de-carbonization” and “needs de-carbonization” as shown in Table 2 of the application. Also, identify the scope of work, service time, and cost associated with an “overhaul” since it appears to have a significant impact on the emission performance of the engine.
- Evaluate Add-On Controls Technologies for Cost Effectiveness – The application did not evaluate any add-on control measures, instead, dismissing the options as technically infeasible. For your reference, the use of both selective catalytic reduction (SCR) for NO<sub>x</sub> emission reduction and oxidation catalyst for CO emission reduction has already been determined to be technically and economically feasible for engines burning landfill gas by this Agency. If siloxane removal is considered necessary and included in the cost evaluation, identify it as a separate cost. Additionally, if it is included in the cost estimate, identify the siloxane concentrations which must be met for the emission control devices, the basis for that specifying that concentration level, information on the siloxane concentrations in West Point’s

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King County DNRP  
January 27, 2010  
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digester gas, and the linkage between siloxane removal performance needs and the siloxane removal system costs.

3. **Impacts** – After your BACT analysis is updated, prepare an air quality impact analysis, for any increases in emissions associated with the application request. Requested increases in allowable emissions for NOX (4.1 lb/hr to 8.2 lb/hr) and CO (1.6 lb/hr to 31.0 lb/hr) are increases not reviewed under the original permit review (NOC 5125). Also, an increase of that magnitude of in CO would also indicate an increase in organic based toxic air contaminants.

If you have any questions, please contact me at (206) 689-4061, or by email at [claudew@pscleanair.org](mailto:claudew@pscleanair.org).

Sincerely,



Claude Williams, PE  
Air Pollution Engineer

CMW: ns

cc: Steven M. Van Slyke  
John Schantz





*Working together for clean*

April 19, 2010

Pam Elardo  
West Section Manager  
King County Wastewater Treatment Division  
1400 Utah Street West, WTP-NR-0100  
Seattle, WA 98199-1004

Dear Ms. Elardo:

Registration No. 10088  
Raw Sewage Pump Engines at West Point WWTP  
Notice of Construction (NOC) Application No. 10107  
Second Incomplete Notice

INTERIM EXECUTIVE  
DIRECTOR  
James L. Nolan

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Jake Fay, Councilman

The Puget Sound Clean Air Agency received King County Wastewater Treatment Division (WTD)'s second submittal for NOC Application No. 10107 on March 23, 2010 (letter dated March 19, 2010). This submittal was provided in response to the Agency's Incomplete Application letter dated January 27, 2010. Upon review of this second submittal, in combination with the original application, the Agency has determined that application No. 10107 is still incomplete. The reasons for this incomplete determination are as follows:

#### 1. Emission Estimates

As stated in your March 19, 2010 letter, WTD appears to believe the Agency misunderstands the purpose of the WTD's application. To be clear, however, the Agency will not be able to set any new emission limits at WTD's secondary treatment facility based upon incomplete or inadequate analyses or data. For the following reasons, the Agency has determined that it continues to have received incomplete information regarding WTD's emission estimates in support of NOC application 10107:

- If it is WTD's view that the emission information used in three applications submitted to this Agency (NOC No. 4295 for Secondary Treatment Facility Upgrade, NOC No. 4655 for RSP 404 Replacement, and NOC No. 5125 for RSP 401/402/403 Replacement) is invalid, then the basis for issuing all three approvals is questionable. Order of Approval No. 4295 included an emission increase from combustion equipment based on the increased digester gas production expected with additional treatment capacity and the additional solids from secondary treatment available for digestion. If questioning the limit set in Order No. 4295 to support a higher limit now is indeed the direction WTD seeks, then the applicability analysis for the

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West Section Manager  
King County Wastewater Treatment Division  
April 19, 2010  
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Prevention of Significant Deterioration (PSD) permit program completed in NOC application No. 4295 also needs to be re-evaluated. The conclusion from that revised PSD applicability analysis also may need to be coordinated with the Washington Department of Ecology and EPA Region 10 staff, as they have the PSD program responsibilities.

- The Agency continues to need a clear understanding of WTD's view of the existing emission profile for the RSP engines prior to their replacement in 1994 and after. The original application documents for NOC No. 10107 requested an absolute emission limit (see Table 8), but did not specify if those limits were requested for both fuels (digester gas and propane). WTD's March 19, 2010 submittal provides the requested test report data, but provides no analysis regarding the actual emission performance values WTD believes to exist for the engines under review. The March 19, 2010 submittal leaves the Agency with the suggestion that the WTD has no reliable indicator of the previous emissions prior to the engine replacement while holding the view that there is no emission increase upon that unknown condition. The proposed emission limits provided in the initial submittal (in Table 8) are lower than some of the self monitored data provided to this Agency for the RSP engines (plant monitoring data from 2002-2008). If those proposed limits were approved in response to this NOC application, it would be helpful to understand how WTD would intend to meet those limits continuously in light of the monitored data exceeding those proposals. A complete analysis, addressing these inconsistencies and the gaps in analyses, as described in the Agency's January 27, 2010 letter and herein, must be submitted to the Agency before we can proceed with analyzing any new limits proposed by WTD.
- 2. **BACT Analysis** - The BACT Analysis remains incomplete as WTD's March 19, 2010 letter did not include any evaluation of add-on control technology options. In that letter, WTD instead states that the analysis submitted in 1994 satisfies this requirement. That conclusion is incorrect. The application, analysis, and BACT determination made in 1994 was based on the application material submitted at that time. That determination was made because the engines were new and required BACT at that time. WTD's current application intends to change the basis of that permit, including the BACT determination, thus, the BACT analysis must be updated and must be based upon an analysis of technology available now.
- 3. **Impacts** -The WTD's March 19, 2010 submittal asserts that there is no emission increase and questions why an air quality impact analysis would be required. This Agency does not concur with this premise at this time, thus, the application remains incomplete. The requested air quality impact analysis is based upon the requirements that any new source or modification to an existing source which increases emissions is subject to NOC review (See Puget Sound Clean Air Agency Regulation I, Section 6.01 and WAC 173-400-113). In order to approve an NOC application, this Agency must conclude the allowable emissions will not cause or contribute to an ambient air quality standard violation and that the requirements of WAC 173-460 have been satisfied. *Id.* To the extent any additional emissions from the RSP engines are beyond those recognized and approved through the review of NOC No. 5125 are sought by WTD, they must be accounted for with respect to the above WAC requirements. Because an air quality analysis still has not been submitted by WTD, the application remains incomplete.



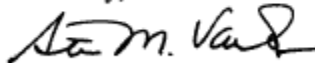
Pam Elardo  
West Section Manager  
King County Wastewater Treatment Division  
April 19, 2010  
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WTD's March 19, 2010 letter also expresses an interest to further understand how the emission limits were set for the three RSP engines during the review of NOC No. 5125. We agree that it would be useful for you to review the Agency's NOC application file again in anticipation of another meeting with us. Please let us know if you would like us to send you a copy of that file. We can discuss how the limits were set with you further, but the subsequent monitoring data and information we have reviewed (that was provided by your staff and reviewed with your staff at WTD's request) shows that the emission levels observed by the plant personnel are higher than the values in the 1991 test data used in that NOC application. Regardless of the form of the limit (ppm or g/hp-hr) or any calculations made to convert the monitored data, the NOC No. 5125 permit limits were based on the application data (which was the 1991 test data) submitted by WTD.

With this second notification of incompleteness, and in accordance with Regulation I, Section 6.04(d) ("Additional Fee for Service – Second Incomplete Application"), the Agency is ceasing review of King County's NOC Application No. 10107. Review work will not continue until King County Wastewater Treatment Division pays the required deposit and signs a fee for service agreement to complete the application review. Attached to this letter is a Fee for Service Agreement. If King County Wastewater Treatment Division wishes to have this Agency continue review of this application, please sign the agreement and return it to this Agency along with a deposit of \$1,000 (as described in the agreement). Additionally, please provide the addressee/attention information to be used for the invoices, in the event those invoices should not be sent directly to you.

After you have had a chance to review this letter, Mario Pedroza and I would be happy to meet with you to answer your questions and understand how further review of this NOC application (and subsequent submittals by WTD) may affect the resolution of the pending enforcement actions related to this issue. If you have any questions, please contact me at (206) 689-4052. If you have questions about the terms of the Fee for Service Agreement, please feel free to contact Jennifer Dold at (206) 689-4015.

Sincerely,



Steven M. Van Slyke  
Manager - Compliance

SMV/ns

Enclosure

cc: Claude Williams  
Mario Pedroza  
John Schantz  
Jennifer Dold

On January 27, 2011, King County submitted a BACT analysis to the Agency demonstrating it was possible to decrease emissions of NO<sub>x</sub> by 89%, and emissions of CO by 44% from the RSP engines. Below are tables 4-1 and 4-6 from King County's BACT analysis.

**Table 4-1. Hourly and Annual Uncontrolled Emissions  
from RSP Engines Fueled on Digester Gas**

Engine	Power Rating (hp)	Hourly Emissions (lbs/hr) <sup>1</sup>		Annual Emissions (tpy) <sup>1</sup>	
		NO <sub>x</sub>	CO	NO <sub>x</sub>	CO
No. 401	440	6.5	2.4	28	10
No. 402	440	6.5	2.4	28	10
No. 403	440	6.5	2.4	28	10
Total	1,320	20	7	85	31

\*Emission calculations based on monitored data for digester gas with assumed operation of 8,760 hrs per year for each engine at full load. Total emissions may not sum exactly from individual sources because of rounding differences.

**Table 4-6. Summary of Hourly and Annual Controlled Emissions  
from RSP Engines Fueled by Digester Gas**

Engine	Power Rating (hp)	Hourly Emissions (lbs/hr) <sup>1</sup>		Annual Emissions (tpy) <sup>1</sup>	
		NO <sub>x</sub>	CO	NO <sub>x</sub>	CO
No. 401	440	0.8	1.3	3.4	5.7
No. 402	440	0.8	1.3	3.4	5.7
No. 403	440	0.8	1.3	3.4	5.7
Total	1,320	2.3	3.9	10	17

Key:

CO = carbon monoxide

NO<sub>x</sub> = nitrogen oxides

Notes:

<sup>1</sup> Total emissions may not sum exactly from individual sources because of rounding differences.

King County's BACT analysis proposed a treatment system for removing contaminants from the incoming biogas (siloxane and sulfur), air to fuel ratio controls, and a 3- way catalyst for controlling NOx, CO, and VOC. On February 23, 2012, King County and the Agency finalized a settlement agreement making these emission limits enforceable requirements. The settlement agreement also included:

- Added RSP engine 404 to this NOC application
- A civil penalty
- Engine retrofits
- Timelines by which the changes needed to be completed.

In addition to the above, this Order of Approval changes the units from the original limits in grams per brake horsepower hour limits to ppm for NOx and CO. The ppm concentration units are consistent with the facility's exhaust gas analyzer (PPM at 15% O2) and makes compliance determinations more accurate and clear.

## **F. EMISSIONS**

This Order of Approval will reduce the facility-wide emissions. See section E above for expected emissions from the engines.

Facility-wide PTE of CO and NOx is determined by facility-wide limits of 249 tons per year for each pollutant in OA 8914. OA 8914 was issued for the cogeneration engines in 2004 and was included to avoid applicability of the federal PSD permitting rules. OA 8914 will be cancelled and superseded by OA 10470. OA 10470 includes an updated synthetic minor limit and specific methods for determining compliance with these limits. The updated limit is 224 tons per year, which is 90% of the PSD threshold as recommended by US EPA. OA 10470 also includes updated and more robust compliance determinations of annual emissions of NOx and CO.

The controls installed on the RSP engines under this Order of Approval and other more recent changes at the facility may have reduced the potential facility-wide emissions to below the PSD threshold. However, the facility has not provided any information that would indicate that is the case and it will continue to be considered as a synthetic minor source for PSD purposes. If King County provides information indicating the PTE of NOx and CO is below the PSD thresholds the synthetic minor limits may be removed at a later date via permit action.

## **G. OPERATING PERMIT OR PSD**

The Title V Air Operating Permit (AOP) program applicability for the entire source has been reviewed. The facility is a Title V air operating permit source and conditions of this Order will be included in the AOP. If this Order of Approval is issued, it will be issued simultaneously with the AOP.

## H. AMBIENT TOXICS IMPACT ANALYSIS

An ambient toxics impact analysis is not required as toxic emissions will decrease rather than increase due to the add-on controls and new emission limits on the engines.

## I. PUBLIC NOTICE

### J. PUBLIC NOTICE

This Order of Approval was public noticed with the renewal of the Air Operating Permit. The notice period started on [fill in date of public notice start] and ended on [fill in date of public notice end]

[Add in any comments received during the public comment period and responses in Section L]

## J. RECOMMENDED APPROVAL CONDITIONS

### Standard Conditions:

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.
2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

### Specific Conditions:

3. The emissions from each of the raw sewage pump engines (401, 402, 403 and 404) when burning digester gas or propane shall not exceed:  
178 ppmv CO @ 15% O<sub>2</sub>  
62 ppmv NOX @ 15% O<sub>2</sub>
4. The owner or operator shall perform periodic monitoring and performance testing to demonstrate compliance with the emission limits in condition 3 for each of the four raw sewage pump engines while burning digester gas as described in this condition:
  - a. The periodic monitoring shall measure CO, NO<sub>x</sub> and O<sub>2</sub> concentrations at the outlet of each engine and be performed at least every 700 hours of operation for each engine. The initial periodic monitoring required by this Order of Approval must be conducted within 120 days of the issuance of this Order of Approval.
  - b. All periodic monitoring shall be performed with a portable electrochemical analyzer and follow EPA test method CTM-034. Three identical runs must be performed on each engine. Unless otherwise approved by the Agency, each run must consist of at least a two minute test phase followed by eight minutes of refresh.

- c. At least once every 60 months, and at any other time required by the Agency, the owner or operator must conduct a performance test on each of the four engines to show compliance with the emission limits in condition 3 using EPA methods 7E, 10, 3A, and/or other test methods required by the Agency. The four engines may be tested at the same time, however the owner or operator can choose to test the engines separately or in any combination. An initial test on each of the four engines must be performed no more than 60 months after the issuance of this Order of Approval. Each test shall include three identical 60-minute runs performed on each engine. Following completion of the initial test, each successive engine performance test must be performed within 60 months of the previous test on that engine.
  - d. During each test and monitoring event, the wastewater incoming flow rate, the engine output (in percent), the amount of fuel used, and any activities or non-typical operation shall be recorded. The Agency may require additional parameters to be recorded. The engines must be operating at least at 50% of rated output during all monitoring and testing.
  - e. Within 21 days of completion, a periodic monitoring report shall be submitted to the Agency for each monitoring event. The report must include all results of the monitoring, values of all parameters required to be recorded under condition 4.d. of this Order of Approval, all corrective action taken and maintenance performed associated with the monitoring, and all other relevant information.
  - f. Within 60 days of completion, a performance test report shall be submitted to the Agency for each performance test. The report must include all results of the testing values of all parameters required to be recorded under condition 4.d. of this Order of Approval, all corrective action taken and maintenance performed associated with the performance test and all other relevant information.
  - g. All performance tests must comply with Regulation I, Article 3.07.
  - h. Periodic monitoring does not need to comply with Regulation I, Article 3.07 unless otherwise required by the Agency.
- 5. The raw sewage pump engines (401, 402, 403, and 404) shall be fired only with digester gas that has been scrubbed of hydrogen sulfide and siloxane; or fired with propane. Propane usage for each engine cannot exceed 500 hours over each 12-month rolling period.
  - 6. For each engine, the owner or operator shall record the number of hours burning propane and the number of hours burning digester gas during each rolling consecutive 12-month period.
  - 7. The owner or operator shall submit a written report to the Agency for each calendar quarter identifying the number of hours propane was used during the previous 12-month rolling period. The report must be submitted to the Agency within 30 days of the last day of the calendar quarter. The report shall include the list of engines that used propane and the number of hours propane was used in each engine during the previous 12-month rolling period.
  - 8. The Agency may require testing of the emissions from the engines while running on propane at any time.
  - 9. The owner or operator shall maintain and operate all engines in accordance with manufacturer's recommendations. These recommendations must be included in the facility's O&M plan.
  - 10. This Order cancels and supersedes Order of Approval No. 5125, dated May 12, 1994, for three engines on the effective date of this Order.
  - 11. This Order cancels and supersedes Order of Approval No. 4655, dated August 25, 1992, for one engine on the effective date of this Order.



**K. PUBLIC COMMENTS AND RESPONSES**

<Will be added after public comment period>

**L. REVIEWS**

Reviews	Name	Date
Engineer:	Carole Cenci	3/28/23
Inspector:	Gerard Van der Jagt	3/30/23
Second Review:	John Dawson	6/12/2023
Applicant Name:	Kenny Siu	7/26/2023