Puget Sound Clean Air Agency

Notice of Construction No. 9056

Registration No. 10088

Date APR 0 8 2005

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

One Binks Model No. 30-4208 Paint Spray booth rated at 7,125 cfm with a 365 gallons/minute Water Wash system.

APPLICANT

Showell Osborn
King Co Ntrl Res Wastewater Treatment
1400 Utah St W
Seattle, WA 98199

OWNER

King Co Ntrl Res Wastewater Treatment
1400 Utah St W
Seattle, WA 98199

INSTALLATION ADDRESS

King Co Ntrl Res Wastewater Treatment, 1400 Utah St W (West Point), Seattle, WA, 98199

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.

3. Within 60 days of this approval King County shall remove the cap from this booth's vertical stack and convert it to a rain proof unobstructed vertical stack.

4. King County shall maintain a water flow meter to measure water flow through the manifold. Within 90 days after issuance of this Order of Approval, the acceptable flow range for the gauge shall be clearly marked on or nearby the gauge.

5. The following maintenance must be conducted on the water wash spray booth:

a) Daily record the flow rate prior to spray coating,

b) Daily check makeup water level to determine correct reservoir level,

c) Annually - Inspect the inside surfaces of the water wash spray booth and remove accumulated paint. Inspect water manifold for plugging and take corrective action as needed.

6. If the spray coating booth is operating outside of the acceptable water flow rate, or; the water levels are low, or; the water distribution across the face of the booth is interrupted; King County shall discontinue spray coating upon discovery of the problem until corrective action has been taken.

7. King County shall only use either high volume, low pressure (HVLP), spray equipment or other equipment capable of achieving equivalent or better transfer efficiency than HVLP spray guns.

8. King County shall use best management practices in its spray coating operation, including the collection of organic solvent used for cleanup of equipment into normally closed containers to minimize evaporation to the atmosphere, and

APR 0 8 2005

keeping containers used for the storage and disposal of organic solvent closed except when these containers are being cleaned or when materials are being added.

9. Records of all maintenance, inspections and corrective actions shall be maintained on site for at least two years and made available to Puget Sound Clean Air Agency personnel upon request.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

Claude Williams
Reviewing Engineer
ns

Steven Van Slyke
Supervising Engineer

Puget Sound Clean Air Agency

Notice of Construction No. 9069

Registration No. 10088

Date 3/3/2005

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Primary and Seconday Wastewater Treatment with the following source groups: A. Combustion (a new 25.7 MMBH boiler #3, and two John Zink Flares (#1 at 2,000 cfm & #2 at 500 scfm); B. Solids (three scrubbers at 75,000 cfm each to control odors from the raw sludge blending tank, polymer room, ten gravity belt thickeners, truck loading & four sludge centrifuges; 2-sludge tanks with 2-225 cfm adsorbers; and C. Liquids (Primary Treatment sources with 3-odor control scrubbers at 75,000 cfm each and a pre-scrubber at 3,200 cfm; & Secondary Treatment sources at 143 MGD annual average with an emergency release chlorine scrubber at 35,000 cfm).

APPLICANT

Showell Osborn
King Co Ntrl Res Wastewater Treatment
1400 Utah St W
Seattle, WA 98199

OWNER

King Co Ntrl Res Wastewater Treatment
1400 Utah St W
Seattle, WA 98199

INSTALLATION ADDRESS

King Co Ntrl Res Wastewater Treatment, 1400 Utah St W (West Point), Seattle, WA, 98199

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.

3. Metro shall not emit more than 0.11 lbs of NOx/MMBTU from its Boiler #3. Metro shall conduct a source test within 60 days of startup in accordance with a PSAPCA approved test plan.

4. Metro shall submit a plan for monitoring NOx from all its combustion sources before startup of the secondary treatment facility.

5. Metro shall submit and implement an Operation & Maintenance Plan with respect to air emission sources.

6. This Order of Approval, to remove references to the two 4,000 cfm carbon adsorbers for the six digesters, hereby supersedes and cancels Order of Approval number 4295, dated August 3, 1992.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

Order of Approval for NC No. 9069

MAR 0 3 2005

Claude Williams
Reviewing Engineer

ns

Steven Van Slyke
Supervising Engineer

Puget Sound Clean Air Agency

Notice of Construction No. 9422

Registration No. 10088

Date MAY 23 2006

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Modifications to the Primary Treatment and Solids Building odor control packed bed chemical scrubber systems (six units at 75,000 cfm each), to improve odor removal efficiency, by replacing H2O2 with NaOCl in the scrubbing solution, and a introducing a 10% reduction in stack diameter.

APPLICANT

Dirk Apgar
King Co Ntrl Res Wastewater Treatment-
1400 Utah St W
Seattle, WA 98199

OWNER

King Co Ntrl Res Wastewater Treatment
1400 Utah St W
Seattle, WA 98199

INSTALLATION ADDRESS

King Co Ntrl Res Wastewater Treatment, 1400 Utah St W (West Point), Seattle, WA, 98199

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

Claude Williams
Reviewing Engineer
ns

Steven Van Slyke
Supervising Engineer

PUGET SOUND
Clean Air Agency

Puget Sound Clean Air Agency

Notice of Construction No. **10107**

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No. **10088**

Date 4/24/2024

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% O2 for emissions of NOx and CO.

OWNER	INSTALLATION ADDRESS
King County Wastewater West Point Treatment Plant **1400 Utah St W** **Seattle, WA 98199**	**King County Wastewater West Point Treatment Plant** **1400 Utah St W (West Point)** **Seattle, WA 98199**

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.

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_2
   62 ppmv NOX @ 15% O_2.

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_X and O_2 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. The results of the periodic monitoring shall be included in a semiannual report submitted to the Agency. 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 tested 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.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

Carole Cenci PE

Carole Cenci
Reviewing Engineer

John Dawson PE

John Dawson
Engineering Manager

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.

PUGET SOUND
Clean Air Agency

Puget Sound Clean Air Agency

Notice of Construction No. **10470**

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No. **10088**

Date **04/24/2024**

Two Caterpillar G3612 Lean Burn Engine Generators rated at 3,221 hp at 100% load each and combusting digester gas. The engines are part of a 4.6 Megawatt cogeneration system that generates heat for the West Point facility and generates electricity for sale to Seattle City Light.

This Order approves the following:
Cancelling and superseding OA 8914 and changing the units on the engine exhaust emission limits from g/bhp-hr to ppm at 15% O2 . It also includes periodic monitoring and testing of the engines and compliance methods for the PSD synthetic minor limits that were originally included in OA 8914. OA 8914 contained the emission limits for NOx and CO, but did not contain compliance methods.

OWNER	INSTALLATION ADDRESS
King County Wastewater West Point Treatment Plant **1400 Utah St W (West Point)** **Seattle, WA 98199**	**King County Wastewater West Point Treatment Plant** **1400 Utah St W (West Point)** **Seattle, WA 98199**

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.

3. King Country DNR Wastewater Treatment Division shall not exceed the following one-hour average limits from each of the two Caterpillar G3612 Lean Burn engines.

   a. NOx: 54 PPM @ 15% O_2
   b. CO: 363 PPM @ 15% O_2

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 two Caterpillar G3612 Lean Burn engines while burning digester gas as described in this condition:
   a. The periodic monitoring shall measure CO, NO_X and O_2 concentrations at the outlet of each engine and be performed at least every 600 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 Appendix A to 40 CFR 63 Subpart ZZZZ or other methods approved by the Agency.
   c. At least once every 60 months, and at any other time required by the Agency, the owner or operator shall conduct a performance test to show compliance with the emission limits in condition 4 using

EPA methods 7E, 10, 3A, and/or other test methods required by the Agency. The initial test shall be performed no more than six months after the issuance of this Order of Approval. Each test shall include three identical 60-minute runs performed on each engine.

d. During each test and monitoring event, the engine output (in kW), the amount of fuel used, and any activities or non-typical operation shall be recorded. The Agency may require additional parameters to be recorded.

e. The engines must be operating at least at 1000 kW minimum during all monitoring and testing.

f. The results of the periodic monitoring required by condition 4.a. shall be included in a semiannual report submitted to the Agency. 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 report.

g. Within 60 days of completion of each performance test required by condition 4.c., a test report shall be submitted to the Agency. 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.

h. All performance tests must comply with Regulation I, Article 3.07.

i. Periodic monitoring does not need to comply with Regulation I, Article 3.07 unless otherwise required by the Agency.

5. The two Caterpillar G3612 Lean Burn engines shall only be fired on digester gas.

6. PSD Synthetic Minor Limit. The permittee shall limit facility-wide emissions of oxides of nitrogen (NOx) and carbon monoxide (CO) during each consecutive 12-month period to the following amounts:

    a. 249 tons per year of oxides of nitrogen (NOx)

    b. 249 tons per year of carbon monoxide (CO)

7. PSD Synthetic Minor Limit Compliance: Within 30 days of the end of each calendar month the permittee shall calculate and record the NOx and CO emissions for the previous calendar month (for example, the emissions for March must be calculated by April 30). Within 30 days of the end of each 12-month rolling period the permittee shall calculate and record the NOx and CO emissions for the previous 12-month rolling period. These calculations must be completed as described in condition 8 of this Order of Approval.

8. PSD Synthetic Minor Limit Compliance Calculations: The NOx and CO calculations must include emissions from all sources of NOx and CO at the facility. However, fugitive emissions [as defined in 40 CFR 52.21(b)(20)], mobile source emissions, and emissions from nonroad engines do not need to be included in the calculations. The permittee shall use the following methods and approved emission factors:

    a. Source specific emission tests results for individual external combustion units (e.g., boilers and heaters) if the test is conducted using EPA Reference Test Methods and results are approved by the Agency;

    b. Emission factors reviewed for new or modified emission sources at the facility through the Notice of Construction review process in Regulation I, Article 6, including any emission limits in the final Order of Approval;

    c. Alternative emission factors can be used if the Agency has preapproved each factor in writing.

    d. If none of the emission calculation methods listed in sections i., ii., and iii. of this condition are available, the permittee may use EPA's AP-42: Compilation of Air Emission Pollutant

Factors

9. PSD Synthetic Minor Limit Compliance Notification: The owner or operator shall provide notification to the Puget Sound Clean Air Agency in writing, within 60 days after the end of any 12-month period if, during that period, facility-wide emissions of NOx or CO exceeded 200 tons. The report shall include a summary of the total 12-month emissions and a list of the emission factors used for each source of NOx and CO. Upon request by the Agency, the owner or operator shall provide the supporting emission calculations for the reported emission totals.

10. This Order of Approval cancels and supersedes Order of Approval No. 8914, dated August 3, 2004.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

Carole Cenci PE

Carole Cenci
Reviewing Engineer

John Dawson PE

John Dawson
Engineering Manager

Puget Sound Clean Air Agency

Notice of Construction No. **10861**

Registration No. **10088**

Date DEC 3 0 2014

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Replace burners on two (2) existing hot water boilers with Weishaupt WM-G30/2-A, ZM Burners, each using digester gas and propane as fuel

APPLICANT

Christopher Dew
King Co Ntrl Res Wastewater Treatment
1400 Discovery Park Blvd
Seattle, WA 98199

OWNER

King Co Ntrl Res Wastewater Treatment
1400 Discovery Park Blvd
Seattle, WA 98199

INSTALLATION ADDRESS

King Co Ntrl Res Wastewater Treatment, 1400 Discovery Park Blvd (West Point), Seattle, WA, 98199

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.

3. The hot water boilers with the replacement burners approved by this Order are subject to the federal Standards of Performance for Small Industrial-Commercial Units under 40 CFR Part 60, Subpart Dc and General Provisions under Subpart A.

4. The heat input capacity for each burner on each fuel shall not exceed 9.683 MMBtu/hr.

5. Submit an engineering test plan that will demonstrate the maximum heat input rate for the new burners to the Agency within 60 days of the approval date of this Order.

6. Complete the engineering test to demonstrate the maximum heat input rate for the new burners and submit that test report to the Agency no later than 90 days after the burners have been installed and are in service to the plant.

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

DEC 3 0 2014

Steven Van Slyke
Reviewing Engineer

ns

Carole Cenci
Senior Engineer

pscleanair.org
Puget Sound Clean Air Agency

Puget Sound Clean Air Agency

Notice of Construction No. **11302**

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No. **10088**

Date JAN 0 3 2018

Replacement of three existing John Zink enclosed flares with three new Varec Series 244E enclosed flares. The new enclosed flares will be used to combust excess gas from the anaerobic digesters.

APPLICANT

King Co Ntrl Res Wastewater Treatment
1400 Discovery Park Blvd
Seattle, WA 98199

OWNER

King Co Ntrl Res Wastewater Treatment
1400 Discovery Park Blvd
Seattle, WA 98199

INSTALLATION ADDRESS

King Co Ntrl Res Wastewater Treatment, 1400 Utah St W (West Point), Seattle, WA 98199

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.
3. All digester gas produced in excess of the amount sent to the boilers and the engines must be vented to the three flare system. The three flare system must be operated and maintained in continuous operation at all times when digester gas in excess of the amount sent to the boilers and the engines is produced.
4. Each of the three flares must meet a minimum non-methane organic compound (NMOC) destruction efficiency of 98.0 percent, or the three flare system must not cause a discharge of NMOCs into the atmosphere in excess of 20.0 ppm as Hexane, on a dry, volumetric basis corrected to 3% O_2.
5. Each of the three flares must meet a minimum hydrogen sulfide (H_2S) destruction efficiency of 99.0 percent, or the three flare system must not cause a discharge of H_2S into the atmosphere in excess of 8.0 ppm, on a dry, volumetric basis corrected to 3% O_2.
6. None of the three flares may cause a discharge of total sulfur dioxide (SO_2) into the atmosphere in excess of 0.20 lbs/MMBtu.
7. None of the three flares may not cause a discharge of nitrogen oxides (NO_x) into the atmosphere in excess of 0.060 lbs/MMBtu.
8. None of the three flares may cause a discharge of carbon monoxide (CO) into the atmosphere in excess of 0.30 lbs/MMBtu.
9. None of the three flares may cause visible emissions as determined by EPA Method 22.

Initial Compliance Demonstration:

10. Initial compliance with Conditions #4 must be demonstrated by testing the lead flare within 180 days of starting-up the three flare system in accordance with Section 3.07 of Puget Sound Clean Air Agency (PSCAA) Regulation I using EPA reference methods 1, 2, 3C, 4 and 25C from Appendix A of 40 CFR

Part 60. Inlet and outlet NMOC concentrations must be converted to ppmv of Hexane. Compliance testing must consist of at least three separate 60-min test runs.

11. Initial compliance with Condition #5 must be demonstrated by testing the lead flare within 180 days of starting-up the three flare system in accordance with Section 3.07 of PSCAA Regulation I using EPA reference methods 1, 2, 3A, 4 and 15 from Appendix A of 40 CFR Part 60. Compliance testing must consist of at least three separate 60-min test runs.
12. Initial compliance with Condition #6 must be demonstrated by testing the lead flare within 180 days of starting-up the three flare system in accordance with Section 3.07 of PSCAA Regulation I using EPA reference methods 1, 2, 3A, 4 and 6A from Appendix A of 40 CFR Part 60. Compliance testing must consist of at least three separate 60-min test runs.
13. Initial compliance with Condition #7 must be demonstrated by testing the lead flare within 180 days of starting-up the three flare system in accordance with Section 3.07 of PSCAA Regulation I using EPA reference methods 1, 2, 3A, 4 and 7E from Appendix A of 40 CFR Part 60. Compliance testing must consist of at least three separate 60-min test runs.
14. Initial compliance with Condition #8 must be demonstrated by testing the lead flare within 180 days of starting-up the three flare system in accordance with Section 3.07 of PSCAA Regulation I using EPA reference methods 1, 2, 3A, 4 and 10 from Appendix A of 40 CFR Part 60. Compliance testing must consist of at least three separate 60-min test runs.
15. A testing notification must be submitted to the PSCAA in accordance with Section 3.07 of Regulation I, at least twenty one (21) days before any compliance test required by this Order of Approval is conducted. In addition, at least 60 days prior to each compliance test, the facility must submit a test plan that includes all relevant test information and all specific flare and process equipment operating data that will be collected during the test as well as the methods that will be used to collect the data.

Ongoing Compliance Demonstration:

16. Ongoing compliance with Conditions #4, #5, #6, #7 and #8 must be demonstrated by testing at least one flare every sixty (60) months after the initial compliance test. If the volume of digester gas vented to each flare over the sixty (60) months varies by more than 20 percent of the average volume vented to the three flare system, all flares must be tested. Ongoing compliance must be conducted in accordance with Section 3.07 of PSCAA Regulation I using the same procedures for initial compliance testing described in Conditions #10, #11, #12, #13, #14 and #15.
17. Ongoing compliance with Condition #9 must at a minimum be demonstrated by inspecting each flare stack for visible emissions once a week. These inspections must be performed during daylight hours when the flare system is in operation. If during the scheduled inspection or at any other time, visible emissions other than uncombined water are observed, the owner or operator must submit a report to the Agency within 30 calendar days of the end of the month in which the violation occurred. The report must include the time and duration of the visible emissions and a description of actions taken to correct the violation.

Monitoring and Maintenance:

18. The three flare system must operate with a monitoring system that measures and records the digester gas flow rate to each flare. The digester gas flow rate monitoring system must be equipped with a computerized data acquisition system and data logger that continuously measures and records instantaneous digester gas flow rates.
19. The data acquisition system must complete a minimum of one cycle of operation every 15-minutes and must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid 1-hour of data. The data logger must log the 1-hour average digester gas flow rate during each operation cycle.
20. The read out of the three flare system that provides a visual display or record of the digester gas flow rates must be readily accessible on site for operational control or inspection.
21. All digester gas flow rate and pressure monitoring system components must be calibrated, maintained, repaired, and replaced in accordance with the manufacturer's recommendations, instructions and operating

manuals. The owner or operator must keep a written copy of the manufacturer's instructions and the operating manuals onsite and available for Agency review at all times.

22. All burner and ignition system components must be calibrated, maintained, repaired, and replaced in accordance with the manufacturer's recommendations, instructions and operating manuals. The owner or operator must keep a written copy of the manufacturer's instructions and the operating manuals onsite and available for Agency review at all times.

Recordkeeping Requirements

23. All records required by this Order of Approval must be maintained for at least five years.
24. The following records shall be kept onsite and up-to-date, and be made readily available to Agency personnel upon request at all times:
    a. Compliance test reports.
    b. Certified opacity readings.
    c. A written log showing calibration, maintenance, repair and replacement actions of monitoring, burner and ignition system equipment for each flare. Each log entry must include date, time and description of the action.
    d. A written log showing corrective actions taken to maintain compliance with this Order of Approval. Each log entry must include date, time and description of the action.
    e. A written log showing any instance digester gas bypasses the three flare system and is released to the atmosphere unflared. Each log entry must include date, time, duration and the amount in MMscf of digester gas released.
    f. The Operation and Maintenance (O&M) plan. The O&M plan shall be developed and implemented per Agency's Regulation I. The following shall be included in the O&M plan:
        i. Calibration, maintenance, repair and replacement procedures of monitoring, burner and ignition system equipment for the three flare system.
        ii. Opacity inspection procedures.
        iii. Procedures to correct known malfunctions of the three flared system.
25. The following records shall be kept onsite, updated within 30 days at the end of each month for at least five years from the date of generation, and be made readily available to Agency personnel upon request:
    a. For each flare: record of the monthly and consecutive 12-month period one hour digester gas flow rate averages.
    b. Results of opacity inspections to determine compliance with the requirements in Condition #17.

Reporting Requirements:

26. The Agency shall be notified, in writing, within 30 days of the end of the month in which an exceedance of any emissions limitation and standard identified in Conditions #3, #4, #5, #6, #7 and #8 is discovered.

Order of Approval for NC No. 11302

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

Alfredo Arroyo
Reviewing Engineer

Carole Cenci
Compliance Manager

PUGET SOUND
Clean Air Agency

Puget Sound Clean Air Agency

Notice of Construction No. **12323**

HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No. **10088**

Date

APR 14 2023

One temporary 3.9 MMSCFD capacity flare for back-up use to combust excess gas from the anaerobic digesters during periods when any or all of the three Varec Series 244E enclosed flares under NOC 11302 cannot be utilized.

OWNER

King Co Ntrl Res Wastewater Treatment
1400 Discovery Park Blvd
Seattle, WA 98199

INSTALLATION ADDRESS

King Co Ntrl Res Wastewater Treatment
1400 Discovery Park Blvd (West Point)
Seattle, WA 98199

THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND 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.

3. This condition cancels and supersedes Order of Approval No. 11302 Condition #3 and replaces Order of Approval No. 11302 Condition #3 with the following:

   All digester gas produced in excess of the amount sent to the boilers and the engines must be vented to either the Varec Series 244E three flare system or to the 3.9 MMscfd back-up flare alone or in combination with the three flare system, as discussed in Order of Approval No. 12304 Conditions 3 and 4. The three flare system or the 3.9 MMscfd back-up flare must be operated at all times when digester gas in excess of the amount sent to the boilers and the engines is produced.

4. Operation of the 3.9 MMscfd back-up flare (temporary flare) must not exceed 126 days in any 12-month rolling period.

5. Prior to each operation of the temporary flare, the owner or operator must provide written notice to Puget Sound Clean Air Agency. Written notice may be electronically submitted and must include:
   a. The anticipated dates that temporary flare operation will begin and end,
   b. A description of which Varec flare(s) will not be operational during the temporary flare operation,
   c. A description of the cause of disruption to the Varec flare(s); and
   d. The last date of flare inspection and maintenance including stack, pilot, and tip including any corrective actions taken.

6. No more than 30 days after the end of each instance of temporary flare operation, the owner or operator must provide written notice to Puget Sound Clean Air Agency. Written notice may be electronically submitted and must include:
   a. The total duration of the temporary flare usage for the instance of temporary flare operation,
   b. All visible emissions observed during the flare usage period per Condition 10; and

c. The total number of days of temporary flare usage in the month(s) containing the most current instance of usage and the previous 11 calendar months.

7. The temporary flare must meet a minimum non-methane organic compound (NMOC) destruction efficiency of 98.0 percent. Compliance with this emission limit will be demonstrated through manufacturer's specifications. Stack testing for compliance with this emission limit shall only be required upon Puget Sound Clean Air Agency request under Regulation I 3.05(b).

8. The temporary flare must meet the following emission limits. Compliance with these limits shall be demonstrated through good operational practices and inspection and maintenance of the temporary flare in accordance with the manufacturer's recommendations. Stack testing for compliance with these emission limits shall only be required upon Puget Sound Clean Air Agency request under Regulation I 3.05(b).

    a. The flare must meet a minimum hydrogen sulfide (H_2S) destruction efficiency of 98.0 percent.
    b. Total nitrogen oxides (NO_x) emissions from the flare must not exceed 0.068 lb/MMBtu.
    c. Total carbon monoxide (CO) emissions from the flare must not exceed 0.31 lb/MMBtu.

9. The temporary flare may not cause visible emissions as determined by EPA Method 22. Compliance with this emission limit to be demonstrated through weekly visible emission checks during temporary flare operating periods as described in Condition 10.

10. Ongoing compliance with Condition 9 must at a minimum be demonstrated by inspecting the flare stack for visible emissions on the first day of each operating period and then weekly for the duration of each period of temporary flare operation.
    a. These inspections must be performed during daylight hours when the flare system is in operation. The observer shall select a position between 15 feet and 0.25 miles from the emission source in a position where sunlight is not shining directly in the observer's eyes.
    b. Observations shall be conducted for a minimum of 6 minutes.
    c. For each observation the observer shall record:
        i. Observer's name
        ii. Date of observation
        iii. Estimated wind speed, wind direction and sky condition
        iv. Sketch of the process unit being observed and location of observer relative to source and sun, and indication of emission points, or digital photographic records as described in EPA Method 22 Section 11.2.3.
        v. Duration of observation; and
        vi. Presence or absence of visible emissions.
    d. If during the scheduled inspection or at any other time, visible emissions other than uncombined water are observed, the owner or operator must submit a report to the Agency within 30 calendar days of the end of the month in which the violation occurred. The report must include the time and duration of the visible emissions and a description of actions taken to correct the violation.

11. The temporary flare must operate with a monitoring system that measures and records the digester gas flow rate to the flare. The digester gas flow rate monitoring system must be equipped with a computerized data acquisition system and data logger that continuously measures and records instantaneous digester gas flow rates.

12. The data acquisition system must complete a minimum of one cycle of operation every 15-minutes and must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid 1-hour of data. The data logger must log the 1-hour average digester

gas flow rate during each operation cycle.

13. The read out of the temporary flare that provides a visual display or record of the digester gas flow rates must be readily accessible on site for operational control or inspection.

14. All digester gas flow rate and pressure monitoring system components must be calibrated, maintained, repaired, and replaced in accordance with the manufacturer's recommendations, instructions and operating manuals. The owner or operator must keep a written copy of the manufacturer's instructions and the operating manuals onsite and available for Agency review at all times.

15. All burner and ignition system components must be calibrated, maintained, repaired, and replaced in accordance with the manufacturer's recommendations, instructions and operating manuals. The owner or operator must keep a written copy of the manufacturer's instructions and the operating manuals onsite and available for Agency review at all times.

16. All records required by this Order of Approval must be maintained for at least five years.

17. The following records shall be kept onsite and up-to-date, and be made readily available to Agency personnel upon request at all times:
    a. Visible emission observations as required by Condition 10
    b. A written log showing calibration, maintenance, repair and replacement actions of monitoring, burner and ignition system equipment for the temporary flare. Each log entry must include date, time and description of the action.
    c. A written log showing corrective actions taken to maintain compliance with this Order of Approval. Each log entry must include date, time and description of the action.
    d. The Operation and Maintenance (O&M) plan. The O&M plan shall be developed and implemented per Agency's Regulation I. The following shall be included in the O&M plan:
        i. Calibration, maintenance, repair and replacement procedures of monitoring, burner and ignition system equipment for the temporary flare.
        ii. Opacity inspection procedures.

18. The following records shall be kept onsite, updated within 30 days at the end of each month for at least five years from the date of generation, and be made readily available to Agency personnel upon request:
    a. Record of the monthly and consecutive 12-month period digester gas flow to the temporary flare.
    b. Record of the monthly and consecutive 12-month period temporary flare operating days.

19. The Agency shall be notified, in writing, within 30 days of the end of the month in which an exceedance of the Condition 4 annual operational limit of the temporary flare is exceeded.

20. Upon issuance, this NOC 12323 cancels and supersedes NOC 12304 issued January 25, 2023.

Order of Approval for NC No: 12323

APR 14 2023

APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

for Madeline McFerran
Reviewing Engineer

John Dawson
Engineering Manager