Permit No.: 05-0030-ST-01 Expiration Date: 8/1/2027 Application No.: 32808

Page 1 of 24



# STANDARD AIR CONTAMINANT DISCHARGE PERMIT **REVIEW REPORT**

State of Oregon Department of Environmental Quality	Port West Township 8N, Ra	rable Fuels Oregon, LLC ward Industrial Park ange 4W, Sections 22 & 23 kanie, OR 97016	
	Source Inf	ormation:	T
SIC	2869	Source Categories (Table 1 Part, code)	В, 57
NAICS	325199	Public Notice Category	III
EPA ICIS-Air ID		Theme I tende entegery	
Compliance and Emission	s Monitoring Requi	rements:	1
FCE		Source test	Yes
Compliance schedule		COMS	
Unassigned emissions		CEMS	$NO_x$
Emission credits		PEMS	NH <sub>3</sub>
Special Conditions	Yes	Ambient monitoring	
Reporting Requirements			
Annual report (due date)	2/15	Monthly report (due dates)	
Quarterly report		Excess emissions report	
(due dates)		Other (semiannual)	
Air Programs			
Synthetic Minor (SM)	Yes	NSR (by pollutant)	State Type B:
SM -80		PM, PM <sub>10</sub> , PM <sub>2.5</sub> , VOC	
NSPS (list subparts)	Dc, Kb, IIII	PSD (by pollutant)	
NESHAP (list subparts)	Part 61 FF;	GHG Yes	
	Part 63 ZZZZ	RACT	

Synthetic Minor (SM)	Yes
SM -80	
NSPS (list subparts)	Dc, Kb, IIII
NESHAP (list subparts)	Part 61 FF;
	Part 63 ZZZZ
CAO	Yes

NSR (by pollutant)	State Type B: PM, PM <sub>10</sub> , PM <sub>2.5</sub> , VOC
PSD (by pollutant)	
GHG	Yes
RACT	
TACT	Yes

Permit No.: 05-0030-ST-01

Expiration Date: 8/1/2027 Application No.: 32808 Page 2 of 24

# TABLE OF CONTENTS

PERMITTING	3
SOURCE DESCRIPTION	3
COMPLIANCE HISTORY	9
SPECIAL CONDITIONS	9
EMISSIONS	10
TITLE V MAJOR SOURCE APPLICABILITY	14
CLEANER AIR OREGON	14
ADDITIONAL REQUIREMENTS	16
SOURCE TESTING	23
PUBLIC NOTICE	24

Expiration Date: 8/1/2027 Application No.: 32808 Page 3 of 24

## **PERMITTING**

## PERMITTEE IDENTIFICATION

NEXT Renewable Fuels Oregon, LLC
Port Westward (Address TBD)
Tax Lots 100, 200, 300; Township 8N, Range 4W, Sections 22 & 23
Approximate Latitude and Longitude: 46.1643310° N, 123.1681526° W
Clatskanie, OR 97016

#### PERMITTING ACTION

- 2. The proposed permit is a new permit for a new source.
- 3. NEXT Renewable Fuels has been determined to be a new source for the purposes of Cleaner Air Oregon in accordance with OAR 340-245-0020 because the air quality permit application was not submitted and deemed complete, nor had construction commenced on this facility before November 16, 2018. As a new source the permittee is required to perform a risk assessment in accordance with OAR 340-245-0050 and demonstrate compliance with the Risk Action Levels for a "New and Reconstructed Source" in OAR 340-245-8010 Table 1.

#### OTHER PERMITS

4. Other permits required by the DEQ for this source include a National Pollutant Discharge Elimination System (NPDES) permit.

#### ATTAINMENT STATUS

- 5. The source is located in an attainment area for all pollutants.
- 6. The source is not located within 10 kilometers or any Class I Air Quality Protection Area.

# **SOURCE DESCRIPTION**

# **OVERVIEW**

7. NEXT Renewable Fuels Oregon, LLC (NEXT) is proposing to construct a renewable diesel, naphtha, and jet fuel manufacturing facility in Clatskanie, Oregon. The proposed facility will receive and process raw oil feedstocks including vegetable oils and animal fats, to produce renewable fuel products. The facility will be constructed after issuance of this initial air quality permit.

Expiration Date: 8/1/2027 Application No.: 32808 Page 4 of 24

# PROCESS AND CONTROL DEVICES

# 8. Device/Processes (all are new):

Devices and Processes Description	Device ID	Pollution Control Device Description	Pollution Control Device ID	Emission Point ID
77.5 MMBtu/hr Natural Gas (NG) fired Boiler	Boiler 1	Selective Catalytic	CCD DI D	DOIL ED
77.5 MMBtu/hr NG fired Boiler	Boiler 2	Reduction (SCR) and Oxidation Catalyst	SCR-BLR	BOILER
35.2 MMBtu/hr NG Fired Ecofining Unit Trains- Feed Heater 1	ECO1F	SCR and Oxidation	SCR-ECO1	ECO1
5.3 MMBtu/hr NG Fired Ecofining Unit Trains- Isomerization Heater 1	ECO1I	Catalyst	SCK-LCO1	LCOI
35.2 MMBtu/hr NG Fired Ecofining Unit Trains- Feed Heater 2	ECO2F	SCR and Oxidation	SCR-ECO2	ECO2
5.3 MMBtu/hr NG Fired Ecofining Unit Trains- Isomerization Heater 2	ECO2I	Catalyst	SCR ECO2	2002
35.2 MMBtu/hr NG Fired Ecofining Unit Trains- Feed Heater 3	ECO3F	SCR and Oxidation	SCR-ECO3	ECO3
5.3 MMBtu/hr NG Fired Ecofining Unit Trains- Isomerization Heater 3	ECO3I	Catalyst	SCK-ECOS	ECOS
700 MMBtu/hr NG and PSA Tail Gas Fired Hydrogen Plant Heater	H2HTR	SCR and Oxidation Catalyst	SCR-H2HTR	H2HTR
125 MMBtu/hr NG Fired Jet Fractionator	JETFRAC	SCR and Oxidation Catalyst	SCR-JF	JETFRAC
Pretreatment Train 1-BE Day Tank	1BEDAY1	High-Efficiency Filter Bag	FB- 1BEDAY1	FB- 1BEDAY1
Pretreatment Train 1-BE Day Tank	1BEDAY2	High-Efficiency Filter Bag	FB- 1BEDAY2	FB- 1BEDAY2

Expiration Date: 8/1/2027 Application No.: 32808 Page 5 of 24

Devices and Processes Description	Device ID Pollution Control Device Description		Pollution Control Device ID	Emission Point ID
Pretreatment Train 1- Bleaching Earth Silo	1BESV1	High-Efficiency Filter Bag	FB-1BESV1	FB- 1BESV1
Pretreatment Train 1- Bleaching Earth Silo	1BESV2	High-Efficiency Filter Bag	FB-1BESV2	FB- 1BESV2
Pretreatment Train 1- Bleaching Earth Silo	1BESV3	High-Efficiency Filter Bag	FB-1BESV3	FB- 1BESV3
Pretreatment Train 1-Filter Aid Day Tank	1FADT	High-Efficiency Filter Bag	FB-1FADT	FB-1FADT
Pretreatment Train 1-Filter Aid Dry Silo	1FASV1	High-Efficiency Filter Bag	FB-1FASV1	FB- 1FASV1
Pretreatment Train 2-BE Day Tank	2BEDAY1	High-Efficiency Filter Bag	FB- 2BEDAY1	FB- 2BEDAY1
Pretreatment Train 2-BE Day Tank	2BEDAY2	High-Efficiency Filter Bag	FB- 2BEDAY2	FB- 2BEDAY2
Pretreatment Train 2- Bleaching Earth Silo	2BESV1	High-Efficiency Filter Bag	FB-2BESV1	FB- 2BESV1
Pretreatment Train 2- Bleaching Earth Silo	2BESV2	High-Efficiency Filter Bag	FB-2BESV2	FB- 2BESV2
Pretreatment Train 2- Bleaching Earth Silo	2BESV3	High-Efficiency Filter Bag	FB-2BESV3	FB- 2BESV3
Pretreatment Train 2-Filter Aid Day Tank	2FADT	High-Efficiency Filter Bag	FB-2FADT	FB-2FADT
Pretreatment Train 2-Filter Aid Dry Silo	2FASV1	High-Efficiency Filter Bag	FB-2FASV1	FB- 2FASV1
Pretreatment Train 3-BE Day Tank	3BEDAY1	High-Efficiency Filter Bag	FB- 3BEDAY1	FB- 3BEDAY1
Pretreatment Train 3-BE Day Tank	3BEDAY2	High-Efficiency Filter Bag	FB- 3BEDAY2	FB- 3BEDAY2
Pretreatment Train 3- Bleaching Earth Silo	3BESV1	High-Efficiency Filter Bag	FB-3BESV1	FB- 3BESV1
Pretreatment Train 3- Bleaching Earth Silo	3BESV2	High-Efficiency Filter Bag	FB-3BESV2	FB- 3BESV2

Expiration Date: 8/1/2027 Application No.: 32808 Page 6 of 24

Devices and Processes Description	Device ID	Device ID Pollution Control Device Description		Emission Point ID
Pretreatment Train 3- Bleaching Earth Silo	3BESV3	High-Efficiency Filter Bag	FB-3BESV3	FB- 3BESV3
Pretreatment Train 3-Filter Aid Day Tank	3FADT1	High-Efficiency Filter Bag	FB-3FADT1	FB- 3FADT1
Pretreatment Train 3-Filter Aid Day Tank	3FADT2	High-Efficiency Filter Bag	FB-3FADT2	FB- 3FADT2
Pretreatment Train 3-Filter Aid Day Tank	3FADT3	High-Efficiency Filter Bag	FB-3FADT3	FB- 3FADT3
Pretreatment Train 3-Filter Aid Dry Silo	3FASV1	High-Efficiency Filter Bag	FB-3FASV1	FB- 3FASV1
Pretreatment Train 3-Filter Aid Dry Silo	3FASV2	High-Efficiency Filter Bag	FB-3FASV2	FB- 3FASV2
Pretreatment Train 3-Filter Aid Dry Silo	3FASV3	High-Efficiency Filter Bag	FB-3FASV3	FB- 3FASV3
5.25 MMGal Animal Fats Storage Tank*	ANIFATS1	None	N/A	ANIFATS1
5.25 MMGal Animal Fats Storage Tank*	ANIFATS2	None	N/A	ANIFATS2
5.25 MMGal Animal Fats Storage Tank*	ANIFATS3	None	N/A	ANIFATS3
16,000 Gal Citric Acid Storage Tank*	CACID1	None	N/A	CACID1
16,000 Gal Citric Acid Storage Tank*	CACID2	None	N/A	CACID2
Cooling Tower*	CT01	Ultra-high Efficiency Drift Eliminator		CT01
Cooling Tower*	CT02	Ultra-high Efficiency Drift Eliminator		CT02
2,000 hp Compression Ignition Emergency Engine	EGEN1	Tier IV Certified		EGEN1

Expiration Date: 8/1/2027 Application No.: 32808 Page 7 of 24

Devices and Processes Description	Device ID	Pollution Control Device Description	Pollution Control Device ID	Emission Point ID
2,000 hp Compression Ignition Emergency Engine	EGEN2	Tier IV Certified		EGEN2
410 hp Compression Ignition Fire Water Pump Engine	EPUMP	Tier IV Certified		EPUMP
Flare with 1.4 MMBtu/hr pilot	FLARE	None	N/A	FLARE
630,000 Gal Hydrocarbon Slop Storage Tank	HCS	Internal Floating Roof		HCS
Acid Gas Regenerator Unit and Sour Water Stripper	AGRU & SWS	18 MMBtu/hr NG Fired Thermal Oxidizer, Baghouse with Dry Sorbent Injection, SCR and Oxidation Catalyst (in series)	TO-INCIN, SBH-INCIN, and SCR- INCIN	INCIN
Fugitive Equipment Leaks	LEAK	Leak Detection and Repair		LEAK
Renewable Diesel Product Loadout (Rail & Truck)	LOAD	1.7 MMBtu/hr NG Fired Vapor Combustion Unit	VCU1	VCU1
420,000 Gal Oil Water Separator Slop Tank	OWS	Internal Floating Roof		OWS
9.45 MMGal Swing RD/RJ Storage Tank	RD/RJ1	Internal Floating Roof		RD/RJ1
9.45 MMGal RD Product Storage Tank	RD1	None	N/A	RD1
9.45 MMGal RD Product Storage Tank	RD2	None	N/A	RD2
9.45 MMGal RD Product Storage Tank	RD3	None	N/A	RD3

Expiration Date: 8/1/2027 Application No.: 32808 Page 8 of 24

Devices and Processes Description	Device ID Pollution Control Device Description		Pollution Control Device ID	Emission Point ID
2.1 MMGal Swing RJ/RN Storage Tank	RN/RJ1	Internal Floating Roof		RN/RJ1
2.1 MMGal Swing RJ/RN Storage Tank	RN/RJ2 Internal Floating Roof			RN/RJ2
2.1 MMGal Swing RJ/RN Storage Tank	RN/RJ3 Internal Floating Roof			RN/RJ3
5.25 MMGal Vegetable Oils Storage Tank*	VEGOIL1 None		N/A	VEGOIL1
5.25 MMGal Vegetable Oils Storage Tank*	VEGOIL2 None		N/A	VEGOIL2
5.25 MMGal Vegetable Oils Storage Tank*	VEGOIL3 None		N/A	VEGOIL3
Wastewater Treatment System	WWT	None	N/A	WWT

- a. The permit requires NEXT to operate the SCR and Oxidation Catalysts with appropriate ammonia injection rates at all times that the exhaust gas and catalyst temperatures meet the specifications of the SCR and Oxidation Catalyst device manufacturer. Operation of the controls outside of the specifications can result in decreased control of pollutants, ammonia being emitted to the atmosphere (e.g., not reacting with NO<sub>2</sub>), and catalyst fouling or destruction.
- b. Devices and processes marked with an asterisk (\*) are considered Categorically Insignificant Activities, as defined in OAR 340-200-0020(23).

#### CONTINUOUS MONITORING DEVICES

- 9. The facility will have the following continuous monitoring devices:
  - a. EGEN1, EGEN2, and EPUMP will each be equipped with non-resettable hour meters;
  - b. BOILER, H2HTR, and JETFRAC: Each of these Emission Points (EPs) will each be equipped with operational NO<sub>x</sub> and O<sub>2</sub> continuous emissions monitoring systems (CEMS), CO analyzers, and NH<sub>3</sub> parametric emissions monitoring systems (PEMS);
  - c. ECO1, ECO2, and ECO3: Each of these EPs will each be equipped with a NO<sub>x</sub> analyzer and NH<sub>3</sub> PEMS;
  - d. EP INCIN will be equipped with a NO<sub>x</sub> and SO<sub>2</sub> analyzers and an NH<sub>3</sub> PEMS;

Expiration Date: 8/1/2027 Application No.: 32808 Page 9 of 24

- e. Each SCR System will be equipped with devices capable of continuously monitoring ammonia injection rate, gas temperature at the catalyst inlet, and pressure difference across the catalyst;
- f. Each Oxidation Catalyst will be equipped with devices capable of continuously monitoring gas temperature at the catalyst inlet and pressure difference across the catalyst;
- g. The filtration devices controlling 1BEDAY1, 1BEDAY2, 1BESV1, 1BESV2, 1BESV3, 1FADT, 1FASV1, 2BEDAY1, 2BEDAY2, 2BESV1, 2BESV2, 2BESV3, 2FADT, 2FASV1, 3BEDAY1, 3BEDAY2, 3BESV1, 3BESV2, 3BESV3, 3FADT, 3FADT2, 3FADT3, 3FASV1, 3FASV2, and 3FASV3 will be equipped with operational pressure differential indicators;
- h. VCU1 and TO-INCIN will be equipped with temperature monitoring systems; and
- i. SBH-INCIN will be equipped with an operational pressure differential indicator and a device capable of measuring the sorbent injection rate.
- 10. The permit includes requirements to ensure that all CEMS are properly operated in accordance with DEQ's continuous monitoring manual.
- 11. The permit does not include requirements for the pollutant analyzers or PEMS. Therefore, NEXT will be unable to use these devices to demonstrate compliance with any applicable requirements of the permit (e.g., plant site emission limits).

## **COMPLIANCE HISTORY**

12. The facility will be inspected by DEQ personnel to ensure compliance with the permit conditions.

## **SPECIAL CONDITIONS**

- 13. The proposed ACDP contains two special conditions:
  - a. The first special condition requires NEXT purchase emergency generator and fire pump engines certified by the manufacturer to meet EPA Tier 4 emission standards. NEXT indicated that all of their engines will be certified to the EPA Tier 4 emission standards, which are more stringent than what is required by NSPS Subpart IIII. The specific emissions standards for each engine type are listed below for reference.
    - i. EGEN1 and EGEN2:
      - A. 0.03 g/kW-hr of particulate matter (PM);

Expiration Date: 8/1/2027 Application No.: 32808 Page 10 of 24

- B. 0.67 g/kW-hr of nitrogen oxides (NO<sub>X</sub>);
- C. 0.19 g/kW-hr of non-methane hydrocarbons (NMHC); and
- D. 3.5 g/kW-hr of Carbon Monoxide (CO).

# ii. EPUMP:

- A. 0.02 g/kW-hr of particulate matter (PM);
- B. 0.40 g/kW-hr of nitrogen oxides (NO<sub>X</sub>);
- C. 0.19 g/kW-hr of non-methane hydrocarbons (NMHC); and
- D. 3.5 g/kW-hr of Carbon Monoxide (CO).
- b. The second special condition requires that NEXT loadout only renewable diesel from the truck and rail loadout. NEXT must transfer out all other products via pipeline.

## **EMISSIONS**

# 14. Proposed PSEL information:

		Netting	g Basis	Plant Site Emission Limits (PSEL)		
Pollutant	Baseline Emission Rate (tons/yr)	Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	0	NA	0	NA	27	NA
$PM_{10}$	0	NA	0	NA	27	NA
PM <sub>2.5</sub>	NA	NA	0	NA	27	NA
$SO_2$	0	NA	0	NA	39	NA
NO <sub>x</sub>	0	NA	0	NA	39	NA
CO	0	NA	0	NA	99	NA
VOC	0	NA	0	NA	70	NA
H <sub>2</sub> S	0	NA	0	NA	9	NA
GHG (CO <sub>2</sub> e) (including biomass CO <sub>2</sub> )	0	NA	0	NA	1,152,905	NA

Expiration Date: 8/1/2027 Application No.: 32808 Page 11 of 24

		Netting Basis		Plant Site Emission Limits (PSEL)		
Pollutant	Baseline Emission Rate (tons/yr)	Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
GHG (CO <sub>2</sub> e) (excluding biomass CO <sub>2</sub> )	0	NA	0	NA	436,938	NA

- a. The proposed PSELs for SO<sub>2</sub>, NO<sub>x</sub>, CO, and H<sub>2</sub>S are equal to the Generic PSEL in accordance with OAR 340-222-0040(2).
- b. The proposed PSELs for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, VOC, and GHG are source specific PSELs established in accordance with OAR 340-222-0041 and 340-224-0270.
- c. The netting basis for all pollutants is zero because NEXT is a new (i.e., greenfield) source and is not required to go through Federal or Type A State NSR.
- d. The PSEL is a federally enforceable limit on the potential to emit.
- e. There are two GHG PSELs, one that includes biomass CO<sub>2</sub> and one that does not include biomass CO<sub>2</sub>. The biomass deferral was vacated for federal law (New Source Review and Prevention of Significant Deterioration) only, not state law (Plant Site Emission Limits).
  - i. The GHG PSEL that includes biomass CO<sub>2</sub> is for tracking whether PSD is triggered for anyway sources (sources that trigger NSR/PSD for other regulated pollutants). DEQ's EZ-Filer calculates GHG emissions that include biomass CO<sub>2</sub> so emissions calculated with EZ-Filer can be used to report total GHG emissions that include biomass and to determine whether PSD is triggered.
  - ii. Anthropogenic GHG emissions come from two main processes:
    - A. Combustion of natural gas; and
    - B. Hydrogen production. Natural gas is combined with steam to produce hydrogen and CO<sub>2</sub>. The chemical reaction for the hydrogen production process is: CH<sub>4</sub> + 2H<sub>2</sub>O → CO<sub>2</sub> + 4H<sub>2</sub>
  - iii. The GHG PSEL that does not include biomass CO<sub>2</sub> is for PSEL purposes only. There is no baseline emission rate or netting basis for GHGs that do not include biomass CO<sub>2</sub> because the baseline emission rate and netting basis are the mechanism for tracking increases that may trigger NSR/PSD. Sources can use EZ-Filer to calculate GHG emissions that exclude

Expiration Date: 8/1/2027 Application No.: 32808

Page 12 of 24

biomass CO<sub>2</sub> for determining compliance with the PSEL that excludes biomass CO<sub>2</sub>.

- iv. The biomass CO<sub>2</sub> emissions come from the combustion of renewable diesel in the emergency generator and fire pump engines and from the combustion of PSA Tail gas. The PSA Tail gas is produced during the refining process when oxygen is removed from the raw materials (i.e., triglycerides). The refining process results in production of branched alkane molecules (which are further processed), CO<sub>2</sub> (which is ultimately emitted to the atmosphere), and combustible compounds such as CO and propane (which give the PSA tail gas heat content). The CO<sub>2</sub> and combustible compounds originated from biomass (fats and oils) which is why emissions are counted as "biomass CO<sub>2</sub>." Biomass CO<sub>2</sub> emissions are highest when NEXT is producing renewable jet fuel so the PSEL for GHG excluding biomass CO<sub>2</sub> is based on NEXT producing renewable diesel.
- f. BOILER, JETFRAC, H2HTR, ECO1, ECO2, ECO3, and INCIN: NEXT will monitor ammonia emissions from these EPs with parametric emissions monitoring systems. Ammonia does not have a de minimis level and is not a regulated clean air act pollutant so DEQ is not including a PSEL, associated monitoring, or testing requirements in the proposed ACDP.

# SIGNIFICANT EMISSION RATE ANALYSIS

15. An analysis of the proposed PSEL increases over the Netting Basis is shown in the following table.

Pollutant	SER	Requested increase over previous netting basis	Increase due to utilizing capacity that existed in baseline period	Increase due to physical changes or changes in method of operation	Increase due to changes to rules (i.e., the Generic PSEL)
PM	25	27	0	27	0
PM <sub>10</sub>	15	27	0	27	0
PM <sub>2.5</sub>	10	27	0	27	0
$SO_2$	40	39	0	39	0
NO <sub>x</sub>	40	39	0	39	0
СО	100	99	0	99	0
VOC	40	70	0	70	0
GHG (CO <sub>2</sub> e)	75,000	1,152,905	0	1,152,905	0

16. The proposed PSELs for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC are more than the SER over the netting basis.

Expiration Date: 8/1/2027 Application No.: 32808 Page 13 of 24

- 17. NSR applicability determinations are made on a pollutant-by-pollutant basis, based on the criteria specified in OAR 340-224-0010. The criteria, which are discussed, consider:
  - a. How the area the source is located in is designated;
  - b. Whether or not the source meets the definition of "federal major source";
  - c. Whether emissions exceed 100 tons per year in areas other than attainment/unclassified areas;
  - d. Whether emissions will exceed the netting basis by the SER or more; and
  - e. Whether or not the source is making a major modification.
- 18. Areas are designated as nonattainment, maintenance, etc. on a pollutant-specific basis. Clatskanie, where NEXT proposes to construct, is classified as in attainment or unclassifiable for all NAAQS pollutants.
- 19. Prevention of Significant Deterioration (PSD) is a subdivision of Major NSR which applies in attainment/unclassified areas. "Federal major source" is defined in OAR 340-200-0020, and generally means a source that has potential to emit:
  - a. 100 tons per year or more of any individual regulated pollutant, excluding greenhouse gases and hazardous air pollutants listed in OAR 340 division 244 if in a source category listed in subsection (c) of the definition of federal major source; or
  - b. 250 tons per year or more of any individual regulated pollutant, excluding greenhouse gases and hazardous air pollutants listed in OAR 340 division 244, if not in a source category listed in subsection (c) of the definition of federal major source.
- 20. NEXT is in a source category listed in subsection (c) of the definition of federal major source (chemical process plants) but will not emit 100 tons per year or more of any individual regulated pollutant, excluding greenhouse gases. Therefore, NEXT is not a federal major source.
- 21. PM, PM<sub>10</sub>, and PM<sub>2.5</sub>
  - a. NEXT requested PSELs of 27 tons per year for PM, PM<sub>10</sub>, and PM<sub>2.5</sub>. The proposed PSELs are more than the SER over the netting basis and are therefore subject to NSR; and
  - b. The proposed location for NEXT is designated as an attainment/unclassified area for PM<sub>10</sub> and PM<sub>2.5</sub> (PM does not have a NAAQS). NEXT does not meet the definition of Federal Major Source and is not subject to PSD. NEXT is subject to Type B State NSR for the PM emissions increases, which requires an ambient impact analysis. Specific details are available in the January 19, 2022, modeling report.

# 22. VOC

a. NEXT requested s PSEL of 70 tons per year for VOC. The proposed PSEL is more than the SER over the netting basis and is therefore subject to NSR;

Expiration Date: 8/1/2027 Application No.: 32808 Page 14 of 24

b. The proposed location for NEXT is designated as an attainment/unclassified area for Ozone, of which VOC is a precursor. NEXT does not meet the definition of Federal Major Source and is not subject to PSD. NEXT is subject to Type B State NSR for the VOC emission increase; and

- c. The permittee was required to perform an Ozone Precursor Distance calculation [see OAR 340-225-0020(10)] to determine if the emissions from the proposed source could impact the Portland Vancouver Air Quality Maintenance Area. The Ozone Precursor Distance was determined to be 52.1 km. The permittee's facility is 60 km from the Portland Vancouver Ozone Maintenance Area, so emission offsets are not a requirement of this permit action.
- 23. NEXT was also required to demonstrate that emissions of NOx would not cause any modeled violations to the 1-Hour NO<sub>2</sub> NAAQS. Details regarding the analysis are in the January 19, 2022, modeling report.

#### TITLE V MAJOR SOURCE APPLICABILITY

- 24. A major source is a facility that has the potential to emit 100 tons/year or more of any criteria pollutant or 10 tons/year or more of any single HAP or 25 tons/year or more of combined HAPs.
- 25. A source that has potential to emit at the major source levels but accepts a PSEL below major source levels is called a synthetic minor (SM).
- 26. NEXT's PSELs are below the Title V thresholds and will not be a Title V major source.

# CRITERIA POLLUTANTS

27. This facility is a synthetic minor source of criteria pollutant emissions because the use of control devices is necessary to keep criteria pollutant emissions below 100 tons per year

#### HAZARDOUS AIR POLLUTANTS

28. This source is not a major source of hazardous air pollutants. The PTE for HAP is 0.40 tons/yr with the largest single HAP emitted being Ethylbenzene with a PTE of 0.089 tons/yr.

# **CLEANER AIR OREGON**

29. NEXT proposes to construct and operate a renewable diesel, naphtha, and jet fuel manufacturing facility in Clatskanie, Oregon. The proposed facility will receive and process raw oil feedstocks, including vegetable oils and animal fats, to produce renewable fuel products. NEXT conducted a Level 3 Risk Assessment to determine

Expiration Date: 8/1/2027 Application No.: 32808

Page 15 of 24

cancer and noncancer risk from renewable fuel production. Both annual and short-term (24 hour) emissions were used to model emissions using AERMOD dispersion modeling. Cancer and noncancer chronic risk were determined based on the highest impacted residential, worker, and child exposure locations. The facility's risk did not exceed any risk action levels that would require further reduction of emissions above the emissions controls already proposed.

Risk Type	Facility Risk	Risk Assessment Results	
Cancer Risk – Added cancer risk per million with 70 years of exposure			
Residential (e.g., homes near facility)	0.2		
Non-Residential Child (e.g., school near facility)	<0.1	Facility Risk is below the Risk Action Level* limit of 10	
Non-Residential Worker (e.g., office near facility)	<0.1		
Noncancer Risk – Hazard Index (Less than or equal to 1 is considered safe)			
Annual Exposure-Residential (e.g., home)	< 0.1		
Annual Exposure-Non-Residential Child (e.g., school)	<0.1	Facility Risk is below the Risk Action Level limit of 1	
Annual Non-Residential Worker (e.g., office)	0.1		
24-Hour Exposure (acute)	<0.1	Facility Risk is below the Risk Action limit of 1	

<sup>\*</sup>DEQ requires risk reduction if risk is above these Risk Action Levels.

30. NEXT is considered to be a new facility for the purposes of the CAO program. The calculated source risks for all exposure scenarios were less than the Source Permit Risk Action Level established for new sources in OAR 340-245-8010 Table 1. Because operations were modeled at capacity for this facility, and all of the source risk levels are below the Source Permit Risk Action Level, this facility is determined to be a de minimis source in accordance with OAR 340-245-0050(7); therefore, no Source Risk Limits are required to be included in the permit to limit toxic air contaminant emissions from this facility.

#### TOXICS RELEASE INVENTORY

31. The Toxics Release Inventory (TRI) is federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which DEQ has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI Program. In general, chemicals covered by the TRI Program are those that cause:

Expiration Date: 8/1/2027 Application No.: 32808 Page 16 of 24

- a. Cancer or other chronic human health effects;
- b. Significant adverse acute human health effects; or
- c. Significant adverse environmental effects.
- 32. There are currently over 650 chemicals covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each chemical.
- 33. NEXT has not reported to the TRI because it has not yet been built.

# **ADDITIONAL REQUIREMENTS**

#### NEW SOURCE PERFORMANCE STANDARDS APPLICABILITY

- 34. NEXT has emission units (EUs) that are subject to Subpart Dc, "Small Industrial, Commercial and Institutional Steam Generating Units" which applies to each steam generating unit with a maximum design heat input capacity between 10 and 100 MMBtu/hr that commenced construction, modification, or reconstruction after June 9, 1989.
  - a. EUs at NEXT that are subject to this subpart and the applicable decision points are listed in the table below.

EU ID	Capacity (MMBtu/hr)	Fuel	<b>Construction Date</b>
Boiler 1	77.5	Natural Gas	Post 2021
Boiler 2	77.5	Natural Gas	Post 2021

- b. The Hydrogen Plant (H2HTR) and Jet Fractionator (JETFRAC) do not meet the size criteria for Subpart Dc because each will have a maximum heat input capacity greater than 100 MMBtu/hr. Similarly, each Isomerization Heater (ECO1I, ECO2I, & ECO3I) will not meet the size criteria because the maximum heat input capacity of each unit will be less than 10 MMBtu/hr. Therefore, the Hydrogen Plant, Jet Fractionator, and each Isomerization Heater will not be subject to Subpart Dc requirements.
- c. The 35.2 MMBtu/hr natural gas fired Ecofining Feed Heaters (ECO1F, ECO2F, & ECO3F) are considered "process heaters" under this subpart and are therefore not subject to this subpart.
- 35. NEXT has EUs that are subject to Subpart Kb, "Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984" which applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) (approx. 19,813 gallons) that is used to store volatile organic liquids (VOL), with certain exclusions based upon function, true vapor pressure of contents, design, or other regulatory requirements, for which construction, reconstruction, or modification is commenced after July 23, 1984.

Expiration Date: 8/1/2027 Application No.: 32808 Page 17 of 24

a. EUs at NEXT are subject to this subpart and the applicable decision points are listed in the table below:

EU ID	Capacity (gal)	Control	Contents	Construction Date
RN/RJ1	2,100,000	Internal Floating Roof	Renewable Naphtha	TBD
RN/RJ2	2,100,000	Internal Floating Roof	or Renewable Jet	TBD
RN/RJ3	2,100,000	Internal Floating Roof	Fuel (swing tanks)	TBD

- b. The remaining tanks at NEXT are not subject to this subpart because they have capacities less than 75 m<sup>3</sup> or store products with vapor pressures below the applicable thresholds.
- 36. NEXT has EUs that are subject to 40 CFR Part 60, Subpart IIII, "Stationary Compression Ignition Internal Combustion Engines" which applies to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE). The EUs at NEXT are used for emergency power generation and fire suppression. EGEN1, EGEN2, and EPUMP will each be certified by the manufacturer to meet the applicable IIII emission limits. Specific parameters for each engine subject to this subpart are listed below:

EU ID	Capacity	Displacement	Construction	Fuel
	(hp)	per cylinder (L)	Date	
EGEN1	2,000	< 10	TBD	Diesel
EGEN2	2,000	< 10	TBD	Diesel
EPUMP	410	< 10	TBD	Diesel

- 37. NEXT is not subject to 40 CFR Part 60, Subpart Db, "Industrial, Commercial and Institutional Steam Generating Units" which applies to each steam generating unit with a maximum design heat input capacity greater than 100 MMBtu/hr that commenced construction, modification, or reconstruction after June 19, 1984. Under the NSPS, "Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart." Additionally, Process heater "means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst." The Hydrogen Plant (H2HTR) and Jet Fractionator (JETFRAC) are considered "process heaters" under this subpart and are therefore not subject to this subpart.
- 38. NEXT <u>is not</u> subject to 40 CFR Part 60, Subparts J or Ja, "Petroleum Refineries" which applies to various equipment at petroleum refineries. Under the subpart, "Petroleum refinery means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt (bitumen) or other products through distillation of petroleum or through redistillation, cracking, or reforming of unfinished petroleum derivatives." and "Petroleum means the crude oil removed from the earth and the oils

Expiration Date: 8/1/2027 Application No.: 32808 Page 18 of 24

derived from tar sands, shale, and coal." The proposed facility will not refine petroleum. As such, the facility is not a petroleum refinery and this subpart does not apply.

- 39. NEXT is not subject to 40 CFR Part 60, Subpart VVa, "Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006" which applies to facilities in source group 28 (synthetic organic chemical manufacturers) that manufacture any of the chemicals listed in 40 CFR 60.489. The list in 40 CFR 60.489 lists several hydrocarbons that may be present in the renewable diesel produced by NEXT. However, product is defined as any compound or chemical listed in \$60.489 that is produced for sale as a final product as that chemical, or for use in the production of other chemicals or compounds. By-products, co-products, and intermediates are considered to be products<sup>1</sup>. The specific chemicals in 40 CFR 60.489 are not sold as the listed chemical. They are sold as renewable diesel or naphtha, both products are a combination of constituents, rather than sold as any one of these listed chemicals. Therefore, this subpart does not apply.
- 40. NEXT is not subject to 40 CFR Part 60, Subparts GGG or GGGa, "equipment Leaks of VOC in Petroleum Refineries" which applies to various equipment at petroleum refineries. Under the subpart, "Petroleum refinery means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt (bitumen) or other products through distillation of petroleum or through redistillation, cracking, or reforming of unfinished petroleum derivatives." and "Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal." The proposed facility does not refine petroleum. As such, the facility is not a petroleum refinery and this subpart does not apply.
- 41. NEXT is not subject to 40 CFR Part 60, Subpart NNN, "VOC Emissions From SOCMI Distillation Operations" which applies to distillation operations that are part of a process unit that produces any of the chemicals listed in 40 CFR 60.667 as a product, co-product, by-product, or intermediate product. The list in 40 CFR 60.667 lists several hydrocarbons that may be present in the renewable diesel produced at NEXT. However, product is defined as any compound or chemical listed in §60.667 that is produced for sale as a final product as that chemical, or for use in the production of other chemicals or compounds. By-products, co-products, and intermediates are considered to be products. The specific chemicals in 40 CFR 60.667 are not sold as the listed chemical. They are sold as renewable diesel or naphtha, both products are a combination of constituents, rather than sold as any one of these listed chemicals. Therefore, this subpart does not apply.
- 42. NEXT **is not** subject to 40 CFR Part 60, Subpart QQQ, "Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems" which applies to affected facilities located in petroleum refineries for which construction, modification, or

<sup>1</sup> Letter from John Rasnic, Director, Stationary Source Compliance Division Office of Air Quality Planning and Standards, EPA, to Raymond Hiley, Goodwin, Proctor & Hoar, regarding SOCMI Product/CMPU Definitions, dated April 6, 1994. Applicability Determination Index: Control Number 9700142. <a href="https://cfpub.epa.gov/adi/pdf/adi-nsps-9700142.pdf">https://cfpub.epa.gov/adi/pdf/adi-nsps-9700142.pdf</a> (accessed April 7, 2021)

Expiration Date: 8/1/2027 Application No.: 32808 Page 19 of 24

reconstruction is commenced after May 4, 1987. The proposed facility does not refine petroleum. As such, the facility is not a petroleum refinery and this subpart does not apply.

43. NEXT is not subject to 40 CFR Part 60, Subpart RRR, "VOC Emissions From SOCMI Reactor Processes" which applies to reactor processes that are part of a process unit that produces any of the chemicals listed in 40 CFR 60.707 as a product, co-product, by-product, or intermediate product. The list in 40 CFR 60.707 lists several hydrocarbons that may be present in the renewable diesel produced by NEXT. However, product is defined as any compound or chemical listed in §60.707 that is produced for sale as a final product as that chemical, or for use in the production of other chemicals or compounds. By-products, co-products, and intermediates are considered to be products. The specific chemicals in 40 CFR 60.707 are not sold as the listed chemical. They are sold as renewable diesel or naphtha, both products are a combination of constituents, rather than sold as any one of these listed chemicals. Therefore, this subpart does not apply.

# NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS APPLICABILITY

- 44. NEXT has EUs that may be subject to 40 CFR Part 61, Subpart FF, "Benzene Waste Operations" which applies to benzene-containing hazardous waste operations at chemical manufacturing plants, coke by-product recovery plants and petroleum refineries. The proposed facility meets the definition of a "chemical manufacturing plant" as defined in 40 CFR 61.341.
  - a. The specific control standards and operating requirements under this Subpart are applicable to the handling of benzene-containing hazardous waste streams where the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 tons/yr);
  - b. Facilities with a total annual benzene quantity of less than 11 tons/yr but greater than 1.1 tons/yr are not subject control standards or operating requirements under this subpart. However, they are subject to recordkeeping and reporting requirements;
  - c. Facilities with a total annual benzene quantity of less than 1.1 tons/yr must maintain documentation of their benzene calculations; and
  - d. NEXT indicated that their annual benzene waste quantity would remain below 1.1 tons/yr so the permit does not specifically reference any control or recordkeeping requirements. However, if calculated benzene waste exceeds 1.1 tons/yr NEXT must comply with all applicable requirements of this subpart.
- 45. NEXT has EUs that are subject to 40 CFR Part 63, Subpart ZZZZ, "Stationary Reciprocating Internal Combustion Engines" which applies to existing, new, or reconstructed stationary RICE located at a major or area sources of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. The EUs at NEXT are used for emergency power generation and fire suppression. NEXT will

Expiration Date: 8/1/2027 Application No.: 32808

Page 20 of 24

comply with the applicable requirements of this subpart by complying with NSPS Subpart IIII. Specific parameters for each engine subject to this subpart are listed in paragraph 36.

- 46. NEXT <u>is not</u> subject to 40 CFR 61, Subpart J "Equipment Leaks of Benzene" which applies to fugitive emission sources that operate in benzene service. In benzene service is defined as equipment contacting or containing a fluid (liquid or gas) that is at least 10 percent benzene by weight per 40 CFR 61.111. The proposed facility will not contain any equipment that operates in benzene service. Therefore, Subpart J will not be applicable
- 47. NEXT **is not** subject to 40 CFR 61, Subpart V "Equipment Leaks" which applies to fugitive emission sources that operate in volatile HAP service after the promulgation date of Subpart V. Volatile HAP service is defined as equipment contacting or containing a fluid (liquid or gas) that is 10 percent or greater by weight benzene or vinyl chloride. There will be no equipment or piping operating in volatile HAP service at the proposed facility and so the requirements of Subpart V will not be applicable
- 48. NEXT <u>is not</u> subject to 40 CFR 63, Subpart F "Organic HAPs from the Synthetic Organic Chemical Manufacturing Industry" which applies to facilities that are located at major HAP sources that manufacture or use the regulated chemicals defined in the subpart. NEXT will be an area source of HAP (i.e., not a major source) so the requirements of Subpart F will not be applicable.
- 49. NEXT is not subject to 40 CFR 63, Subpart Y "Organic HAPs from Marine Tank Vessel Loading Operations" which applies to any source location with at least one dock or loading berth that is used for bulk loading onto marine vessels, except for offshore drilling platforms and lightering operations. The proposed facility will load final product by rail or tanker truck for shipment offsite, or final product will be transported via pipeline to a nearby third-party offsite terminal provider to distribute into commerce. Therefore, the proposed facility will not be performing marine tank vessel loading operations, and will not be subject to Subpart Y.
- 50. NEXT **is not** subject to 40 CFR 63, Subpart EEEE "HAPs from Organic Liquids Distribution" which applies to organic liquids distribution operations located at major sources of HAP emissions. NEXT will be an area source of HAP (i.e., not a major source) so the requirements of Subpart EEEE will not be applicable.
- 51. NEXT <u>is not</u> subject to 40 CFR 63, Subpart FFFF "HAPs from Miscellaneous Organic Chemical Manufacturing" which applies to miscellaneous organic chemical manufacturing process units that are located at a major source of HAP emissions. NEXT will be an area source of HAP (i.e., not a major source) so the requirements of Subpart FFFF will not be applicable.
- 52. NEXT <u>is not</u> subject to 40 CFR 63, Subpart JJJJJJ "*Industrial, Commercial, and Institutional Boilers at Area Sources*" which applies to the collection of all existing industrial, commercial, and institutional boilers within a subcategory located at an area source of HAP, and to each new or reconstructed industrial, commercial, or institutional boiler located at an area source of HAP.

Expiration Date: 8/1/2027 Application No.: 32808 Page 21 of 24

- a. The boilers at NEXT (Boiler 1 and Boiler 2) combust only natural gas, which makes them "gas-fired boilers" with respect to this subpart. Gas-fired boilers are considered an unaffected facility under this subpart: and
- b. The Hydrogen Plant (H2HTR), the Feed and Isomerization Heaters (ECO1F, ECO2F, ECO3F, ECO1I, ECO2I, and ECO3I), and the Jet Fractionator (JETFRAC) will be considered process heaters under Subpart JJJJJJ. Because process heaters are specifically excluded from the definition of boiler, these units are not subject to the requirements of Subpart JJJJJJ;
- 53. NEXT is not subject to 40 CFR 63, Subpart VVVVV "Chemical Manufacturing Area Sources" which applies owners and operators of chemical manufacturing process units (CMPUs) at area sources of HAPs. In order for a source to be subject to this standard, it must use as a feedstock, emit as byproduct or produce as a product one of the following HAPs: 1,3-butadiene, 1,3-dichloropropene, acetaldehyde, chloroform, ethylene dichloride, hexachlorobenzene, methylene chloride, quinoline, arsenic compounds, cadmium compounds, chromium compounds, lead compounds, manganese compounds, or nickel compounds. Additionally, the concentration of a target HAP must be greater than 0.1% for carcinogens and 1.0% for non-carcinogens in order to be subject. The proposed facility will not operate any chemical manufacturing process units that process, use or produce regulated HAPs determined according to 40 CFR 63.11494(a)(2)(i) through (iv). Therefore, the requirements of Subpart VVVVVV will not be applicable to the proposed facility.
- 54. The source is subject to the following updated federal standards or requirements that, at time of permit issuance, have not been adopted by the Environmental Quality Commission. For any violations of the following specific regulation, the permittee may be subject to enforcement action by EPA, but not DEQ. DEQ retains the authority to modify the permit or issue attachments as provided in Oregon Administrative Rule Chapter 340 Division 216 if the EQC adopts these regulations.

Applicable Federal Standards Not Yet Adopted by EQC			
40 CFR Part	Subpart	Federal Register Citation	Date of Promulgation
60	A - General Provisions	83 FR 56720	11/14/2018
60	A - General Provisions	84 FR 47882	09/11/2019
60	Kb - Volatile Organic Liquid Storage Vessels	86 FR 5019	01/19/2021
60	IIII – Stationary RICE	84 FR 61563	11/13/2019
60	IIII – Stationary RICE	86 FR 34357	06/29/2021
63	A - General Provisions	83 FR 56725	11/14/2018
63	A - General Provisions	84 FR 47882	09/11/2019
63	A - General Provisions	85 FR 73885	11/19/2020
63	ZZZZ - Stationary RICE	85 FR 73912	11/19/2020

Expiration Date: 8/1/2027 Application No.: 32808 Page 22 of 24

## GREENHOUSE GAS REPORTING APPLICABILITY

55. OAR Chapter 340 Division 215 is applicable to the source because emissions of greenhouse gases exceed 2,500 metric tons (2,756 short tons) of CO<sub>2</sub> equivalents per year.

- 56. NEXT **is not** subject to 40 CFR 98, Subpart P "*Hydrogen Production*" because NEXT will not produce hydrogen gas sold as a product to other entities.
- 57. NEXT <u>is not</u> subject to 40 CFR 98, Subpart Y "*Petroleum Refineries*" because NEXT will produce renewable diesel, renewable jet fuel, and renewable naphtha which are not products listed in the definition of "petroleum refinery" in this subpart.

## CLIMATE PROTECTION PROGRAM

58. NEXT is not subject to the Best Available Emission Reduction (BAER) requirements of DEQ's Climate Protection Program (CPP) because all of the natural gas used on site (whether combusted or used as a feedstock) will be delivered by a natural gas utility. If NEXT changes natural gas supplier to an interstate pipeline, NEXT may be subject to additional requirements under OAR 340-271.

## REASONABLY AVAILABLE CONTROL TECHNOLOGY APPLICABILITY

- 59. The RACT rules are not applicable to this source because it is not in the Portland AQMA, Medford AQMA, or Salem SKATS.
- 60. OAR 340-226-0130 Highest and Best Practicable Treatment and Control and Typically Achievable Control Technology (TACT):
  - a. TACT is required for any new EU that:
    - i. would emit any criteria pollutant > 1 tpy or > 500 pounds/year for PM<sub>10</sub> in a PM<sub>10</sub> nonattainment area;
    - ii. are not subject to Major of type A State NSR (division 224), NSPS (division 238), rules for areas with unique air quality needs (division 240), or applicable standards in incinerator rules (division 230), wood products rules (division 234), specific industry rules (division 236) for new or modified sources; and
    - iii. DEQ determines that proposed air pollution control devices and emission reduction processes do not represent TACT.
  - b. Equipment leaks (LEAK) and the three renewable diesel storage tanks (RD1, RD2, and RD3) met all three criteria and required a TACT analysis;
  - c. NEXT proposed to monitor emissions from LEAK with a leak detection and repair (LDAR) program with a leak definition of 5,000 ppm. DEQ agreed that this meets TACT and the LDAR requirements are located in Condition 4.4. of the proposed permit; and

Expiration Date: 8/1/2027 Application No.: 32808 Page 23 of 24

- d. NEXT provided a cost analysis demonstrating that the use of internal floating roofs for RD1, RD2, and RD3 is economically infeasible. The incremental annual cost effectiveness was approximately \$500,000 per ton of VOC reduced.
- 61. The source is likely meeting OAR 340-226-0130 Highest and Best Practicable Treatment and Control and Typically Achievable Control Technology (TACT) by:
  - a. Controlling emissions of CO and NO<sub>x</sub> with SCR and Oxidation catalysts on ECO1F, ECO1I, ECO2F, ECO2I, ECO3F, ECO3I, H2HTR, and JETFRAC;
  - b. Controlling emissions of PM with filtration systems on 1BEDAY1, 1BEDAY2, 1BESV1, 1BESV2, 1BESV3, 1FADT, 1FASV1, 2BEDAY1, 2BEDAY2, 2BESV1, 2BESV2, 2BESV3, 2FADT, 2FASV1, 3BEDAY1, 3BEDAY2, 3BESV1, 3BESV2, 3BESV3, 3FADT, 3FADT2, 3FADT3, 3FASV1, 3FASV2, and 3FASV3;
  - c. Controlling emissions of VOC from LOAD with a VCU;
  - d. Controlling emissions of VOC from HCS, OWS, RD/RJ1 with internal floating roofs; and
  - e. Controlling emissions from AGRU & SWS with a thermal oxidizer, dry sorbent injection, a filtration unit, SCR, and an Oxidation catalyst.

## **SOURCE TESTING**

# PROPOSED TESTING

62. The table below summarize the proposed testing requirements and indicates which control device parameters must be recorded during the tests:

EP ID	Pollutant(s)	Testing Frequency
BOILER	$CO^a$	Every 5 years
ECO1, ECO2, & ECO3	$CO^a$	Every 5 years
	NOx <sup>b</sup>	Every 3 years
H2HTR	$CO^a$	Every 5 years
JETFRAC	$CO^a$	Every 5 years
INCIN	PM <sup>c</sup> , PM <sub>10</sub> <sup>c</sup> , PM <sub>2.5</sub> <sup>c</sup> , SO <sub>2</sub> <sup>c</sup> , VOC <sup>d</sup> , CO <sup>a</sup> , NO <sub>x</sub> <sup>b</sup> , H <sub>2</sub> S, Sulfuric Acid Mist	Every 5 years
VCU1	VOC	Every 5 years

- a. The permittee must monitor gas temperature at oxidation catalyst inlet and pressure difference across the oxidation catalyst;
- b. The permittee must monitor ammonia injection rate, gas temperature at catalyst inlet, and pressure difference across the catalyst;

Expiration Date: 8/1/2027 Application No.: 32808

Page 24 of 24

c. The permittee must monitor pressure differential across the filtration unit and dry sorbent injection rate; and

d. The permittee must monitor the operating temperature of the thermal oxidizer;

# **PUBLIC NOTICE**

63. Pursuant to OAR 340-216-0066(4)(a)(A), issuance of Standard Air Contaminant Discharge Permits require public notice in accordance with OAR 340-209-0030(3)(c), which requires DEQ to provide notice of the proposed permit action and a minimum of 35 days for interested persons to submit written comments. In addition, a hearing will be scheduled to allow interested persons to submit oral or written comments. The public notice was emailed/mailed on March 24, 2022, and the 60-day comment period will end on May 26, 2022; unless another hearing is scheduled.

A virtual public hearing will begin at 6:00 p.m. on April 27, 2022.

During the public comment period, DEQ received 6,993 written comments and 41 oral comments. Comments received during the public comment period as well as comments received at the public hearing are summarized in the attached document.

dg:lb