Notice of Construction (NOC) Worksheet

PUGET SOUND Clean Air Agency

Source: King Co Solid Waste Op Sec Cedar Hills	**NOC Number:** 12127
Installation Address: 16645 228th Ave SE | Maple Valley, WA 98038	**Registration Number:** 10138
Contact Name: Toraj Ghofrani	**Contact Email:** toraj.ghofrani@kingcounty.gov
Applied Date: 08/05/2021	**Contact Phone:** (206) 477-5221
Engineer: Carl Slimp	**Inspector:** Rick Woodfork

A. DESCRIPTION

For the Order of Approval:
The addition of one mobile Byers dry vapor-phase system and small diesel generator to control refuse odor nuisance around the landfill active face of Area 8. This unit shall be used to implement odor control when and where the area 8 landfill is actively being filled and compressed.

Additional Information:

Facility

The King County Cedar Hills Regional Landfill (CHRL) is a facility that is specifically constructed for the purpose of disposing of municipal solid waste. It is constructed in cells or sections isolated from other parts of the landfill by soil or other noncombustible cover material. According to the application, older sections have clay-based or flexible membrane caps that Cedar Hills actively monitors for tears or damage. CHRL is located at 16645 228th Avenue Southeast, off Cedar Grove Road, three miles north of Maple Valley, six miles east of the City of Renton and about four miles south of the City of Issaquah. CHRL is a current Air Operating Permit source. CHRL occupies approximately 940 acres in total size. This equipment will be implemented at Area 8, which started receiving waste in 2019.

This facility has also received two NOV's for using related equipment that did not meet their permit conditions

2-A000002 written warning.pdf

Proposed Equipment/Activities

According to the application, the landfilling of fresh refuse at Cedar Hills Regional Landfill's active face is the suspected source of malodorous compounds emission to the ambient air. CHRL is required to keep a cover layer of soil over this landfill except when they are actively filling and compressing a cell. This control equipment will be run during this operation to decrease the proliferation of odor.

Permit History

This control device is being proposed to use at area 8. The most recent NOC that is applicable to this area is NOC # 11307.

This source is also subject a title V air operating permit #10138. This permit has several sections related to odor control, which include a complaint response plan, and limits to what can be used to control odor.

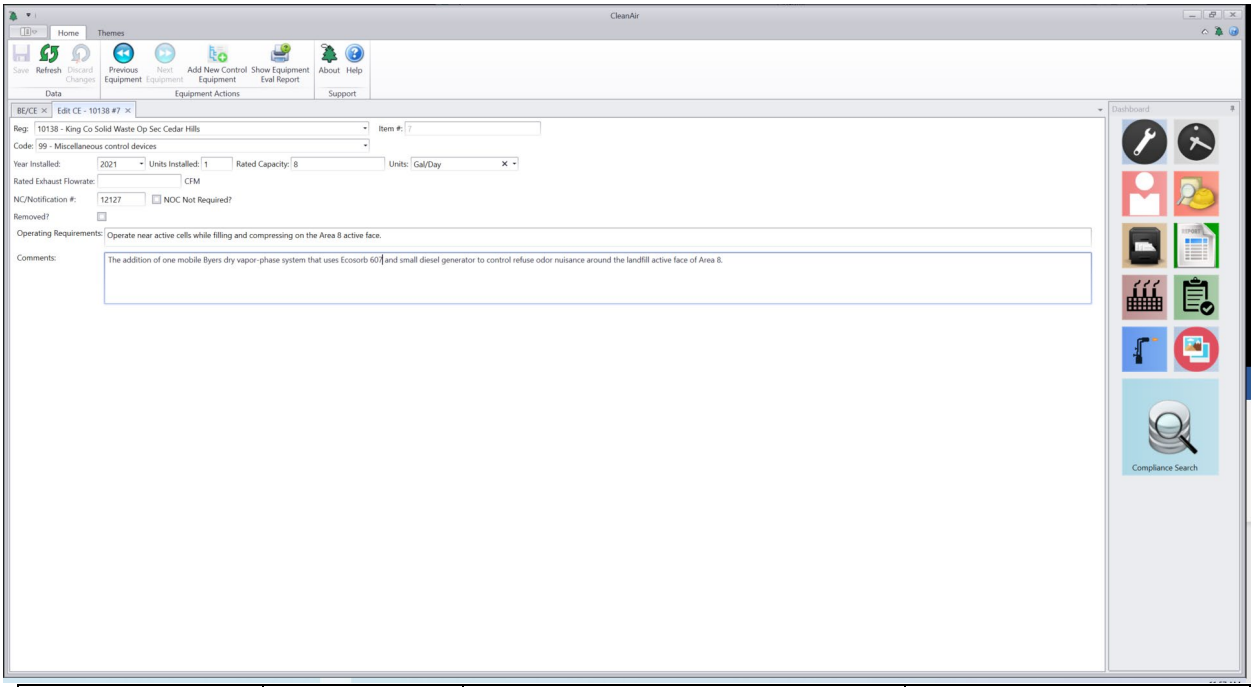
(b) Complaint Response
King County Solid Waste Division shall maintain and follow a complaint response plan, which includes the following:
1) Designation of a responsible person to respond to and record complaints regarding odor, fugitive dust or nuisance. [Puget Sound Clean Air Agency - Order of Approval No. 7676 Condition No. 8]
2) An informational bulletin that will be mailed out to any person that contacts the landfill, or to other interested persons forwarded from a local governmental agency that has a complaint or questions about the complaint response process. This informational bulletin shall include an explanation of the landfill's odor and nuisance control plans and the name and telephone number of the person responsible for responding to the complaints. [Puget Sound Clean Air Agency Order of Approval No. 7676, Condition No. 8]
3) King County Solid Waste Division shall record and investigate complaints regarding odor, fugitive dust, or nuisance as soon as possible, but no later than 12 hours after receipt of the complaint. The investigation will include documentation of wind direction and speed during the time the complaint occurred. King County Solid Waste Division shall use good industrial practices to correct any problems identified by the complaint investigations within 24 hours. [Puget Sound Clean Air Agency Order of Approval No. 7676, Condition No. 8]. King County Solid Waste Division shall record and investigate complaints about any emissions that are, or likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interfere with enjoyment of life and property, emissions from fallout and any track-out onto paved roads open to the public, or complaints regarding other applicable. requirements.
4) King County Solid Waste Division shall maintain records on-site of all complaints received regarding odor, fugitive dust or nuisance including the date and time of the complaint, the nature of the complaint, the wind speed and wind direction at the time of the complaint, and the date, time and nature of any corrective action taken. [Puget Sound Clean Air Agency Order of Approval No. 7676, Condition No. 8]
5) The complaint response plan shall be maintained on-site and made available to Puget Sound Clean Air Agency personnel upon request. [Puget Sound Clean Air Agency Order of Approval No. 7676, Condition No. 8]
King County Solid Waste Division shall investigate the complaint and determine if there was noncompliance with an applicable requirement of this permit. King County Solid Waste Division shall correct any such compliance problems as soon as possible. King County Solid Waste Division shall shut down the unit or activity if the unit or activity is not returned to a compliant status within 24 hours of identification.

D. Concealment.

King County Solid Waste Division shall not cause or allow the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of an air contaminant that would otherwise violate Puget Sound Clean Air Agency Regulation I, Article 9 or Chapter 173-400 WAC. [Puget Sound Clean Air Agency Regulation I, Section 9.13(a), 6/9/88; WAC 173-400-040(7), 8/20/93; and 40 CFR 60.12]

E. Masking.
King County Solid Waste Division shall not cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant that causes detriment to health, safety or welfare of any person or conceals or masks an emission of an air contaminant that would otherwise violate Regulation I, Article 9 or Chapter 173-400 WAC. [Puget Sound Clean Air Agency Regulation I, Section 9.13(b), 6/9/88; and WAC 173-400-040(7), 8/20/93]

B. DATABASE INFORMATION



New NSPS due to this NOCOA?	**No**	**Applicable NSPS:**	**Delegated? Yes**
New NESHAP due to this NOCOA?	**No**	**Applicable NESHAP:**	**Delegated?**
New Synthetic Minor due to this NOCOA?	**No**		

CHRL is already subject to the requirements of 40 CFR 60 Subpart XXX and 40 CFR 63 Subpart AAAA. This project will not affect these criteria.

C. NOC FEES AND ANNUAL REGISTRATION FEES

NOC Fees:

Fees have been assessed in accordance with the fee schedule in Regulation I, Section 6.04. All fees must be paid prior to issuance of the final Order of Approval.

Fee Description	Cost	Amount Received (Date)
Filing Fee	$ 1,150	
Equipment	$600	
SEPA (DNS)	--	
Filing received		$ 1,150 (8/5/2021)
Additional fee received		$ 600 (not yet paid)
Total	**$ 1,750**	

Registration Fees:
Registration fees are assessed to the facility on an annual basis. Fees are assessed in accordance with Regulation I, Section 5.07.

Cedar Hills is an AOP source which pays fees associated with their NAICS code, no change in registration fees with the addition of this equipment is expected besides the additional costs per ton of air pollution outlined in Reg 1 Section 7.07(b)(2).

A copy of the 2020 registration is posted below for informational purposes. Note that the pollutant emission surcharges could potentially change every year, based on actual emission rates:

PUGET SOUND
Clean Air Agency

Puget Sound Clean Air Agency
1904 Third Avenue, Suite 105
Seattle, WA 98101-3317
Tax ID: 91-0823558
206.689.4072

Invoice for Year 2021 Operating Permit Fees

Bill To:
King Co Solid Waste Op Sec Cedar Hills 201 S Jackson St Ste 701 Seattle, WA 98104-3855 Attention: Accounts Payable

Invoice Date:	Invoice #:
November 20, 2020	20210019
Due Date:	**Terms:**
January 04, 2021	Net 45 Days
Facility ID (Permit #):	
10138	

Site Address: ***King Co Solid Waste Op Sec Cedar Hills***
16645 228th Ave SE, Maple Valley, WA 98038

The annual operating permit fee is required by Washington State law and Puget Sound Clean Air Agency's Regulation I.
Your fees are based on your NAICS code and your actual emissions during 2019.

Facility Fees and Applicable Regulations			Charges
Facility Fee for Operating Permit Sources. Reg I, 7.07(b)(1)(iii)			**$ 28,600.00**
NAICS 562212 -- Solid Waste Landfill			
Emission Surcharges - Reg I, 7.07(b)(2)	**Tons in 2019**	**Per Ton**	
CO (Carbon Monoxide)	1	$ 30	$ 30.00
HAP (Hazardous Air Pollutants)	1	$ 60	$ 60.00
NOx (Nitrogen Oxides)	5	$ 60	$ 300.00
SOx (Sulfur Oxides)	3	$ 60	$ 180.00
			$ 570.00
Fee Totals			
Operating Permit Fee (After February 18, 2021, the fee is $35,670.00).			**$ 29,170.00**
The Total Fee is due by January 04, 2021. If unpaid after February 18, 2021, an additional delinquent fee of $6,500.00 will be applied. The delinquent fee is equal to 25% of the Operating Permit Fee, not to exceed $6,500 (Reg I, 7.07(b)).			
WA State Department of Ecology surcharge, Reg I, 7.07(d)			**$ 665.15**
For further information regarding the WDOE surcharge, please call 1-360-407-7530.			
TOTAL FEE			**$ 29,835.15**

Pay online and confirm payment: www.pscleanair.gov/annualfee
This copy is for your records. If paying by check, please mail the yellow copy with your payment.
Your canceled check is your receipt.

11/06/2020

D. STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW

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

However, this project is for additive control equipment to area 8. When this area was authorized in NOC 11307, it was determined that a new SEPA was not needed, as described below.

Cedar Hills underwent a SEPA review with King County in 2010, under their site development plan with King County Department of Natural Resources and Parks, Solid Waste Division (KCSWD). The contact for this SEPA determination is Laura Belt – Project Manager at 206-477-5215. The Final Environmental Impact Statement and all associated documents can be found on the web at:

https://your.kingcounty.gov/solidwaste/facilities/cedar-hills-development.asp#project_documents

This EIS included the development plan for Area 8 (Called Alternative 2 in the EIS document) and for this NOC action we will rely on the existing EIS. Alternative 2 is located in the "alternatives" EIS section:

https://kingcounty.gov/~/media/depts/dnrp/solid-waste/facilities/documents/Final_EIS_Chapter_2.ashx?la=en

No further action will be taken by the Agency for SEPA.[1]

That EIS has a Landfill Gas and Odor Control section. This EIS the effectiveness of gas and odor control systems to be monitored regularly, and for corrective measures to be taken in the event of any exceedances of regulatory standards. The implementation of this odor control would be a corrective measure.

The applicant also submitted a completed Environmental checklist that is included below. While helpful for understanding this permitting, I believe no further action is needed for SEPA.

3-SEPA.pdf Maps.pdf

E. TRIBAL CONSULTATION

On November 21, 2019, the Agency's Interim Tribal Consultation Policy was adopted by the Board. Criteria requiring tribal consultation are listed in Section II.A of the policy and include establishment of a new air operating permit source, establishment of a new emission reporting source, modification of an existing emission reporting source to increase production capacity, or establishment or modification of certain equipment or activities. In addition, if the Agency receives an NOC application that does not meet the criteria in Section II.A but may represent similar types and quantities of emissions, the Agency has the discretion to provide additional consultation opportunities.

This project does not meet any of the criteria for consultation listed in Section II.A of the Agency's Interim Tribal Consultation Policy.

F. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REVIEW

Best Available Control Technology (BACT)

New stationary sources of air pollution are required to use BACT to control all pollutants not previously emitted, or those for which emissions would increase as a result of the new source or modification. BACT is defined in WAC 173-400-030 as, "an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under Chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available

[1] NOC Worksheet 11307ram

methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant."

An emissions standard or emissions limitation means "a requirement established under the Federal Clean Air Act or Chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice, or operational standard adopted under the Federal Clean Air Act or Chapter 70.94 RCW."

There are two parts of this machinery to consider BACT for, the engine and then the Byers dry vapor-phase system.

The engine is exempt from permitting per regulation 1 section 6.03(c)(5) as it fits the definition of a non-road engine described in Regulation 1 section 15.01(a)(3)
(3) The engine remains or will remain at a location for more than twelve consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

The Byers dry vapor-phase system is a form of BACT for odor control but has not yet been used for Washington.

Best Available Control Technology for Toxics (tBACT)

New or modified sources are required to use tBACT for emissions control for TAP. Best available control technology for toxics (tBACT) is defined in WAC 173-460-020 as, "the term defined in WAC 173-400-030, as applied to TAP."

In this application, there are no toxics to identify. The main ingredients of the vapor are RO water, essential oils and surfactants. The manufacturer, OMI, has provided the following documents to attest that these ingredients do not contain anything on the Washington TAP list (WAC 173-460-150). The SDS was also requested and does not list anything hazardous. On top of that, they have also provided in attachment 4 the results of a toxicology study performed by CPF Associates, Inc. showing that the spray is safe. After conferring with OMI, plant-based, essential oils can make up to 5% of the solution.

Ecosorb 607 SDS.pdf 4-Attachments.pdf Ecosorb 606 and 607_Washington TAP

Similar Permits

Finding permits for this technology has proven to be challenging. In the state of Washington, this technology has not passed scrutiny with WAC 173-400-040 (7) or PSCAA Regulation I, Section 9.13(a) & (b). An example of a similar process being denied is shown below.

NOC		
NOC 12023 Vashon Bioenergy Farm LLC	Denied biochar supplement due to violation of Regulation I, Section 9.13 – BreakDown XC 40 Odor elimanator Concentrate	• d-Limonene an oily substance which creates a fresh smell (this is common in biogenic emissions from citrus trees) and d-limonene is also a particulate matter precursor. • Salicylic acid gives a subtle sweet fragrance • Alcohols are surfactants that help mix the oil/acid with water and the sulfonate is what makes it stick to surfaces including our noses. • Odor Control handled by halting production if Odor detected

Other Regulatory Agencies BACT

Finding permits outside of Washington where this is used has proven to be difficult, due to it being designed to usually not need permitting, as advertised on the 607 ecosorb technical data sheet in attachment 4 of the application.

While visiting the ecosorb website, several various case studies and implementation are listed.

One example of this being used is at the Queen City Compost in North Carolina.
https://www.wastetodaymagazine.com/article/queen-city-compost/

Since installed, the NCDENR has reported no complaints. Their response is included below.
https://www.wastetodaymagazine.com/article/queen-city-compost/

RE_ _External_ Queen City Compost Permit.ı

Analysis

Throughout the country, this unit is used to control odor and is designed for this specific application. It is a fair argument that this unit is BACT for odor when dealing with landfills and composting. In Washington there are two applicable laws that have been prohibitive in permitting spray technology to

deal with odors that need to be addressed before this unit can be approved. This involves the masking and concealment of odors. As noted in the permit history:

D. Concealment.
King County Solid Waste Division shall not cause or allow the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of an air contaminant that would otherwise violate Puget Sound Clean Air Agency Regulation I, Article 9 or Chapter 173-400 WAC. [Puget Sound Clean Air Agency Regulation I, Section 9.13(a), 6/9/88; WAC 173-400-040(7), 8/20/93; and 40 CFR 60.12]

E. Masking.
King County Solid Waste Division shall not cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant that causes detriment to health, safety or welfare of any person or conceals or masks an emission of an air contaminant that would otherwise violate Regulation I, Article 9 or Chapter 173-400 WAC. [Puget Sound Clean Air Agency Regulation I, Section 9.13(b), 6/9/88; and WAC 173-400-040(7), 8/20/93]

Based on the manual provided by OMI industries, I do not believe this device and product qualify as masking or concealment. Please see the BACT section for further discussion.

OMI provided the following paper that describes the chemical reactions involved with the Ecosorb spray. When cross referenced with the NOC application for area 8, hydrogen sulfide and mercaptans are the suspected constituents for the odor. In that regard, we will look at the chemical reactions this paper assigns these chemicals as acids and form a salt compound in the water spray. The essential oils act as a kind of catalyst as well as promoting clustering so that the compounds fall out of the air.

Paper-ControlOfMalodorsUsingEcosorb.pdf

Ecosorb also supplied this table showing the results after the introduction of the ecosorb spray. It appears that this chemical does remove the pollutants as opposed to concealing or masking.

Table 1.1: Ecosorb® contact testing with identified gases

	ppm/vol. Perm Tube	ppm/vol. Reactor Out	Contact	4 minutes	18 minutes
Hydrogen sulfide	36	36	20.04	36	
Sulfur dioxide	26	26	< 0.01	4.4	
Ammonia	97	97	68	8	38
Ethyl mercaptan	3.92	3.92	< 0.1		< 0.1
Methyl mercaptan	3.2	3.2	< 0.01		< 0.1
Testing completed by independent laboratories. Full test methods and results are provided in Section 5.					

I believe the paper and these lab results are enough to show that enough chemical reactions are taking place to show that this spray is doing more than masking and concealing.

Recommendations

NOC 11307 and 40 CFR 60 part XXX both describe the proper monitoring and practices for proper odor control. However, CHRL has identified need for additional control. As this method is both widely used nationwide and meets the criteria for a non-masking, non-concealing odor removal, it is a valid solution.

Since this is considered control equipment, WAC 173-400-114 applies.

Requirements for replacement or substantial alteration of emission control technology at an existing stationary source.

(1) Any **person** proposing to replace or substantially alter the **emission** control technology installed on an existing **stationary source** or **emission unit** shall file a **notice of construction application** with the appropriate **authority**, or with **ecology** in areas or for **sources** over which **ecology** has jurisdiction. Replacement or substantial alteration of control technology does not include routine maintenance, repair or similar parts replacement.

(2) A project to replace or substantially alter emission control technology at an existing stationary source that results in an increase in emissions of any air contaminant is subject to new source review as provided in WAC **173-400-110**. For any other project to replace or significantly alter control technology the permitting **authority** may:

(a) Require that the owner or operator employ **RACT** for the affected **emission unit;**

(b) Prescribe reasonable operation and maintenance conditions for the control equipment; and

(c) Prescribe other requirements as authorized by chapter **70.94** RCW.

(3) Within thirty days of receipt of a **notice of construction application** under this section **ecology** or the **authority** shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary to complete the application. Within thirty days of receipt of a complete **notice of construction application** under this section **ecology** or the **authority** shall either issue an **order of approval** or a proposed **RACT** determination for the proposed project.

(4) Construction shall not **"commence,"** as defined in WAC **173-400-030**, on a project subject to review under this section until **ecology** or the **authority** issues a final **order of approval.** However, any **notice of construction application** filed under this section shall be deemed to be approved without conditions if **ecology** or the **authority** takes no action within thirty days of receipt of a complete **notice of construction application.**

(5) Approval to replace or substantially alter **emission** control technology shall become invalid if construction is not **commenced** within eighteen months after receipt of such approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. **Ecology** or the **authority** may extend the eighteen-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen months of the projected and approved commencement date.

CHRL has suggested using both a nasal ranger and a community survey to monitor the effectiveness of the Byers dry vapor-phase system.

Summary BACT determination

Pollutant	Available Method That Meets BACT	Implementation of Method
NO_x	N/A	N/A
SO_2	N/A	N/A
CO	N/A	N/A
Total VOCs	Track usage	Inventory of Ecosorb 607 spray
PM	N/A	N/A

G. EMISSION ESTIMATES

Proposed Project Emissions

Actual Emissions

It is expected that this unit will only run during operational hours which is approximately 10 hours per day. Actual emissions should be less than half of the potential emissions calculated, but as CHRL requested the ability to operate 24 hours per day, actual emissions will be treated as potential emissions.

Potential Emissions

The permitted potential to emit calculations are based on operating at 100% rated capacity and 8,760 hour per year.

The 100% throughput of the Byers Vapor System is 8 gallons/24 hours, or .33 gallons/hr. With a relative density of 0.99, or 8.25 lb/gallon. The chemical emitted is mostly RO water and can be up to 5% essential oils which will count as VOC's. Assuming 24/7 operation:

0.33 gallons/hr*8,760 hours per year * .05 VOC/lb * 8.25lb/gallon = 1,204.5 lbs/year of VOC's per mobile Byers dry vapor-phase system. 5% VOC's is based on communication with OMI Industries included below

Email confirming 5 percent essential oils.

While surfactants have a potential to be particulate emissions, after discussing the system with Laura Haupert from OMI Industries, the unit does not get hot enough to vaporize the surfactants so that they don't leave the system, and no particulate should be emitted.

Facility-wide Emissions

As this facility is already operating under an AOP, and facility wide emissions are calculated yearly, and for the most part, beyond the scope of this permit. However, the diesel engine operation adds 3.6 tons per year to the 5 tons emitted in 2020 and 1 ton of CO on top of the 1 ton/year of 2020.

This increase does not trigger any rules or regulations beyond what is already applicable to the facility.

H. OPERATING PERMIT OR PSD

The Title V Air Operating Permit (AOP) program applicability for the entire source has been reviewed.

The facility is a Title V "**air operating permit source**" and conditions of this Order will be incorporated into the AOP during the next AOP opening.
Emission increases associated with this project were reviewed for Prevention of Significant Deterioration (PSD) Program applicability. The facility is not an existing PSD major source and the increase in emissions from this permitting action is below PSD thresholds.

I. AMBIENT TOXICS IMPACT ANALYSIS

No TAPS will be emitted from this permitting action.

J. APPLICABLE RULES & REGULATIONS

Puget Sound Clean Air Agency Regulations

SECTION 7.09(b): Owner or operators of air contaminant sources subject to Article 7 of this regulation shall develop and implement an operation and maintenance plan to ensure continuous compliance with Regulations I, II, and III. A copy of the plan shall be filed with the Control Officer upon request. The plan shall reflect good industrial practice and shall include, but not be limited to, the following:
(1) Periodic inspection of all equipment and control equipment;
(2) Monitoring and recording of equipment and control equipment performance;
(3) Prompt repair of any defective equipment or control equipment;
(4) Procedures for startup, shut down, and normal operation;
(5) The control measures to be employed to ensure compliance with Section 9.15 of this regulation; and
(6) A record of all actions required by the plan.
The plan shall be reviewed by the source owner or operator at least annually and updated to reflect any changes in good industrial practice.

SECTION 6.09: Within 30 days of completion of the installation or modification of a stationary source subject to the provisions of Article 6 of this regulation, the owner or operator or applicant shall file a Notice of Completion with the Agency. Each Notice of Completion shall be submitted on a form provided by the Agency, and shall specify the date upon which operation of the stationary source has commenced or will commence.

SECTION 9.03: (a) It shall be unlawful for any person to cause or allow the emission of any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour, which is:
(1) Darker in shade than that designated as No. 1 (20% density) on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(2) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Section 9.03(a)(1).
(b) The density or opacity of an air contaminant shall be measured at the point of its emission, except when the point of emission cannot be readily observed, it may be measured at an observable point of the plume nearest the point of emission.
(c) This section shall not apply when the presence of uncombined water is the only reason for the failure of the emission to meet the requirements of this section.

SECTION 9.09: General Particulate Matter (PM) Standard. It shall be unlawful for any person to cause or allow the emission of particulate matter in excess of the following concentrations:
Equipment Used in a Manufacturing Process: 0.05 gr/dscf.

SECTION 9.11: It shall be unlawful for any person to cause or allow the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

SECTION 9.13: It shall be unlawful for any person to cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes detriment to health, safety or welfare of any person.

SECTION 9.15: It shall be unlawful for any person to cause or allow visible emissions of fugitive dust unless reasonable precautions are employed to minimize the emissions. Reasonable precautions include, but are not limited to, the following:
(1) The use of control equipment, enclosures, and wet (or chemical) suppression techniques, as practical, and curtailment during high winds;
(2) Surfacing roadways and parking areas with asphalt, concrete, or gravel;
(3) Treating temporary, low-traffic areas (e.g., construction sites) with water or chemical stabilizers, reducing vehicle speeds, constructing pavement or rip rap exit aprons, and cleaning vehicle undercarriages before they exit to prevent the track-out of mud or dirt onto paved public roadways; or
(4) Covering or wetting truck loads or allowing adequate freeboard to prevent the escape of dust-bearing materials.

SECTION 9.16(c): General Requirements for Indoor Spray-Coating Operations. It shall be unlawful for any person subject to the provisions of this section to cause or allow spray-coating inside a structure, or spray-coating of any motor vehicles or motor vehicle components, unless all of the following requirements are met:
(1) Spray-coating is conducted inside an enclosed spray area;
(2) The enclosed spray area employs either properly seated paint arresters, or water-wash curtains with a continuous water curtain to control the overspray; and
(3) All emissions from the spray-coating operation are vented to the atmosphere through an unobstructed vertical exhaust vent.

REGULATION I, SECTION 9.20(a): It shall be unlawful for any person to cause or allow the operation of any features, machines or devices constituting parts of or called for by plans, specifications, or

other information submitted pursuant to Article 6 of Regulation I unless such features, machines or devices are maintained in good working order.

Washington State Administrative Code

WAC 173-400-040(3): Fallout. No person shall cause or allow the emission of particulate matter from any source to be deposited beyond the property under direct control of the owner or operator of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

WAC 173-400-040(4): Fugitive emissions. The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission:

(a) If located in an attainment area and not impacting any nonattainment area, shall take reasonable precautions to prevent the release of air contaminants from the operation.

WAC173-400-111(7): Construction limitations.

(a) Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing by the permittee that an extension is justified.

Federal
CHRL is already subject to the requirements of 40 CFR 60 Subpart XXX and 40 CFR 63 Subpart AAAA.

K. PUBLIC NOTICE

This project does not meet the criteria for mandatory public notice under WAC 173-400-171(3). Criteria requiring public notice includes, but is not limited to, a project that exceeds emission threshold rates as defined in WAC 173-400-030 (e.g. 40 tpy NOx, VOC, or SO_2, 100 tpy CO, 15 tpy PM_{10}, 10 tpy $PM_{2.5}$, 0.6 tpy lead), includes a WAC 173-400-091 synthetic minor limit, has a toxic air pollutant emission increase above the acceptable source impact level in WAC 173-460-150, or has significant public interest. A notice of application was posted on the Agency's website for 15 days. No requests or responses were received. A copy of the website posting is below:

New Construction Projects

Company	Address	Project Description	Date Posted	Contact Engineer
King Co Solid Waste Op Sec Cedar Hills	16645 228th Ave SE, Maple Valley, WA 98038	The addition of one mobile Byers dry vapor-phase system and small diesel generator to control refuse odor nuisance around the landfill active face.	8/9/21	Carl Slimp

L. RECOMMENDED APPROVAL CONDITIONS

Standard Conditions:

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.

2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

Specific Conditions:

3. This equipment shall be used to control odor whenever cover soil in area 8 is removed.
4. Only OMI Industries Ecosorb 607 is approved to be used with the mobile Byers dry vapor-phase system.
5. The owner and/or operator will keep an inventory of Ecosorb 607 used. Purchase receipts can be used for this purpose.
6. Up to 5% of ecosorb 607 used may be essential oils. The owner and/or operator will be responsible for obtaining up to date technical sheets or SDS's that show the composition.
7. A daily log shall be kept on site up to 2 years for the mobile Byers dry vapor-phase system. This log shall include
    a. Time of startup
    b. Time of shut down
    c. Replacement of Ecosorb 607 supply
    d. Nasal ranger readings
    e. Maintenance
    f. Movement and location of the system
8. This permit expires 12/31/2022. Authorization to operate this equipment expires on 12/31/2022. Operation of this equipment beyond 12/31/2022 would require issuance of a new Notice of Construction Order of Approval.

M. CORRESPONDENCE AND SUPPORTING DOCUMENTS

FW_ Plz Provide the Following Info for Ou

RE_ follow up on NOC 12127.msg

N. REVIEWS

Reviews	Name	Date
Engineer:	Carl Slimp	10/12/2021, 11/10/2021
Inspector:	Rick Woodfork	10/12/2021
Second Review:	John Dawson	11/10/2021
Applicant Name:	Mark Monteiro	11/10/2021