

**State of Washington Department of Ecology
Notice of Construction Approval Order**

In the matter of approving a	)	Draft Approval Order No.
modified air contaminant source	)	19AQ-C234 First Revision
for Sabey Data Center Properties'	)	
Intergate Columbia II	)	AQPID No. B0170059

Project Summary

Sabey Data Center Properties, herein referred to as the Permittee, operates the Intergate Columbia II data center located at 4405 Grant Rd, East Wenatchee, Washington, in Douglas County. The data center is adjacent to the separately-permitted Intergate Columbia I data center. Together, the two data centers include:

Intergate Columbia I – Building A

- Leased to T-Mobile West Corporation – emergency generator operation approved under Notice of Construction (NOC) Approval Order No. 08AQ C075 First Revision.

Intergate Columbia I – Building B

- Northern portion leased to Costco Wholesale Corporation – emergency generator operation approved under NOC Approval Order No. 10AQ C152 Second Revision.
- Central portion leased to BlackRock, Inc. – emergency generator operation approved under NOC Approval Order No. 10AQ C153.
- Southern portion directly operated by the Permittee – emergency generator operation approved under NOC Approval Order No. 08AQ C078 Third Revision.

Intergate Columbia II – Building D

- Direct operation by the Permittee of 11 existing diesel-fired generator sets (gensets).

Intergate Columbia II – Building E

- This project is for the direct operation by the Permittee of 15 gensets.

The facility is classified as a 'Synthetic Minor' for nitrogen oxide emissions. This is due to allowable emissions for this pollutant relative to the 100 ton-per-year threshold under Title V of the federal Clean Air Act.

Legal Authority

The emissions from the proposed modification have been reviewed under the legal authority of RCW 70A.15.2210 and the applicable rules and regulations adopted thereunder. The proposed modification, if operated as specified, will be in accordance with applicable rules and regulations, as set forth in Chapters 173-400 WAC and 173-460 WAC and the operation thereof, at the location proposed, will not result in ambient air quality standards being exceeded.

This NOC Approval Order rescinds and replaces NOC Approval Order No. 19AQ-C234. NOC Approval Order No. 19AQ-C234 is no longer in effect.

Therefore, it is ordered that the project as described in the NOC application and more specifically detailed in plans, specifications, and other information submitted to the Washington State Department of Ecology (Ecology) is approved for construction and operation, provided the following conditions are satisfied:

Approval Conditions

1. Emission Units/Activities

The following emission units have been identified and are approved for installation in this NOC Approval Order; the engine group numbers will be used elsewhere in this Order to identify requirements for like engines:

Emission Unit ID	Engine Group	Building	Engine Make and Model	Engine Rating (bhp)	No. of Units
COL-CD1-A COL-CD1-B COL-CD1-R COL-CD2-A COL-CD2-B COL-CD2-R COL-CD3-C COL-CD3-D COL-CD4-C COL-CD4-D	1	D	Cummins QSK78-G12	4,060	10
COL-CDBC-GEN	2	D	Cummins QSL9-G7	464	1
CD1-GEN-A CD1-GEN-B CD1-GEN-C CD1-GEN-D CD1-GEN-E CD1-GEN-F CD1-GEN-R CD2-GEN-A CD2-GEN-B CD2-GEN-C CD2-GEN-D CD2-GEN-E CD2-GEN-F CD2-GEN-R	3	E	TBD ¹	TBD ¹	14
CEBC-GEN-1	4	E	TBD ¹	TBD ¹	1

¹ The Permittee must choose from the list of approved engines in Appendix A

2. Operational Limitations

a. Operation Limits

- i. For engine groups 1 and 2, operation of each engine must be limited to a total of 73.0 hours per rolling 12-month period.
- ii. For engine groups 3 and 4, operation of each engine must be limited to a total of 76.0 hours per rolling 12-month period.
- iii. For each engine, any hours associated with operation for commissioning and source testing must count against the number of hours allowed under Approval Conditions 2.a.i and 2.a.ii.
- iv. Simultaneous operation of two or more engines must be limited to 7 calendar days per rolling 12-month period. For the remainder of the period, only one engine at any given time may be operated.

b. Equipment Restrictions

- i. The engines must only be operated for reliability testing, maintenance, emergency power generation, or source testing.
- ii. Under no circumstances may the generators be utilized to satisfy a financial arrangement with any entity (e.g. curtailment rate structures, load shedding, or distributed power generation), or to provide electrical power to any electric power provider or user, without first submitting an NOC application to revise this order.
- iii. All engines must be certified for conformance with the emission limits listed in Conditions 2.c.i or 2.c.ii, as appropriate.
- iv. Genset or engine replacement and modification:
 - A. Replacement of failed gensets or engines with like or equivalent units will trigger minor new source review.
 - B. Replacement must be preceded by submission of a NOC application and issuance of a revised approval order.
 - C. Modifications that change emission rates from this project may trigger minor new source review.
- v. Only ultra-low-sulfur diesel, i.e. No. 2 fuel oil containing a sulfur content of no greater than 15 parts per million, may be used to fuel the engines.
 - A. The permittee must limit engine fuel usage to:

Engine Group	Fuel Limit per Engine (gallons/12-months)
1	13,643
2	1,684
3	13,452
4	8,048

- vi. The exhaust stacks for each genset must meet the following constraints:

Engine Group	Maximum Exhaust Stack Diameter (inches)	Minimum Exhaust Stack Height (feet above grade)
1 and 3	18.1	60.0
2	5.9	9.5
4	9.8	60.0

- vii. The stacks must be installed such that bends, obstructions, and building interferences with exhaust dispersion are minimized.
- viii. Exhaust from the exhaust stacks for each engine must be discharged vertically.
- ix. Stack caps that interfere with vertical dispersion are prohibited.

c. Emission Limits

- i. Emissions from each of the Group 1, Group 3, and Group 4 engines must not exceed the following 'Tier 2' weighted limits:

Pollutants	e_{comp}^a (g/kW-hr)
NMHC ^b + NO _x	6.4
CO	3.5
PM	0.20

^a e_{comp} is the composite brake-specific emissions, as calculated using the formula specified at 40 C.F.R. 1065.650(g), using the weighting factors specified at 40 C.F.R. Part 1039, Appendix II(a)(1).

^b NMHC is non-methane hydrocarbons and is considered as VOC.

- ii. Emissions from the Group 2 engine must not exceed the following 'Tier 3' weighted limits:

Pollutants	e_{comp} (g/kW-hr)
NMHC + NO _x	4.0
CO	3.5
PM	0.20

- iii. Visible emissions from each engine must not exceed the more restrictive of:
 - A. An opacity of 10 percent, with the exception of a two-minute period after unit startup¹. Visual emissions must be measured by 40 C.F.R. Part 60, Appendix A, Test Method 9.
 - B. An opacity of 20 percent for more than three minutes in any one hour, as measured by Ecology Method 9A.
 - C. There must be no visible emissions from any engine at or beyond the property boundary, as measured by 40 C.F.R. Part 60, Appendix A, Test Method 22.
- iv. At all times:
 - A. Aggregate NO_x emissions from all approved in this Approval Order must not exceed 34.8 tons per year per any rolling 12-month period.
 - B. The exhaust of each engine must contain no greater than 0.10 grains per dry standard² cubic foot (dscf) of particulate.

3. Operation and Maintenance

- a. The Permittee must follow all recommended installation, configuration, operation, and maintenance provisions supplied by emission unit and component manufacturers.
- b. An operations and maintenance (O&M) manual must be developed by the Permittee for each emission unit. The manufacturer's instructions may be referenced in the O&M manuals.
 - i. The O&M manuals must include the following, at a minimum:
 - A. Normal operating parameters for emissions units.
 - B. A maintenance schedule for each emissions unit.
 - C. A description of the monitoring procedures.
 - D. Monitoring and record keeping requirements.
 - E. Actions for abnormal control system operation.

¹ Startup means the setting in operation of an engine for any purpose.

² "Standard conditions" means a temperature of 20°C (68°F) and a pressure of 760 mm (29.92 inches) of mercury.

- F. The engine make, model, serial number, and control module software version for which the O&M manual applies.
- G. Manufacturer testing and maintenance procedures that will ensure each engine will conform to the emission limits specified under Conditions 2.c.i and 2.c.ii throughout the useful life of the engine.
- ii. The O&M manuals must be developed within 30 days of finishing commissioning of each emission unit.
- c. Emission units must be operated and maintained in accordance with the O&M manuals.
- d. The Permittee must assess all complaints received. The Permittee must initiate corrective action in response to a complaint within three calendar days of receipt of the complaint.

4. Monitoring and Recordkeeping

- a. The O&M manual must be reviewed annually.
 - i. The date of each review and the person performing each review must be documented in the O&M manual.
 - ii. The O&M manual must be updated to reflect any modifications to emission units or operating procedures.
- b. O&M records must be kept on premises in hard copy or readily available on-site electronically.
- c. For all air-quality-related complaints, the following records must be kept:
 - i. A written record of the complaint received by the Permittee or forwarded to the Permittee.
 - ii. The Permittee's action to investigate the validity of the complaint, any corrective action that was taken in response to the complaint, and the effectiveness of the remedial action.
- d. All data required by this NOC Approval Order must be maintained in a readily retrievable manner for a period of five years and must be made available to authorized representatives of Ecology upon request.
- e. Each engine must be equipped with a properly installed and maintained non-resettable meter that continuously¹ tracks hours of operation.

¹ Continuously means 95% of the monthly engine operations, except for periods of monitoring system down-time, provided that the Permittee demonstrates that the down time was not a result of inadequate design, operation, maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system were conducted prior to the next planned operation.

- i. The annual hours of operation for each engine must be compiled monthly, on a rolling 12-month basis.
 - ii. An operation log must be maintained for each engine. The logs must indicate: the purpose of each period of engine operation; the hours operated; the operating load; and whether any other engines were operated concurrently.
- f. The Permittee must maintain an upset condition log for each engine. The log must include the date, time, duration, cause, and corrective action taken for each upset.
- g. For the purposes of tracking and recording fuel use:
 - i. Measure and record fuel consumption on at least a weekly basis, and at the start of the calendar month. Tracking may be done manually by measuring the quantity of fuel in each generator belly tank (on a percent-full basis), or digitally using each engine's electronic modular control panel (EMCP).
 - ii. Maintain record of fuel-delivery receipts displaying the type of diesel, quantity (total and amount of fuel delivered to each generator belly tank), and sulfur content for each delivery. Sulfur content may be tracked separately if not listed on the receipts (e.g. via contractual agreement).
- h. The Permittee must maintain written verification, from the engine manufacturer, to confirm like-performance of engines with the same model number.
 - i. The verification must attest that each engine within a group employs the same electronic programmable system parameters (i.e. configuration parameters) in the electronic engine control unit.
 - ii. Any engines within a group may be taken to be representative of all other engines in the group, unless source test results suggest otherwise.
- i. Each engine enclosure must be marked by a permanent method with an emission unit identification as listed under Condition 1. Marking must be accomplished within 12 months of issuance of this NOC Approval Order or installation of each emission unit, whichever is later.
- j. For all air-quality related complaints, the following records must be kept:
 - i. A written record of the complaint received by the Permittee or forwarded to the Permittee.
 - ii. The Permittee's action to investigate the validity of the complaint, any corrective action that was taken in response to the complaint, and the effectiveness of the remedial action.

5. Testing

- a. The Permittee must follow engine manufacturer recommended diagnostic testing and maintenance procedures to ensure that each engine will conform to the emission limits listed under Conditions 2.c.i and 2.c.ii throughout the life of the engine.
- b. The Permittee must perform an initial source test of at least one representative engine from each installed 'genset model'¹ within six months of commissioning to show compliance with the emission limits listed under Section 2.c.i. No test is required for engine group 2.
 - i. For engine group 1, the initial source test was performed October 9, 2019.
 - ii. For engine groups 3 and 4, an initial source test must be conducted within 6 months of startup of the first genset within the group for commissioning.
 - iii. Measure the emissions of pollutants listed under Condition 2.c.i using the equipment and in-use testing procedures for compression-ignition engines specified in 40 C.F.R. Part 1065 Subpart F, as approved by Ecology.
 - iv. Measure emissions of CO₂ as described in 40 C.F.R. 1039.235.
 - v. Measure visible emissions per 40 C.F.R. Part 60, Appendix A, Method 9.
 - vi. Use the constant-speed-engine applicable duty cycles specified in 40 C.F.R. Part 1039, Appendix II, as approved by Ecology.
 - vii. Use the F-factor described in 40 C.F.R. Part 60, Appendix A, Method 19 to calculate exhaust flow rate through the exhaust stack.
 - viii. Calculate emissions of sulfur oxides (SO_x), on a mass-balance basis, using the sulfur content of the fuel. Use the sulfur content based on analysis of the fuel purchased; vendor-provided test data may be utilized.
 - ix. Measure fuel usage with a properly installed and calibrated fuel-flow monitoring system.
- c. The Permittee must conduct ongoing, periodic testing of engines from each genset model, except for engine group 2. Testing must be performed on a 5-year recurring cycle for each genset model group.
 - i. For engine group 1, the cycle is based on a start date of May 23, 2019.
 - ii. For engine groups 3 and 4, the cycles must be based on the date of the initial source test for each genset model within the engine groups.
 - iii. For ongoing testing, the engine with the most operating hours is the likely candidate for ongoing testing, as long as it is a different engine from that which

¹ Within this Order, 'genset model' shall be taken to indicate a specific combination of genset manufacturer, model, and installed engine control module software version.

was tested during the previous testing event. The selected engine(s) must be approved by Ecology.

- iv. Testing may be performed more frequently. Tests that are performed late, or because of a failed test, will not alter the cycle.
- v. Testing must be conducted as specified under Condition 5.b.
- d. Failure of one engine to meet the emission limits specified under Condition 2.c will be taken as failure of all engines within the same genset model to meet said limits.
- e. In the event that an engine source test shows noncompliance with any applicable emission limit listed under Condition 2.c, the Permittee must:
 - i. Repair the engine, where appropriate.
 - ii. If there are three or more installed engines of the same genset model as that tested, repeat the test on the same engine, plus two additional representative engines, as approved by Ecology. Otherwise, test all installed engines within the genset model.
- f. The Permittee must submit a test plan to Ecology for review and approval at least 60 days prior to source testing. Ecology may require a new protocol for re-test events conducted after a failed source test, when required, and Ecology may approve a shorter timeframe for submission for the re-test protocol. The test plan must include the following information, at a minimum:
 - i. Identification of each emission unit to be tested.
 - ii. The operating parameters to be monitored during the test.
 - iii. A description of the emission units to be tested, including the: manufacturer; model number; serial number; design capacity; installed engine control software; and the location of the sample ports or test locations.
 - iv. The time and date of the proposed source test.
 - v. Identification and qualifications of the source test personnel.
 - vi. A description of the test methods and procedures to be used.
 - vii. Alternate test methods and procedures may be proposed in writing by the Permittee for Ecology review; a justification for the change must be included. Proposed alternates must not be utilized unless an approval is issued by Ecology, in writing, prior to the test.
- g. Deviations from the test plan due to conditions encountered while conducting the test must be approved by the Ecology representative identified as the point of contact. The initial request and approval may be verbal, so long as the request is formalized in writing within 24 hours of completing the test.

- h. Test reports must be submitted to Ecology within 60 days of completion of the source testing. Test reports must include the following information, at a minimum:
 - i. The information described in the test plan and any subsequent test plan approval letters.
 - ii. Field and analytical laboratory data.
 - iii. Quality assurance/quality control procedures and documentation.
 - iv. Analyzer data, recorded at least once every minute during the test.
 - v. A summary of results, reported in units and averaging periods consistent with the applicable emission limit. NMHC and NO_x emissions must be reported separately as well.
 - vi. A summary of control system and equipment operating conditions.
 - vii. Copies of all field data.
 - viii. Chain of custody information. At a minimum, chain of custody documentation must include:
 - A. Filter IDs for all filters, including sample blanks.
 - B. Adequate information to determine which run and engine load correspond to each filter.
 - ix. Calibration documentation.
 - x. Discussion of any abnormalities associated with the results.
 - xi. A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
 - xii. Emission calculations.
 - xiii. Engine run time and horsepower output for each test run for each load.
 - xiv. Fuel meter data.
- i. The Permittee must provide adequate sampling ports, safe sampling platforms, and access to platforms and utilities for sampling and testing, in accordance with 40 C.F.R. 60.8, 40 C.F.R. 63.7(d), and WAC 173-400-105(4).
- j. When information obtained by Ecology indicates the need to quantify emissions, Ecology may require the Permittee to conduct material analysis or air emission testing under WAC 173-400-105. This testing requirement is in addition to any testing required by Ecology in this NOC Approval Order, other permits, or other state or federal requirements.

6. Reporting

- a. All notifications, plans, reports, and other submittals must be submitted in a manner approved by Ecology.
- b. The Permittee must notify Ecology within three business days of the receipt of any complaint.
- c. The Permittee must notify Ecology of commissioning of each genset one week prior to initiating such activities. The notice must include:
 - i. The engine make, model, serial number, and location.
 - ii. Identification of the software version used in the engine control module.
 - iii. If a phased construction schedule is employed, the phase under which the genset is installed.
 - iv. Date of commission completion.
- d. At least seven days prior to source testing, the Permittee must submit notification to Ecology confirming the date and start time of the test.
- e. The Permittee must notify Ecology within thirty days of the following events:
 - i. Commencement of construction of the project.
 - ii. Completion of the construction of the project.
 - iii. If construction or operation has been discontinued for more than 18 months.
- f. The Permittee must notify Ecology within 60 days (or longer as approved by Ecology) of the following events:
 - i. Changes in operation contrary to information submitted in the NOC application.
 - ii. Discontinued operations. This notification must include a shutdown status maintenance plan containing the following information, at a minimum:
 - A. Maintenance that will be performed during the shutdown to allow startup in a timely manner with minimum amount of work and emissions, (allowable emission levels as of the date of shutdown cannot increase upon reopening).
 - iii. Reactivating the facility following discontinued operations of 18 months or more. This notification must include a start-up plan containing the following information, at a minimum:
 - A. Documentation that the shutdown maintenance was performed during shutdown to allow startup in a timely manner with minimum amount of work and emissions (allowable emissions levels as of the date of shutdown cannot increase upon reopening).

- B. Documentation of testing performed which demonstrates that units are still able to meet the parameters of this approval order after being inactive, or other documentation which demonstrates why testing is not necessary.
- g. Engine, generator, and control device electronic data must be supplied by the source in a readable format, as specified by Ecology.

7. General Conditions

- a. **Activities Inconsistent with this Order** - Any activity undertaken by the Permittee, or others, in a manner that is inconsistent with the data and specifications submitted as part of the NOC application or this NOC Approval Order, must be subject to Ecology enforcement under applicable regulations.
- b. **Availability of Order** - Legible copies of this NOC Approval Order and any O&M manual(s) must be available to employees in direct operation of the equipment described in the NOC application and must be available for review upon request by Ecology.
- c. **Compliance Assurance Access** - Access to the source by representatives of Ecology or the United States Environmental Protection Agency (EPA) must be permitted upon request. Failure to allow access is grounds for enforcement action under the federal Clean Air Act or the Washington State Clean Air Act and may result in revocation of this NOC Approval Order.
- d. **Discontinuing Construction** - Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, or if construction is discontinued for a period of eighteen months or more. The permitting authority may extend the 18-month period upon a satisfactory showing by the permittee that an extension is justified.
- e. **Equipment Operation** - Operation of the facility must be conducted in compliance with all data and specifications submitted as part of the NOC application and in accordance with O&M manuals, unless otherwise approved in writing by Ecology.
- f. **Registration** - Periodic emissions inventory and other information may be requested by Ecology as part of Registration Program requirements listed in WAC 173-400-099 through 173-400-105. The requested information must be submitted within 30 days of receiving the request, unless otherwise specified. All fees must be paid by the date specified.
- g. **Violation Duration** - If the Permittee violates an approval condition in this NOC Approval Order, testing, recordkeeping, monitoring, or credible evidence will be used to establish the starting date of the violation. The violation is presumed to continue until testing, recordkeeping, monitoring, or other credible evidence indicates compliance. A violation of an approval condition includes, but is not limited to, failure

of air pollution control equipment, failure of other equipment resulting in increased emissions, or a failed source test indicating an exceedance of an emission limit.

- h. **Obligations Under Other Laws or Regulations** - Nothing in this NOC Approval Order must be construed so as to relieve the Permittee of its obligations under any state, local, or federal laws or regulations.
- i. **Maintaining Compliance** - It must not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the operations in order to maintain compliance with the conditions of this NOC Approval Order.
- j. **Visible Emissions** - No visible emissions from the source are allowed beyond the property line, as determined by 40 C.F.R. Part 60, Appendix A, Test Method 22.
- k. **Changes in Operations** - Changes in operation, discontinued operation, or inadequate maintenance plans or re-start plans (see “Reporting” requirements), may require a new or amended NOC Approval Order.

Authorization may be modified, suspended, or revoked in whole or part for cause, including, but not limited to, the following:

- Violation of any terms or conditions of this authorization.
- Obtaining this authorization by misrepresentation or failure to disclose all relevant facts.

The provisions of this authorization are severable and, if any provision of this authorization or application of any provision to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this authorization, must not be affected thereby.

Your Right to Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt. The appeal process is governed by RCW 43.21B and WAC 371-08. “Date of receipt” is defined in Chapter 43.21B.001(2) RCW.

To appeal, you must do all of the following within 30 days of the date of receipt of this Order:

- File your notice of appeal and a copy of this Order with the PCHB (see filing information below). “Filing” means actual receipt by the PCHB during regular business hours as defined in Chapter 371-08-305 WAC and -335. “Notice of appeal” is defined in Chapter 371-08-340 WAC.
- Serve a copy of your notice of appeal and this Order on the Department of Ecology by mail, in person, or by email (see addresses below).

You must also comply with other applicable requirements in Chapter 43.21B RCW and 371-08 WAC.

Address and Location Information

Filing with the PCHB

For the most current information regarding filing with the PCHB, visit: <https://elaho.wa.gov/> or call: 360-664-9160.

Service on Ecology

Street Address:

Department of Ecology

Attn: Appeals Processing Desk
300 Desmond Drive SE
Lacey, WA 98503

Mailing Address:

Department of Ecology

Attn: Appeals Processing Desk
PO Box 47608
Olympia, WA 98504-7608

Email Address:

ecologyappeals@ecy.wa.gov

Americans with Disabilities Act Information

ADA Accessibility

To request an ADA accommodation, email ecyaqciewa@ecy.wa.gov, call (509) 575-2490, or dial 711 to call through the Washington Telecommunications Relay for services like text telephone (TTY). Visit <https://ecology.wa.gov/accessibility> for more accessibility information.

Dated on <Month> <Day>, 2026.

Prepared by:

____ DRAFT _____
Ryan Vicente, PE
Air Quality Program
Department of Ecology
State of Washington

Approved by:

____ DRAFT _____
Will Strand, Section Manager
Air Quality Program
Department of Ecology
State of Washington

Appendix A

The Permittee may choose from any of the following engines, per engine group, for installation in Building E:

Engine Group	Genset Make	Genset Model ¹	Engine Model	Engine Rating (bhp)
3	Cummins	DQKAN	QSK60-G26	3,626
3	Cummins	DQKAF	QSK60-G14	3,239
3	Caterpillar	3516C (P.N. EM6222)	3516	3,379
3	Caterpillar	3516C (P.N. EM1895)	3516	3,634
3	MTU	16V4000 DS2250	16V4000G84S	3,353
3	Rehiko	KD2250	KD62V12	3,352
3	Rehiko	KD2500	KD62V12A	3,621
4	Cummins	QST30-G5		
4	Caterpillar	C32 (P.N. EM0449)	C32	1,474
4	Caterpillar	3512C (P.N. EM1899)	3512	2,206
4	Rehiko	KD1000	KD27V12	1,494
4	Rehiko	KD1250	KD36V16	1,865
4	Rehiko	KD1500	KD45V20	2,218

¹ P.N. stands for performance number for Caterpillar gensets.

Technical Support Document
Notice of Construction Approval Order No. 19AQ-C234 First Revision
Sabey Data Center Properties
AQPID No. B0170059
East Wenatchee, WA

Prepared by: Ryan Vicente, PE

1. Project Summary

Sabey Data Center Properties (the source) operates the Intergate Columbia II data center. The source also directly operates portions of the adjacent Intergate Columbia I data center. Together, these facilities are classified as a 'Synthetic Minor Source' for nitrogen oxide emissions. This review is for a revision and expansion of the previously permitted, but never built, Building E.

An initial Notice of Construction (NOC) application dated December 12, 2025 was submitted by the source for the project. The Washington State Department of Ecology (Ecology) reviewed the initial application and found it incomplete per Washington Administrative Code (WAC) 173-400-111 on January 22, 2026. Additional information was received by Ecology on February 18, 2026 and April 17, 2026. The application was determined to be complete after a meeting held with the source and their consultant on April 15, 2026.

2. Application Processing

a. Public Notice

This project is subject to a mandatory 30-day public comment period per WAC 173-400-171(3)(b) for an order issued under Chapter 173-460 WAC with any increase in emissions of a toxic air pollutant above the acceptable source impact level. The comment period is scheduled to start July 15, 2026. If any comments are received, a response will be issued in a separate document.

b. State Environmental Policy Act (SEPA)

An environmental checklist was submitted with the NOC Application which considered environmental impacts of the project as required by Chapter 43.21C RCW, also known as the State Environmental Policy Act (SEPA). Ecology reviewed the checklist and plans to issue an amended Determination of Non-significance (DNS). The DNS will be available for public comment at the same time as the NOC Approval Order.

3. Applicable Regulations

a. State Regulations

i. Minor New Source Review Applicability

Per WAC 173-400-110, an NOC application and an order of approval must be issued by the permitting authority prior to the establishment of a new source or modification.

As stated in the NOC application and consistent with Ecology's review, the engines supporting Building E are being constructed by this project and therefore are subject to minor new source review (NSR).

A. Exempt Equipment

The source did not propose any equipment as exempt as part of this project.

B. Potential to Emit (Potential Emissions)

The potential emissions from the project are greater than the exemption levels listed under WAC 173-400-110(5) as shown below in Tables 1 and 2 (in bold).

Table 1. Potential emissions for pollutants listed under WAC 173-400-110(5), versus the Minor NSR Exemption Levels

Pollutant	New Units (tons/year)	Minor NSR Exemption (tons/year)
Carbon Monoxide (CO)	43	5.0
Lead (Pb)	5.1E-03	5E-03
Nitrogen Oxides (NO_x)	230	2.0
PM₁₀	13	0.75
PM_{2.5}	13	0.5
Total Suspended Particulates (TSP)	13	1.25
Sulfur Dioxide (SO ₂)	0.16	2.0
Volatile Organic Compounds, total (VOC)	9.3	2.0

Table 2. Potential Toxic Air Pollutant (TAP) emissions increase and de minimis emission values (pounds per averaging period)

Pollutant	Potential Emissions from Project	De Minimis Emission Values	Averaging Period
Acetaldehyde	1.0E+03	3.0E+00	year
Acrolein	2.1E+00	1.3E-03	24-hr
Arsenic	2.1E+00	2.5E-03	year
Benzene	2.4E+02	1.0E+00	year
Benz[a]anthracene	1.1E-01	4.5E-02	year
Benzo[a]pyrene	4.5E-02	8.2E-03	year
Benzo[b]fluoranthene	2.0E-01	4.5E-02	year
Benzo[k]fluoranthene	3.9E-02	4.5E-02	year
1,3-Butadiene	2.8E+02	2.7E-01	year
Cadmium	1.9E+00	1.9E-03	year
Chlorobenzene	1.2E-02	3.7E+00	24-hr
Chromium(III), insoluble particles	3.7E-02	3.7E-04	24-hr
Chromium(VI)	1.3E-01	3.3E-05	year
Chrysene	2.7E-01	4.5E-01	year
Copper	1.1E-02	9.3E-03	1-hr
Dibenz[a,h]anthracene	6.1E-02	4.1E-03	year
Ethyl benzene	1.4E+01	3.2E+00	year
Formaldehyde	2.2E+03	1.4E+00	year
n-Hexane	1.7E+00	2.6E+00	24-hr
Hydrogen chloride	1.2E+01	3.3E-02	24-hr
Indeno[1,2,3-cd]pyrene	7.3E-02	4.5E-02	year
Lead	1.1E+01	1.0E+01	year
Manganese	1.9E-01	1.1E-03	24-hr
Mercury, elemental	1.2E-01	1.1E-04	24-hr
Naphthalene	2.5E+01	2.4E-01	year
Nickel	5.0E+00	3.1E-02	year
Propylene	2.9E+01	1.1E+01	24-hr
Selenium	1.4E-01	7.4E-02	24-hr
Toluene	6.5E+00	1.9E+01	24-hr
Xylenes	2.6E+00	8.2E-01	24-hr
Diesel engine exhaust, particulate	8.1E+03	2.7E-02	year
Sulfur dioxide	6.4E-01	4.6E-01	1-hr
Carbon monoxide	2.0E+02	1.1E+00	1-hr
Nitrogen dioxide	9.2E+01	4.6E-01	1-hr

ii. Prevention of Significant Deterioration (PSD)

PSD does not apply to this project based on uncontrolled 500 hour-per-year PTE. While the PTE for all engines operated by the source has not been calculated, based on allowable emissions PSD also does not apply.

iii. Other Applicable Requirements

In accordance with WAC 173-400-113, the proposed new units must comply with all applicable emission standards adopted under Chapter 70A.15 RCW. The following applicable emission standards are associated with the proposed project:

A. General Standards for Maximum Emissions

WAC 173-400-040(2) generally limits visible emissions from all sources to no more than three minutes of 20 % opacity, in any one hour, of an air contaminant from any emissions unit. This standard applies to each of the proposed gensets. The standard is specified as an emission limit under Approval Condition 2.c.iii.B.

B. Emission Standards for Combustion and Incineration Units

WAC 173-400-050(1) limits emissions of particulate matter from combustion units to 0.23 gram per dry cubic meter at standard conditions (0.10 grains per dry standard cubic foot) of exhaust gas. This standard applies to each of the proposed gensets. The standard is specified as an emission limit under Approval Condition 2.c.iv.B.

C. Standards of Performance for New Sources

WAC 173-400-115(1)(a) adopts by reference 40 C.F.R. Part 60, Subpart IIII as the regulation existed on February 12, 2025. Subpart IIII has not been revised since adoption. Therefore, requirements of the state-adopted version are equivalent to the current federal version. Subpart IIII applies to the proposed genset (discussed below).

b. Federal Regulations

In accordance with WAC 173-400-113, the proposed new units must comply with all applicable new source performance standards (NSPS) included in 40 C.F.R. Part 60, national emission standards for hazardous air pollutants (NESHAPs) included in 40 C.F.R. Part 61, and NESHAPs for source categories included in 40 C.F.R. Part 63. The following applicable emission standards are associated with the proposed project:

i. Standards of Performance for New Stationary Sources

The ICE NSPS (40 C.F.R. Part 60, Subpart IIII) applies to each genset engine. The regulation specifies:

- Criteria for classification as emergency engines.
- Tier-2 emission standards for the engines.
- Fuel, monitoring, compliance, and notification requirements for the Permittee.

The Tier-2 emission standards specified by the regulation were the basis of the emission limits listed under Approval Condition 2.c.i.

ii. National Emission Standards for Hazardous Air Pollutants for Source Categories

The RICE NESHAP (40 C.F.R. Part 63, Subpart ZZZZ) applies to each genset engine. However, each engine is also subject to the ICE NSPS (see above). At 40 C.F.R. 63.6590(c), the NESHAP specifies that compliance shall be met by meeting the requirements of the NSPS; therefore, no further requirements apply to the engines.

4. Emissions

a. Emission Factors

i. Criteria Air Pollutants (Except Lead) and VOC

Emission-unit specific emission factors for CO, NO_x, PM, and unburned hydrocarbons were provided by each of the manufacturers. The manufacturer data was treated in the following manner:

- Unburned hydrocarbons were assumed to be equivalent to VOC and NMHC.
- DEEP was taken to be the manufacturer-measured PM.
- The sum of PM and hydrocarbon emissions (assuming all condense) was used in comparison to the exemption levels for PM_{2.5}, PM₁₀, and total suspended particulates.

The emission factor for SO₂ was calculated based on the sulfur content of ultra-low-sulfur diesel, assuming complete conversion of sulfur to SO₂.

ii. Lead, non-Criteria Toxic Air Pollutants, and Hazardous Air Pollutants

Fuel-usage based emission factors were employed for lead, toxic air pollutants (other than CO, NO_x, and SO₂), and hazardous air pollutants. For each pollutant, the highest emission factor from the following sources was utilized:

- EPA's AP-42 Compilation of Air Pollutant Emission Factors, 5th Edition, Volume 1, Chapter 3.4 - Large Stationary Diesel and All Stationary Dual-fuel Engines, October 1996 (> 600 hp).

- VCAPCD's AB 2588 Combustion Emission Factors, for diesel internal combustion, dated May 17, 2001. Total chromium was reduced for the stated hexavalent chromium value, with the remainder treated as insoluble chromium(III) particles.

b. Best Available Control Technology (BACT) | Best Available Control Technology for Toxics (tBACT)

The definition of best available control technology (BACT) states that application of BACT shall not “result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard under 40 C.F.R. Part 60 and Part 61”. As such, the starting point for the BACT analysis was the Tier-2 emission standards for nonroad engines with rated power exceeding 560 kW.

Ecology’s experience with this sector supported a presumptive BACT determination for the project. Specifically, emissions of Tier-2 certified engines meet: BACT for CO, lead, NO_x, particulate, and VOC; and tBACT for the TAPs that triggered review.

c. Allowable Emissions

The allowable emissions from the project, considering all emission controls and operational limits specified by the approval order, are shown in Table 3 and Table 5. Table 3 also presents the allowable emissions for each of the other engines operated by the source in Buildings B and D. These engines used to be permitted directly to the tenants. However, they have since been transferred to the source. Due to the common control of these adjacently located engines, they are considered in determining the synthetic minor status of the source.

Table 3. Allowable Emissions for Total Source (tons per year)

Pollutant	Building B ¹ (Costco Wholesale Data Center)	Building B ¹ (VMware)	Building D	Building E	Total Source Allowable Emissions (tons/year)
CO	1.62	4.65	2.80	6.87	15.9
Pb	-	-	5.72E-04	8.15E-04	1.4E-03
NO _x	2.83	12.89	27.43	34.78	77.9
PM	0.09	0.37	1.94	2.06	4.5
VOC	0.13	0.13	1.12	1.43	2.8

¹ The emissions for these engines were calculated using the EPA Tier 2 standards. These estimates are less conservative than using the not-to-exceed or potential-site-variation maximum emission values listed by the manufacturers. Lead emissions were also not calculated for these engines.

5. Ambient Air Quality Standards

As specified in WAC 173-400-113, the proposed new or modified source(s) must not cause or contribute to a violation of any ambient air quality standard. This includes the ambient air quality standards for both criteria and toxic air pollutants.

a. Pollutants Listed Under WAC 173-400-110 (Except TAPs)

Modeling was not required for SO₂ allowable emissions, as they are below the Table 110(5) exemption level in WAC 173-400-110(5). This is in keeping with prior practice within this section, where it is assumed that the exemption levels were based on concentrations which would not cause or contribute to violations of the National Ambient Air Quality Standards (NAAQS) or Washington Ambient Air Quality Standards (WAAQS). However, the consultant submitted modeling for the pollutant, so it is presented in the Table below.

VOC is not a criteria air pollutant; therefore, dispersion modeling of VOC emissions was not conducted for this project. While, under the right conditions, VOC is a precursor for ozone and secondary PM_{2.5} (both are criteria pollutants), this source's VOC emissions are not expected to contribute to NAAQS or WAAQS exceedances.

For CO, NO₂, and PM, modeling was performed to satisfy the requirements of WAC 173-400-113(3). The modeling demonstrates that the emissions increase as a result of the project will not exceed the NAAQS or WAAQS. The modeling results are included in the table below. The consultant did not compare PM_{2.5} emissions against the annual NAAQS standard. However, based on Ecology's experience with previous demonstrations against that standard and the longer averaging time, exceedance is not expected.

Table 4. Criteria Pollutant Modeling Results

Criteria Pollutant	Averaging Period	Maximum Modeled Concentration	Ambient Air Quality Standard	Percent of Ambient Air Quality Standard
CO	1-hr	4,223	40,000	11%
CO	8-hr	1276	10,000	13%
NO ₂	1-hr	142	188	76%
NO ₂	annual	6	100	6%
PM ₁₀	24-hr	84	150	56%
PM _{2.5}	24-hr	21	35	61%
SO ₂	1-hr	14	196	7%

a. Toxic Air Pollutants (TAPs)

In accordance with WAC 173-460-040, new TAP sources must meet the requirements of Chapter 173-460 WAC, unless they are exempt by WAC 173-400-110(5).

As shown in Table 2, minor NSR is required for the project. As such, the new emission units must comply with WAC 173-460-070 (ambient impact requirement). The source may demonstrate compliance with the ambient impact requirement by either showing that the emissions increase is less than the small quantity emissions rates (SQER) or through dispersion modeling. The table below includes the estimated emissions increases associated with the project and the applicable SQER.

Table 5. TAP Analysis (pounds per averaging period)

TAP	Allowable Emissions	SQER	Modeling Required?
Acetaldehyde	1.5E+02	6.0E+01	yes
Acrolein	2.1E+00	2.6E-02	yes
Arsenic	3.1E-01	4.9E-02	yes
Benzene	3.7E+01	2.1E+01	yes
Benz[a]anthracene	1.7E-02	8.9E-01	no
Benzo[a]pyrene	6.9E-03	1.6E-01	no
Benzo[b]fluoranthene	3.0E-02	8.9E-01	no
1,3-Butadiene	4.3E+01	5.4E+00	yes
Cadmium	2.9E-01	3.9E-02	yes
Chromium(III), insoluble particles	3.7E-02	7.4E-03	yes
Chromium(VI)	2.0E-02	6.5E-04	yes
Copper	1.1E-02	1.9E-01	no
Dibenz[a,h]anthracene	9.3E-03	8.2E-02	no
Ethyl benzene	2.1E+00	6.5E+01	no
Formaldehyde	3.4E+02	2.7E+01	yes
Hydrogen chloride	1.2E+01	6.7E-01	yes
Indeno[1,2,3-cd]pyrene	1.1E-02	8.9E-01	no
Lead	1.6E+00	1.4E+01	no
Manganese	1.9E-01	2.2E-02	yes
Mercury, elemental	1.2E-01	2.2E-03	yes
Naphthalene	3.9E+00	4.8E+00	no
Nickel	7.7E-01	6.2E-01	yes
Propylene	2.9E+01	2.2E+02	no
Selenium	1.4E-01	1.5E+00	no
Xylenes	2.6E+00	1.6E+01	no
Diesel engine exhaust, particulate	1.3E+03	5.4E-01	yes
Sulfur dioxide	6.4E-01	1.2E+00	no
Carbon monoxide	2.0E+02	4.3E+01	yes
Nitrogen dioxide	9.2E+01	8.7E-01	yes

For the TAPs that require modeling, modeling was performed to satisfy the requirements of Washington's state toxics rule in Chapter 173-460 WAC. The modeling demonstrates that the emissions increases as a result of the project will not exceed the acceptable source impact level (ASIL) screening thresholds, except for diesel engine exhaust particulate and nitrogen dioxide. The modeling results are included in the table below.

Table 9. TAP Modeling Results

TAP	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)	ASIL ($\mu\text{g}/\text{m}^3$)	Percent of ASIL
Acetaldehyde	year	3.3E-03	3.7E-01	1%
Acrolein	24-hr	1.1E-01	3.5E-01	31%
Arsenic	year	9.5E-06	3.0E-04	3%
Benzene	year	8.0E-04	1.3E-01	1%
1,3-Butadiene	year	9.3E-04	3.3E-02	3%
Cadmium	year	9.5E-06	2.4E-04	4%
Chromium(III), insoluble particles	24-hr	1.9E-03	5.0E+00	0%
Chromium(VI)	year	4.3E-07	4.0E-06	11%
Formaldehyde	year	7.4E-03	1.7E-01	4%
Hydrogen chloride	24-hr	6.0E-01	9.0E+00	7%
Manganese	24-hr	1.0E-02	3.0E-01	3%
Mercury, elemental	24-hr	6.5E-03	3.0E-02	22%
Nickel	year	1.9E-05	3.8E-03	1%
Diesel engine exhaust, particulate	year	3.3E-02	3.3E-03	999%
Carbon monoxide	1-hr	3.4E+03	2.3E+04	15%
Nitrogen dioxide	1-hr	1.8E+03	4.7E+02	376%

A Second Tier Health Impact Assessment (HIA) was conducted for diesel engine exhaust particulate and nitrogen dioxide and submitted separately from the NOC application, per WAC 173-460-090. Ecology reviewed the assessment and found the project to be approvable. Ecology's analysis and recommendations will be available for public comment at the same time as the NOC Approval Order.