State of Washington Department of Ecology
Notice of Construction Approval Order

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| In the matter of approving new | ) | **Draft Approval Order No. 10AQ-C147** |
| air contaminant sources for | ) | **Second Revision** |
| Central Washington University | ) | **AQPID No. B0370004** |

**Project Summary**

Central Washington University, herein referred to as the Permittee, is an existing stationary source located at 400 E University Way, Ellensburg, Washington, in Kittitas County.

The Permittee is classified as a 'Synthetic Minor Source' (SM) for carbon monoxide (CO) and nitrogen oxide ($NO_X$) emissions. The classification is a result of its potential to emit having been limited to below 80% of the CO and $NO_X$ thresholds under Title V of the federal Clean Air Act.

The project consists of replacement of three existing boilers, installation and operation of two new water heaters, and reassessment of potential to emit for the source.

**Legal Authority**

The emissions from the proposed project have been reviewed under the legal authority of RCW 70A.15.2210 and the applicable rules and regulations adopted thereunder. The proposed project, 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 Notice of Construction (NOC) Approval Order rescinds and replaces NOC Approval Order No. 10AQ-C147 First Revision; NOC Approval Order No. 10AQ-C147 First Revision is no longer in effect.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**
    a. The following emission units have been identified and are approved to be installed in this NOC Approval Order; the specified ID numbers will be used elsewhere in this Order to identify each unit.

### i. Boilers and Water Heaters

| ID No. | Manufacturer | Model | Rating (MMBtu/hr) | Location | Installed (year) |
|---|---|---|---|---|---|
| B1 | National U.S. | 209 | 0.4 | President's Residence | 1967 |
| B2 | Cleaver-Brooks | DL-76 | 85.8 | New Heating Plant | 1975 |
| B3 | Cleaver-Brooks | DL-76 | 85.8 | New Heating Plant | 1975 |
| B4 | Cleaver-Brooks | DL-76 | 87.7 | New Heating Plant | 1975 |
| B5 | Cleaver-Brooks | CB200-800 | 33.5 | New Heating Plant | 1983 |
| B6 | Thermal Solutions | EVA0250BN1UAB | 0.3 | Brooklane | 2003 |
| B7 | Thermal Solutions | EVA0250BN1UAB | 0.3 | Brooklane | 2003 |
| B13 | Hamilton Engineering | HWD 199.1 | 0.2 | Getz Short Apartments | 2012 |
| B14 | Hamilton Engineering | HWD 199.1 | 0.2 | Getz Short Apartments | 2012 |
| B15 | Cleaver-Brooks | MCF700 | 1.8 | Wahle Hall Apartments | 2015 |
| B16 | Cleaver-Brooks | CFC700 | 1.8 | Wahle Hall Apartments | 2017 |
| B17 | Viessmann | Vitodens 200-W | 0.5 | Health Center | 2018 |
| B18 | Viessmann | Vitodens 200-W | 0.5 | Health Center | 2018 |
| B19 | Cleaver-Brooks | CFC-E 1500 | 1.5 | Student Village | 2023 |
| B20 | Cleaver-Brooks | CFC-E 1500 | 1.5 | Student Village | 2023 |
| B21 | Cleaver-Brooks | CFC-E 1500 | 1.5 | Student Village | 2023 |
| B22 | Hubbell | NX500WH | 0.5 | Wendell Hill Hall | 2023 |
| B23 | Hubbell | NX500WH | 0.5 | Wendell Hill Hall | 2023 |

### ii. Emergency Generators

| ID No. | Manufacturer | Model | Rating (bhp) | Location | Installed (year) |
|---|---|---|---|---|---|
| G2 | Onan | 17.5RDJF-4XR | 32 | Psychology Building | 1974 |
| G3 | Onan/Allis-Chalmers | 3500 | 148 | Library | 1974 |
| G4 | Perkins | 1100 | 65 | SOD Farm | 1994 |
| G5 | Detroit Diesel | 8083-7416 | 643 | Science Building | 1996 |
| G6 | Caterpillar | 3412T | 749 | Substation B | 1999 |
| G7 | Caterpillar | 3412T | 749 | Substation B | 1999 |
| G8 | Perkins | 1306-E8TTA300 | 325 | Computer Center | 2003 |
| G9 | Cummins | DQAF | 470 | Student Union | 2005 |
| G10 | Cummins/Ford | GGHE-7082116 | 115 | Dean Hall | 2008 |
| G11 | Olympian | G150LG2 | 231 | Discovery Hall | 2016 |

iii. **Other Emission Units**

One paint booth, at the Grounds Warehouse Building.

b. The Permittee owns and operates additional small natural-gas combustion devices that are not regulated by this Order. These devices include dozens of small water heaters, space heaters, and laboratory equipment. The larger exempt emission units are listed in Appendix A.

2. **Operational Limitations**

a. **Production Limits**

i. All emergency generators must be limited to no more than 500 hours of operation per generator per consecutive 12-month period, including periods of testing, maintenance, and emergency operation.

ii. The Grounds Warehouse Building paint booth must not operate more than eight hours per day and must not operate more than five days per week.

iii. The Grounds Warehouse Building paint booth must be limited to no more than 55 gallons of paint use per calendar month.

b. **Equipment Restrictions**

i. Any diesel fuel used to fire the boilers or emergency generators must be either: ultra-low sulfur diesel[1]; or an oil blend that meets ASTM D 6751 specifications for biodiesel blends, so long as no condition in this Order will be violated.

ii. Limits on diesel fuel usage:

A. B2 – B4 must be limited, in aggregate, to no more than 25,000 gallons of ultra-low sulfur diesel (ULSD) fuel per rolling 12-month period.

B. G2 – G9 must be limited, in aggregate, to no more than 29,300 gallons of ULSD fuel per rolling 12 month period.

iii. Limits on natural gas fuel usage:

A. B1 – B23 must be limited, in aggregate, to no more than 623 million cubic feet of natural gas per rolling 12-month period.

B. G10 – G11 must be limited, in aggregate, to no more than 120,000 cubic feet of natural gas per rolling 12-month period.

iv. The emergency generators must be operated only for testing, maintenance, and during periods of line power unavailability. In no circumstance may the generator

[1] No. 2 distillate fuel oil containing less than 15 parts per million by weight sulfur.

provide power to the grid or to an entity other than Central Washington University.

v. For the Grounds Warehouse Building paint booth:

A. Except as allowed under this condition, no spray paint equipment must be used other than high-volume low-pressure (HVLP) spray equipment which operates with a fluid pressure no greater than ten pounds per square inch and which operates without cleaning solvents. Airless spray equipment may be used where viscosity and high solid coating preclude the use of higher-transfer efficiency spray equipment.

B. Topcoats used must contain 420 grams or less VOC per liter less water. Primers used must contain 250 grams or less VOC per liter less water. Substrate surface preparation materials must contain 200 grams or less VOC per liter less water.

c. **Emission Limits**

i. Emissions of $NO_X$ from each B19, B20, and B21 must not exceed 0.55 pounds per hour AND 30.0 ppm corrected to 3% oxygen in the exhaust gas. $NO_X$ must be measured by using the procedures contained in 40 C.F.R. Part 60, Appendix A, Methods 7 or 7A.

ii. Emissions of CO from each B19, B20, and B21 must not exceed 0.55 pounds per hour AND 50.0 ppm corrected to 3% oxygen in the exhaust gas. CO must be measured by using the procedures contained in 40 C.F.R. Part 60, Appendix A, Method 10.

iii. Visual emissions from the exhaust stack of each G5, G6, and G7 must be no more than 5% opacity, with the exception of a ten-minute period after engine start-up. Visual emissions must be measured by using the procedures contained in 40 C.F.R. Part 60, Appendix A, Method 9.

iv. Visual emissions from the shared exhaust stack of B19, B20, and B21 must not exceed 0% opacity from the boiler exhaust. Visual emissions must be measured by using the procedures contained in 40 C.F.R. Part 60, Appendix A, Method 9.

v. There must be no visual emissions of paint overspray outside of the Grounds Warehouse Building paint booth.

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.

      F. Additional project-specific information, as needed.

   ii. The O&M manuals must be developed within 30 days of commencing operation 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.

e. For the Grounds Warehouse Building paint both:

   i. A negative static pressure must be maintained during use.

   ii. The paint booth must not be operated unless all exhaust air passes through filter media at least two inches thick.

   iii. The Permittee must utilize an indicator of alarm for the filter differential pressure, or an operational requirement specified in the O&M manual, to prevent the filter from plugging with paint.

f. The B19, B20, B21, G5, G6, and G7 exhaust stacks must vent vertically without obstruction.

4. **Monitoring and Recordkeeping**

a. The O&M manuals 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 manuals 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. The date, time, duration, and cause of any periods where control technology equipment is out of service must be documented and maintained.

e. 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.

f. The Permittee must complete any additional monitoring or recordkeeping necessary to determine compliance with the requirements of this NOC Approval Order, as determined by Ecology.

g. For B1 – B23, the quantities of natural gas and diesel fuel used must be totaled monthly and on a rolling 12 month basis.

h. For G2 – G11, the quantities of natural gas and diesel fuel used, and the hours of individual engine operation, must be totaled monthly and on a rolling 12-month basis.

   i. The fuel quantities may be based upon purchase and inventory records, supplier documentation, and tank readings.

   ii. G5, G6, and G7 must each be equipped with a properly installed and maintained non-resettable hour meter to track the number of hours operated during any type of operation.

   iii. For the remaining emergency generators, hours of operation must be based upon hour meters for all engines so equipped, and upon operation and maintenance records for other engines.

i. The Permittee must keep records of all fuel receipts with the amount and the sulfur content of each delivery.

j. The Permittee must maintain a manometer that measures the pressure differential across the paint booth filter bank.

   i. The manometer must be periodically monitored.

   ii. Corrective action must be taken, where appropriate, to assure compliance with Condition 3.e.i.

k. Boilers with rated heat inputs equal to or greater than 0.4 MMBtu/hr must undergo emission monitoring for CO, $NO_X$, and $O_2$ annually, using methods approved by Ecology.

   i. Monitoring may be performed with portable analyzers; alternative methodologies may be used if approved by Ecology.

   ii. Monitoring may be performed by the Permittee or a qualified third party.

   iii. Emission monitoring data must be collected and retained.

l. If emission monitoring results for a boiler indicate that emission concentrations may exceed the levels used to quantify emissions for this Order:

   i. The Permittee must either perform 60 minutes of additional monitoring to more accurately quantify CO and $NO_X$ emissions, or initiate corrective action.

   ii. Corrective action must be initiated as soon as practical, but no later than three business days after the potential exceedance is identified.

m. Upset condition logs must be maintained for B19, B20, B21, G5, G6, and G7 that include the date, time, duration of upset, cause, and corrective action taken.

5. **Testing**

a. No initial or periodic source testing is required by this Order.

b. If source testing is performed:

   i. Ecology will specify the required number of runs, testing procedures, methods, and loads to be utilized.

   ii. A test plan must be submitted to Ecology at least 60 days prior to any testing. The test plan must include a testing protocol for Ecology approval.

   iii. Test reports must be submitted to Ecology within 30 days of completion of the test event. Ecology will specify the minimum content reports must include.

c. 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).

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 days of the discovery of any violation of this NOC Approval Order.

c. The Permittee must report an annual summary of any emission limit exceedances that occur during each calendar year.

d. The fuel usage and hours of operation for each emergency engine must be reported annually according to the cycle specified by Ecology's Registration Program.

e. The fuel usage and hours of operation for B2–B5 and B19–B21 must be reported annually according to the cycle specified by Ecology's Registration Program.

f. The Permittee must notify Ecology within thirty days of the following events:

   i. If operation of an emission unit covered by this NOC Approval Order has been discontinued for more than 18 months.

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 or Operation** – This NOC Approval Order will become invalid if construction of the equipment described in the NOC application and this NOC Approval Order does not commence within 18 months after receipt of this NOC Approval Order.

   If construction or operation is discontinued for 18 months or longer on a portion or all of the equipment described in the NOC application and this NOC Approval Order, the portion of the NOC Approval Order regulating the inactive equipment will become invalid. Ecology may extend the 18-month period upon request by the Permittee and a satisfactory showing 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. 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. **Testing** – 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 Order, other permits, or other state or federal requirements.

h. **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 will be 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.

i. **Odor** - The Permittee must not cause or allow the generation of any odor which unreasonably interferes with any other property owner's use and enjoyment of their property. The Permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum.

j. **Outdoor Burning** - There must be no outdoor burning.

k. **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.

l. **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.

m. **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.

n. **Changes in Operations** - Any changes in operation contrary to information submitted in the NOC application must be reported to Ecology at least 60 days before the changes are implemented. Such changes in operation 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 full 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 NOC Approval Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this NOC Approval Order. 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 NOC Approval Order:

- File your notice of appeal and a copy of this NOC Approval 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 NOC Approval 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://eluho.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

**Accommodation Requests**

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-7668 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Dated on this XX Day of <Month>, 2025

**Prepared by:**

_____

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

**Approved By:**

_____

Will Strand, Section Manager
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State of Washington

**Appendix A**

This appendix lists the larger exempt emission units operated by the Permittee. Exempt units are not subject to this NOC Approval Order.

1. **Boilers and Water Heaters**

| Manufacturer | Model | Rating (MMBtu/hr) | Location | Installed (year) |
|---|---|---|---|---|
| Lochinvar | AWN501P | 0.5 | Dugmore Hall | 2019 |
| Lochinvar | AWN501P | 0.5 | Dugmore Hall | 2019 |
| Hubbell | NX800WH | 0.8 | Student Union | 2023 |
| Hubbell | NX800WH | 0.8 | Student Union | 2023 |
| Cleaver-Brooks | CFC-E-700-750-125HW | 0.75 | Getz Short Appartments | 2023 |
| Cleaver-Brooks | CFC-E-700-750-125HW | 0.75 | Getz Short Appartments | 2023 |

2. **Dust Collectors and Shop Vacuums**

| Manufacturer | Model | Location | Installed (year) |
|---|---|---|---|
| Denray | 2872 | Randall Hall | unknown |
| Car-mon | CMX-120PA | Randall Hall | unknown |
| Torit | 36CYC | Jongeward Shops | 2001 |
| Sternvent | DKRD24405 | McConnell Hall | 2004 |
| Sternvent | DKRD48020 | Randall Hall | 2004 |
| Sternvent | DKRD36010 | Randall Hall | 2004 |
| Cincinnati | Dust Master 50S/T1 | Randall Hall | 2004 |
| Cincinnati | Dust Master 33S/T1 | Randall Hall | 2004 |
| Cincinnati | Dust Master 50S/T1 | Randall Hall | 2004 |
| Cincinnati | Dust Master 50S/T1 | Randall Hall | 2004 |
| Cincinnati | Dust Master 50S/T1 | Randall Hall | 2004 |
| Cincinnati | Dust Master 50S/T1 | Randall Hall | 2004 |
| Handler | 75-2 Dyna Series | Randall Hall | 2004 |
| Handler | 75-2 Dyna Series | Randall Hall | 2004 |
| Econoline | 4KR11 | Randall Hall | 2004 |
| Becker | VTLF 2.250 | Randall Hall | 2010 |
| Sternvent | DKCD96030-4 | Hogue Hall | 2011 |
| United Air Specialists | BDC-21-P | Hogue Hall | 2011 |

3. **Emergency Generator**

| Manufacturer | Model | Rating (bhp) | Location | Installed (year) |
|---|---|---|---|---|
| Caterpillar | C13 | 457 | New Heating Plant | 2024 |

4. **Kilns and Melting Furnaces**

| Description | Manufacturer | Model | Location | Installed (year) |
|---|---|---|---|---|
| Natural Gas Kiln | Bailey | Shuttle Pro 54 | Randall Hall | 2004 |
| Natural Gas Kiln | Geil | DLB 16 | Randall Hall | 2008 |
| Natural Gas Melting Furnace | MIFCo | B-301 | Hogue Hall | 2011 |
| Electric Smelting Pot | Inductotherm | Power-Trak 175-30 | Hogue Hall | 2011 |
| Wood Kiln | hand-built | n/a | Randall Hall | 2022 |

5. **Paint Booths**

| Manufacturer | Model | Location | Installed (year) |
|---|---|---|---|
| Global Finishing Solutions | IDB-67 (Unit SB-1) | Randall Hall | 2004 |
| Paasche Spray Booth | FABF-4 | Randall Hall | 2004 |
| Col-met | IB1008 | Hogue Hall | 2011 |