

1.1 Central Washington University’s emission units, specified within this Order, shall not exceed the following emissions:

Emission Units	NO_x (TPY)	CO (TPY)	SO₂ (TPY)	VOC (TPY)	PM₁₀/PM_{2.5} (TPY)
Central Steam Plant and Student Village Boilers #1-#6 (while fired on natural gas)	60.00	50.40	0.36	3.30	4.56
Central Steam Plant Boilers #1-#4 (while fired on No. 2 distillate fuel oil)	6.00	1.50	0.06	0.10	0.99
Other 10 Specified Boilers (fired solely on natural gas)	4.35	3.65	0.03	0.24	0.33
9 Specified Emergency Generators (fired solely on diesel)	19.48	3.72	1.88	2.27	1.16
Cummins/Ford Emergency Generator (fired solely on natural gas)	0.70	0.61	0.0001	0.07	0.002
Paint Booth	0	0	0	1.30	0
Total	90.53	59.88	2.33	7.28	7.04

Note: Central Washington University owns and operates additional small natural gas combustion devices at the source that will contribute slightly to the source-wide potential to emit. These devices include dozens of small water heaters, space heaters, and laboratory equipment. Their contribution is anticipated to be insignificant.

1.2 Total fuel use in the Central Steam Plant and the Student Village Boilers #1 through #6 shall be limited to no more than 1,200 million cubic feet of natural gas per consecutive 12-month period AND no more than 600,000 gallons of No.2 distillate fuel oil per consecutive 12-month period, totaled monthly.

1.3 All emergency generators shall be limited to no more than 500 hours of operation per consecutive 12-month period, totaled monthly.

1.4 The quantities of natural gas and fuel oil used and the hours of individual emergency generator operation shall be totaled monthly for that month and for the consecutive 12-month period ending on the last day of that month. The quantities shall be reported annually and if any condition of this Order is exceeded during the calendar year. The fuel quantities may be based upon purchase and inventory records, supplier documentation, and tank readings. Emergency generator operation shall be based upon hour meters, for all engines with an hour meter, and operation and maintenance records, for all engines that do not have hour meters. The annual report shall be due by the specified Air Quality Registration Program Emission Inventory due date, or April 15,

whichever is sooner. If a condition of this Order is violated, such violation shall be reported within ten working days of the quantification or discovery, whichever is sooner.

- 1.5 Any application form or report, including the annual quantity report, submitted pursuant to this Order shall contain certification by a responsible official of truth, accuracy, and completeness. The certification shall state that, based on information and belief formed after reasonable inquiry, the information contained in the document are true, accurate, and complete.

2. Emergency Generators

Legal Authority: The 643 hp Detroit qualified as a new source of air contaminants under WAC 173-400-110, March 22, 1995, and a new source of toxic air pollutants under WAC 173-460-040, January 14, 1994. The two-749 hp Caterpillar qualified as a new source of air contaminants under WAC 173-400-110, October 23, 1998, and a new source of toxic air pollutants under WAC 173-460-040, July 21, 1998. These emission units were reviewed under the legal authority of RCW 70.94.152 and the applicable rules and regulations adopted thereunder.

2.1 Emission Units

- 2.1.1 The following emergency generators are subject to the conditions in sections 1. Synthetic Minor, 2. Emergency Generators and 5. General Conditions, of this Order.

Emergency Generator	Location	Installation Date	Power Rating (hp)	Maximum Fuel Use (gal/hr)	Fuel Type	Minimum Stack Height Above Ground Level (feet)	Maximum Stack Inside Diameter (inches)
Caterpillar, model 3412T	Substation B	1999	749	40.42	No. 2 fuel oil	14	8
Caterpillar, model 3412T	portable use	1999	749	40.42	No. 2 fuel oil	10	8
Detroit Diesel, model 8083-7416	Science Building	1996	643	38.4	No. 2 fuel oil	40	8

2.1.2 The following emergency generators are subject to the conditions in sections 1. Synthetic Minor and 5. General Conditions, of this Order.

Engine Description	Location	Installation Date	Power Rating (hp)	Maximum Fuel Use (gal/hr)	Fuel Type
Caterpillar D346	Heating Plant	1974	490	27	No. 2 fuel oil
Cummins DQAF	Student Union	2005	470	21	No. 2 fuel oil
Perins 1306-E8TTA300	Computer Center	2003	325	14	No. 2 fuel oil
Cummins/Ford	Dean Hall	2008	115	789 cf/hr	Natural gas
Onan/A/C 3500	Library	1974	148	6	No. 2 fuel oil
Onan	Psychology Building	1974	32	2	No. 2 fuel oil
Perkins 1100	SOD Farm	1994	65	3	No. 2 fuel oil

2.2 Emission Limits

2.2.1 The emergency generators listed in 2.1.1, may produce up to the following estimated emissions:

Pollutant	Emissions	
Nitrogen Oxides (NO _x)	12.29	tons per year
Carbon Monoxide (CO)	1.35	tons per year
Sulfur Dioxide (SO ₂)	12.7	pounds per year
Particulate Matter (PM ₁₀)	0.69	tons per year
PM _{2.5}	0.69	tons per year
Volatile Organic Compounds (VOC)	1.32	tons per year

Note: Estimated emissions of all Toxic Air Pollutant Emissions (ie., 1,3-Butadiene, Acetaldehyde, Acrolein, Benzene, Chlorobenzene, Ethylbenzene, Formaldehyde, Hexane, Hydrogen Chloride, Naphthalene, Toluene, total Xylenes, and total PAHs), as defined at time of installation (ie., 1996 or 1999, respectively), are below the respective ASILs in place at the time of review of these emission units (ie., May 2010).

2.2.2 The emergency generators shall not exceed the following specified emission limits:

Emergency Generator	Pollutant	Emission Limit (lb/hp-hr)	40 CFR part 89 Tier Rating
Detroit Diesel, model 8083-7416	NOx	0.031	Tier 0 (predates applicability)
	CO	0.00668	
	Particulate Matter	0.0022	
	VOC	0.00247	
Caterpillar, model 3412T	NOx	0.0195	Tier 1
	CO	0.000734	
	Particulate Matter	0.000908	
	VOC	0.00247	

2.2.3 Visual emissions from each diesel engine exhaust stack shall be no more than 5 percent, with the exception of a ten (10) minute period after unit start-up. Visual emissions shall be measured by using the procedures contained in 40 CFR 60, Appendix A, Method 9.

2.3 Equipment Restrictions

2.3.1 The emergency generators shall be fired exclusively with No. 2 distillate fuel oil containing less than 15 parts per million by weight sulfur (ie., ultra low sulfur diesel). Oil blends that meet ASTM D 6751 specifications for biodiesel blends may be used only if no condition in this Order will be violated.

2.3.2 Each engine shall be equipped with a properly installed and maintained non-resettable hour meter to track the number of hours operated during any type of operation.

2.3.3 The emergency generator exhaust stacks shall vent vertically without obstruction, at the above specified minimum height above the ground level at the base of the engine.

2.3.4 Total engine operation shall not exceed 500 hours per engine in any consecutive 12-month period, including periods of testing, maintenance and emergency operation.

2.3.5 The emergency generators shall be operated only for testing, maintenance, and during periods of line power unavailability. In no circumstance shall the generator provide power to the grid or to an entity other than Central Washington University.

2.3.6 It shall be grounds for rescission of approval to operate these emergency generators if physical operation is discontinued for a period of eighteen (18) months or more. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.

2.3.7 Operation of equipment must be conducted in compliance with all data and specifications submitted as part of the Notice of Construction application unless otherwise approved by Ecology. Any activity undertaken by the permittee, or others, in a manner which is inconsistent with the application or this Order, shall be subject to Ecology enforcement under applicable regulations.

2.4 Operation and Maintenance

The emergency Generators shall be properly operated and maintained. An emission unit specific operating and maintenance (O&M) manual shall be developed and followed. Manufacturers' operating instructions and design specifications for the engines, generators and associated equipment shall be included in the manual. The O&M manual shall be updated to reflect any modifications of the equipment or its operating procedures. Emissions that result from failure to follow the operating procedures contained in the O&M manual or manufacturer's operating instructions may be considered proof that the equipment was not properly installed, operated, and/or maintained. The O&M manual for the diesel electric generation units and associated equipment shall at a minimum include:

2.4.1 Manufacturer recommended diagnostic testing and maintenance procedures.

2.4.2 Normal operating parameters and design specifications.

2.4.3 Operating maintenance schedule.

2.4.4 Actions for abnormal operation.

2.4.5 Upset condition log for each engine and generator that includes date, time, duration of upset, cause, and corrective action.

2.5 Recordkeeping and Reporting

2.5.1 Permittee shall keep records of all fuel receipts with amount of diesel and sulfur content for each delivery.

2.5.2 Permittee shall keep record of the monthly hours of operation for each emergency generator.

3. Boilers

Legal Authority: The Student Village Boilers qualified as a new source of air contaminants under WAC 173-400-110, December 23, 1997, and a new source of toxic air pollutants under WAC 173-460-040, June 3, 1998. These units were originally permitted under Order No. 00AQCR-C1573, issued August 25, 2000. This Order supercedes Order No. 00AQCR-C1573; Order No. 00AQCR-C1573 is no longer in effect. These emission units were reviewed under the legal authority of RCW 70.94.152 and the applicable rules and regulations adopted thereunder.

3.1 Emission Units

3.1.1 The following boilers are subject to the conditions in sections 1. Synthetic Minor, 3. Boilers and 5. General Conditions, of this Order.

Boiler Description	Location	Installation Date	Power Rating	Fuel Type	Minimum Stack Height Above Ground Level (feet)	Maximum Stack Inside Diameter (inches)
Boiler #5	Student Village Boiler Plant	2000	3.75 MMBtu/hr	natural gas	33	23.5
Boiler #6	Student Village Boiler Plant	2000	3.75 MMBtu/hr	natural gas	Shares stack w/ boiler #5	

3.1.2 The following boilers are subject to the conditions in sections 1. Synthetic Minor and 5. General Conditions, of this Order.

Boiler Description	Location	Installation Date	Power Rating	Fuel Type
Boiler #1	Central Steam Plant	1975	85.85 MMBtu/hr (60,000 lb/hr steam)	Natural gas or diesel oil
Boiler #2	Central Steam Plant	1975	85.85 MMBtu/hr (60,000 lb/hr steam)	Natural gas or diesel oil
Boiler #3	Central Steam Plant	1975	87.70 MMBtu/hr (60,000 lb/hr steam)	Natural gas or diesel oil
Boiler #4	Central Steam Plant	1983	33.48 MMBtu/hr (30,000 lb/hr steam)	Natural gas or diesel oil
Boiler #1	Wahl Hall Apartments	1992	2.713 MMBtu/hr	Natural gas
Boiler #2	Wahl Hall Apartments	2008	1.75 MMBtu/hr	Natural gas
Boiler #1	Brook Lane	2003	0.25 MMBtu/hr	Natural gas
Boiler #2	Brook Lane	2003	0.25 MMBtu/hr	Natural gas
Boiler #1	Health Center	2003	0.5 MMBtu/hr	Natural gas
Boiler #2	Health Center	2000	0.5 MMBtu/hr	Natural gas
Boiler #1	Student Union	2006	1.25 MMBtu/hr	Natural gas
Boiler #2	Student Union	2006	1.25 MMBtu/hr	Natural gas
Boiler #3	Student Union	2006	1.25 MMBtu/hr	Natural gas
Boiler #1	President's House	1967	0.42 MMBtu/hr	Natural gas

3.2 Emission Limits

3.2.1 The Student Village Boilers may produce up to the following estimated emissions:

Pollutant	Emissions	
Nitrogen Oxides (NO _x)	1.7	tons per year
Carbon Monoxide (CO)	2.7	tons per year
Sulfur Dioxide (SO ₂)	0.02	tons per year
Particulate Matter (PM ₁₀)	0.24	tons per year
Volatile Organic Compounds (VOC)	0.18	tons per year
Lead	0.03	pounds per year

3.2.2 NO_x shall not exceed 0.40 pounds per hour AND 31.2 ppm corrected to 7% oxygen in the exhaust gas. NO_x shall be measured by using the procedures contained in 40 CFR 60, Appendix A Methods 7 or 7A.

3.2.3 CO shall not exceed 0.70 pounds per hour AND 9 ppm corrected to 7% oxygen in the exhaust gas. CO shall be measured by using the procedures contained in 40 CFR 60, Appendix A, Method 10.

3.2.4 Visual emissions shall not exceed 10 percent opacity from the boiler exhaust. Visual emissions shall be measured by using the procedures contained in 40 CFR 60, Appendix A, Method 9.

3.3 Equipment Restrictions

3.3.1 The boilers shall utilize forced draft automatic burners and cast iron water backed boilers.

3.3.2 No fuel other than natural gas or Liquefied Petroleum Gas (LPG) shall be burned in the boilers.

3.3.3 Boilers shall use good combustion.

3.3.4 It shall be grounds for rescission of this approval if physical operation of a Student Village boiler is discontinued for a period of eighteen (18) months or more. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.

3.3.5 Operation of equipment must be conducted in compliance with all data and specifications submitted as part of the Notice of Construction application unless otherwise approved by Ecology.

3.4 Operation and Maintenance

The Student Village boilers shall be properly operated and maintained at all times. They will be operated and maintained in accordance with a site-specific Operating and Maintenance (O&M) Manual, to be prepared by the permittee. Manufacturers' instructions may be referenced. The O&M manual shall be updated to reflect any modifications to the facility or operating procedures. Failure to follow the requirements of the O&M manual and the adequacy of the O&M Manual will be two of the factors considered by Ecology in determining whether the facility is properly operated and maintained. Regular maintenance records shall be kept at the facility. These O&M records shall be available for inspection by Ecology and organized in a readily accessible manner. The O&M manual shall at a minimum include:

- 3.4.1 Normal operating parameters for the emissions units.
- 3.4.2 A maintenance schedule for the emissions units.
- 3.4.3 Actions to be taken in response to abnormal system operation.

4. Paint Spray Booth

Legal Authority: The paint booth qualified as a new source of air contaminants under WAC 173-400-110, August 15, 2001, and a new source of toxic air pollutants under WAC 173-460-040, June 3, 1998. This unit was originally permitted under Order No. 02AQCR-3536, issued February 26, 2002. This Order supercedes Order No. 02AQCR-3536; Order No. 02AQCR-3536 is no longer in effect. This emission unit was reviewed under the legal authority of RCW 70.94.152 and the applicable rules and regulations adopted thereunder.

4.1 Emission Unit

The following paint spray booth is subject to the conditions in sections 1. Synthetic Minor, 4. Paint Spray Booth and 5. General Conditions, of this Order.

	Location	Installation Date
Paint Spray Booth	Grounds Warehouse Building	2002

4.2 Emission Limits

4.2.1 The paint spray booth may produce up to the following estimated emissions:

Pollutant	Emissions	
Volatile Organic Compounds (VOC)	1.3	tons per year
Toxic Air Pollutants		
Ethylbenzene ^{HAP}	15	pounds per year
Isopropyl Alcohol	132	pounds per year
Methyl Ethyl Ketone ^{HAP}	371	pounds per year
Methyl Isobutyl Ketone ^{HAP}	63	pounds per year
Styrene ^{HAP}	109	pounds per year
Toluene ^{HAP}	373	pounds per year
Xylenes ^{HAP}	314	pounds per year

^{HAP} = Federal Hazardous Air Pollutant

- 4.2.2 Visual emissions. Emissions of paint overspray shall not be visible outside of the booth.
- 4.2.3 Odor from the project shall not be detectable beyond the facility property line. Such violations shall be subject to any or all of the remedies proved in RCW 70.94 for violations of an Ecology Order. In the event odor from the project is detected beyond the property line a second time, Ecology may order the permittee to take specific measures to control odor. These measures may included, but are not limited to, the installation of additional pollution control devices such as thermal oxidation and carbon adsorption.
- 4.3 Equipment Restrictions
 - 4.3.1 One paint spray booth, utilizing fans and ducting may be installed.
 - 4.3.2 The paint spray booth shall not operate more than 8 hours per day and shall not operate more than 5 days per week.
 - 4.3.3 No more than 55 gallons of paint shall be used per calendar month.
 - 4.3.4 Except as allowed under this condition, no spray paint equipment shall be used other than High Volume Low Pressure (HVLP) airspray equipment which operates with a fluid pressure no greater than ten pounds per square inch and which operates without cleaning solvents. Air less spray equipment may be used where viscosity and high solid coating preclude the use of higher-transfer efficiency spray equipment.
 - 4.3.5 Topcoats used shall contain 420 grams or less VOC per liter less water. Primers used shall contain 250 grams or less VOC per liter less water. Substrate surface preparation materials shall contain 200 grams or less VOC per liter less water.
 - 4.3.6 To the extent practicable, the exhaust stack shall be designed to increase dispersion of exhaust gases by limited bends, obstructions, non-vertical discharges, and building interference with plume dispersion.
 - 4.3.7 It shall be grounds for rescission of this approval if physical operation of the paint spray booth is discontinued for a period of eighteen (18) months or more. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.
 - 4.3.8 Operation of equipment must be conducted in compliance with all data and specifications submitted as part of the Notice of Construction application unless otherwise approved by Ecology.

4.4 Operation and Maintenance

The paint spray booth shall be properly operated and maintained at all times. It will be operated and maintained in accordance with a site-specific Operating and Maintenance (O&M) Manual, to be prepared by the permittee. Manufacturers' instructions may be referenced. The O&M manual shall be updated to reflect any modifications to the facility or operating procedures. Failure to follow the requirements of the O&M manual and the adequacy of the O&M Manual will be two of the factors considered by Ecology in determining whether the facility is properly operated and maintained. Regular maintenance records shall be kept at the facility. These O&M records shall be available for inspection by Ecology and organized in a readily accessible manner. The O&M manual shall at a minimum included:

- 4.4.1 Normal operating parameters for the emissions units.
- 4.4.2 A maintenance schedule for the emissions unit(s).
- 4.4.3 Monitoring and record keeping requirements.
- 4.4.4 A description of the monitoring procedures.
- 4.4.5 Actions for abnormal control system operation.
- 4.4.6 A requirement for monitoring by a manometer measuring the draft (pressure) across the filter bank and appropriate corrective action based on the monitoring.
- 4.4.7 A requirement that negative static pressure be maintained in the booth during use.
- 4.4.8 A requirement that the spray paint booth shall not be operated unless all exhaust air passes through filter media at least two inches thick.
- 4.4.9 An indicator of alarm for the filter differential pressure, or an operational requirement as specified in the Operations and Maintenance Manual, in place to prevent the filter from plugging with paint.

5. General Conditions

- 5.1 Ecology may require the permittee to conduct source testing. This testing is in addition to any testing required by Ecology under WAC 173-400-105.
- 5.2 Records of all data shall be maintained in a readily retrievable manner for a period of five years and be made available at the project site to authorized representatives of Ecology upon request.
- 5.3 Legible copies of this Order and the O&M Manuals shall be on-site in a location known by and available to employees in direct operation of the described equipment and available to Ecology upon request.
- 5.4 No outdoor burning shall be performed on-site.
- 5.5 Access to the source by the United States Environmental Protection Agency or the Department of Ecology shall be permitted upon request for the purposes of compliance assurance inspections. Failure to allow access is grounds for revocation of this Order.

- 5.6 Nothing in this Order shall be construed so as to relieve the permittee of its obligations under any state, local, or federal laws or regulations.
- 5.7 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.
- 5.8 Any activity undertaken by the permittee, or others, in a manner which is inconsistent with the application or this Order, shall be subject to Ecology enforcement under applicable regulations.

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

- I. Violation of any terms or conditions of this authorization;
- II. Obtaining this authorization by misrepresentation or failure to disclose fully 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, shall not be affected thereby.

You have a right to appeal this Approval Order. To appeal you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the “date of receipt” of the Approval Order. Filing means actual receipt by the Board during regular office hours
- Serve your appeal on the Department of Ecology within 30 days of the “date of receipt” of the Approval Order. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). “Date of receipt” is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of (1) the Approval Order you are appealing and (2) the application for the Approval Order.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

Deliver your appeal in person to:

The Pollution Control Hearings Board
PO Box 40903
Olympia WA 98504-0903

OR

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey, WA 98503

2. To serve your appeal on the Department of Ecology

Mail appeal to:

Deliver your appeal in person to:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, WA 98504-7608

OR

The Department of Ecology
Appeals Coordinator
300 Desmond Dr SE
Lacey, WA 98503

3. And send a copy of your appeal to:

Sue Billings
Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

*For additional information visit the Environmental Hearings Office Website:
<http://www.eho.wa.gov>*

*To find laws and agency rules visit the Washington State Legislature Website:
<http://www1.leg.wa.gov/CodeReviser>*

DATED at Yakima, Washington, this [day] Day of [month], 2010.

Reviewed by:

Approved by:

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Draft

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