

June 26, 2024

Mr. Paul Richie, Supervisor of Facilities
Kelso School District No. 458
601 Crawford Street
Kelso, WA 98626

Subject: Preliminary Air Discharge Permit for Replacement Boiler at Coweeman MS

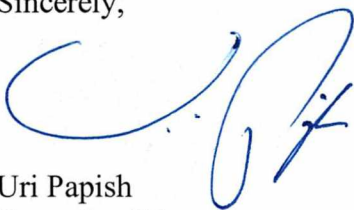
Dear Mr. Richie:

A preliminary determination to issue Air Discharge Permit 24-3648 (ADP 24-3648) has been completed for ADP Application CO-1098 pursuant to Section 400-110(4) of the General Regulations for Air Pollution Sources of the Southwest Clean Air Agency (SWCAA). Public notice for ADP Application CO-1098 was published in the permit section of SWCAA's internet website on May 22, 2024. SWCAA received a request for a public comment period in response to the public notice. Therefore, a 30-day public comment period will be provided prior to a final determination.

Electronic copies of ADP 24-3648 and the associated Technical Support Document are available for public review in the permit section of SWCAA's internet website (<http://www.swcleanair.gov/permits/publiccomments.asp>). Original copies are enclosed for your files. If you have any comments on this preliminary determination, please notify SWCAA within the specified comment period. If no comments are received, a final Air Discharge Permit will be issued subsequent to the comment period.

If you have any comments, or desire additional information, please contact me or Wess Safford at (360) 574-3058, extension 126.

Sincerely,



Uri Papish
Executive Director

UP:wls

Enclosure – Air Discharge Permit 24-3648 and Technical Support Document





DRAFT

**AIR DISCHARGE PERMIT
24-3648**

Preliminary Issued: June 26, 2024

Kelso School District – Coweeman Middle School
2000 Allen Street, Kelso, WA 98626

SWCAA ID - 575

REVIEWED BY:

Clinton Lamoreaux, Chief Engineer

APPROVED BY:

Uri Papish, Executive Director

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1. Equipment/Activity Identification

ID No.	Equipment/Activity	Control Measure/Equipment
1	Coweeman Middle School Natural Gas-fired Equipment	Low Sulfur Fuel (natural gas), Low Emission Burners

2. Approval Conditions

The following tables detail the specific requirements of this permit. In addition to the requirements listed below, equipment at this facility may be subject to other federal, state, and local regulations. The permit requirement number is identified in the left-hand column. The text of the permit requirement is contained in the middle column. The emission unit, equipment, or activity to which the permit requirement applies is listed in the right-hand column.

ADP 24-3648 will supersede those portions of ADP 22-3543 applicable to Coweeman Middle School.

Emission Limits

Req. No.	Emission Limits	Equipment/Activity ID No.								
1.	<p>Combined emissions from natural gas fired equipment at Coweeman Middle School must not exceed:</p> <table border="1"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>0.83 tpy</td> </tr> <tr> <td>CO</td> <td>0.78 tpy</td> </tr> <tr> <td>PM₁₀</td> <td>0.12 tpy</td> </tr> </tbody> </table> <p>Annual emissions must be determined from actual operation consistent with the methodology in Section 6 of the Technical Support Document for this Permit.</p>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	0.83 tpy	CO	0.78 tpy	PM ₁₀	0.12 tpy	1
<u>Pollutant</u>	<u>Emission Limit</u>									
NO _x	0.83 tpy									
CO	0.78 tpy									
PM ₁₀	0.12 tpy									
2.	<p>Emissions from Boiler 1 must not exceed the following:</p> <table border="1"> <thead> <tr> <th><u>Pollutant</u></th> <th><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>NO_x</td> <td>30 ppmvd @ 3% O₂ (1-hr avg)</td> </tr> <tr> <td>CO</td> <td>50 ppmvd @ 3% O₂ (1-hr avg)</td> </tr> </tbody> </table>	<u>Pollutant</u>	<u>Emission Limit</u>	NO _x	30 ppmvd @ 3% O ₂ (1-hr avg)	CO	50 ppmvd @ 3% O ₂ (1-hr avg)	1		
<u>Pollutant</u>	<u>Emission Limit</u>									
NO _x	30 ppmvd @ 3% O ₂ (1-hr avg)									
CO	50 ppmvd @ 3% O ₂ (1-hr avg)									
3.	<p>Visible emissions from natural gas-fired equipment must not exceed zero percent opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400).</p>	1								

Operating Limits and Requirements

Req. No.	Operating Limits and Requirements	Equipment/Activity ID No.
4.	Reasonable precautions must be taken at all times to prevent and minimize fugitive emissions from plant operations.	Facility-wide
5.	The permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum.	Facility-wide

Req. No.	Operating Limits and Requirements	Equipment/ Activity ID No.
6.	Each pollution control device/measure must be in use whenever the associated production equipment is in operation. Control devices must be operated and maintained in accordance with the manufacturer's specifications and operated in a manner that minimizes emissions.	1
7.	Emission units identified in this Permit must be maintained and operated in total and continuous conformity with the conditions identified in this Permit. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this Permit, including directing the facility to cease operations until corrective action can be completed.	1
8.	Boiler 1 must only be fired on natural gas.	1
9.	Exhaust gases from Boiler 1 must be discharged vertically into the ambient air above the level of the building roof. Any device that obstructs or prevents vertical discharge is prohibited.	1
10.	Corrective action must be taken within 7 days if emission monitoring results for Boiler 1 indicate emission concentrations in excess of permitted emission limits. Corrective action includes, but is not limited to, service by maintenance personnel or retesting for each pollutant of concern using a reference test method. Emission monitoring of affected units must be conducted following completion of any corrective action to confirm that the corrective action has been effective. Corrective action must be pursued until observed emission concentrations no longer exceed permitted emission limits. Initiation of corrective action does not shield the permittee from enforcement actions by SWCAA.	1

Monitoring and Recordkeeping Requirements

Req. No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID No.
11.	All air quality related complaints, including odor complaints, received by the permittee and the results of any subsequent investigation or corrective action must be recorded for each occurrence.	Facility-wide
12.	With the exception of data logged by a computerized data acquisition system, each record required by this Permit must include the date and the name of the person making the record entry. If a control device or process is not operating during a specific time period, a record must be made to that effect.	1
13.	All records required by this Permit must be kept for a minimum period of no less than three years and must be maintained in a form readily available for inspection by SWCAA representatives.	1
14.	Excess emissions and upset conditions must be recorded for each occurrence.	1
15.	The following information must be collected, recorded at the intervals specified below, and readily available on-site for inspection: (a) Boiler/water heater fuel consumption Recorded monthly (b) Maintenance and repair activities Recorded for each occurrence	1

Emission Monitoring and Testing Requirements

Req. No.	Emission Monitoring and Testing Requirements	Equipment/ Activity ID No.
16.	The permittee must conduct initial and periodic emission monitoring of Boiler 1 as described in Appendix A of this Permit.	1

Reporting Requirements

Req. No.	Reporting Requirements	Equipment/ Activity ID No.
17.	All air quality related complaints received by the permittee must be reported to SWCAA within three days of receipt. Complaint reports must include the following information: (a) Date and time of the complaint; (b) Name of the complainant; (c) Nature of the complaint; and (d) Description of corrective action taken in response to complaint (if any).	Facility-wide
18.	Excess emissions must be reported to SWCAA as follows: (a) As soon as possible, but no later than 12 hours after discovery for emissions that represent a potential threat to human health or safety; (b) As soon as possible, but no later than 48 hours after discovery for emissions which the permittee wishes to claim as unavoidable pursuant to SWCAA 400-107; and (c) No later than 30 days after the end of the month of discovery for all other excess emissions.	1
19.	Emission monitoring results must be reported to SWCAA in writing within 15 days of completion.	1
20.	Initial start-up of Boiler 1 must be reported to SWCAA in writing within 10 days of commencing regular operation.	1
21.	The following emission-related information must be reported to SWCAA by March 15 th for the previous calendar year: (a) Quantity of boiler/water heater fuel consumption; and (b) Air emissions of criteria air pollutants, volatile organic compounds, toxic air pollutants (TAPs), and hazardous air pollutants (HAPs).	1

3. General Provisions

Req. No.	General Provisions
A.	For the purpose of ensuring compliance with this ADP, duly authorized representatives of the Southwest Clean Air Agency must be permitted access to the Permittee's premises and the facilities being constructed, owned, operated, and/or maintained by the Permittee for the purpose of inspecting said facilities. These inspections are required to determine the status of compliance with this ADP and applicable regulations and to perform or require such tests as may be deemed necessary.
B.	The provisions, terms, and conditions of this ADP bind the Permittee, its officers, directors, agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for the Permittee.
C.	The requirements of this ADP survive any transfer of ownership of the source or any portion thereof.
D.	This ADP must be posted conspicuously at or be readily available near the source.
E.	This ADP will be invalidated, in whole or in part, if construction or installation of any new or modified equipment has not commenced within eighteen (18) months from date of issuance, if construction is discontinued for a period of eighteen (18) months or more without prior SWCAA approval, or if construction is not completed within a reasonable time.
F.	This ADP does not supersede requirements of other Agencies with jurisdiction and further, this ADP does not relieve the Permittee of any requirements of any other governmental Agency. In addition to this ADP, the Permittee may be required to obtain permits or approvals from other agencies with jurisdiction.
G.	Compliance with the terms of this ADP does not relieve the Permittee from the responsibility of compliance with SWCAA General Regulations for Air Pollution Sources, previously issued Regulatory Orders, RCW 70A.15, Title 173 WAC or any other applicable emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
H.	If any provision of this ADP is held to be invalid, all unaffected provisions of the ADP will remain in effect and be enforceable.
I.	No change in this ADP will be made or be effective except as may be specifically set forth by written order of the Southwest Clean Air Agency upon written application by the Permittee for the relief sought.
J.	The Southwest Clean Air Agency may, in accordance with RCW 70A.15, impose such conditions as are reasonably necessary to assure the maintenance of compliance with the terms of this ADP, the Washington Clean Air Act, and the applicable rules and regulations adopted under the Washington Clean Air Act.
K.	For the purposes of establishing if a condition of this ADP has been violated or is being violated, nothing in this ADP precludes the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed.

Appendix A

Emission Monitoring Requirements

Boiler 1

1. Introduction:

The purpose of periodically monitoring boiler exhaust is to minimize emissions and provide a reasonable assurance of proper operation. Periodic monitoring may be conducted with an electrochemical cell combustion analyzer, analyzers used for reference method testing, or other analyzers pre-approved by SWCAA.

2. Monitoring Procedure:

- a. Monitoring of exhaust gases from Boiler 1 to determine emission concentrations of the constituents listed below must be conducted within 90 days of commencing regular operation. Subsequent emission monitoring must be conducted on a 12 month cycle, no later than the end of January of each calendar year.

Constituents to be Measured:

Nitrogen Oxides (NO_x)

Carbon Monoxide (CO)

Oxygen (O₂)

Stack temperature

- b. Source operation during testing must be representative of maximum intended operating conditions.
- c. Alternative testing methodologies must be pre-approved by SWCAA.

3. Minimum Quality Assurance/Quality Control Measures:

- a. The analyzer(s) response to span gas of a known concentration must be determined before and after testing. No more than 12 hours may elapse between span gas response checks. The results of the analyzer response must not be valid if the difference between the pre and post response check results vary by more than 10% of the initial span gas value.
- b. Span gas concentrations must be no less than 50% and no more than 200% of the emission concentration of the corresponding permitted emission limit. A lower concentration span gas may be used if it is more representative of actual measured concentrations. Ambient air may be used to zero the CO and NO_x cells/analyzer(s) and span the oxygen cell/analyzer.
- c. Sampling must consist of at least 1 test consisting of at least 5 minutes of data collection. Data must not be collected until after analyzer readings have stabilized (less than 5% per minute change in emission concentration). Emission concentrations must be recorded at least once every 30 seconds during the data collection phase for a minimum of 10 readings. All test data collected following the ramp-up phase(s) must be reported to SWCAA in the designated format.

4. Reporting:

- a. All monitoring results must be recorded at the facility and reported to SWCAA in writing in a format designated by the Agency. Results must be reported within 15 calendar days of monitoring completion. At a minimum, the following information must be included in the report:
- (1) Time and date of the performance monitoring;
 - (2) Identification of the personnel involved;
 - (3) Identification of the affected unit;
 - (4) A summary of results (NO_x, CO, O₂, etc.), reported in units consistent with the applicable emission standard or limit;
 - (5) A summary of equipment operating conditions (e.g., firing rate, fuel flow, stack temperature, etc.);
 - (6) A description of the evaluation methods or procedures used including all field data, quality assurance/quality control procedures and documentation;
 - (7) Copies of span gas documentation; and
 - (8) Analyzer response check documentation.
- b. Individual monitoring results must be reported as read. Final average monitoring results must be reported corrected to 3% O₂ and adjusted to reflect analyzer response to the zero and span gases (bias/drift adjustment).

5. Changes to Monitoring Requirements:

Emission monitoring must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the monitoring schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.