

November 29, 2023

Mr. Jeff Robinson, Director of Operations
Vancouver Bulk Terminal, LLC
2735 NW Harborside Drive
Vancouver, WA 98660

Subject: Final Air Discharge Permit for Handling Silver (Lead) Concentrate

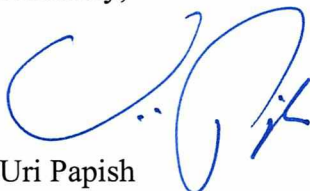
Dear Mr. Robinson:

A final determination to issue Air Discharge Permit 23-3615 (ADP 23-3615) has been completed for Air Discharge Permit (ADP) Application CL-3253 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 CL-3253 was published in the permit section of SWCAA's internet website on October 4, 2023. SWCAA did not receive a request for a public comment period in response to the public notice and has concluded that significant public interest does not exist for this determination. Therefore, a public comment period will not be provided for this permitting action. Electronic copies of ADP 23-3615 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/adpfinal.asp>). Original copies are enclosed for your files.

This Air Discharge Permit may be appealed directly to the Pollution Control Hearings Board (PCHB) within 30 days of receipt as provided in RCW 43.21B.

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 23-3615 and Technical Support Document





SWCAA
Southwest Clean Air Agency


**AIR DISCHARGE PERMIT
23-3615**

Issued: November 29, 2023

Vancouver Bulk Terminal
2735 NW Harborside Drive, Vancouver, WA 98660

SWCAA ID - 1920

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	Baghouse 1 / Railcar Unloading (Airlanco - 17,000 acfm)	Process Enclosure, Powered Filtration
2	Baghouse 2 / Clay Storage Conveyors (MAC - 48,000 acfm)	Process Enclosure, Powered Filtration
3	Baghouse 3 / Reclaim Conveyors (MAC - 4,650 acfm)	Process Enclosure, Powered Filtration
4	Baghouse 4 / Reclaim Conveyor (MAC - 2,550 acfm)	Process Enclosure, Powered Filtration
5	Baghouse 5 / Reclaim Conveyor & Ship Loader (FFAS - 12,500 acfm)	Process Enclosure, Powered Filtration
6	Baghouse 6 / Clay Storage Building (Airlanco - 3,000 acfm)	Process Enclosure, Powered Filtration
7	Baghouse 7 / Ore Reclaim (FFAS - 1,750 acfm)	Process Enclosure, Powered Filtration
8	Ore Storage Building	Process Enclosure
9	Ship Loading	Process Enclosure, Powered Filtration

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 23-3615 supersedes ADP 17-3233 in its entirety.

Emission Limits

Req. No.	Emission Limits	Equipment/ Activity ID No.
1.	Particulate matter emissions from approved baghouses must not exceed a concentration of 0.005 gr/dscf.	1-7

Req. No.	Emission Limits	Equipment/ Activity ID No.																								
2.	<p>Combined emissions from bulk material handling and storage operations must not exceed the following:</p> <table><tr><th>Pollutant</th><th>Emission Limit</th></tr><tr><td>PM₁₀</td><td>1.25 tpy</td></tr><tr><td>Arsenic</td><td>4.202 lb/yr</td></tr><tr><td>Cadmium</td><td>0.503 lb/yr</td></tr><tr><td>Chlorine</td><td>500.0 lb/yr</td></tr><tr><td>Chromium (metal)</td><td>175.0 lb/yr</td></tr><tr><td>Chromium (VI)</td><td>4.4E-4 lb/yr</td></tr><tr><td>Copper</td><td>361.5 lb/yr</td></tr><tr><td>Lead</td><td>104.94 lb/yr</td></tr><tr><td>Manganese</td><td>175.0 lb/yr</td></tr><tr><td>Molybdenum</td><td>1,750 lb/yr</td></tr><tr><td>Silver</td><td>175.0 lb/yr</td></tr></table> <p>Annual emissions must be calculated from actual material throughput consistent with the methodology in Section 6 of the Technical Support Document for this Permit.</p>	Pollutant	Emission Limit	PM ₁₀	1.25 tpy	Arsenic	4.202 lb/yr	Cadmium	0.503 lb/yr	Chlorine	500.0 lb/yr	Chromium (metal)	175.0 lb/yr	Chromium (VI)	4.4E-4 lb/yr	Copper	361.5 lb/yr	Lead	104.94 lb/yr	Manganese	175.0 lb/yr	Molybdenum	1,750 lb/yr	Silver	175.0 lb/yr	1-9
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3.	<p>Visible emissions from approved operations must not exceed the opacity values listed below for more than 3 minutes in any one hour period as determined by a Certified Observer certified in accordance with SWCAA Method 9.</p> <table><tr><th>Operation</th><th>Opacity Limit</th></tr><tr><td>Baghouse exhaust</td><td>0%</td></tr><tr><td>General material handling operations</td><td>5%</td></tr><tr><td>Ship loading other than 'topping off'</td><td>5%</td></tr><tr><td>Ship loading during 'topping off'</td><td>20%</td></tr></table> <p>'Topping off' is defined as any period of ship loading during which the top of the material pile in a ship's hold is at, or above, the plane formed by the hatch of the hold.</p>	Operation	Opacity Limit	Baghouse exhaust	0%	General material handling operations	5%	Ship loading other than 'topping off'	5%	Ship loading during 'topping off'	20%	1-9														
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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
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.	1-9

Req. No.	Operating Limits and Requirements	Equipment/ Activity ID No.
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.	1-9
8.	Permittee must continuously monitor wind speed in miles per hour during Terminal 2 material handling operations.	1-9
9.	Material handling operations must be terminated if sustained wind speeds reach or exceed 35 miles per hour.	1-9
10.	Permittee must maintain in its employ at least two individuals trained in visual emissions evaluation, and certified by a competent governing body in accordance with EPA Method 9. A certified individual must be present on-site during all active material handling operations.	1-9
11.	Permittee must install and maintain a differential pressure gauge capable of continuously monitoring differential pressure across the filtering media in each approved baghouse.	1-7
12.	All baghouses must be operated when actively handling materials other than copper or zinc concentrates. Baghouses 3, 4, and 7 must be operated when actively handling copper or zinc concentrates. Baghouses 3 and 4 may be taken offline when handling copper and zinc concentrates provided there are no visible emissions from associated transfer points.	1-7
13.	Exhaust air from approved equipment must be discharged vertically into the ambient air. Any device that obstructs or prevents vertical discharge is prohibited.	1, 6

Monitoring and Recordkeeping Requirements

Req. No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID No.
14.	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
15.	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.	1-9
16.	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.	1-9
17.	Excess emissions and upset conditions must be recorded for each occurrence.	1-9

Req. No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity ID No.														
18.	<p>Bulk material handling and storage operations must be monitored and recorded as follows:</p> <table><tr><td>(a) Moisture content of each material handled</td><td>Recorded for each shipment</td></tr><tr><td>(b) Differential pressure across each baghouse</td><td>Recorded weekly</td></tr><tr><td>(c) Types and quantities of material throughput</td><td>Recorded monthly</td></tr><tr><td>(d) Upset/breakdown events</td><td>Recorded for each occurrence</td></tr><tr><td>(e) Replacement of filter bags</td><td>Recorded for each occurrence</td></tr><tr><td>(f) Maintenance and repair activities</td><td>Recorded for each occurrence</td></tr><tr><td>(g) Opacity training and certifications</td><td>Maintain copy of each certification on file</td></tr></table>	(a) Moisture content of each material handled	Recorded for each shipment	(b) Differential pressure across each baghouse	Recorded weekly	(c) Types and quantities of material throughput	Recorded monthly	(d) Upset/breakdown events	Recorded for each occurrence	(e) Replacement of filter bags	Recorded for each occurrence	(f) Maintenance and repair activities	Recorded for each occurrence	(g) Opacity training and certifications	Maintain copy of each certification on file	1-9
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(g) Opacity training and certifications	Maintain copy of each certification on file															
19.	Wind speed must be determined and recorded during each Berth #7 ship loading operation.	9														

Emission Monitoring and Testing Requirements

Req. No.	Emission Monitoring and Testing Requirements	Equipment/ Activity ID No.
20.	The permittee must conduct initial and periodic emission testing of Baghouse 1 and Baghouse 6 as described in Appendix A of this Permit.	1, 6

Reporting Requirements

Req. No.	Reporting Requirements	Equipment/ Activity ID No.
21.	<p>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:</p> <ul style="list-style-type: none"> (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

Req. No.	Reporting Requirements	Equipment/ Activity ID No.
22.	<p>The permittee must notify SWCAA at least seven calendar days in advance of the use of any new material, which results in the emission of toxic or hazardous air pollutants listed in Section 6 of the Technical Support Document for this Permit. In response to the notification, SWCAA may require that a written report be submitted with the following:</p> <ul style="list-style-type: none"> (a) A description of the proposed change(s) in materials with an SDS for each new material, (b) The date the change(s) is (are) to be made, (c) The change(s) in emissions of VOCs, HAPs and TAPs occurring as a result of the change, and (d) A summary of any applicable requirement(s) that would apply as a result of the change(s). <p>If the proposed emission rate of a new TAP exceeds the applicable SQER and/or other emission limits established by this Permit or otherwise circumvents an applicable requirement, New Source Review may be required prior to making the proposed change.</p>	Facility-wide
23.	<p>Excess emissions must be reported to SWCAA as follows:</p> <ul style="list-style-type: none"> (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. 	1-9
24.	<p>The following information for bulk material handling and storage operations must be reported to SWCAA in writing no later than March 15th for the previous calendar year:</p> <ul style="list-style-type: none"> (a) Types and quantities of materials handled; (b) Moisture content of each material handled; (c) Maximum and average wind speeds during each Berth 7 ship loading events; (d) Excess emission and/or upset events; (e) Opacity certification training events and copies of certifications; and (f) Air emissions of criteria air pollutants, volatile organic compounds, toxic air pollutants (TAPs), and hazardous air pollutants (HAPs). 	1-9
25.	<p>Emission test results must be reported to SWCAA in writing within 45 days of test completion.</p>	1, 6

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.

Appendix A Emission Testing Requirements Baghouses 1 and 6

1. Introduction:

The purpose of this testing is to quantify emissions from the material handling baghouses and demonstrate compliance with the requirements of this Permit and applicable air quality regulations.

2. Testing Requirements:

- a. **Testing schedule.** Emission testing of Baghouse 1 must be conducted no later than March 2026. Subsequent emission testing of Baghouse 1 must be performed on a rolling five year cycle, no later than March of the year in which testing is due. Emission testing of Baghouse 6 must be conducted no later than March 2031. Subsequent emission testing of Baghouse 6 must be performed on a rolling ten year cycle, no later than March of the year in which testing is due. Emission testing may be conducted in the three calendar months preceding the month in which testing is due. Emission testing conducted earlier requires prior approval by SWCAA. Testing before or after the due date does not modify or reset the test schedule.
- b. **Test plan.** A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to each test. SWCAA personnel must be informed at least five business days prior to testing so that a representative may be present during testing.
- c. **Test Location.** Sampling must be conducted at the exhaust stack of each baghouse.
- d. **Test runs/Reference test methods.** A minimum of three (3) test runs must be performed for each constituent listed below to ensure the data are representative. Compliance must be demonstrated by averaging the results of the individual sampling runs. The sampling methods identified below must be used unless alternate methods are approved in writing by SWCAA in advance of the emission testing.

<u>Constituent</u>	<u>Reference Test Method</u>	<u>Minimum Test Run Duration</u>
Flow rate, temperature	EPA Methods 1 and 2	N/A
O ₂ , CO ₂ content	EPA Method 3 or 3A	60 minutes
Moisture content	EPA Method 4	60 minutes
PM	EPA Method 5	60 minutes
Opacity	SWCAA Method 9	6 minutes*

* For every reading in excess of the opacity standard, opacity must be read for an additional 6 minutes to a maximum total of 60 minutes or 13 readings in excess of the opacity standard, whichever is shorter.

3. Source Operation:

- a. **Source Operations.** Source operations during the emissions test must be representative of maximum intended operating conditions.
- b. **Record of Production Parameters.** Production related parameters and equipment operating conditions must be recorded during emissions testing to correlate operating conditions with emissions. Recorded parameters must, at a minimum, include type of material being handled, quantity of material handled, process startups/shutdowns, and plant adjustments. All recorded production parameters must be documented in the test results report.

4. Reporting Requirements:

- a. **Test Report.** Unless otherwise directed by SWCAA, a final test report must be prepared and submitted to SWCAA in an approved format within forty-five (45) calendar days of test completion and, at a minimum, must contain the following information:
- (1) Description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations,
 - (2) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing,
 - (3) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit,
 - (4) Summary of control system or equipment operating conditions,
 - (5) Summary of production related parameters,
 - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation,
 - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation,
 - (8) Copies of field data and example calculations,
 - (9) Chain of custody information,
 - (10) Calibration documentation,
 - (11) Discussion of any abnormalities associated with the results, and
 - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.
- b. **Test Results.** All test results must be reported as measured.

5. Changes to Testing Requirements:

Emission testing 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 testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.