



September 4, 2024

Mr. Patrick Sypher  
Columbia River Carbonates  
300 N Pekin Road  
Woodland, WA 98674

Subject: Final Air Discharge Permit for New Impact Mill

Dear Mr. Sypher:

A final determination to issue Air Discharge Permit 24-3660 (ADP 24-3660) has been completed for Air Discharge Permit (ADP) Application CO-1102 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-1102 was published in the permit section of SWCAA's internet website on June 14, 2024. 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 24-3660 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 24-3660 and Technical Support Document






**AIR DISCHARGE PERMIT  
24-3660**

**Issued: September 4, 2024**

Columbia River Carbonates – Pelletizing Plant  
289 N Pekin Road, Woodland, Washington 98674

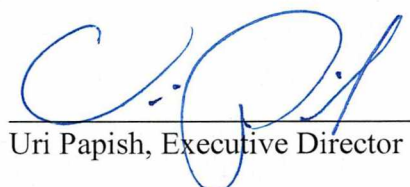
SWCAA ID - 2522

REVIEWED BY:

  
Clinton Lamoreaux, Chief Engineer



APPROVED BY:

  
Uri Papish, Executive Director

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**1. Equipment/Activity Identification**

| <b>ID No.</b> | <b>Equipment/Activity</b>   | <b>Control Measure/Equipment</b>               |
|---------------|---|--|
| 1             | Air Heater - ACM Mill 1 (GMAHE01)   | Low Sulfur Fuel,<br>Low Emission Burner        |
| 2             | Air Heater - Fluid Bed Dryer (PAAHE01)                                    | Low Sulfur Fuel,<br>Low Emission Burner        |
| 3             | ACM Mill 1 (GMACM01)  | Process Enclosure,<br>Dust Collector (GMDCL01) |
| 4             | ACM Mill 2 (GMACM02)  | Process Enclosure,<br>Dust Collector (GMDCL02) |
| 5             | Fluid Bed Dryer (PADRY01)   | Process Enclosure,<br>Dust Collector (PADCL01) |
| 6             | Central Dust Control System, Railcar Loading System, Truck Loading System | Process Enclosure,<br>Dust Collector (PADCL03) |
| 7             | Material Hopper (PAHOP01)   | Process Enclosure,<br>Bin Vent (PABVT01)       |
| 8             | Material Hopper (PAHOP02)   | Process Enclosure,<br>Bin Vent (PABVT02)       |
| 9             | Material Hopper (PAHOP03)   | Process Enclosure,<br>Bin Vent (PABVT03)       |
| 10            | Material Hopper (PAHOP04)   | Process Enclosure,<br>Bin Vent (PABVT04)       |
| 11            | Raw Material Receiving and Storage - Fugitives                            | Process Enclosure                              |
| 12            | Pellet Storage and Shipping - Fugitives                                   | Process Enclosure                              |

**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 24-3660 supersedes ADP 21-3460 in its entirety.

**Emission Limits**

| Req. No.         | Emission Limits   | Equipment/ Activity ID No. |                       |                 |                     |    |                      |     |          |                 |          |   |
|------------------|---|----------------------------|-----------------------|-----------------|---------------------|----|----------------------|-----|----------|-----------------|----------|---|
| 1.               | <p>Combustion emissions from the ACM Mill Air Heater (GMAHE01) must not exceed the following:</p> <table border="0"> <thead> <tr> <th data-bbox="337 338 456 369"><u>Pollutant</u></th> <th data-bbox="537 338 737 369"><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="354 373 418 405">NO<sub>x</sub></td> <td data-bbox="537 373 797 405">1.97 tpy, 20 ppmv*</td> </tr> <tr> <td data-bbox="354 409 391 441">CO</td> <td data-bbox="537 409 808 441">5.99 tpy, 100 ppmv*</td> </tr> <tr> <td data-bbox="354 445 418 476">VOC</td> <td data-bbox="537 445 646 476">0.07 tpy</td> </tr> <tr> <td data-bbox="354 480 407 512">SO<sub>2</sub></td> <td data-bbox="537 480 646 512">0.01 tpy</td> </tr> </tbody> </table> <p>* Emission concentration limits are calculated as a 1-hour average. Data must be corrected to 18% O<sub>2</sub> if measured O<sub>2</sub> is equal to or less than 18% or uncorrected if measured O<sub>2</sub> is greater than 18%.</p> <p>Annual emissions must be determined based on actual fuel use consistent with the methodology in Section 6 of the Technical Support Document for this ADP.</p>            | <u>Pollutant</u>           | <u>Emission Limit</u> | NO <sub>x</sub> | 1.97 tpy, 20 ppmv*  | CO | 5.99 tpy, 100 ppmv*  | VOC | 0.07 tpy | SO <sub>2</sub> | 0.01 tpy | 1 |
| <u>Pollutant</u> | <u>Emission Limit</u>   |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| NO <sub>x</sub>  | 1.97 tpy, 20 ppmv*  |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| CO               | 5.99 tpy, 100 ppmv*   |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| VOC              | 0.07 tpy  |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| SO <sub>2</sub>  | 0.01 tpy  |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| 2.               | <p>Combustion emissions from Fluid Bed Dryer Air Heater (PAAHE01) must not exceed the following:</p> <table border="0"> <thead> <tr> <th data-bbox="337 863 456 894"><u>Pollutant</u></th> <th data-bbox="537 863 737 894"><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="354 898 418 930">NO<sub>x</sub></td> <td data-bbox="537 898 808 930">11.82 tpy, 30 ppmv*</td> </tr> <tr> <td data-bbox="354 934 391 966">CO</td> <td data-bbox="537 934 824 966">23.96 tpy, 100 ppmv*</td> </tr> <tr> <td data-bbox="354 970 418 1001">VOC</td> <td data-bbox="537 970 662 1001">0.28 tpy</td> </tr> <tr> <td data-bbox="354 1005 407 1037">SO<sub>2</sub></td> <td data-bbox="537 1005 662 1037">0.03 tpy</td> </tr> </tbody> </table> <p>* Emission concentration limits are calculated as a 1-hour average. Data must be corrected to 18% O<sub>2</sub> if measured O<sub>2</sub> is equal to or less than 18% or uncorrected if measured O<sub>2</sub> is greater than 18%.</p> <p>Annual emissions must be determined based on actual fuel use consistent with the methodology in Section 6 of the Technical Support Document for this ADP.</p> | <u>Pollutant</u>           | <u>Emission Limit</u> | NO <sub>x</sub> | 11.82 tpy, 30 ppmv* | CO | 23.96 tpy, 100 ppmv* | VOC | 0.28 tpy | SO <sub>2</sub> | 0.03 tpy | 2 |
| <u>Pollutant</u> | <u>Emission Limit</u>   |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| NO <sub>x</sub>  | 11.82 tpy, 30 ppmv*   |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| CO               | 23.96 tpy, 100 ppmv*  |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| VOC              | 0.28 tpy  |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| SO <sub>2</sub>  | 0.03 tpy  |                            |                       |                 |                     |    |                      |     |          |                 |          |   |
| 3.               | <p>Combined PM<sub>10</sub> emissions from approved operations must not exceed 16.18 tpy.</p> <p>Annual emissions must be determined based on actual material throughput consistent with Section 6 of the Technical Support Document for this ADP.</p>  | 1-12                       |                       |                 |                     |    |                      |     |          |                 |          |   |
| 4.               | <p>PM exhaust concentration from each dust collector or bin vent must not exceed 0.005 gr/dscf (1-hr avg).</p>  | 3-10                       |                       |                 |                     |    |                      |     |          |                 |          |   |
| 5.               | <p>Visible emissions from the dust collectors and bin vents must not exceed 0% opacity for more than three minutes in any one-hour period as determined by a Certified Observer certified in accordance with SWCAA Method 9.</p>  | 1-10                       |                       |                 |                     |    |                      |     |          |                 |          |   |
| 6.               | <p>Visible emissions from fugitive sources must not exceed 5% opacity for more than three minutes in any one-hour period as determined by a Certified Observer certified in accordance with SWCAA Method 9.</p>   | 11-12                      |                       |                 |                     |    |                      |     |          |                 |          |   |

**Operating Limits and Requirements**

| <b>Req. No.</b> | <b>Operating Limits and Requirements</b>   | <b>Equipment/ Activity ID No.</b> |
|-----------------|--|-----------------------------------|
| 7.              | Reasonable precautions must be taken at all times to prevent and minimize fugitive emissions from plant operations.  | Facility-wide                     |
| 8.              | The permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum.  | Facility-wide                     |
| 9.              | 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.   | 1-12                              |
| 10.             | 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.   | 1-12                              |
| 11.             | Air heaters must be fired on natural gas only.   | 1-2                               |
| 12.             | Corrective action must be taken within 7 days if emission monitoring results for the air heaters 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. Corrective action must be pursued until observed emission concentrations no longer exceed permitted emission limits. | 1-2                               |
| 13.             | Differential pressure gauges must be installed and maintained to measure the pressure drop across each dust collector and bin vent.  | 3-10                              |
| 14.             | Exhaust air from approved equipment 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                              |

**Monitoring and Recordkeeping Requirements**

| <b>Req. No.</b> | <b>Monitoring and Recordkeeping Requirements</b>  | <b>Equipment/ Activity ID No.</b> |
|-----------------|---|-----------------------------------|
| 15.             | 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                     |
| 16.             | 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. | 1-12                              |
| 17.             | 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.   | 1-12                              |
| 18.             | Excess emissions and upset conditions must be recorded for each occurrence.   | 1-12                              |

| <b>Req. No.</b> | <b>Monitoring and Recordkeeping Requirements</b>  | <b>Equipment/ Activity ID No.</b> |
|-----------------|---|-----------------------------------|
| 19.             | The permittee must monitor and record the following information:<br>(a) Pressure drop across each dust collector and bin vent Recorded weekly<br>(b) Fuel consumption in each air heater Recorded monthly<br>(c) Quantity/type of material received at the facility Recorded monthly<br>(d) Quantity of product shipped from facility Recorded monthly<br>(e) Hours of operation for each dust collector and bin vent Recorded annually<br>(f) Maintenance and repair activities that may affect air pollutant emissions Recorded for each occurrence | 1-12                              |

### Emission Monitoring and Testing Requirements

| <b>Req. No.</b> | <b>Emission Monitoring and Testing Requirements</b>   | <b>Equipment/ Activity ID No.</b> |
|-----------------|---|-----------------------------------|
| 20.             | The permittee must conduct initial and periodic emission testing of dust collectors as described in Appendix A of this permit and 40 CFR 60.675.                | 3-6                               |
| 21.             | The permittee must conduct initial emission testing of fugitive emissions from approved operations as described in Appendix B of this permit and 40 CFR 60.675. | 3-12                              |
| 22.             | The permittee must conduct initial and periodic emission testing of the Fluid Bed Dryer Air Heater as described in Appendix C of this permit.                   | 2                                 |
| 23.             | The permittee must conduct initial and periodic emission monitoring of the Fluid Bed Dryer and ACM Mill Air Heaters as described in Appendix D of this permit.  | 1-2                               |

### Reporting Requirements

| <b>Req. No.</b> | <b>Reporting Requirements</b>  | <b>Equipment/ Activity ID No.</b> |
|-----------------|--|-----------------------------------|
| 24.             | 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:<br>(a) Date and time of the complaint;<br>(b) Name of the complainant;<br>(c) Nature of the complaint; and<br>(d) Description of corrective action taken in response to complaint (if any). | Facility-wide                     |

| <b>Req. No.</b> | <b>Reporting Requirements</b>  | <b>Equipment/ Activity ID No.</b> |
|-----------------|--|-----------------------------------|
| 25.             | <p>A written report must be submitted to SWCAA at least 7 calendar days prior to the use of any new product that contains VOCs, TAPs, or HAPs. The report must contain the following:</p> <ul style="list-style-type: none"> <li>(a) A description of the product, Safety Data Sheet information, and the location where the product will be used;</li> <li>(b) The date by which the Permittee intends to begin use of the product;</li> <li>(c) The amount of product expected to be used;</li> <li>(d) A quantification of the change in VOC, HAP and TAP emissions from use of the product; and</li> <li>(e) A summary of any applicable requirement that would apply as a result of using the product.</li> </ul> <p>If use of the new product would cause any emission limit or SQER to be exceeded, the Permittee must submit an ADP application to SWCAA to request a revision to this ADP. The Permittee must not begin using the new product until a revised ADP is issued. Any new product that is only to be used for testing purposes with a quantity of 5 gallons or less of usage does not need to be reported to SWCAA prior to use.</p> | Facility-wide                     |
| 26.             | <p>Excess emissions must be reported to SWCAA as follows:</p> <ul style="list-style-type: none"> <li>(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;</li> <li>(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</li> <li>(c) No later than 30 days after the end of the month of discovery for all other excess emissions.</li> </ul>   | 1-12                              |
| 27.             | <p>The following emission-related information must be reported to SWCAA by March 15<sup>th</sup> for the previous calendar year:</p> <ul style="list-style-type: none"> <li>(a) Fuel consumption in each air heater;</li> <li>(b) Quantity/type of material received at the facility;</li> <li>(c) Quantity of product shipped from facility;</li> <li>(d) Hours of operation for each dust collector and bin vent; and</li> <li>(e) Quantity of air emissions of criteria air pollutants, volatile organic compounds, toxic air pollutants (TAPs), and hazardous air pollutants (HAPs).</li> </ul>  | 1-12                              |
| 28.             | Emission test results must be reported to SWCAA in writing within 45 days of test completion.  | 1-12                              |
| 29.             | Emission monitoring results must be reported to SWCAA in writing within 15 days of completion.   | 1-2                               |
| 30.             | Initial start-up of SWCAA approved emission units must be reported to SWCAA in writing within 10 days of commencing regular operation.   | 4                                 |



**3. General Provisions**

| <b>Req. No.</b> | <b>General Provisions</b>   |
|-----------------|---|
| 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 Testing Requirements

#### Dust Collectors

#### 1. Introduction:

The purpose of this testing is to quantify emissions from crushed gypsum and limestone processing and to demonstrate compliance with the requirements of this permit and 40 CFR 60 Subpart 000.

#### 2. Testing Requirements:

- a. **Testing Schedule.** The emission units listed below must be emission tested by the date specified below and every 120 months thereafter no later than the end of March. Emission testing may be conducted up to three calendar months prior to the month in which testing is due. Emission testing conducted earlier requires prior approval by SWCAA. Testing before or after the scheduled due date does not modify or reset the test schedule.

| <u>Emission Unit</u>     | <u>Test Due Date</u> |
|--------------------------|----------------------|
| Dust Collector (GMDCL02) | March 2025           |
| Dust Collector (GMDCL01) | March 2030           |
| Dust Collector (PADCL01) | March 2030           |
| Dust Collector (PADCL03) | March 2030           |

- 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 of the proposed test date and location at least 5 business days prior to testing so that a representative may be present during testing.
- c. **Test Location.** Sampling must be conducted at the outlet of each individual dust collector.
- d. **Test Runs/Reference Test Methods.** A minimum of 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.

| <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 <sub>2</sub> , CO <sub>2</sub> content | EPA Method 3 or 3A           | 60 minutes                       |
| Moisture content                         | EPA Method 4                 | 60 minutes                       |
| PM                                       | EPA Method 5 or 17           | 60 minutes                       |
| Opacity                                  | EPA/SWCAA Method 9           | 60 minutes                       |

#### 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. 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 form within 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) A brief description of the purpose of the test, for example, an initial test, a periodic test required by an ADP, a test required by a federal, state, or local rule or regulation, or a test required to determine compliance with a Notice to Correct;
  - (3) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing;
  - (4) The location and description of the discharge point (stack, port, etc.), including the dimensions (diameter, length and width, or other) and height above ground level. A photo of the discharge point is highly recommended;
  - (5) The location of the sample ports or test location and a description of how the sampling location relates to the discharge point. For example, the sampling location may be in a square duct some distance away from the discharge point, which is a round stack. A photo of the sample ports or test location is highly recommended;
  - (6) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit;
  - (7) Summary of control system or equipment operating conditions;
  - (8) Summary of production related parameters, including those cited in Section 3;
  - (9) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation;
  - (10) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation;
  - (11) Copies of field data and example calculations;
  - (12) Chain of custody information;
  - (13) Calibration documentation;
  - (14) Discussion of any abnormalities associated with the results; and
  - (15) A statement signed by the senior management official of the testing firm certifying the validity of the source test report. Test reports with material mistakes or misinformation may be rejected by SWCAA.
- b. **Test Results.** PM test results must be reported in units of gr/dscf and lb/hr.

#### 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.

## Appendix B

### Emission Testing Requirements

#### Fugitive Emissions

#### 1. Introduction:

The purpose of this performance testing requirement is to demonstrate compliance with the visual emissions limitations of this permit and 40 CFR 60 Subpart OOO. This testing requirement is only applicable to rock crushing equipment that has not previously conducted initial emission testing pursuant to 40 CFR 60, Subpart OOO.

#### 2. Testing Requirements:

- a. **Testing Schedule.** Emission testing must be performed within 60 days of achieving maximum production rate, but not later than 180 days after initial startup for each affected facility consistent with the requirements of 40 CFR 60.8 and 60.675.
- 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 of the proposed test date and location at least 5 business days prior to testing so that a representative may be present during testing.
- c. **Test Location.** Visual observations must be performed at the affected facility or building opening if an affected facility is located inside a building. Affected facilities are each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station.
- d. **Test Runs / Reference Methods.** A minimum of 30 minutes of observations must be conducted as required by 40 CFR 60.675(c)(3) using the sampling method identified below.

| <u>Constituent</u> | <u>Reference Test Method</u> |
|--------------------|------------------------------|
| Opacity            | EPA Method 9                 |

#### 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. All recorded production parameters must be documented in the test results report.

#### 4. Reporting Requirements:

- a. **Data Reduction.** Opacity observation data must be reduced and analyzed using the protocols in EPA Method 9 and SWCAA Method 9.
- b. **Compliance Determination.** Compliance must be determined by comparing the reduced opacity data with the visible emission limits contained in this permit and 40 CFR 60, Subpart OOO.
- c. **Test Report.** Unless otherwise directed by SWCAA, a final test report must be prepared and submitted to SWCAA in an approved form within 45 calendar days of test completion and, at a minimum, must contain the following information:
  - (1) A 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) A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit;
  - (4) A summary of control system or equipment operating conditions;
  - (5) A 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) Discussion of any abnormalities associated with the results; and
  - (11) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

#### 5. Changes to Testing Requirements

The source test 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.

## Appendix C

### Emission Testing Requirements Fluid Bed Dryer Air Heater

#### 1. Introduction:

The purpose of this testing is to quantify emissions from the Fluid Bed Dryer Air Heater and demonstrate compliance with the requirements of this permit and applicable air quality regulations.

#### 2. Testing Requirements:

- a. **Testing Schedule.** The Fluid Bed Dryer Air Heater must be emission tested by March 2030 and every 120 months thereafter no later than the end of March. Emission testing may be conducted up to three calendar months prior to the month in which testing is due. Emission testing conducted earlier requires prior approval by SWCAA. Testing before or after the scheduled 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 of the proposed test date and location at least 5 business days prior to testing so that a representative may be present during testing.
- c. **Test Location.** Sampling must be conducted at the unit exhaust stack.
- d. **Test Runs/Reference Test Methods.** A minimum of 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.

| <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 <sub>2</sub> , CO <sub>2</sub> content | EPA Method 3 or 3A           | 60 minutes                       |
| Moisture content                         | EPA Method 4                 | 60 minutes                       |
| NO <sub>x</sub>                          | EPA Method 7E                | 60 minutes                       |
| CO                                       | EPA Method 10                | 60 minutes                       |

#### 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 material processing rate, air heater fire rate, process startups and 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 form within 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) A brief description of the purpose of the test, for example, an initial test, a periodic test required by an ADP, a test required by a federal, state, or local rule or regulation, or a test required to determine compliance with a Notice to Correct;
  - (3) Time and date of the test and identification and qualifications of the personnel involved, including SWCAA personnel who observed the testing;
  - (4) The location and description of the discharge point (stack, port, etc.), including the dimensions (diameter, length and width, or other) and height above ground level. A photo of the discharge point is highly recommended;
  - (5) The location of the sample ports or test location and a description of how the sampling location relates to the discharge point. For example, the sampling location may be in a square duct some distance away from the discharge point, which is a round stack. A photo of the sample ports or test location is highly recommended;
  - (6) Summary of results, reported in units and averaging periods consistent with the applicable emissions standard or unit;
  - (7) Summary of control system or equipment operating conditions;
  - (8) Summary of production related parameters, including those cited in Section 3;
  - (9) A description of the test methods or procedures used, including all field data, quality assurance/quality control procedures and documentation;
  - (10) A description of the analytical procedures used, including all laboratory data, quality assurance/quality control procedures and documentation;
  - (11) Copies of field data and example calculations;
  - (12) Chain of custody information;
  - (13) Calibration documentation;
  - (14) Discussion of any abnormalities associated with the results; and
  - (15) A statement signed by the senior management official of the testing firm certifying the validity of the source test report. Test reports with material mistakes or misinformation may be rejected by SWCAA.
- b. **Oxygen Correction.** All test results must be corrected to 18% O<sub>2</sub> if measured O<sub>2</sub> is equal to or less than 18% or uncorrected if measured O<sub>2</sub> is greater than 18%.

#### 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.

## **Appendix D**

### **Emission Monitoring Requirements**

### **Fluid Bed Dryer and ACM Mill Air Heaters**

#### **1. Introduction:**

The purpose of periodically monitoring air heater 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 of the Fluid Bed Dryer Air Heater and ACM Mill Air Heaters to determine emission concentrations of the constituents listed below must be conducted on a continuing 12-month cycle, no later than the end of March. Emission monitoring of the Fluid Bed Dryer Air Heater is not required during any year in which emission testing is conducted pursuant to Appendix C of this permit.

##### Constituents to be Measured

CO  
NO<sub>x</sub>  
O<sub>2</sub>

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 are not valid if the difference between the pre and post response check results vary by more than 10% of the initial span gas value.

b. The CO and NO<sub>x</sub> span gas concentrations must be no less than 50% and no more than 200% of the emission concentration corresponding to the permitted emission limit. A lower concentration span gas may be used if it is more representative of measured concentrations. Ambient air may be used to zero the CO and NO<sub>x</sub> 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<sub>x</sub>, CO, O<sub>2</sub>, 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 18% O<sub>2</sub> if measured excess O<sub>2</sub> is equal to or less than 18% or uncorrected if measured O<sub>2</sub> is greater than 18%. Final average monitoring results must be 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.