

Bureau of Air Pollution Control

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249 p: 775-687-9349 • ndep.nv.gov/air

Facility ID No. A2214

Permit No. AP1041-4680

CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC - Spring Valley Mine Project (Hereinafter referred to as Permittee)

Mailing Address: 2000 VASSAR STREET, PO Box 11340, RENO, NV 89510

Driving Directions: From Lovelock take I-80 E for approximately 12.6 miles. Take exit 119 toward NV-

858 E AND TURN RIGHT ONTO NV-858 E. CONTINUE ONTO LOVELOCK-UNIONVILLE ROAD AND

DRIVE FOR APPROXIMATELY 14 MILES.

General Facility Location: Sections 24 through 28 and 33 through 36, T 29 N, R 34 E, MDB&M

SECTIONS 19 THROUGH 21 AND 28 THROUGH 32, T 29 N, R 35 E, MDB&M

SECTIONS 1 THROUGH 4, T 28 N, R 34 E, MDB&M SECTIONS 4 THROUGH 6, T 28 N, R 35 E, MDB&M HA 129 – BUENA VISTA VALLEY / PERSHING COUNTY

HA 73A – LOVELOCK VALLEY/OREANA SUB-AREA / PERSHING COUNTY NORTH 4,463,762 M, EAST 401,328 M, UTM ZONE 11, NAD 83

Emission Unit List:

A. System 1 – Primary Crushing - Material Transfers

PF1.001	Material Transfer to Ore Bin via Truck Dump
PF1.002	Ore Bin Transfer to Vibratory Grizzly Feeder

B. System 2 - Primary Crushing - Primary Crushing Area Baghouse

S2.001	Vibratory Grizzly Feeder transfer to Surge Stockpile Conveyor Belt
S2.002	Primary Jaw Crusher and Associated Transfers (IN: Vibratory Grizzly Feeder, OUT: Surge Stockpile Conveyor Belt)

S2.003 Surge Stockpile Conveyor Belt transfer to Surge Stockpile

C. System 3 – Secondary Crushing and Screening - Feeder(s) Area Baghouse

S2.004	Surge Stockpile Transfer to Apron Feeder 1
S2.005	Surge Stockpile Transfer to Apron Feeder 2
S2.006	Apron Feeder 1 transfer to Secondary Vibratory Screen Feeder Conveyor
S2.007	Apron Feeder 2 transfer to Secondary Vibratory Screen Feeder Conveyor
S2.008	Secondary Cone Crusher and Associated Transfers (IN: Secondary Return Belt 2, OUT: Secondary Vibratory Screen Feed Conveyor)

D. System 4 – Secondary Crushing and Screening - Secondary Crushing Area Baghouse

S2.009	Secondary Vibratory Screen and Associated Transfers (IN: Secondary Vibratory Screen Feed Conveyor, OUT: Tertiary
32.009	Crushing Feed Conveyor Belt -OR- Secondary Return Belt No. 1)
S2.010	Secondary Return Belt No. 1 transfer to Secondary Return Belt No. 2
S2.011	Tertiary Crushing Feed Conveyor Belt to Tertiary Distributor



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

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	Unit I ist (continued).
Emission (Jnit List (continued):
E. System	5 – Tertiary Crushing and Screening - Tertiary Crushing Area Baghouse
S2.012	Vibrating Tertiary Screen 1 and Associated Transfers (IN: Tertiary Distributor, OUT: Tertiary Cone Crusher No. 1 -
\$2.012	OR- Crushed Product Conveyor Belt)
S2.013	Vibrating Tertiary Screen 2 and Associated Transfers (IN: Tertiary Distributor, OUT: Tertiary Cone Crusher 2 -OR-
32.013	Crushed Product Conveyor Belt)
S2.014	Tertiary Cone Crusher 1 and Associated Transfers (IN: Tertiary Screen 1, OUT: Tertiary Crushing Return Belt 1)
S2.015	Tertiary Cone Crusher 2 and Associated Transfers (IN: Tertiary Screen 2, OUT: Tertiary Crushing Return Belt 1)
S2.016	Tertiary Crushing Return Belt 1 transfer to Tertiary Crushing Return Belt 2
S2.017	Tertiary Crushing Return Belt 2 transfer to Tertiary Crushing Feed Conveyor Belt
S2.018	Crushed Product Conveyor Belt transfer to Overland Conveyor 1 -OR- Emergency Stockpile Feed Conveyor Belt
S2.019	Emergency Stockpile Hopper Feeder transfer to Crushed Product Conveyor Belt
F. System	6 – Emergency Stockpile Scenario
PF1.003	Emergency Stockpile Feed Conveyor Transfer to Emergency Stockpile
PF1.004	Material Transfer to Emergency Stockpile Hopper via Truck
PF1.005	Emergency Stockpile Hopper transfer to Emergency Stockpile Hopper Feeder
G. System	7 – Overland Conveyor System
PF1.006	Overland Conveyor 1 to Overland Conveyor 2
PF1.007	Overland Conveyor 2 to Grasshopper Conveyor 1
PF1.008	Grasshopper Conveyor 1 to Grasshopper Conveyor 2
PF1.009	Grasshopper Conveyor 2 to Grasshopper Conveyor 3
PF1.010	Grasshopper Conveyor 3 to Grasshopper Conveyor 4
PF1.011	Grasshopper Conveyor 4 to Grasshopper Conveyor 5
PF1.012	Grasshopper Conveyor 5 to Grasshopper Conveyor 6
PF1.013	Grasshopper Conveyor 6 to Grasshopper Conveyor 7
PF1.014	Grasshopper Conveyor 7 to Grasshopper Conveyor 8
PF1.015	Grasshopper Conveyor 8 to Grasshopper Conveyor 9
PF1.016	Grasshopper Conveyor 9 to Grasshopper Conveyor 10
PF1.017	Grasshopper Conveyor 10 to Grasshopper Conveyor 11
PF1.018	Grasshopper Conveyor 11 to Grasshopper Conveyor 12
PF1.019	Grasshopper Conveyor 12 to Radial Stacker Conveyor
PF1.020	Radial Stacker Conveyor to Crushed Heap Leach Pad
H System	8 – Crushed Lime Silo
S2.020	Lime Silo #1 Loading [Lime Silo #1 Unloading to Screw Conveyor 1 is Fully Enclosed]
32.020	Eline 5110 #1 Loading [Eline 5110 #1 Olifoading to Serew Conveyor 1 is Fully Eliciosed]
I. System 9	O - Crushed Lime Silo (Screw Conveyor 1 to Overland Conveyor 1)
PF1.021	Screw Conveyor 1 to Overland Conveyor 1
J. System	10 – ROM Lime Silo
S2.021	Lime Silo #2 Loading [Lime Silo #2 Unloading to Screw Conveyor 2 is Fully Enclosed]
	11 - ROM Lime Silo (Screw Conveyor 2 to Truck Loadout)
PF1.022	Screw Conveyor 2 to Truck Loadout
I Creatain	12 Makila Cuughing and Sayaaning Dlant, Hannau Laadina
-	12 – Mobile Crushing and Screening Plant - Hopper Loading
PF1.023	Loader to Hopper
M. System	13 – Mobile Crushing and Screening Plant - Mobile Crusher
PF1.024	Mobile Crusher (IN: Hopper; OUT: Attached Crusher Conveyor)
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Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

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Emission Unit List (continued):

N. System 14 - Mobile Crushing and Screening Plant - Mobile Screen

PF1.025 Mobile Screen (IN: Attached Crusher Conveyor; OUT: Screen Conveyor 1, Screen Conveyor 2, Screen Conveyor 3)

O. System 15 - Mobile Crushing and Screening Plant - Conveyor Transfers

PF1.026 Screen Conveyor 1 to Oversize Stockpile PF1.027 Screen Conveyor 2 to Mids Stockpile PF1.028 Screen Conveyor 3 to Fines Stockpile

P. System 16 – Emergency Diesel-Fired Generators

S2.022 Standby Generator 1 (2,000 kW CAT, 3516B, 2015+) S2.023 Standby Generator 2 (2,000 kW CAT, 3516B, 2015+)

Q. System 17 - Assay Laboratory - Fire Assay Baghouse

S2.024 Fire Assay Workstation 1 S2.025 Fire Assay Workstation 2 S2.026 Fire Assay Workstation 3 S2.027 Fusion Furnace S2.028 Cupellation Furnace

R. System 18 - Assay Laboratory - Sample Preparation Baghouse

S2.029 Sample/Carbon Prep Workstations 1 S2.030 Sample/Carbon Prep Workstation 2 S2.031 Carbon Pulverizer S2.032 Sample Pulverizer S2.033 Sample Crusher S2.034 Sample Dryer S2.035 Sample Receiving Workstation 1 Sample Receiving Workstation 2 S2.036 S2.037 Sample Receiving Workstation 3

S. System 19 – Diesel Storage Tank

S2.038

S2.039 273,000 Gallon Diesel Storage Tank

Sample Receiving Workstation 4

T. System 20 – Gasoline Storage Tank

S2.040 4,000 Gallon Gasoline Storage Tank

****End of Emission Unit List****



Bureau of Air Pollution Control

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Section I. General Provisions

- A. Prohibited acts; penalty; establishment of violation; request for prosecution (NRS 445B.470) (State Only Requirement)
 - 1. A person shall not knowingly:
 - a. Violate any applicable provision, the terms or conditions of any permit or any provision for the filing of information;
 - b. Fail to pay any fee;
 - c. Falsify any material statement, representation or certification in any notice or report; or
 - d. Render inaccurate any monitoring device or method, required pursuant to the provisions of NRS 445B.100 to 445B.450, inclusive, or 445B.470 to 445B.640, inclusive, or any regulation adopted pursuant to those provisions.
 - 2. Any person who violates any provision of subsection 1 shall be punished by a fine of not more than \$10,000 for each day of the violation.
 - 3. The burden of proof and degree of knowledge required to establish a violation of subsection 1 are the same as those required by 42 U.S.C. § 7413(c), as that section existed on October 1, 1993.
 - 4. If, in the judgment of the Director of the Department or the Director's designee, any person is engaged in any act or practice which constitutes a criminal offense pursuant to NRS 445B.100 to 445B.640, inclusive, the Director of the Department or the designee may request that the Attorney General or the district attorney of the county in which the criminal offense is alleged to have occurred institute by indictment or information a criminal prosecution of the person.
 - 5. If, in the judgment of the control officer of a local air pollution control board, any person is engaged in such an act or practice, the control officer may request that the district attorney of the county in which the criminal offense is alleged to have occurred institute by indictment or information a criminal prosecution of the person.
- B. <u>Visible emissions: Maximum opacity; determination and monitoring of opacity</u> (NAC 445B.22017)

(Federally Enforceable SIP Requirement)

- Except as otherwise provided in this section and NAC 445B.2202, no owner or operator may cause or permit the discharge into the atmosphere from any emission unit which is of an opacity equal to or greater than 20 percent. Opacity must be determined by one of the following methods:
 - a. If opacity is determined by a visual measurement, it must be determined as set forth in Reference Method 9 in Appendix A of 40 CFR Part 60.
 - b. If a source uses a continuous monitoring system for the measurement of opacity, the data must be reduced to 6-minute averages as set forth in 40 CFR 60.13(h).
- 2. The provisions of this section and NAC 445B.2202 do not apply to that part of the opacity that consists of uncombined water. The burden of proof to establish the application of this exemption is upon the person seeking to come within the exemption.
- 3. If the provisions of 40 CFR Part 60, Subpart D or Da apply to an emission unit, the emission unit must be allowed one 6-minute period per hour of not more than 27 percent opacity as set forth in 40 CFR 60.42(a)(2) and 40 CFR 60.42a(b).
- 4. The continuous monitoring system for monitoring opacity at a facility must be operated and maintained by the owner or operator specified in the permit for the facility in accordance with NAC 445B.256 to 445B.267, inclusive.
- C. <u>Visible emissions: Exceptions for stationary sources</u> (NAC 445B.2202) (*Federally Enforceable SIP Requirement*) The provisions of NAC 445B.22017 do not apply to:
 - 1. Smoke from the open burning described in NAC 445B.22067;
 - 2. Smoke discharged in the course of training air pollution control inspectors to observe visible emissions, if the facility has written approval of the Commission;
 - 3. Emissions from an incinerator as set forth in NAC 445B.2207; or
 - 4. Emissions of stationary diesel-powered engines during warm-up for not longer than 15 minutes to achieve operating temperatures.



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Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

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Section I. General Provisions (continued)

- D. Odors (NAC 445B.22087) (State Only Requirement)
 - 1. No person may discharge or cause to be discharged, from any stationary source, any material or regulated air pollutant which is or tends to be offensive to the senses, injurious or detrimental to health and safety, or which in any way interferes with or prevents the comfortable enjoyment of life or property.
 - 2. The Director shall investigate an odor when 30 percent or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy. The sample must be at least 20 people or 75 percent of those exposed if fewer than 20 people are exposed.
 - 3. The Director shall deem the odor to be a violation if he or she is able to make two odor measurements within a period of 1 hour. These measurements must be separated by at least 15 minutes. An odor measurement consists of a detectable odor after the odorous air has been diluted with eight or more volumes of odor-free air.
- E. <u>Prohibited Conduct: Concealment of Emissions</u> (NAC 445B.225) (*Federally Enforceable SIP Requirement*)

 No person may install, construct or use any device which conceals any emission without reducing the total release of regulated air pollutants to the atmosphere.
- F. <u>Prohibited conduct: Operation of source without required equipment; removal or modification of required equipment; modification of required procedure (NAC 445B.227) (Federally Enforceable SIP Requirement)</u>

Except as otherwise provided in NAC 445B.001 to 445B.390, inclusive, no person may:

- 1. Operate a stationary source of air pollution unless the control equipment for air pollution which is required by applicable requirements or conditions of this Operating Permit is installed and operating.
- 2. Disconnect, alter, modify or remove any of the control equipment for air pollution or modify any procedure required by an applicable requirement or condition of the permit.
- G. Excess Emissions (NAC 445B.232) (State Only Requirement)
 - 1. Scheduled maintenance or testing or scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.390, inclusive, must be approved in advance by the Director and performed during a time designated by the Director as being favorable for atmospheric ventilation.
 - 2. Each owner or operator shall notify the Director of the proposed time and expected duration at least 30 days before any scheduled maintenance or testing which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.390, inclusive. The scheduled maintenance or testing must not be conducted unless the scheduled maintenance or testing is approved pursuant to subsection 1.
 - 3. Each owner or operator shall notify the Director of the proposed time and expected duration at least 24 hours before any scheduled repairs which may result in excess emissions of regulated air pollutants prohibited by NAC 445B.001 to 445B.390, inclusive. The scheduled repairs must not be conducted unless the scheduled repairs are approved pursuant to subsection 1.
 - 4. Each owner or operator shall notify the Director of any excess emissions within 24 hours after any malfunction or upset of the process equipment or equipment for controlling pollution or during start-up or shutdown of that equipment.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

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Section I. General Provisions (continued)

- G. Excess Emissions (NAC 445B.232) (State Only Requirement) (continued)
 - 5. Each owner or operator shall provide the Director, within 15 days after any malfunction, upset, start-up, shutdown or human error which results in excess emissions, sufficient information to enable the Director to determine the seriousness of the excess emissions. The information must include at least the following:
 - a. The identity of the stack or other point of emission, or both, where the excess emissions occurred.
 - b. The estimated magnitude of the excess emissions expressed in opacity or in the units of the applicable limitation on emission and the operating data and methods used in estimating the magnitude of the excess emissions.
 - c. The time and duration of the excess emissions.
 - d. The identity of the equipment causing the excess emissions.
 - e. If the excess emissions were the result of a malfunction, the steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunction.
 - f. The steps taken to limit the excess emissions.
 - g. Documentation that the equipment for controlling air pollution, process equipment or processes were at all times maintained and operated, to a maximum extent practicable, in a manner consistent with good practice for minimizing emissions.
 - 6. Each owner or operator shall ensure that any notification or related information submitted to the Director pursuant to this section is provided in a format specified by the Director.
- H. Testing and Sampling (NAC 445B.252) (Federally Enforceable SIP Requirement)
 - 1. To determine compliance with NAC 445B.001 to 445B.390, inclusive, before the approval or the continuance of an operating permit or similar class of permits, the Director may either conduct or order the owner of any stationary source to conduct or have conducted such testing and sampling as the Director determines necessary. Testing and sampling or either of them must be conducted and the results submitted to the Director within 60 days after achieving the maximum rate of production at which the affected facility will be operated, but not later than 180 days after initial start-up of the facility and at such other times as may be required by the Director.
 - 2. Tests of performance must be conducted and data reduced in accordance with the methods and procedures of the test contained in each applicable subsection of this section unless the Director:
 - a. Specifies or approves, in specific cases, the use of a method of reference with minor changes in methodology;
 - b. Approves the use of an equivalent method;
 - c. Approves the use of an alternative method, the results of which the Director has determined to be adequate for indicating whether a specific stationary source is in compliance; or
 - d. Waives the requirement for tests of performance because the owner or operator of a stationary source has demonstrated by other means to the Director's satisfaction that the affected facility is in compliance with the standard.
 - 3. Tests of performance must be conducted under such conditions as the Director specifies to the operator of the plant based on representative performance of the affected facility. The owner or operator shall make available to the Director such records as may be necessary to determine the conditions of the performance test. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a performance test unless otherwise specified in the applicable standard.
 - 4. The owner or operator of an affected facility shall give notice to the Director 30 days before the test of performance to allow the Director to have an observer present. A written testing procedure for the test of performance must be submitted to the Director at least 30 days before the test of performance to allow the Director to review the proposed testing procedures.
 - 5. Each test of performance must consist of at least three separate runs using the applicable method for that test. Each run must be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the runs apply. In the event of forced shutdown, failure of an irreplaceable portion of the sampling train, extreme meteorological conditions or other circumstances with less than three valid samples being obtained, compliance may be determined using the arithmetic mean of the results of the other two runs upon the Director's approval.
 - 6. All testing and sampling will be performed in accordance with recognized methods and as specified by the Director.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

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Section I. General Provisions (continued)

- H. Testing and Sampling (NAC 445B.252) (Federally Enforceable SIP Requirement) (continued)
 - 7. The cost of all testing and sampling and the cost of all sampling holes, scaffolding, electric power and other pertinent allied facilities as may be required and specified in writing by the Director must be provided and paid for by the owner of the stationary source.
 - 8. All information and analytical results of testing and sampling must be certified as to their truth and accuracy and as to their compliance with all provisions of these regulations, and copies of these results must be provided to the Director no later than 60 days after the testing or sampling, or both.
 - 9. Notwithstanding the provisions of subsection 2, the Director shall not approve an alternative method or equivalent method to determine compliance with a standard or emission limitation contained in Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations for:
 - a. An emission unit that is subject to a testing requirement pursuant to Part 60, 61 or 63 of Title 40 of the Code of Federal Regulations; or
 - b. An affected source.
- I. <u>Permit Revision</u> (NAC 445B.287(1)(b)) (Federally Enforceable SIP Requirement)

If a stationary source is a Class II source, a revision of the operating permit or the permit to construct is required pursuant to the requirements of NAC 445B.3465 before the stationary source may be modified.

- J. Violations: Acts constituting; notice (NAC 445B.275) (Federally Enforceable SIP Requirement)
 - 1. Failure to comply with any requirement of NAC 445B.001 to 445B.390, inclusive, any applicable requirement or any condition of an operating permit constitutes a violation. As required by NRS 445B.450, the Director shall issue a written notice of an alleged violation to any owner or operator for any violation, including, but not limited to:
 - a. Failure to apply for and obtain an operating permit;
 - b. Failure to construct a stationary source in accordance with the application for an operating permit as approved by the Director;
 - c. Failure to construct or operate a stationary source in accordance with any condition of an operating permit;
 - d. Commencing construction or modification of a stationary source without applying for and receiving an operating permit or a modification of an operating permit as required by NAC 445B.001 to 445B.3477, inclusive, or a mercury operating permit to construct as required by NAC 445B.3611 to 445B.3689, inclusive;
 - e. Failure to comply with any requirement for recordkeeping, monitoring, reporting or compliance certification contained in an operating permit; or
 - f. Failure to pay fees as required by NAC 445B.327 or 445B.3689.
 - 2. The written notice must specify the provision of NAC 445B.001 to 445B.390, inclusive, the condition of the operating permit or the applicable requirement that is being violated.
 - 3. Written notice shall be deemed to have been served if delivered to the person to whom addressed or if sent by registered or certified mail to the last known address of the person.
- K. Operating permits: Imposition of more stringent standards for emissions (NAC 445B.305)

(Federally Enforceable SIP Requirement)

1. The Director may impose standards for emissions on a proposed stationary source that are more stringent than those found in NAC 445B.001 to 445B.390, inclusive, as a condition of approving an operating permit for the proposed stationary source.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

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Section I. General Provisions (continued)

- L. <u>Contents of operating permits: Exception for operating permits to construct; required conditions (NAC 445B.315)</u>
 (Federally Enforceable SIP Requirement)
 - 1. Notwithstanding any provision of this section to the contrary, the provisions of this section do not apply to operating permits to construct
 - 2. The Director shall cite the legal authority for each condition contained in an operating permit.
 - 3. An operating permit must contain the following conditions:
 - a. The term of the operating permit is 5 years.
 - b. The holder of the operating permit shall retain records of all required monitoring data and supporting information for 5 years after the date of the sample collection, measurement, report or analysis. Supporting information includes all records regarding calibration and maintenance of the monitoring equipment and all original strip-chart recordings for continuous monitoring instrumentation.
 - c. Each of the conditions and requirements of the operating permit is severable, and if any are held invalid, the remaining conditions and requirements continue in effect.
 - d. The holder of the operating permit shall comply with all conditions of the operating permit. Any noncompliance constitutes a violation and is a ground for:
 - (1) An action for noncompliance;
 - (2) Revising, revoking, reopening and revising, or terminating the operating permit by the Director; or
 - (3) Denial of an application for a renewal of the operating permit by the Director.
 - e. The need to halt or reduce activity to maintain compliance with the conditions of the operating permit is not a defense to noncompliance with any condition of the operating permit.
 - f. The Director may revise, revoke and reissue, reopen and revise, or terminate the operating permit for cause.
 - g. The operating permit does not convey any property rights or any exclusive privilege.
 - h. The holder of the operating permit shall provide the Director, in writing and within a reasonable time, with any information that the Director requests to determine whether cause exists for revising, revoking and reissuing, reopening and revising, or terminating the operating permit, or to determine compliance with the conditions of the operating permit.
 - i. The holder of the operating permit shall pay fees to the Director in accordance with the provisions set forth in NAC 445B.327 and 445B.331.
 - j. The holder of the operating permit shall allow the Director or any authorized representative, upon presentation of credentials, to:
 - (1) Enter upon the premises of the holder of the operating permit where:
 - (a) The stationary source is located;
 - (b) Activity related to emissions is conducted; or
 - (c) Records are kept pursuant to the conditions of the operating permit;
 - (2) Have access to and copy, during normal business hours, any records that are kept pursuant to the conditions of the operating permit;
 - (3) Inspect, at reasonable times, any facilities, practices, operations or equipment, including any equipment for monitoring or controlling air pollution, that are regulated or required pursuant to the operating permit; and
 - (4) Sample or monitor, at reasonable times, substances or parameters to determine compliance with the conditions of the operating permit or applicable requirements.
 - k. A responsible official of the stationary source shall certify that, based on information and belief formed after a reasonable inquiry, the statements made in any document required to be submitted by any condition of the operating permit are true, accurate and complete.



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Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

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Section I. General Provisions (continued)

- M. Operating permits: Revocation and reissuance (NAC 445B.3265) (State Only Requirement)
 - 1. An operating permit may be revoked if the control equipment is not operating.
 - 2. An operating permit may be revoked by the Director upon determining that there has been a violation of NAC 445B.001 to 445B.390, inclusive, or the provisions of 40 CFR 52.21, or 40 CFR Part 60 or 61, Prevention of Significant Deterioration, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants, adopted by reference in NAC 445B.221.
 - 3. The revocation is effective 10 days after the service of a written notice, unless a hearing is requested.
 - 4. To reissue a revoked operating permit, the holder of the revoked permit must file a new application with the Director, accompanied by the fee for an initial operating permit as specified in NAC 445B.327. An environmental review of the stationary source must be conducted as though construction had not yet commenced.
- N. Required contents of permit (NAC 445B.346) (Federally Enforceable SIP Requirement)

In addition to the conditions set forth in NAC 445B.315, Class II operating permits must contain, as applicable:

- 1. Emission limitations and standards, including those operational requirements and limitations that ensure compliance with the conditions of the operating permit.
- 2. All requirements for monitoring, testing and reporting that apply to the stationary source.
- 3. A requirement that the owner or operator of the stationary source promptly report any deviations from any requirements of the operating permit.
- 4. The terms and conditions for any reasonably anticipated alternative operating scenarios identified by the owner or operator of the stationary source in his or her application and approved by the Director. Such terms and conditions must require the owner or operator to keep a contemporaneous log of changes from one alternative operating scenario to another.
- 5. A schedule of compliance for stationary sources that are not in compliance with any applicable requirement or NAC 445B.001 to 445B.390, inclusive:
 - a. Semiannual progress reports and a schedule of dates for achieving milestones;
 - b. Prior notice of and explanations for missed deadlines; and
 - c. Any preventive or corrective measures taken.

****End of General Provisions****





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Section II. General Monitoring, Recordkeeping, and Reporting Conditions

- A. Records Retention (NAC 445B.315(3)(b)) (Federally Enforceable SIP Requirement)

 The holder of the operating permit shall retain records of all required monitoring data and supporting information for 5 years after
 - the date of the sample collection, measurement, report or analysis. Supporting information includes all records regarding calibration and maintenance of the monitoring equipment and all original strip-chart recordings for continuous monitoring instrumentation.
- B. <u>Deviations</u> (NAC 445B.346(3)) (Federally Enforceable SIP Requirement)

 Under the authority of NAC 445B.346(3), and in addition to the conditions set forth in NAC 445B.315, the owner or operator of the stationary source shall promptly report to the Director any deviations from the requirements of the operating permit. The report to the Director shall include the probable cause of all deviations and any action taken to correct the deviations. For the operating permit, prompt is defined as submittal of a report within 15 days of the deviation. This definition does not alter any reporting requirements as established for reporting of excess emissions as required under NAC 445B.232 as reproduced in Section I.G. E-mail notifications to: aircompliance@ndep.nv.gov
- C. Yearly Reports (NAC 445B.315(3)(h), NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 Under the authority of NAC 445B.315(3)(h) and NAC 445B.346(2) the Permittee will submit yearly reports including, but not limited to, throughput, production, fuel consumption, hours of operation, emissions and supporting documentation to support the calculation of annual emissions. These reports and supporting documentation (if applicable) will be submitted via the State and Local Emissions. Inventory System (SLEIS) maintained by the Bureau of Air Quality Planning for all emission units/systems specified. The completed report must be submitted to the Bureau of Air Quality Planning no later than March 1 annually for the preceding calendar year.

****End of General Monitoring, Recordkeeping, and Reporting Conditions****





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Section III. General Construction Conditions

- A. Notification (NAC 445B.250; NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 Under the authority of NAC 445B.250 and NAC 445B.346; the Director shall be notified in writing of the following for PF1.001 through PF1.028 and S2.001 through S2.040:
 - 1. The date construction (or reconstruction as defined under NAC 445B.247) of the affected facility is commenced, postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
 - 2. The anticipated date of initial startup of an affected facility, postmarked no more than 60 days and no less than 30 days prior to such date.
 - 3. The actual date of initial startup of the affected facility, postmarked within 15 days after such date.
 - 4. The date upon which demonstration of the continuous monitoring system performance commences in accordance with NAC 445B.256 to 445B.267, inclusive. Notification must be postmarked not less than 30 days before such date.

****End of General Construction Conditions****





Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section IV. Specific Construction Requirements

- A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests (NAC 445B.22017, NAC 445B.252, NAC 445B.346(2))</u> (Federally Enforceable SIP Requirement)
 - 1. Under the authority of NAC 445B.22017, NAC 445B.252, and NAC 445B.346, the Permittee, upon issuance of this operating permit, shall conduct initial opacity compliance demonstrations and/or initial performance tests within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup. The Permittee shall follow the test methods and procedures referenced in Table IV-1 and Table IV-2 below:

System	ystem Emission Unit(s) Pollutant To Be Tested Testing Methods/Procedures						
System 1	PF1.001 and PF1.002	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 2	S2.001 through S2.003	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 3	S2.004 through S2.008	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations seconded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 4	S2.009 through S2.011	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 5	\$2.012 through \$2.019	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 6	PF1.003 through PF1.005	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 7	PF1.006 through PF1.020	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 8	S2.020	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				

$\textbf{Nevada Department of Conservation and Natural Resources} \quad \textbf{\textbf{O}} \textbf{Division of Environmental Protection}$



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section IV. Specific Construction Requirements (continued)

A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests (NAC 445B.22017, NAC 445B.252, NAC 445B.346(2))</u> (Federally Enforceable SIP Requirement) (continued)

Table IV-1: Initial Opacity Compliance Demonstration (continued)							
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures				
System 9	PF1.021	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 10	S2.021	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 11	PF1.022	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 12	PF1.023	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 13	PF1.024	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 14	PF1.025	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 15	PF1.026 through PF1.028	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 16	S2.022 and S2.023	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				
System 17	S2.024 through S2.028	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.				



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section IV. Specific Construction Requirements (continued)

A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests (NAC 445B.22017, NAC 445B.252, NAC 445B.346(2))</u> (Federally Enforceable SIP Requirement) (continued)

Table IV-1: Initial Opacity Compliance Demonstration (continued)					
System	Emission Unit(s)	Pollutant To Be Tested	Testing Methods/Procedures		
System 18	S2.029 through S2.038	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.		
System 19	S2.039	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.		
System 20	S2.040	Opacity	Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.		

Table IV-2: Initial Performance Tests					
System Emission Unit(s) Pollutants To Be Tested Testing Methods/Procedures					
		PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.		
System 2	S2.001 through S2.003	PM ₁₀ /PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM ₁₀ and PM _{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.		



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section IV. Specific Construction Requirements (continued)

A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests (NAC 445B.22017, NAC 445B.252, NAC 445B.346(2))</u> (Federally Enforceable SIP Requirement) (continued)

Table IV-2: Initial Performance Tests (continued)						
System	Emission Unit(s)	Pollutants To Be Tested	Testing Methods/Procedures			
	S2.004 through S2.008	PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.			
System 3		PM ₁₀ /PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM ₁₀ and PM _{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.			
	S2.009 through S2.011	PM	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.			
System 4		PM ₁₀ /PM _{2.5}	Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM ₁₀ and PM _{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.			
System 5	S2.012 through S2.019	PM PM ₁₀ /PM _{2.5}	Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM ₁₀ and PM _{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60 test. All particulate captured in the Method 5 test performed under this provision shall be considered PM _{2.5} for determination of compliance.			



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section IV. Specific Construction Requirements (continued)

- A. <u>Initial Opacity Compliance Demonstration and Initial Performance Tests (NAC 445B.22017, NAC 445B.252, NAC 445B.346(2))</u> (Federally Enforceable SIP Requirement) (continued)
 - 2. All initial opacity compliance demonstrations and initial performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of **Section I.H.** Testing and Sampling (NAC 445B.252) of this operating permit. Material sampling must be conducted in accordance with protocols approved by the Director. All initial performance test results shall be based on the arithmetic average of three valid runs. (NAC 445B.252(5))
 - 3. Testing shall be conducted on the exhaust stack (post controls).
 - 4. Initial opacity compliance demonstrations and initial performance tests, as specified in Table IV-1 and Table IV-2 above, must be conducted under such conditions as the Director specifies to the operator of the plant based on representative performance of the affected facility. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the initial opacity compliance demonstrations and initial performance tests. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of the initial opacity compliance demonstrations and initial performance tests unless otherwise specified in the applicable standard. (NAC 445B.252(3))
 - 5. The Permittee shall give notice to the Director 30 days before the initial opacity compliance demonstrations and initial performance tests to allow the Director to have an observer present. A written testing procedure must be submitted to the Director at least 30 days before the initial opacity compliance demonstrations and initial performance tests to allow the Director to review the proposed testing procedures. (NAC 445B.252(4) and 40 CFR Part 60.7(a)(6))
 - 6. Within 60 days after completing the initial opacity compliance demonstrations and initial performance tests contained in Table IV-1 and Table IV-2 of this section, the Permittee shall furnish the Director a written report of the results. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3689, inclusive. (NAC 445B.252(8))
 - 7. Initial opacity compliance demonstrations and initial performance tests required under this section that are conducted below the maximum allowable throughput, shall be subject to the Director's review to determine if the throughputs during the initial opacity compliance demonstrations and initial performance tests were sufficient to provide adequate compliance demonstration. Should the Director determine that the initial opacity compliance demonstrations and initial performance tests do not provide adequate compliance demonstration, the Director may require additional testing.

****End of Specific Construction Requirements****







Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions

A. Emission Units PF1.001 and PF1.002

System 1 – Primary Crushing - Material Transfers		Location UTM (Zone 11, NAD 83)	
System 1 –	rrimary Crusning - Material Transfers	m North	m East
PF1.001	Material Transfer to Ore Bin via Truck Dump	4,466,674	407,341
PF1.002	Ore Bin Transfer to Vibratory Grizzly Feeder	4,466,682	407,332

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement) Emissions from **PF1.001** and **PF1.002**, each, shall be controlled by commercially designed water sprays.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.001** and **PF1.002**, each, shall not exceed **1,600.0** tons of metallic ore per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) PF1.001 and PF1.002, each, may operate a total of 24 hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.001 and PF1.002**, each, the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.72** pounds per hour, nor more than **3.15** tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.26 pounds per hour, nor more than 1.16 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.040 pounds per hour, nor more than 0.18 tons per year.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for PF1.001 and PF1.002, each, on a daily basis.
- b. Monitor and record the hours of operation for PF1.001 and PF1.002, each, on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.001** and **PF1.002**, each, on a monthly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.
- f. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

- A. Emission Units PF1.001 and PF1.002 (continued)
 - 5. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing

 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **PF1.001** and **PF1.002**, each, will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Process fugitive emissions from **PF1.001 and PF1.002, each**, will not exceed **10 percent** opacity. (40 CFR Part 60.382(b))
 - (2) The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **PF1.001** and **PF1.002**, each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

B. Emission Units S2.001 through S2.003

System 2 – Primary Crushing - Primary Crushing Area Baghouse		Location UTM (Zone 11, NAD 83)	
System 2 –	Frimary Crushing - Frimary Crushing Area Dagnouse	m North	m East
S2.001	Vibratory Grizzly Feeder transfer to Surge Stockpile Conveyor Belt	4,466,490	407,393
S2.002	Primary Jaw Crusher and Associated Transfers (IN: Vibratory Grizzly Feeder, OUT: Surge Stockpile Conveyor Belt)	4,466,490	407,393
S2.003	Surge Stockpile Conveyor Belt transfer to Surge Stockpile	4,466,490	407,393

- 1. Air Pollution Control Equipment (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from **S2.001 through S2.003, combined,** shall be controlled by a **baghouse**.
 - b. <u>Descriptive Stack Parameters</u>

Stack Height: 32.3 feet Stack Diameter: 2.33 feet Stack Temperature: 40 °F

Exhaust Flow: 12,400.0 dry standard cubic feet per minute (dscfm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.001 through S2.003**, each, shall not exceed **1,600.0** tons of metallic ore per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) S2.001 through S2.003, each, may operate a total of 24 hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **baghouse** the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 1.06 pounds per hour, nor more than 4.66 tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 1.06 pounds per hour, nor more than 4.66 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 1.06 pounds per hour, nor more than 4.66 tons per year.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

B. Emission Units S2.001 through S2.003 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.001 through S2.003**, each, on a daily basis.
- b. Monitor and record the hours of operation for \$2.001 through \$2.003, each, on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling \$2.001 through \$2.003 on a monthly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.001 through S2.003** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
- f. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Performance Testing</u> (NAC 445B.346(2))

The Permittee, upon issuance of this operating permit, shall conduct renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and/or performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.H. Testing and Sampling (NAC 445B.252) of this operating permit. All performance test results shall be based on the arithmetic average of three valid runs (NAC 445B.252(5)).
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

- B. Emission Units S2.001 through S2.003 (continued)
 - 6. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing

 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **S2.001** and **S2.002**, each, will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Particulate matter in excess of **0.05** grams per dry standard cubic meter (**2.32** lb/hr). (40 CFR 60.382(a)(1))
 - (2) Emissions from the baghouse will not exceed **7 percent** opacity. (40 CFR 60.382(a)(2))
 - b. The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - c. At all times, including periods of startup, shutdown, and malfunction, owner and operators shall, to the extent practicable, maintain and operate **S2.001** and **S2.002**, each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.11(d))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

C. Emission Units S2.004 through S2.008

System 3 – Secondary Crushing and Screening - Feeder(s) Area Baghouse		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.004	Surge Stockpile Transfer to Apron Feeder 1	4,466,538	407,375
S2.005	Surge Stockpile Transfer to Apron Feeder 2	4,466,538	407,375
S2.006	Apron Feeder 1 transfer to Secondary Vibratory Screen Feeder Conveyor	4,466,538	407,375
S2.007	Apron Feeder 2 transfer to Secondary Vibratory Screen Feeder Conveyor	4,466,538	407,375
S2.008	Secondary Cone Crusher and Associated Transfers (IN: Secondary Return Belt 2,	4,466,538	407.375
	OUT: Secondary Vibratory Screen Feed Conveyor)	4,400,338	407,373

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from \$2.004 through \$2.008, combined, shall be controlled by a baghouse.
 - b. Descriptive Stack Parameters

Stack Height: 26.3 feet Stack Diameter: 2.33 feet Stack Temperature: 40 °F

Exhaust Flow: 13,800.0 dry standard cubic feet per minute (dscfm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.004** and **S2.005**, combined, shall not exceed **1,600.0** tons of metallic ore per any one-hour period averaged over a daily basis.
 - b. The maximum allowable throughput rate for **S2.006 and S2.007, combined,** shall not exceed **1,600.0** tons of **metallic ore** per any one-hour period averaged over a daily basis.
 - c. The maximum allowable throughput rate for \$2.008 shall not exceed 1,600.0 tons of metallic ore per any one-hour period averaged over a daily basis.
 - d. <u>Hours</u>
 - (1) S2.004 through S2.008, each, may operate a total of 24 hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **baghouse** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **1.18** pounds per hour, nor more than **5.18** tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 1.18 pounds per hour, nor more than 5.18 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 1.18 pounds per hour, nor more than 5.18 tons per year.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

C. Emission Units S2.004 through S2.008 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for \$2.004 through \$2.008, each, on a daily basis.
- b. Monitor and record the hours of operation for **S2.004 through S2.008**, each, on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling \$2.004 through \$2.008 on a monthly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.004 through S2.008** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
- f. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Performance Testing</u> (NAC 445B.346(2))

The Permittee, upon issuance of this operating permit, shall conduct renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and/or performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.H. Testing and Sampling (NAC 445B.252) of this operating permit. All performance test results shall be based on the arithmetic average of three valid runs (NAC 445B.252(5)).
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

- C. Emission Units S2.004 through S2.008 (continued)
 - 6. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing

 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **S2.004 through S2.008, each,** will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Particulate matter in excess of **0.05** grams per dry standard cubic meter (**2.58** lb/hr). (40 CFR 60.382(a)(1))
 - (2) Emissions from the baghouse will not exceed **7 percent** opacity. (40 CFR 60.382(a)(2))
 - b. The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - c. At all times, including periods of startup, shutdown, and malfunction, owner and operators shall, to the extent practicable, maintain and operate **S2.004 through S2.008**, each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.11(d))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

D. Emission Units S2.009 through S2.011

System 4 – Secondary Crushing and Screening - Secondary Crushing Area Baghouse		Location UTM (Zone 11, NAD 83)	
		m North	m East
	Secondary Vibratory Screen and Associated Transfers (IN: Secondary Vibratory		
S2.009	Screen Feed Conveyor, OUT: Tertiary Crushing Feed Conveyor Belt -OR-	4,466,571	407,398
	Secondary Return Belt No. 1)		
S2.010	Secondary Return Belt No. 1 transfer to Secondary Return Belt No. 2	4,466,571	407,398
S2.011	Tertiary Crushing Feed Conveyor Belt to Tertiary Distributor	4,466,571	407,398

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from **S2.009 through S2.011, combined,** shall be controlled by a **baghouse**.
 - b. <u>Descriptive Stack Parameters</u>

Stack Height: 28.9 feet Stack Diameter: 2.33 feet Stack Temperature: 40 °F

Exhaust Flow: 16,800.0 dry standard cubic feet per minute (dscfm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.009 through S2.011**, each, shall not exceed **1,600.0** tons of metallic ore per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) S2.009 through S2.011, each, may operate a total of 24 hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **baghouse** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **1.44** pounds per hour, nor more than **6.31** tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 1.44 pounds per hour, nor more than 6.31 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 1.44 pounds per hour, nor more than 6.31 tons per year.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

D. Emission Units S2.009 through S2.011 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.009 through S2.011**, each, on a daily basis.
- b. Monitor and record the hours of operation for **S2.009 through S2.011**, each, on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling \$2.009 through \$2.011 on a monthly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.009 through S2.011** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
- f. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Performance Testing</u> (NAC 445B.346(2))

The Permittee, upon issuance of this operating permit, shall conduct renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and/or performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.H. Testing and Sampling (NAC 445B.252) of this operating permit. All performance test results shall be based on the arithmetic average of three valid runs (NAC 445B.252(5)).
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

- D. Emission Units S2.009 through S2.011 (continued)
 - 6. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing

 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **S2.009 through S2.011, each**, will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Particulate matter in excess of **0.05** grams per dry standard cubic meter (**3.15** lb/hr). (40 CFR 60.382(a)(1))
 - (2) Emissions from the baghouse will not exceed **7 percent** opacity. (40 CFR 60.382(a)(2))
 - b. The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - c. At all times, including periods of startup, shutdown, and malfunction, owner and operators shall, to the extent practicable, maintain and operate **S2.009 through S2.011**, each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.11(d))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

E. Emission Units S2.012 through S2.019

System 5 – Tertiary Crushing and Screening - Tertiary Crushing Area Baghouse		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.012	Vibrating Tertiary Screen 1 and Associated Transfers (IN: Tertiary Distributor,	4,466,608	407.352
32.012	OUT: Tertiary Cone Crusher No. 1 -OR- Crushed Product Conveyor Belt)	4,400,000	407,352 407,352 407,352 407,352
S2.013	Vibrating Tertiary Screen 2 and Associated Transfers (IN: Tertiary Distributor,	4,466,608 407,352	407.352
32.013	OUT: Tertiary Cone Crusher 2 -OR- Crushed Product Conveyor Belt)	4,400,000	407,332
S2.014	Tertiary Cone Crusher 1 and Associated Transfers (IN: Tertiary Screen 1, OUT:	4,466,608 407,352	407.352
32.014	Tertiary Crushing Return Belt 1)	4,400,000	407,332
S2.015	Tertiary Cone Crusher 2 and Associated Transfers (IN: Tertiary Screen 2, OUT:	4,466,608 407,352	407.352
32.013	Tertiary Crushing Return Belt 1)		407,332
S2.016	Tertiary Crushing Return Belt 1 transfer to Tertiary Crushing Return Belt 2	4,466,608	407,352
S2.017	Tertiary Crushing Return Belt 2 transfer to Tertiary Crushing Feed Conveyor Belt	4,466,608	407,352
S2.018	Crushed Product Conveyor Belt transfer to Overland Conveyor 1 -OR- Emergency	4,466,608 407,3	407.252
52.018	Stockpile Feed Conveyor Belt		407,332
S2.019	Emergency Stockpile Hopper Feeder transfer to Crushed Product Conveyor Belt	4,466,608	407,352

- 1. Air Pollution Control Equipment (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from **S2.012 through S2.019**, **combined**, shall be controlled by a **baghouse**.
 - b. <u>Descriptive Stack Parameters</u>

Stack Height: 25.3 feet Stack Diameter: 2.33 feet Stack Temperature: 40 °F

Exhaust Flow: 22,400.0 dry standard cubic feet per minute (dscfm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.012 through S2.019**, **each**, shall not exceed **1,600.0** tons of **metallic ore** per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) S2.012 through S2.019, each, may operate a total of 24 hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **baghouse** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **1.92** pounds per hour, nor more than **8.41** tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 1.92 pounds per hour, nor more than 8.41 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 1.92 pounds per hour, nor more than 8.41 tons per year.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

E. Emission Units S2.012 through S2.019 (continued)

4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for \$2.012 through \$2.019, each, on a daily basis.
- b. Monitor and record the hours of operation for **S2.012 through S2.019**, each, on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling \$2.012 through \$2.019 on a monthly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. Inspect the baghouse installed on **S2.012 through S2.019** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
- f. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))

5. <u>Performance Testing</u> (NAC 445B.346(2))

The Permittee, upon issuance of this operating permit, shall conduct renewal performance testing at least 90 days prior to the expiration of this operating permit, but no earlier than 365 days from the date of expiration of this operating permit, and every 5 years thereafter, in accordance with the following:

- a. All opacity compliance demonstrations and/or performance tests must comply with the advance notification, protocol review, operational conditions, reporting, and other requirements of Section I.H. Testing and Sampling (NAC 445B.252) of this operating permit. All performance test results shall be based on the arithmetic average of three valid runs (NAC 445B.252(5)).
- b. Testing shall be conducted on the exhaust stack (post controls).
- c. Method 5 in Appendix A of 40 CFR Part 60 shall be used to determine PM emissions. The sample volume for each test run shall be at least 1.7 dscm (60 dscf). Test runs must be conducted for up to two hours in an effort to collect this minimum sample.
- d. Method 201A in Appendix M of 40 CFR Part 51 shall be used to determine PM₁₀ and PM_{2.5} emissions. The sample time and sample volume collected for each test run shall be sufficient to collect enough mass to weigh accurately.
- e. The Method 201A test required in this section may be replaced by a Method 5 in Appendix A of 40 CFR Part 60. All particulate captured in the Method 5 test performed under this provision shall be considered PM_{2.5} for determination of compliance.
- f. Method 9 in Appendix A of 40 CFR Part 60 shall be used to determine opacity. Opacity observations shall be conducted concurrently with the applicable performance test. The minimum total time of observations shall be six minutes (24 consecutive observations recorded at 15 second intervals), unless otherwise specified by an applicable subpart.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

- E. Emission Units S2.012 through S2.019 (continued)
 - 6. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing

 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **S2.012 through S2.019**, each, will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Particulate matter in excess of **0.05** grams per dry standard cubic meter (**4.20** lb/hr). (40 CFR 60.382(a)(1))
 - (2) Emissions from the baghouse will not exceed **7 percent** opacity. (40 CFR 60.382(a)(2))
 - b. The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - c. At all times, including periods of startup, shutdown, and malfunction, owner and operators shall, to the extent practicable, maintain and operate **S2.012 through S2.019**, each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.11(d))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

F. Emission Units PF1.003 through PF1.005

System 6 – Emergency Stockpile Scenario		Location UTM (Zone 11, NAD 83)	
		m North	m East
PF1.003	Emergency Stockpile Feed Conveyor Transfer to Emergency Stockpile	4,466,848	407,326
PF1.004	Material Transfer to Emergency Stockpile Hopper via Truck	4,466,873	407,310
PF1.005	Emergency Stockpile Hopper transfer to Emergency Stockpile Hopper Feeder	4,466,873	407,303

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement) Emissions from **PF1.003 through PF1.005**, each, shall be controlled by **commercially designed water sprays**.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.003 through PF1.005**, **each**, shall not exceed **1,600.0** tons of **metallic ore** per any one-hour period averaged over a daily basis.
 - b. <u>Hours</u>
 - (1) PF1.003 through PF1.005, each, may operate a total of 24 hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B.22017) (Federally Enforceable SIP Requirement)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.003 through PF1.005, each,** the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.72** pounds per hour, nor more than **3.15** tons per year.
 - b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.26 pounds per hour, nor more than 1.16 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.040 pounds per hour, nor more than 0.18 tons per year.
 - d. The opacity from PF1.003 shall not equal or exceed 20 percent.





Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

F. Emission Units PF1.003 through PF1.005 (continued)

4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (*Federally Enforceable SIP Requirement*)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All

specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for PF1.003 through PF1.005, each, on a daily basis.
- b. Monitor and record the hours of operation for PF1.003 through PF1.005, each, on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.003 through PF1.005**, each, on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.
- f. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **PF1.004 and PF1.005**, each, will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Process fugitive emissions from **PF1.004 and PF1.005, each**, will not exceed **10 percent** opacity. (40 CFR Part 60.382(b))
 - (2) The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **PF1.004 and PF1.005**, each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

G. Emission Units PF1.006 through PF1.020

System 7 – Overland Conveyor System		Location UTM (Zone 11, NAD 83)	
		m North	m East
PF1.006	Overland Conveyor 1 to Overland Conveyor 2	4,468,518	407,292
PF1.007	Overland Conveyor 2 to Grasshopper Conveyor 1	4,468,522	408,313
PF1.008	Grasshopper Conveyor 1 to Grasshopper Conveyor 2	4,468,474	408,315
PF1.009	Grasshopper Conveyor 2 to Grasshopper Conveyor 3	4,468,422	408,315
PF1.010	Grasshopper Conveyor 3 to Grasshopper Conveyor 4	4,468,376	408,314
PF1.011	Grasshopper Conveyor 4 to Grasshopper Conveyor 5	4,468,325	408,314
PF1.012	Grasshopper Conveyor 5 to Grasshopper Conveyor 6	4,468,276	408,314
PF1.013	Grasshopper Conveyor 6 to Grasshopper Conveyor 7	4,468,227	408,314
PF1.014	Grasshopper Conveyor 7 to Grasshopper Conveyor 8	4,468,177	408,314
PF1.015	Grasshopper Conveyor 8 to Grasshopper Conveyor 9	4,468,129	408,314
PF1.016	Grasshopper Conveyor 9 to Grasshopper Conveyor 10	4,468,128	408,364
PF1.017	Grasshopper Conveyor 10 to Grasshopper Conveyor 11	4,468,128	408,415
PF1.018	Grasshopper Conveyor 11 to Grasshopper Conveyor 12	4,468,127	408,465
PF1.019	Grasshopper Conveyor 12 to Radial Stacker Conveyor	4,468,178	408,464
PF1.020	Radial Stacker Conveyor to Crushed Heap Leach Pad	4,468,162	408,510

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (*Federally Enforceable SIP Requirement*) Emissions from **PF1.006 through PF1.020, each**, shall be controlled by **commercially designed water sprays**.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.006 through PF1.020**, each, shall not exceed **1,601.6** tons of **metallic** ore per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) **PF1.006 through PF1.020, each,** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B.22017) (Federally Enforceable SIP Requirement)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.006 through PF1.020, each, the following pollutants in excess of the following specified limits:
 - a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.72 pounds per hour, nor more than 3.16 tons per year.
 - b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.26 pounds per hour, nor more than 1.16 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.040 pounds per hour, nor more than 0.18 tons per year.
 - d. The opacity from PF1.020 shall not equal or exceed 20 percent.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

G. Emission Units PF1.006 through PF1.020 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (*Federally Enforceable SIP Requirement*)

 The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - a. Monitor and record the throughput for PF1.006 through PF1.020, each, on a daily basis.
 - b. Monitor and record the hours of operation for PF1.006 through PF1.020, each, on a daily basis.
 - c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
 - d. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.006 through PF1.020, each,** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
 - e. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.
 - f. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **PF1.006 through PF1.019**, **each**, will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Process fugitive emissions from **PF1.006 through PF1.019**, each, will not exceed **10 percent** opacity. (40 CFR Part 60.382(b))
 - (2) The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **PF1.006 through PF1.019**, each, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

H. Emission Unit S2.020

System 8 – Crushed Lime Silo		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.020	Lime Silo #1 Loading [Lime Silo #1 Unloading to Screw Conveyor 1 is Fully Enclosed]	4,467,171	407,342

- 1. Air Pollution Control Equipment (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from \$2.020 shall be controlled by a bin vent.
 - b. <u>Descriptive Stack Parameters</u>

Stack Height: 22.4 feet Stack Diameter: 2.75 feet Stack Temperature: Ambient

Exhaust Flow: 800.0 dry standard cubic feet per minute (dscfm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.020** shall not exceed **1.61** tons of **lime** per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) **S2.020** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B. 22017) (Federally Enforceable SIP Requirement)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from \$2.020 the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.0016** pounds per hour, nor more than **0.0070** tons per year.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.00055 pounds per hour, nor more than 0.0024 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.000083 pounds per hour, nor more than 0.00036 tons per year.
 - d. The opacity from \$2.020 shall not equal or exceed 20 percent.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **S2.020** on a daily basis.
- b. Monitor and record the hours of operation for **S2.020** on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the bin vent controlling **S2.020** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. Inspect the bin vent installed on **S2.020** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric), and any corrective actions taken.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

I. Emission Unit PF1.021

System 0. Crushed Lime Sile (Sensy Conveyor 1 to Overland Conveyor 1)	Location UTM (Zone 11, NAD 83)		
System 9 – Crushed Lime Silo (Screw Conveyor 1 to Overland Conveyor 1)		m North	m East
PF1.021	Screw Conveyor 1 to Overland Conveyor 1	4,467,170	407,329

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement) Emissions from **PF1.021** shall be controlled by **commercially designed water sprays**.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.021** shall not exceed **1.61** tons of **lime** per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) **PF1.021** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.346(1), NAC 445B.22017) (*Federally Enforceable SIP Requirement*)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.021** the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.00072** pounds per hour, nor more than **0.0032** tons per year.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.00027 pounds per hour, nor more than 0.0012 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.000041 pounds per hour, nor more than 0.00018 tons per year.
 - d. The opacity from PF1.021 shall not equal or exceed 20 percent.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput for **PF1.021** on a daily basis.
- b. Monitor and record the hours of operation for **PF1.021** on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.021** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

J. Emission Unit S2.021

System 10 – ROM Lime Silo		Location UTM (Zone 11, NAD 83)	
System 10 -	- KOM Line Silo	m North	m East
S2.021	Lime Silo #2 Loading [Lime Silo #2 Unloading to Screw Conveyor 2 is Fully Enclosed]	4,468,246	407,376

- 1. Air Pollution Control Equipment (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from \$2.021 shall be controlled by a bin vent.
 - b. <u>Descriptive Stack Parameters</u>

Stack Height: 22.4 feet Stack Diameter: 2.75 feet Stack Temperature: Ambient

Exhaust Flow: 800.0 dry standard cubic feet per minute (dscfm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.021** shall not exceed **4.05** tons of **lime** per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) **S2.021** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B. 22017) (Federally Enforceable SIP Requirement)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from \$2.021 the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.0040** pounds per hour, nor more than **0.018** tons per year.
 - b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.0014 pounds per hour, nor more than 0.0060 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.00021 pounds per hour, nor more than 0.00091 tons per year.
 - d. The opacity from S2.021 shall not equal or exceed 20 percent.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

- a. Monitor and record the throughput for **S2.021** on a daily basis.
- b. Monitor and record the hours of operation for **S2.021** on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on the bin vent controlling **S2.021** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. Inspect the bin vent installed on **S2.021** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric), and any corrective actions taken.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

K. Emission Unit PF1.022

System 11 – ROM Lime Silo (Screw Conveyor 2 to Truck Loadout)		Location UTM (2	Zone 11, NAD 83)
		m North	m East
PF1.022	Screw Conveyor 2 to Truck Loadout	4,468,231	407,377

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement) Emissions from **PF1.022** shall be controlled by **commercially designed water sprays**.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.022** shall not exceed **4.05** tons of **lime** per any one-hour period averaged over a daily basis.
 - b. Hours
 - (1) **PF1.022** may operate a total of **24** hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.346(1), NAC 445B.22017) (*Federally Enforceable SIP Requirement*)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.022** the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.0018** pounds per hour, nor more than **0.0080** tons per year.
 - b. The discharge of PM_{10} (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.00067 pounds per hour, nor more than 0.0029 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.00010 pounds per hour, nor more than 0.00045 tons per year.
 - d. The opacity from PF1.022 shall not equal or exceed 20 percent.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

- a. Monitor and record the throughput for **PF1.022** on a daily basis.
- b. Monitor and record the hours of operation for **PF1.022** on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.022** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
- e. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

L. Emission Unit PF1.023

System 12	System 12 – Mobile Crushing and Screening Plant - Hopper Loading		Location UTM (Zone 11, NAD 83)	
System 12 -	System 12 – Mobile Crushing and Screening Frant - Hopper Loading		m North	m East
			Portable	e Area 1
			4,467,256	403,337
			4,466,845	404,469
			4,464,767	403,712
PF1.023	Loodon to Homen		4,465,179	402,580
PF1.023	Loader to Hopper		Portable	e Area 2
			4,468,490	408,839
			4,466,436	408,873
			4,466,428	407,238
			4,468,473	407,205

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement) Emissions from **PF1.023** shall be controlled by **water sprays**.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.023** shall not exceed **275.0** tons of **metallic ore** per any one-hour period averaged over a daily basis, nor more than **1,000,000.0** tons per year.
 - b. Hours
 - (1) **PF1.023** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.023** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.21** pounds per hour, nor more than **0.38** tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.076 pounds per hour, nor more than 0.14 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.011 pounds per hour, nor more than 0.021 tons per year.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

- a. Monitor and record the throughput for **PF1.023** on a daily basis.
- b. Monitor and record the hours of operation for **PF1.023** on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Monitor and record the total yearly throughput rate in tons per year. The annual throughput shall be determined as the sum of the monthly throughput rates for the year for all previous months of that year.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

L. Emission Unit PF1.023 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (*Federally Enforceable SIP Requirement*) (continued) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - e. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.023** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
 - f. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.
 - g. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. Federal Requirements (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)
 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing
 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **PF1.023** will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Process fugitive emissions from **PF1.023** will not exceed **10 percent** opacity. (40 CFR Part 60.382(b))
 - (2) The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **PF1.023** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

M. Emission Unit PF1.024

System 13 – Mobile Crushing and Screening Plant - Mobile Crusher		Location UTM (Zone 11, NAD 83)	
System 13 -	System 15 – Widdle Crushing and Screening Flant - Widdle Crusher		m East
		Portable	e Area 1
		4,467,256	403,337
		4,466,845	404,469
		4,464,767	403,712
PF1.024	Makila Canahan (IN), Hannam OUT, Attached Canahan Cananan	4,465,179	402,580
PF1.024	Mobile Crusher (IN: Hopper; OUT: Attached Crusher Conveyor)	Portable	e Area 2
		4,468,490	408,839
		4,466,436	408,873
		4,466,428	407,238
		4,468,473	407,205

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement) Emissions from **PF1.024** shall be controlled by **water sprays**.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.024** shall not exceed **275.0** tons of **metallic ore** per any one-hour period averaged over a daily basis, nor more than **1,000,000.0** tons per year.
 - b. Hours
 - (1) **PF1.024** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.024** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.37** pounds per hour, nor more than **0.68** tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.17 pounds per hour, nor more than 0.30 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.025 pounds per hour, nor more than 0.045 tons per year.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

- a. Monitor and record the throughput for PF1.024 on a daily basis.
- b. Monitor and record the hours of operation for **PF1.024** on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Monitor and record the total yearly throughput rate in tons per year. The annual throughput shall be determined as the sum of the monthly throughput rates for the year for all previous months of that year.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

M. Emission Unit PF1.024 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (*Federally Enforceable SIP Requirement*) (continued) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - e. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.024** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
 - f. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.
 - g. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)
 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing
 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **PF1.024** will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Process fugitive emissions from **PF1.024** will not exceed **10 percent** opacity. (40 CFR Part 60.382(b))
 - (2) The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **PF1.024** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

N. Emission Unit PF1.025

System 14 – Mobile Crushing and Screening Plant - Mobile Screen		Location UTM (Zone 11, NAD 83)	
System 14 -	System 14 – Woodle Crushing and Screening Flant - Woodle Screen		m East
		Portable	e Area 1
		4,467,256	403,337
		4,466,845	404,469
		4,464,767	403,712
PF1.025	Mobile Screen (IN: Attached Crusher Conveyor; OUT: Screen Conveyor 1, Screen	4,465,179	402,580
FF1.023	Conveyor 2, Screen Conveyor 3)	Portable	e Area 2
		4,468,490	408,839
		4,466,436	408,873
		4,466,428	407,238
		4,468,473	407,205

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (*Federally Enforceable SIP Requirement*) Emissions from **PF1.025** shall be controlled by **water sprays**.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.025** shall not exceed **275.0** tons of **metallic ore** per any one-hour period averaged over a daily basis, nor more than **1,000,000.0** tons per year.
 - b. Hours
 - (1) **PF1.025** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **PF1.025** the following pollutants in excess of the following specified limits:

- a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **1.72** pounds per hour, nor more than **3.13** tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.60 pounds per hour, nor more than 1.09 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.091 pounds per hour, nor more than 0.16 tons per year.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

- a. Monitor and record the throughput for **PF1.025** on a daily basis.
- b. Monitor and record the hours of operation for **PF1.025** on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Monitor and record the total yearly throughput rate in tons per year. The annual throughput shall be determined as the sum of the monthly throughput rates for the year for all previous months of that year.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

N. Emission Unit PF1.025 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (*Federally Enforceable SIP Requirement*) (continued) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - e. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.025** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
 - f. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.
 - g. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)
 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart LL Standards of Performance for Metallic Processing
 Plants (40 CFR Part 60.380)
 - a. On and after the sixtieth day after achieving the maximum production rate at which **PF1.025** will be operated, but not later than 180 days after initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:
 - (1) Process fugitive emissions from **PF1.025** will not exceed **10 percent** opacity. (40 CFR Part 60.382(b))
 - (2) The opacity standard set forth in this part shall apply at all times except during period of startup, shutdown, and malfunction, and as otherwise provided in the applicable standard. (40 CFR 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, Permittee shall, to the extent practicable, maintain and operate **PF1.025** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR Part 60.11(d))



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

O. Emission Units PF1.026 through PF1.028

System 15 – Mobile Crushing and Screening Plant - Conveyor Transfers			Location UTM (Z	Zone 11, NAD 83)
System 13	System 15 - Woodle Crushing and Screening Frant - Conveyor Transfers		m North	m East
			Portable	e Area 1
			4,467,256	403,337
			4,466,845	404,469
DE1 026	S C 1 t- O Stl		4,464,767	403,712
PF1.026 PF1.027	Screen Conveyor 1 to Oversize Stockpile		4,465,179	402,580
PF1.027 PF1.028	Screen Conveyor 2 to Mids Stockpile Screen Conveyor 3 to Fines Stockpile		Portable	e Area 2
PF1.028	Screen Conveyor 3 to Fines Stockpile		4,468,490	408,839
			4,466,436	408,873
			4,466,428	407,238
			4,468,473	407,205

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement) Emissions from **PF1.026 through PF1.028**, each, shall be controlled by water sprays.
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **PF1.026 through PF1.028**, **each**, shall not exceed **275.0** tons of **metallic ore** per any one-hour period averaged over a daily basis, nor more than **1,000,000.0** tons per year.
 - b. Hours
 - (1) **PF1.026 through PF1.028, each,** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B.22017) (Federally Enforceable SIP Requirement)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from PF1.026 through PF1.028, each, the following pollutants in excess of the following specified limits:
 - a. The discharge of **PM** (particulate matter) to the atmosphere shall not exceed **0.21** pounds per hour, nor more than **0.38** tons per year.
 - b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.076 pounds per hour, nor more than 0.14 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.011 pounds per hour, nor more than 0.021 tons per year.
 - d. The opacity from PF1.026 through PF1.028, each, shall not equal or exceed 20 percent.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

- a. Monitor and record the throughput for **PF1.026 through PF1.028**, each, on a daily basis.
- b. Monitor and record the hours of operation for PF1.026 through PF1.028, each, on a daily basis.
- c. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
- d. Monitor and record the total yearly throughput rate in tons per year. The annual throughput shall be determined as the sum of the monthly throughput rates for the year for all previous months of that year.



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

O. Emission Units PF1.026 through PF1.028 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (*Federally Enforceable SIP Requirement*) (continued) The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - e. Conduct and record an observation of visible emissions (excluding water vapor) on **PF1.026 through PF1.028, each,** on a **monthly** basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
 - f. The Permittee of any affected facility that uses wet suppression to control emissions from the affected facility must perform **monthly** periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken.





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

P. Emission Units S2.022 and S2.023

System 16 – Emergency Diesel-Fired Generators		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.022	Standby Generator 1 (2,000 kW CAT, 3516B, 2015+)	4,468,040	409,226
S2.023	Standby Generator 2 (2,000 kW CAT, 3516B, 2015+)	4,468,043	409,230

- 1. Air Pollution Control Equipment (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. **S2.022 and S2.023, each,** have no add-on controls.
 - b. Descriptive Stack Parameters for S2.022 and S2.023, each

Stack Height: 8.17 feet Stack Diameter: 1.00 foot Stack Temperature: 939.8 °F

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. S2.022 and S2.023, each, may consume only diesel.
 - b. The sulfur content shall not exceed **0.0015** percent.
 - c. The maximum allowable fuel consumption rate for S2.022 and S2.023, each, shall not exceed 147.5 gallons per any one-hour period, nor more than 14,750.0 gallons per year of non-emergency use.
 - d. Hours
 - (1) S2.022 and S2.023, each, may operate a total of 24 hours per day.
 - (2) **S2.022 and S2.023, each,** may operate a maximum of **100** hours per year of non-emergency use. There is no time limit on operation in emergency situations.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B. 22017) (Federally Enforceable SIP Requirement)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **S2.022 and S2.023, each,** the following pollutants in excess of the following specified limits:
 - a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.13 pounds per hour, nor more than 0.0066 tons per year.
 - b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.13 pounds per hour, nor more than 0.0066 tons per year.
 - c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.13 pounds per hour, nor more than 0.0066 tons per year.
 - d. The discharge of SO₂ (sulfur dioxide) to the atmosphere shall not exceed 0.031 pounds per hour, nor more than 0.0016 tons per year.
 - e. The discharge of NO_x (oxides of nitrogen) to the atmosphere shall not exceed 2.95 pounds per hour, nor more than 0.15 tons per year.
 - f. The discharge of CO (carbon monoxide) to the atmosphere shall not exceed 15.4 pounds per hour, nor more than 0.77 tons per year.
 - g. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed **0.84** pounds per hour, nor more than **0.042** tons per year.
 - h. The opacity from S2.022 and S2.023, each, shall not equal or exceed 20 percent.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

P. Emission Units S2.022 and S2.023 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)
 - The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - a. Monitor and record the total daily hours of operation for **S2.022 and S2.023**, **each**, for each day of operation. The Permittee shall note which hours of operation are emergency hours, and which hours of operation are hours for non-emergency use.
 - b. Monitor and record the consumption rate of **diesel** on a daily basis for **S2.022 and S2.023**, **each**, (in **gallons**) by multiplying the maximum hourly fuel consumption rate as stated in **P.2.c** of this section and the total daily hours of operation.
 - c. Monitor and record the total yearly hours of operation of **S2.022 and S2.023**, each, per year. The annual hours of operation shall be determined at the end of each month as the sum of the monthly hours of operation for all previous months of that year.
 - d. Keep on site, and make available upon request, documentation demonstrating that the sulfur content of the **diesel** consumed in **S2.022 and S2.023**, **each**, shall not exceed the limit set forth in **P.2.b.** of this section.
 - e. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))
- 5. <u>Federal Requirements</u> (NAC 445B.346(2), NAC 445B.252(1)) (Federally Enforceable SIP Requirement)

 New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary

 Compression Ignition Internal Combustion Engines
 - a. Emissions Standards (40 CFR 60.4205)
 - The Permittee must comply with the emission standards for new non-road CI (compression ignition) ICE (internal combustion engine) in 40 CR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. (40 CFR 60.4205(b))
 - (1) For a 2007 model year and later Tier 4 non-road engine with a rated power less than 2,237 kW (3,000 hp): (40 CFR 60.4202(a), 40 CFR 1039.101(b) Table 1)
 - (a) The discharge of PM to the atmosphere shall not exceed 0.030 grams/kW-hr (0.13 pounds per hour).
 - (b) The discharge of CO to the atmosphere shall not exceed 3.50 grams/kW-hr (15.4 pounds per hour).
 - (c) The discharge of NMHC (non-methane hydrocarbon) to the atmosphere shall not exceed **0.19** grams/kW-hr (**0.84** pounds per hour).
 - (d) The discharge of NO_X to the atmosphere shall not exceed **0.67** gram/kW-hr (**2.95** pounds per hour).
 - Exhaust opacity must not exceed: (40 CFR 60.4202(a)(1)(i), 40 CFR 1039.105(b))
 - (a) 20 percent during acceleration mode;
 - (b) 15 percent during the lugging mode; and
 - c) 50 percent during the peaks in either the acceleration or lugging modes.
 - b. Fuel Requirements (40 CFR 60.4207)

The Permittee must meet the following diesel requirements for non-road engine: (40 CFR 60.4207(b), 40 CFR 1090.305)

- (1) Sulfur content to be 15 parts per million (ppm) maximum.
- (2) A minimum cetane index of 40; or
- (3) A maximum aromatic content of 35 volume percent.
- c. <u>Monitoring Requirements</u> (40 CFR 60.4209)

If the CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine. (40 CFR 60.4209(a))



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

P. Emission Units S2.022 and S2.023 (continued)

- 5. <u>Federal Requirements</u> (NAC 445B.346(2), NAC 445B.252(1)) (Federally Enforceable SIP Requirement) (continued) New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
 - d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211)
 - (1) The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. (40 CFR 60.4206)
 - (2) The Permittee must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR Part 1068, except as permitted in **P.5.d.(5**) of this section. (40 CFR 60.4211(a))
 - (3) The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in **P.5.d.(5)** of this section. (40 CFR 60.4211(c))
 - (4) In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs P.5.d.(4)(a) through (c) of this section, is prohibited. If the Permittee do not operate the engine according to the requirements in paragraphs P.5.d.(4)(a) through (c) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (40 CFR 60.4211(f))
 - (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (40 CFR 60.4211(f)(1))
 - (b) The Permittee may operate the Permittee's emergency stationary ICE for any combination of the purposes specified in paragraphs **P.5.d.(4)(b)** of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph **P.5.d.(4)(c)** of this section counts as part of the 100 hours per calendar year. (40 CFR 60.4211(f)(2))
 - i. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. (40 CFR 60.4211(f)(2)(i))
 - (c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph **P.5.d.(4)(b)** of this section. Except as provided in paragraph **P.5.d.(4)(c)** of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 60.4211(f)(3))
 - i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 60.4211(f)(3)(i)(A) through (E) are met. (40 CFR 60.4211(f)(3)(i))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

- P. Emission Units S2.022 and S2.023 (continued)
 - 5. <u>Federal Requirements</u> (NAC 445B.346(2), NAC 445B.252(1)) (Federally Enforceable SIP Requirement) (continued) New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
 - d. Compliance Requirements (40 CFR 60.4206, 40 CFR 60.4211) (continued)
 - 5) If the Permittee does not install, configure, operate, and maintain the Permittee's engine and control device according to the manufacturer's emission-related written instructions, or the Permittee change emission-related settings in a way that is not permitted by the manufacturer, the Permittee must demonstrate compliance as follows: (40 CFR 4211(g))
 - (a) For CI ICE greater than 500 hp, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee change emission-related settings in a way that is not permitted by the manufacturer. The Permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
 - e. <u>National Emission Standards for Hazardous Air Pollutants for Source Categories 40 CFR Part 63, Subpart ZZZZ Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:</u>
 If the compression ignition engine meets the requirements of 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ requirements are also met. (40 CFR Part 63.6590(c))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

Q. Emission Units S2.024 through S2.028

System 17 – Assay Laboratory - Fire Assay Baghouse		Location UTM (Zone 11, NAD 83)	
		m North	m East
S2.024	Fire Assay Workstation 1	4,467,478	409,051
S2.025	Fire Assay Workstation 2	4,467,478	409,051
S2.026	Fire Assay Workstation 3	4,467,478	409,051
S2.027	Fusion Furnace	4,467,478	409,051
S2.028	Cupellation Furnace	4,467,478	409,051

- 1. Air Pollution Control Equipment (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from S2.024 through S2.028, combined, shall be controlled by a baghouse.
 - b. <u>Descriptive Stack Parameters</u>

Stack Height: 22.9 feet Stack Diameter: 2.33 feet Stack Temperature: 70 °F

Exhaust Flow: 5,624.9 dry standard cubic feet per minute (dsefm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.024 through S2.028**, each, shall not exceed **0.092** tons of **metallic ore** per any one-hour period averaged over a daily basis, nor more than **402.3** tons per year.
 - b. Hours
 - (1) S2.024 through S2.028, each, may operate a total of 12 hours per day.
 - (2) S2.024 through S2.028, each, may operate a total of 4,380 hours per year.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B. 22017) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **baghouse** the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.19 pounds per hour, nor more than 0.42 tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.19 pounds per hour, nor more than 0.42 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.19 pounds per hour, nor more than 0.42 tons per year.
- d. The opacity from the **baghouse** shall not equal or exceed **20** percent.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

Q. Emission Units S2.024 through S2.028 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - a. Monitor and record the throughput for **S2.024 through S2.028**, each, on a daily basis.
 - b. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
 - c. Monitor and record the total yearly throughput rate in tons per year. The annual throughput shall be determined as the sum of the monthly throughput rates for the year for all previous months of that year.
 - d. Monitor and record the total yearly hours of operation per year. The annual hours of operation shall be determined as the sum of the monthly hours of operation for all previous months of that year.
 - e. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling \$2.024 through \$2.028 on a monthly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
 - f. Inspect the baghouse installed on **S2.024 through S2.028** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

R. Emission Units S2.029 through S2.038

System 18 – Assay Laboratory - Sample Preparation Baghouse		Location UTM (Zone 11, NAD 83)		
System 16	- Assay Laboratory - Sample Freparation Dagnouse		m North	m East
S2.029	Sample/Carbon Prep Workstation 1		4,467,474	409,051
S2.030	Sample/Carbon Prep Workstation 2		4,467,474	409,051
S2.031	Carbon Pulverizer		4,467,474	409,051
S2.032	Sample Pulverizer		4,467,474	409,051
S2.033	Sample Crusher		4,467,474	409,051
S2.034	Sample Dryer		4,467,474	409,051
S2.035	Sample Receiving Workstation 1		4,467,474	409,051
S2.036	Sample Receiving Workstation 2		4,467,474	409,051
S2.037	Sample Receiving Workstation 3		4,467,474	409,051
S2.038	Sample Receiving Workstation 4		4,467,474	409,051

- 1. Air Pollution Control Equipment (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. Emissions from S2.029 through S2.038, combined, shall be controlled by a baghouse.
 - b. <u>Descriptive Stack Parameters</u> Stack Height: 25.3 feet Stack Diameter: 2.33 feet Stack Temperature: 70 °F

Exhaust Flow: 11,206.1 dry standard cubic feet per minute (dscfm)

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. The maximum allowable throughput rate for **S2.029 through S2.038**, each, shall not exceed **0.092** tons of **metallic ore** per any one-hour period averaged over a daily basis, nor more than **402.3** tons per year.
 - b. Hours
 - (1) S2.029 through S2.038, each, may operate a total of 12 hours per day.
 - (2) S2.029 through S2.038, each, may operate a total of 4,380 hours per year.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1)) (Federally Enforceable SIP Requirement)

The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from the exhaust stack of the **baghouse** the following pollutants in excess of the following specified limits:

- a. The discharge of PM (particulate matter) to the atmosphere shall not exceed 0.38 pounds per hour, nor more than 0.84 tons per year.
- b. The discharge of PM₁₀ (particulate matter less than or equal to 10 microns in diameter) to the atmosphere shall not exceed 0.38 pounds per hour, nor more than 0.84 tons per year.
- c. The discharge of PM_{2.5} (particulate matter less than or equal to 2.5 microns in diameter) to the atmosphere shall not exceed 0.38 pounds per hour, nor more than 0.84 tons per year.
- d. The opacity from the **baghouse** shall not equal or exceed **20** percent.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

R. Emission Units S2.029 through S2.038 (continued)

- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.
 - a. Monitor and record the throughput for **S2.029 through S2.038**, each, on a daily basis.
 - b. Record the corresponding average hourly throughput rate in tons per hour. The average hourly throughput rate shall be determined from the total daily throughput and the total daily hours of operation.
 - c. Conduct and record an observation of visible emissions (excluding water vapor) on the baghouse controlling \$2.029 through \$2.038 on a monthly basis while operating. The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented to their back. If visible emissions are observed and exceed the applicable opacity standard, the Permittee shall take immediate corrective action. The Permittee shall maintain in a contemporaneous log with the following recordkeeping: the calendar date and time of any required monitoring, name of the observer, results of the monthly observation of visible emissions, and any corrective actions taken.
 - d. Monitor and record the total yearly throughput rate in tons per year. The annual throughput shall be determined as the sum of the monthly throughput rates for the year for all previous months of that year.
 - e. Monitor and record the total yearly hours of operation per year. The annual hours of operation shall be determined as the sum of the monthly hours of operation for all previous months of that year.
 - f. Inspect the baghouse installed on **S2.029 through S2.038** in accordance with the manufacturer's operation and maintenance manual and record the results (e.g. the condition of the filter fabric) and any corrective actions taken.
 - g. The Permittee, upon issuance of this operating permit, shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR 60.7(b))





Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

S. Emission Unit S2.039

System 19 – Diesel Storage Tank		Location UTM (Zone 11, NAD 83)		
			m North	m East
S2.039	273,000 Gallon Diesel Storage Tank		4,466,459	407,460

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. **S2.039** has no add-on controls.
 - b. Descriptive Stack Parameters

Shell Diameter: 60.0 feet Shell Height: 13.0 feet Capacity: 273,000.0 gallons

- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. **S2.039** shall only be used to store **diesel**.
 - b. The maximum allowable throughput rate for \$2.039 shall not exceed 546,000.0 gallons per year.
 - c. Hours
 - **S2.039** may operate a total of **24** hours per day.
- 3. Emission Limits (NAC 445B.305, NAC 445B.346(1), NAC 445B. 22017) (Federally Enforceable SIP Requirement)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from \$2.039 the following pollutants in excess of the following specified limits:
 - a. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.021 tons per year.
 - b. The opacity from **S2.039** shall not equal or exceed **20** percent.
- 4. <u>Monitoring, Recordkeeping, and Reporting</u> (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

 The Permittee, upon the issuance of this operating permit, shall maintain, in a contemporaneous log, the monitoring and

recordkeeping specified in this section. All records in the log must be identified with the calendar date of the record. All specified records shall be entered into the log at the end of the shift, end of the day of operation, or the end of the final day of operation for the month, as appropriate.

- a. Monitor and record the throughput of **gasoline**, in gallons, loaded into, or dispensed from, **S2.039**, on a monthly basis, as determined from vendor invoices for tank loading or fuel pump non-resettable meter for tank dispensing.
- b. Monitor and record the total yearly throughput rate in gallons per year. The annual throughput shall be determined at the end of each month as the sum of the monthly throughput rates for the year for all previous months of that year.



Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

T. Emission Unit S2.040

System 20 Casalina Staraga Tank	Location UTM (Zone 11, NAD 83	Location UTM (Zone 11, NAD 83)	
System 20 – Gasoline Storage Tank	m North m East		
S2.040 4,000 Gallon Gasoline Storage Tank	4,466,469 407,542		

- 1. <u>Air Pollution Control Equipment</u> (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. **S2.040** shall be controlled by submerged fill.
 - b. <u>Descriptive Tank Parameters</u>
 Shell Diameter: 5.33 feet
 Shell Height: 24.0 feet
 Capacity: 4,000.0 gallons
- 2. Operating Parameters (NAC 445B.346(1)) (Federally Enforceable SIP Requirement)
 - a. **S2.040** shall only be used to store **gasoline**.
 - b. The maximum allowable throughput rate for **S2.040** shall not exceed **8,000.0** gallons per month, nor more than **24,000.0** gallons per year.
 - c. Hours
 - S2.040 may operate a total of 24 hours per day.
- 3. <u>Emission Limits</u> (NAC 445B.305, NAC 445B.346(1), NAC 445B. 22017) (*Federally Enforceable SIP Requirement*)
 The Permittee, upon issuance of this operating permit, shall not discharge or cause the discharge into the atmosphere from **S2.040** the following pollutants in excess of the following specified limits:
 - a. The discharge of VOCs (volatile organic compounds) to the atmosphere shall not exceed 0.53 tons per year.
 - b. The opacity from **S2.040** shall not equal or exceed **20** percent.
- 4. Monitoring, Recordkeeping, and Reporting (NAC 445B.346(2)) (Federally Enforceable SIP Requirement)

- a. Monitor and record the throughput of gasoline, in gallons, loaded into, or dispensed from, **S2.040**, on a monthly basis, as determined from vendor invoices for tank loading or fuel pump non-resettable meter for tank dispensing.
- b. Monitor and record the total yearly throughput rate in gallons per year. The annual throughput shall be determined at the end of each month as the sum of the monthly throughput rates for the year for all previous months of that year.
- 5. Federal Requirements (NAC 445B.346(2), NAC 445B.252(1)) (Federally Enforceable SIP Requirement)

 National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart CCCCCC for Gasoline

 Dispensing Facilities
 - a. Permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.11115)



Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section V. Specific Operating Conditions (continued)

- T. Emission Unit S2.040 (continued)
 - 5. <u>Federal Requirements</u> (NAC 445B.346(2), NAC 445B.252(1)) (*Federally Enforceable SIP Requirement*) (continued)

 <u>National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart CCCCCC for Gasoline Dispensing Facilities</u> (continued)
 - b. Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - (1) Minimize gasoline spills. (40 CFR 63.11116(a)(1))
 - (2) Clean up spills as expeditiously as practicable. (40 CFR 63.11116(a)(2))
 - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. (40 CFR 63.11116(a)(3)).
 - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. (40 CFR 63.11116(a)(4))
 - c. Permittee must have records available within 24 hours of a request by the Administrator to document your gasoline throughput. (40 CFR 63.11116(b))

****End of Specific Operating Conditions****





Nevada Department of Conservation and Natural Resources • Division of Environmental Protection Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section VI. Emission Caps

A. Not Applicable





Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section VII. Surface Area Disturbance Conditions

The surface area disturbance for **Spring Valley Mine** is **6,303.0** acres.

- A. Fugitive Dust (NAC 445B.22037) (Federally Enforceable SIP Requirement)
 - 1. No person may cause or permit the handling, transporting or storing of any material in a manner which allows or may allow controllable particulate matter to become airborne.
 - 2. Except as otherwise provided in subsection 4, no person may cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction and revegetation.
 - 3. Except as otherwise provided in subsection 4, no person may disturb or cover 5 acres or more of land or its topsoil until he has obtained an operating permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.
 - 4. The provisions of subsections 2 and 3 do not apply to:
 - a. Agricultural activities occurring on agricultural land; or
 - b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

****End of Surface Area Disturbance Conditions****





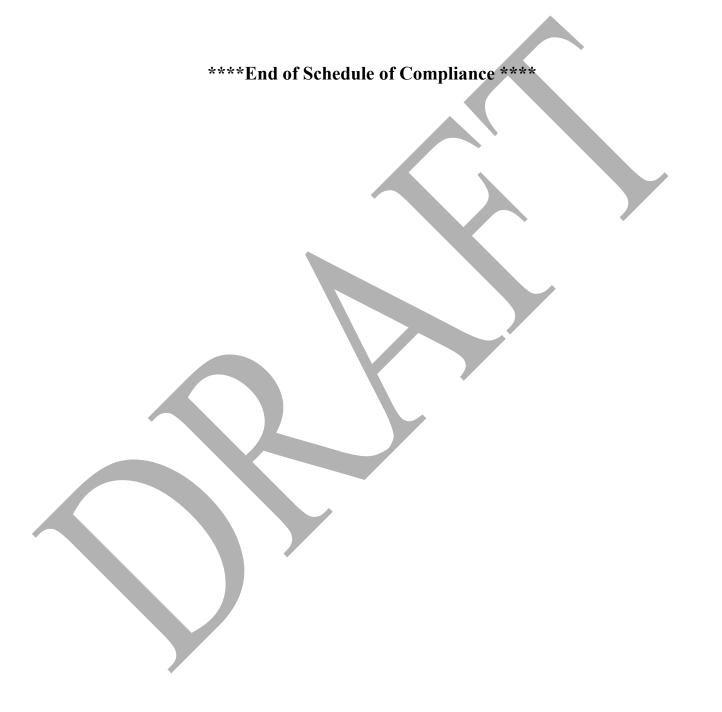
Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources, LLC – Spring Valley Mine Project (As Permittee)

Section VIII. Schedules of Compliance

A. Not Applicable





Bureau of Air Pollution Control

Facility ID No. A2214 Permit No. AP1041-4680 CLASS II AIR QUALITY OPERATING PERMIT

Issued to: Solidus Resources,	LLC - SPRING	VALLEY MINE PROJECT ((As Permittee)
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Section IX. Amendments



This permit:

- 1. Is non-transferable. (NAC 445B.287.3) (Federally Enforceable SIP Requirement)
- 2. Will be posted conspicuously at or near the stationary source. (NAC 445B.318.5) (Federally Enforceable SIP Requirement)
- 3. Will expire and be subject to renewal five (5) years from: (NAC 445B.315) (Federally Enforceable SIP Requirement)
- Date .
- 4. A completed application for renewal of an operating permit must be submitted to the Director on the form provided by him with the appropriate fee at least 70 calendar days before the expiration date of this operating permit. (NAC 445B.3473.2) (Federally Enforceable SIP Requirement)
- 5. Any person aggrieved by a final decision of the Department may, not later than 10 days after notice of the action of the Department, appeal the decision by filing a request for a hearing before the Commission on a form 3* with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. *(See adopting agency for form.) (NAC 445B.890) (State Only Requirement)

THIS PERMIT EXPIRES ON: Date Signature:	
Issued by:	Jaimie Mara, P.E. Supervisor, Permitting Branch Bureau of Air Pollution Control
Phone:	(775) 687- 9343 Date : Date

bh XX/25

Class II Insignificant Activities List Appended to Permit #AP1041–4680

Emission Unit #	Emission Unit Description
IA1.001	4,000 Gallon Diesel Storage Tank

