19.8.14.1412 A(2)(a): The permittee’s name, address and the appropriate permit number.

Westmoreland San Juan Mining LLC (WSJM), San Juan Mine has made an application for the Phase II and III bond release of 1,201 acres to the New Mexico Mining and Minerals Division (MMD) for a portion of the area currently under Permit #19-01 approved March 16, 2020. In addition, 131 acres of non-disturbed land has been included in this bond release application for a total of 1,332 acres. Application for bond release is submitted pursuant to the New Mexico Administrative Code (NMAC), 19.8.14.

Westmoreland San Juan Mining LLC
San Juan Mine
P.O. Box 561
Waterflow, New Mexico 87421

19.8.14.1412 A(2)(b) An accurate legal description of the land sought for bond release (either metes and bounds or precise Section, Township and Range designations).

The San Juan Mine permit area is located approximately 16 miles west of Farmington. The areas requested for Phase II and III bond release are located within the following lands of San Juan County, New Mexico, which are described as follows:

Township 30 North Range 15 West
Section 02 – 117.7 acres (all undisturbed)
Section 03 – 22.6 acres (0.1 acres undisturbed)
Section 04 – 227.0 acres (9.9 acres undisturbed)
Section 09 – 273.9 (0.5 acres undisturbed)
Section 10 – 0.6 acres
Section 16 – 263.6 acres (1.4 acres undisturbed)
Section 32 – 4.9 acres
Section 33 – 359.7 acres

Township 29 North Range 15 West
Section 04 – 62.4 acres (2 acres undisturbed)

19.8.14.1412 A(2)(c): The location of the area proposed for bond release shown on a USGS 7.5’ map, which should also show the permit boundaries.

Areas requested for bond release for the San Juan Mine permit areas are shown in Appendix B Exhibits on a USGS 7.5’ base map (see 2020 Bond Release Areas San Juan Mine USGS Quads).

19.8.14.1412 A(2)(d): A brief narrative summarizing the past history of the mine, the type, amount and date of the current bonding instrument, the number of acres included in the bond release application and the portion it represents of the total permit area, documentation of the type and dates of the reclamation performed with a summary of the results achieved as they relate to the approved reclamation plan, and any other pertinent information that the applicant or the Director may consider appropriate.

The current mining area was originally permitted by Western Coal Company (WCC) under Permit to Mine #2 approved August 20, 1973 by the New Mexico Coal Surface Mining Commission (CSMC). In December 1980, Utah International acquired WCC leases and founded San Juan Coal Company (SJCC). MMD approved Permit #2-5P for the San Juan Mine on September 26, 1984. Permit #2-5P was subsequently renewed on September 26, 1989. Permit #2-5P was changed to Permit #94-01 and was approved on September 26, 1994. Permit #99-01 was renewed by MMD, which included the San Juan Underground Mine operations permit revision on October 22, 1999. On September 24, 2004, permit #04-01 was renewed by MMD, and on September 25, 2009, permit #09-01 was renewed by MMD. The permit #14-01 was approved on September 26, 2014. On March 15, 2019, all permits belonging to SJCC were
assigned to a new company, Westmoreland San Juan Mining LLC (WSJM). The current permit, #19-01, was approved on March 16, 2020.

A letter of credit for $95,390,000 is filed with New Mexico Mining and Minerals Division to satisfy the reclamation bond requirement. The applicant is seeking a determination that the work necessary for Phase II and III bond release has been successfully completed. WSJM will not seek a bond reduction.

<table>
<thead>
<tr>
<th>Portion of Permit Area Proposed for Phase III Release</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Proposed Phase II and III Release Area</td>
<td>1,332</td>
</tr>
<tr>
<td>Total Permit Area</td>
<td>17,740</td>
</tr>
<tr>
<td>Portion of the Permit Area Proposed for Release</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Lands within the bond release area have been designated for a post mining land use of grazing.

19.8.14.1412 A(2)(e): a table listing the current names, addresses and number of acres held by each of the surface and mineral owners of record in the area proposed for bond release;

Appendix B Exhibit 2020 Phase II & III Bond Release Areas San Juan Mine Ownership shows both the surface and mineral ownership areas within the industrial use bond release area. The table below shows the names, addresses, and acreages of each of the surface and mineral owners.

<table>
<thead>
<tr>
<th>Surface Owner(^1)</th>
<th>Address</th>
<th>Area (ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Bureau of Land Management</td>
<td>P. O. Box 27115 Santa Fe, NM 87501</td>
<td>306.3</td>
</tr>
<tr>
<td>2-State of New Mexico</td>
<td>New Mexico State Land Office P. O. Box 1148 Santa Fe, NM 87504</td>
<td>414.0</td>
</tr>
<tr>
<td>4-Sunbelt Mining Company, Inc Sabino Investing, Inc</td>
<td>Sunbelt Mining Company, Inc. 1650 University Blvd., NE Suite 400 Albuquerque, NM 87102 Sabino Investing P. O. Box 711 Tucson, AZ 85702</td>
<td>323.6</td>
</tr>
<tr>
<td>5-Mitworth LLC</td>
<td>Mitworth LLC Attn: John C. Mittell 202 Riverwalk Trail New Market, AL 35761</td>
<td>117.7</td>
</tr>
<tr>
<td>6-Public Service Company of New Mexico Tucson Electric Power Company</td>
<td>Public Service Company of New Mexico 2401 Aztec Road N Albuquerque, NM 87107 Sabino Investing P. O. Box 711 Tucson, AZ 85702</td>
<td>71.6</td>
</tr>
<tr>
<td>8-Garcia, Martin R. and Angelina M., Trustees</td>
<td>Martin R. and Angelina M. Garcia 1103 Canyon Place Farmington, NM 87401</td>
<td>0.1</td>
</tr>
<tr>
<td>11-Public Service Company of New Mexico</td>
<td>Public Service Company of New Mexico</td>
<td>6.6</td>
</tr>
<tr>
<td>Mineral Owner</td>
<td>Address</td>
<td>Area (ac)</td>
</tr>
<tr>
<td>---------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>1-Bureau of Land Management</td>
<td>P. O. Box 27115, Santa Fe, NM 87501</td>
<td>847.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mineral Owner</th>
<th>Address</th>
<th>Area (ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-Kennedy Minerals LLC</td>
<td>48 Road 6050, Farmington, NM 87401</td>
<td>35.1</td>
</tr>
<tr>
<td>26 Sunbelt Mining Company, Inc et al</td>
<td>1650 University Blvd., NE Suite 400, Albuquerque, NM 87102</td>
<td>26.1</td>
</tr>
<tr>
<td>43-Garcia Living Trust</td>
<td>1103 Canyon Place, Farmington, NM 87401</td>
<td>31.4</td>
</tr>
</tbody>
</table>

Total: 1332.5
<table>
<thead>
<tr>
<th></th>
<th>Address</th>
<th>Parcel Number</th>
</tr>
</thead>
</table>
| 2-State of New Mexico | New Mexico State Land Office  
P. O. Box 1148  
Santa Fe, NM 87504 | 268.5         |
| 5-Mitworth LLC | Mitworth LLC  
Attn: John C. Mittell  
202 Riverwalk Trail  
New Market, AL 35761 | 117.7         |
| 7-Garcia Martin R Trust | Garcia Martin R Trust  
9828 Chantilly Rd NW  
Albuquerque, NM 87114 | 31.4          |
| 10-Public Service Company of New Mexico | Public Service Company of New Mexico  
2401 Aztec Road N  
Albuquerque, NM 87107 | 6.6           |
| 20-Kennedy Minerals LLC | Kennedy Minerals LLC  
48 Road 6050  
Farmington, NM 87401 | 61.2          |
| 43-Garcia Living Trust | Martin R. and Angelina M. Garcia  
9828 Chantilly Rd NW  
Albuquerque, NM 87114 | 0.1           |
| **Total** | | **1332.5** |

Notes:
1 - Numbers preceding owner names refer to parcel numbers in Exhibit 701.E-1 of the San Juan Mine #19-01 permit  
2 - Numbers preceding owner names refer to parcel numbers in Exhibit 701.E-4 of the San Juan Mine #19-01 permit

19.8.1412 A(2)(f): copies of letters sent to adjoining landowners, local governmental bodies, planning agencies, sewage and water treatment authorities, and water companies in the vicinity of the reclamation operation, notifying them of the permittee’s intention to seek bond release;

A draft letter to notify landowners, local government bodies, and other planning agencies of San Juan Mine’s request for bond release are in Appendix A Surface Ownership Notification Letter. The addresses are located in Appendix C Notification Mailing List.

19.8.1412 A(3): a copy of the newspaper advertisement that will be used to provide public notification of the application for bond release (cf. 19.8.1412.A (3) NMAC)

Draft public notice for publication in the Farmington Daily Times is provided in Appendix D Draft Public Notice.

19.8.1412 A(2)(g): Other maps or information required by the Director to locate or characterize the areas proposed for bond release, soils, revegetation, hydrological or other reclamation issues.

Maps of the proposed Phase III bond release areas are provided in Appendix B Exhibits. The exhibits include:
- **2020 Phase I, II, and III Bond Release Areas San Juan Mine Aerial**: Shows proposed Phase II and III bond release areas.
- **2020 Phase II and III Bond Release Areas San Juan Mine Land Status**: Shows seeding years.
- **2020 Phase II and III Bond Release Areas San Juan Mine Ownership**: Shows both the surface and mineral ownership areas within the industrial use bond release area.
- **2020 Phase II and III Bond Release Areas San Juan Mine USGS Quads**: Shows the bond release areas on USGS Quadrangle maps.
19.8.14.1412 A(2)(h): the permittee shall include in the application for bond release a notarized statement which certifies that all applicable reclamation activities have been accomplished in accordance with the requirements of SMCRA, the act, the regulatory program, and the approved reclamation plan; a certification shall be submitted for each application or phase of bond release.

Statement of certification is provided in Appendix E Statement of Certification.


1. “revegetation has been established on the regraded mined lands in accordance with the approved reclamation plan”

Revegetation activities at San Juan Mine were conducted in accordance with Subpart 906.A Reclamation Plan: General Requirements of approved permit. This subpart provides a comprehensive plan to satisfy reclamation performance standards required by 19 NMAC 8.2. A vegetation survey was conducted to assess revegetation success at San Juan Mine. The survey and associated results are presented in Appendix F Vegetation Report.

2. A demonstration is made that the lands to be released will not contribute suspended solids to stream flow or runoff outside the permit in excess of requirements of 69-25A-19B(10)NMSA 1978 and 19.8.20 NMAC and, if applicable,

All stormwater within the proposed bond release area flow into ponds constructed within the permit area. This is done to allow the vegetation to reestablish to the point where suspended solids in stormwater flow from reclaimed land would be reduced to natural levels. San Juan Mine has stormwater stations set up in native arroyos upstream and downstream of the reclamation proposed for bond release. Stormwater stations are also set up in channels within the reclamation. The samples collected from the stations on reclamation are compared to stations in the native arroyo in the table below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SWM #3 (Westwater Upstream)</th>
<th>SWM #5 (Shumway Upstream)</th>
<th>SWM #6 (Downstream)</th>
<th>SWM 11 &amp; 12 (Reclalm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.86</td>
<td>7.74</td>
<td>8.07</td>
<td>7.39</td>
</tr>
<tr>
<td>TSS</td>
<td>27,120.32</td>
<td>173,160.97</td>
<td>12,184.03</td>
<td>3,545.22</td>
</tr>
<tr>
<td>Aluminum</td>
<td>283.55</td>
<td>602.72</td>
<td>132.00</td>
<td>92.45</td>
</tr>
<tr>
<td>Iron</td>
<td>302.16</td>
<td>581.92</td>
<td>130.27</td>
<td>106.55</td>
</tr>
</tbody>
</table>

The table indicates that water from the reclamation would not add significant amounts of suspended solids to the natural streamflow.

3. A demonstration that crop yields from reclaimed mines lands are equivalent to those of the same soil type in the surrounding area under equivalent management practices as determined from the soil survey conducted pursuant to Section 69-25A-10(b)(6) NMSA1978 and 19.8.24 NMAC; and, if applicable,

There is no prime farmland in the proposed release area.

4. The Director and the operator have made provisions with the post mine land owner for sound future maintenance of any silt dam that will be retained as a permanent impoundment pursuant to 19.8.20 NMAC.

No silt dams will be retained in the proposed bond release area.
For Measurement of Cover, Production and Diversity

A. Identify revegetation success standards. A description of how these standards were selected or established and all references justifying these standards should be included in the final bond release submittal.

See Appendix F Vegetation Report.

B. Describe how you will collect the data - i.e., the measurement techniques for cover and production, and diversity (19.8.8.808 NMAC). Include literature citations and references for the measurement techniques (19.8.5.505.C (3) NMAC). Describe how you will test data for sample adequacy and assumptions of normal distribution (19.8.5.505.C (2) & (3) NMAC).

See Appendix F Vegetation Report.

C. Address what you will do if the data are not normally distributed. If the data are not normally distributed - most sample adequacy equations are not appropriate for use (See: Coal Mine Reclamation Program Vegetation Standards for some ideas on alternative approaches to determine sample adequacy when data are not normally distributed). If sample adequacy equations produce unreasonably large sample sizes, alternative “distribution free” methods including jack knife or bootstrapping (See: Coal Mine Reclamation Program Vegetation Standards) may be used (19.8.20.2065.A NMAC).

See Appendix F Vegetation Report.

D. Describe the statistical analyses you will use to test the reverse null hypothesis (pp.17-19, Coal Mine Reclamation Program Vegetation Standards) stated below.

$$H_0: \mu_{trt} < 0.90 \mu_{con}$$
$$H_a: \mu_{trt} > 0.90 \mu_{con}$$

where: $\mu_{trt}$ is the mean of the treatment (reclaimed land), and $\mu_{con}$ is the control standard or reference area mean (19.8.20.2065.B(5) NMAC).

See Appendix F Vegetation Report.

E. Describe what alternative approaches you will take if the data are not normally distributed and use of the Student’s t-test is inappropriate. Also note that some transformations (as listed on pp. C-8 and C-9 of the Coal Mine Reclamation Program Vegetation Standards) may be used to adjust data to a more normal distribution prior to statistical analysis. Use of other (nonparametric) techniques is also encouraged by MMD in these instances (pp. C-3 and C-6 of the Coal Mine Reclamation Program Vegetation Standards) (19.8.20.2065.A NMAC).

See Appendix F Vegetation Report.

F. Identify the level of confidence (i.e., 90% statistical confidence, or an alpha error rate of $a = 0.10$, 19.8.20.2065.B(5) NMAC) that you will use to analyze the data.

See Appendix F Vegetation Report.

G. Identify the statistical software packages you will use for conducting your statistical analyses (19.8.5.505.C(3) NMAC).

See Appendix F Vegetation Report.
Surface Water - In the situation where State water quality standards exist for a receiving stream, the operator needs to demonstrate that discharges meet those standards prior to removing sediment control structures. Where there are no numerical stream water quality standards for the receiving waters the operator needs to demonstrate that untreated drainage does not result in an increase in levels of suspended solids, net acidity, total iron (at a minimum) above the ambient, pre-mining levels of the receiving stream.

See paragraph 2 on page 5 above.

If permanent impoundments are planned for livestock watering, a demonstration is needed to verify that the water will be suitable on a permanent basis for its intended use.

No permanent impoundments are planned for livestock watering.

Prime Farmland
A minimum 3-year demonstration that yields from soils of reclaimed prime farmland are equivalent to yields of the same soil type in the surrounding area under the equivalent management practices (19.8.24.2404 NMAC).

There is no prime farmland in the proposed release area.

Silt Dams
A description of the future maintenance of any silt dam that will be retained as a permanent impoundment.

No silt dams will be retained.

Revegetation

1. Maps showing the dates of initial seeding, and last augmented seeding, fertilization or irrigation for each stage of the revegetation sequencing.

   See Appendix B Exhibits

2. Identify revegetation success standards. A description of how these standards were selected or established and all references justifying these standards should be included in the final bond release submittal.
   A. ground cover
   B. production
   C. diversity
   D. shrub and tree stocking

   See Appendix F Vegetation Report.

3. Description of vegetation sampling procedures
   A. description of sampling areas
   B. time periods when data were collected

   C. Sampling methodologies (19.8.8.808 NMAC)
      i. ground cover
      ii. productivity
      iii. diversity
      iv. tree and shrub stocking rates

   D. Include literature citations and references for the measurement techniques (19.8.5.505.C(3) NMAC)
E. Describe how you will test data for sample adequacy and assumptions of normal distribution (19.8.5.505.C(2) & (3) NMAC).

See Appendix F Vegetation Report.

3. Data collected from samples of revegetation
   A. Address what you will do if the data are not normally distributed. If the data are not normally distributed, most sample adequacy equations are not appropriate for use. If sample adequacy equations produce unreasonably large sample sizes, alternative “distribution free” methods including jack-knife or boot-strapping may be used (also see: Statistical Analyses of Vegetation Data, A. Sample Adequacy in Coal Mine Reclamation Program Vegetation Standards) (19.8.2.2065.A NMAC).

See Appendix F Vegetation Report.

B. Describe the statistical analyses you will use to test the reverse null hypothesis (pp. 17-19, Coal Mine Reclamation Program Vegetation Standards) stated below.

\[ H_0: \mu_{\text{trt}} < 0.90 \mu_{\text{con}} \]
\[ H_a: \mu_{\text{trt}} > 0.90 \mu_{\text{con}} \]

Where: \( \mu_{\text{trt}} \) is the mean of the treatment (reclaimed land), and \( \mu_{\text{con}} \) is the control standard or reference area mean (19.8.20.2065.B(5) NMAC).

See Appendix F Vegetation Report.

C. Describe what alternative approaches you will take if the data are not normally distributed and use of the student’s t-test is inappropriate. Also note that some transformations (as listed on pp. C-8 and C-9 of the Coal Mine Reclamation Program Vegetation Standards) may be used to adjust data to a more normal distribution prior to statistical analysis. Use of other (nonparametric) techniques is also encouraged by MMD in these instances (pp. CC-3 and C-6 of the Coal Mine Reclamation Program Vegetation Standards) (19.8.20.2065.A NMAC).

See Appendix F Vegetation Report.

D. Identify the level of confidence (i.e., 90% statistical confidence, or an alpha error rate of \( \alpha = 0.10 \), 19.8.20.2065.B(5) NMAC) that you will use to analyze the data.

See Appendix F Vegetation Report.

E. Identify the statistical software packages you will use for conducting your statistical analyses (19.8.5.505.C(3) NMAC).

See Appendix F Vegetation Report.

4. A demonstration that the revegetation meets or exceeds the mine specific standards as stated in the approved reclamation plan.

See Appendix F Vegetation Report.