



June 28, 2023

Mr. Clayton Wein  
Environmental Protection Specialist  
Colorado Division of Reclamation, Mining and Safety  
1313 Sherman Street, Room 215  
Denver, CO 80203

**RE: New Horizon Mine  
Permit No. C-1981-008  
2023 Annual Impoundment Inspections**


Dear Mr. Wein:

Elk Ridge Mining and Reclamation, LLC (Elk Ridge) operates the New Horizon Mine. Tri-State Generation and Transmission Association, Inc. (Tri-State) is the parent company of Elk Ridge. The New Horizon Mine operates under Colorado Division of Reclamation, Mining and Safety (CDRMS) Permit No. C-1981-008.

In accordance with Rules 4.05.9(14) and 4.05.9(15), Tri-State is submitting the enclosed annual impoundment inspections on behalf of Elk Ridge.

If you have any questions about the enclosed annual impoundment reports, please contact Tony Tennyson at (970) 824-1232 at your convenience.

Sincerely,

DocuSigned by:  
  
D250C711D0BF450...  
Chris Gilbreath  
Senior Manager  
Remediation and Reclamation

CG:TT:der

Enclosures

cc: Tony Tennyson (via email)  
G747-11.3(21)c-8

## 2023 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon Mine (Permit No. C-981-008)**

Pond Name: **Pond 013**

Date Inspected: 6-17-2023

Inspector's Name: **Trevor Ragsdale**



### **Pond Capacity Data**

As Built Pond Embankment elev.: **5560.4**

As Built Pond Bottom elev.: **5548.0**

As Built Pond Emergency Spillway elev.: **5557.0**

As Built Pond Primary Spillway elev.: **5555.0**

As Built Pond Capacity (pond bottom to primary spillway) per As Built **6.14 ac-ft**

Existing Pond Capacity (pond bottom to primary spillway): As Built Volume - SV = **6.14 ac-ft**

Sediment Volume (SV) at Inspection: **no change since as-built**

Surface Water elev. **5554** As Built Pond Bottom elev. **5548.0** = Water Depth **6 feet**

Water Volume (WV) in Pond **4.7 ac-ft** (using as built capacity table & surface water elevation, and then subtracting sediment volume under water level)

Pond Capacity Available below primary spillway **1.2 ac-ft** [As Built Pond Capacity – WV – SV]

Inflow volume from 10-yr 24-hr storm runoff event **2.7 ac-ft**

### **Circle or Write appropriate Response**

- |     |   |   |  |     |
|-----|---|---|--|-----|
| 1.  | Seepage (specify location, color, and approx. volume) _____ | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 2.  | Cracks or scarps on crest or slopes _____                   | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 3.  | Sloughing or bulging on slopes _____                        | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 4.  | Major erosion problems _____                                | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 5.  | Surface movements in valley bottom or on hillside _____     | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 6.  | Water impounded against toe _____                           | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 7.  | Clogging  |   |  |     |
|     | a) Spillway channels and pipes _____                        | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
|     | b) Decant system _____                                      | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
|     | c) Diversion Ditches _____                                  | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 8.  | Cracking or crushing of pipes                               |   |  |     |
|     | a) Spillway pipes _____                                     | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
|     | b) Decant system _____                                      | Yes                                     | <input checked="" type="checkbox"/> No | N/A |
| 9.  | Trash racks clear and in place _____                        | <input checked="" type="checkbox"/> Yes | No                                     | N/A |
| 10. | Monitoring instrumentation                                  | <input checked="" type="checkbox"/> Yes | No                                     | N/A |
|     | <b>Flume in place &amp; functioning</b>                     |   |  |     |

Comments: **Water Level ~1ft below Primary**

## 2023 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon Mine (Permit No. C-1981-008)**

Pond Name: **Pond 012**

Date Inspected: **6-17-2023**

Inspector's Name: **Trevor Ragsdale**



### ***Pond Capacity Data***

As Built Pond Embankment elev.: **5608.5**

As Built Pond Bottom elev.: **5596.5**

As Built Pond Emergency Spillway elev.: **NA**

As Built Pond Primary Spillway elev.: **5606.5**

As Built Pond Capacity (pond bottom to primary spillway) per As Built **4.9 ac-ft**

Existing Pond Capacity (pond bottom to primary spillway): As Built Volume - SV = **4.75 ac-ft**

Sediment Volume (SV) unchanged: **3 areas = ~0.15 ac-ft**

Surface Water elev. **Dry** - As Built Pond Bottom elev. **5596.5** = Water Depth **0 ft**

Water Volume (WV) in Pond **0 ac-ft** (using as built capacity table & surface water elevation, and then subtracting sediment volume under water level)

Pond Capacity Available below primary spillway **4.75 ac-ft** [As Built Pond Capacity – WV – SV]

Inflow volume from 10-yr 24-hr storm runoff event **3.41 ac-ft**

### ***Circle or Write appropriate Response***

- |     |   |                                     |                                     |                                     |
|-----|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1.  | Seepage (specify location, color, and approx. volume) _____ | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 2.  | Cracks or scarps on crest or slopes _____                   | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 3.  | Sloughing or bulging on slopes _____                        | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 4.  | Major erosion problems _____                                | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 5.  | Surface movements in valley bottom or on hillside _____     | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 6.  | Water impounded against toe _____                           | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 7.  | Clogging  |                                     |                                     |                                     |
|     | a) Spillway channels and pipes _____                        | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
|     | b) Decant system _____                                      | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
|     | c) Diversion Ditches _____                                  | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 8.  | Cracking or crushing of pipes                               |                                     |                                     |                                     |
|     | a) Spillway pipes _____                                     | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
|     | b) Decant system _____                                      | Yes                                 | <input checked="" type="checkbox"/> | N/A                                 |
| 9.  | Trash racks clear and in place _____                        | <input checked="" type="checkbox"/> | No                                  | N/A                                 |
| 10. | Monitoring instrumentation _____                            | Yes                                 | No                                  | <input checked="" type="checkbox"/> |

Comments: **Dry**

## 2023 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon Mine (Permit No. C-981-008)**

Pond Name: **Pond 016**

Date Inspected: **6-17-2023**

Inspector's Name: **Trevor Ragsdale**



### Pond Capacity Data

As Built Pond Embankment elev.: **5620.5**

Surveyed Pond Bottom elev.: **5611.0**

As Built Pond Emergency Spillway elev.: **5618.5**

As Built Pond Primary Spillway elev.: **NA**

As Built Pond Capacity (pond bottom to emergency spillway) per As Built **7.5 ac-ft**

Existing Pond Capacity (pond bottom to emergency spillway): As Built Volume - SV = **7.5 ac-ft** <sup>note</sup>

Sediment Volume (SV) at Inspection: length 0 ft X width 0 ft X depth 0 ft = **NA ac-ft**

Surface Water elev. **Dry** - As Built Pond Bottom elev. **5611.0** = Water Depth **NA**

Water Volume (WV) in Pond **Dry** (using as built capacity table & surface water elevation, and then subtracting sediment volume under water level)

Pond Capacity Available **7.5 ac-ft** [As Built Pond Capacity – WV – SV]

Inflow volume from 100-yr 24-hr storm runoff event **5.33 ac-ft**

### Circle or Write appropriate Response

- |     |   |     |                                     |                                     |
|-----|---|-----|-------------------------------------|-------------------------------------|
| 1.  | Seepage (specify location, color, and approx. volume) _____ | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 2.  | Cracks or scarps on crest or slopes _____                   | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 3.  | Sloughing or bulging on slopes _____                        | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 4.  | Major erosion problems _____                                | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 5.  | Surface movements in valley bottom or on hillside _____     | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 6.  | Water impounded against toe _____                           | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 7.  | Clogging  |     |                                     |                                     |
|     | a) Spillway channels and pipes _____                        | Yes | <input checked="" type="checkbox"/> | N/A                                 |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> |
|     | c) Diversion Ditches _____                                  | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 8.  | Cracking or crushing of pipes                               |     |                                     |                                     |
|     | a) Spillway pipes _____                                     | Yes | No                                  | <input checked="" type="checkbox"/> |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> |
| 9.  | Trash racks clear and in place _____                        | Yes | No                                  | <input checked="" type="checkbox"/> |
| 10. | Monitoring instrumentation _____                            | Yes | No                                  | <input checked="" type="checkbox"/> |

Comments: **DRY**

## 2023 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon Mine (Permit No. C-981-008)**

Pond Name: **Pond 018**

Date Inspected: **6-17-2023**

Inspector's Name: **Trevor Ragsdale**



### Pond Capacity Data

As Built Pond Embankment elev.: **5682.0**

Surveyed Pond Bottom elev.: **5570.**

As Built Pond Emergency Spillway elev.: **5678.0**

As Built Pond Primary Spillway elev.: **NA**

As Built Pond Capacity (pond bottom to emergency spillway) per As Built **4.03 ac-ft**

Existing Pond Capacity (pond bottom to emergency spillway): As Built Volume - SV = **4.03 ac-ft**

Sediment Volume (SV) at Inspection: length 0 ft X width 0 ft X depth 0 ft = **NA ac-ft**

Surface Water elev. **Dry** - As Built Pond Bottom elev. **5670.0** = Water Depth **Dry ft**

Water Volume (WV) in Pond **0 ac-ft** (using as built capacity table & surface water elevation, and then subtracting sediment volume under water level)

Pond Capacity Available **4.03 ac-ft** [As Built Pond Capacity – WV – SV]

Inflow volume from 100-yr 24-hr storm runoff event **2.25 ac-ft**

### Circle or Write appropriate Response

- |     |   |     |                                     |                                     |
|-----|---|-----|-------------------------------------|-------------------------------------|
| 1.  | Seepage (specify location, color, and approx. volume) _____ | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 2.  | Cracks or scarps on crest or slopes _____                   | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 3.  | Sloughing or bulging on slopes _____                        | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 4.  | Major erosion problems _____                                | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 5.  | Surface movements in valley bottom or on hillside _____     | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 6.  | Water impounded against toe _____                           | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 7.  | Clogging  |     |                                     |                                     |
|     | a) Spillway channels and pipes _____                        | Yes | <input checked="" type="checkbox"/> | N/A                                 |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> |
|     | c) Diversion Ditches _____                                  | Yes | <input checked="" type="checkbox"/> | N/A                                 |
| 8.  | Cracking or crushing of pipes                               |     |                                     |                                     |
|     | a) Spillway pipes _____                                     | Yes | No                                  | <input checked="" type="checkbox"/> |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> |
| 9.  | Trash racks clear and in place _____                        | Yes | No                                  | <input checked="" type="checkbox"/> |
| 10. | Monitoring instrumentation _____                            | Yes | No                                  | <input checked="" type="checkbox"/> |

Comments: **DRY**

## 2023 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon Mine (Permit No. C-981-008)**

Pond Name: **Pond 015**

Date Inspected: **6-17-2023**

Inspector's Name: **Trevor Ragsdale**



### **Pond Capacity Data**

As Built Pond Embankment elev.: **5671.0**

Surveyed Pond Bottom elev.: **5560.7**

As Built Pond Emergency Spillway elev.: **NA**

As Built Pond Primary Spillway elev.: **NA**

As Built Pond Capacity (pond bottom to top of embankment) per As Built **0.94 ac-ft**

Existing Pond Capacity (pond bottom to top of embankment): As Built Volume - SV = **0.94 ac-ft**

Sediment Volume (SV) at Inspection: length \_\_\_\_ ft X width \_\_\_\_ ft X depth \_\_\_\_ ft = **NA ac-ft**

Surface Water elev. **Dry** - As Built Pond Bottom elev. **5660.0** = Water Depth **NA**

Water Volume (WV) in Pond **Dry** (using as built capacity table & surface water elevation, and then subtracting sediment volume under water level)

Pond Capacity Available **0.94 ac-ft** [As Built Pond Capacity – WV – SV]

Inflow volume from 100-yr 24-hr storm runoff event **0.508 ac-ft**

### **Circle or Write appropriate Response**

- |     |   |     |                                     |   |
|-----|---|-----|-------------------------------------|---|
| 1.  | Seepage (specify location, color, and approx. volume) _____ | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 2.  | Cracks or scarps on crest or slopes _____                   | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 3.  | Sloughing or bulging on slopes _____                        | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 4.  | Major erosion problems _____                                | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 5.  | Surface movements in valley bottom or on hillside _____     | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 6.  | Water impounded against toe _____                           | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 7.  | Clogging  |     |                                     |   |
|     | a) Spillway channels and pipes _____                        | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
|     | c) Diversion Ditches _____                                  | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 8.  | Cracking or crushing of pipes                               |     |                                     |   |
|     | a) Spillway pipes _____                                     | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
| 9.  | Trash racks clear and in place _____                        | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
| 10. | Monitoring instrumentation _____                            | Yes | No                                  | <input checked="" type="checkbox"/> N/A |

Comments: **DRY**

## 2023 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon Mine (Permit No. C-981-008)**

Pond Name: **SP2**

Date Inspected: **6-17-23**

Inspector's Name: **Trevor Ragsdale**



**Circle or Write appropriate Response**

- |     |   |     |                                     |   |
|-----|---|-----|-------------------------------------|---|
| 1.  | Seepage (specify location, color, and approx. volume) _____ | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 2.  | Cracks or scarps on crest or slopes _____                   | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 3.  | Sloughing or bulging on slopes _____                        | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 4.  | Major erosion problems _____                                | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 5.  | Surface movements in valley bottom or on hillside _____     | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 6.  | Water impounded against toe _____                           | Yes | <input checked="" type="checkbox"/> | N/A                                     |
| 7.  | Clogging  |     |                                     |   |
|     | a) Spillway channels and pipes _____                        | Yes | <input checked="" type="checkbox"/> | N/A                                     |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
|     | c) Diversion Ditches _____                                  | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
| 8.  | Cracking or crushing of pipes                               |     |                                     |   |
|     | a) Spillway pipes _____                                     | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
|     | b) Decant system _____                                      | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
| 9.  | Trash racks clear and in place _____                        | Yes | No                                  | <input checked="" type="checkbox"/> N/A |
| 10. | Monitoring instrumentation _____                            | Yes | No                                  | <input checked="" type="checkbox"/> N/A |

Comments: **Pond has very small amount of water pooled in bottom (around 6 inches) and appears to be from irrigation runoff.**