



TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.

HEADQUARTERS: P.O. BOX 33695 DENVER, COLORADO 80233-0695 303-452-6111

December 19, 2018

Sent via email: brock.bowles@state.co.us

Mr. Brock Bowles
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
4th Quarter 2018 Impoundment Inspections**

Dear Mr. Bowles:

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 Rule 4.05.9(17), Tri-State is submitting the enclosed quarterly impoundment inspections on behalf of Elk Ridge.

If you have any questions about the enclosed quarterly impoundment reports, please contact Tony Tennyson at (970) 825-1232 at your convenience.

Sincerely,

Dan Casiraro
Senior Manager
Environmental Services

DJC:TT:der

Enclosures

cc: Frank Ferris (via email)
Chris Gilbreath (via email)
Tony Tennyson (via email)
Jason Storey (via email)
G474-11.3(21)b-9

2018 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon 2 Mine**
 Pond Name: **Pond 009**
 NPDES Permit & Outfall #: **CO-0000213**
 Date Inspected: **1-October-2018**
 Location Description: **2 miles NW of Nucla**

Owner's Rep.: **Frank Ferris, Mine Manager**
 Pond Type: **Partly Incised**
 CDRM & S #: **C-1981-008**
 Date Last Inspected: **25-October-2017**
 Legal Location: **Sec 36 of T47N R16W**
 Inspector's Name: **Frank Ferris**

Pond Capacity Data

As Built Pond Embankment elev.: **5649.25** As Built Pond Bottom elev.: **5639.7**
 As Built Pond Emergency Spillway elev.: **NA** As Built Pond Primary Spillway elev.: **5647.2**
 As Built Pond Capacity (pond bottom to primary spillway) per As Built **4.7 ac-ft**
 Existing Pond Capacity (pond bottom to primary spillway): As Built Volume - SV = **4.67 ac-ft**
 Sediment Volume (SV) unchanged: length **90 ft** X width **50 ft** X depth **0.3 ft** = **.03 ac-ft**
 Surface Water elev. **dry** - As Built Pond Bottom elev. **5639.7** = Water Depth **dry**
 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 below primary spillway **4.67 ac-ft** [As Built Pond Capacity - WV - SV]
 Inflow volume from 10-yr 24-hr storm runoff event **1.65 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: **Minor sediment accumulation (90 ft L, 50 ft W, & 0.3 ft deep) = 0.03 ac-ft, unchanged since 2015**

2018 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon 2 Mine**
 Pond Name: **Pond 012**
 NPDES Permit & Outfall #: **CO-0000213**
 Date Inspected: **12-December-2018**
 Location Description: **2 miles NW of Nucla**

Owner's Rep.: **Frank Ferris, Mine Manager**
 Pond Type: **Partly Incised**
 CDRM & S #: **C-1981-008**
 Date Last Inspected: **25-October-2017**
 Legal Location: **Sec 36 of T47N R16W**
 Inspector's Name: **Frank Ferris**

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 = **4.72 ac-ft**
 Sediment Volume (SV) unchanged: **3 areas = ~0.18 ac-ft**
 Surface Water elev. **5599.7** - As Built Pond Bottom elev. **5596.5** = Water Depth **3.2 ft**
 Water Volume (WV) in Pond **0.68 ac-ft** (using as built capacity table & surface water elevation then subtracting sediment volume under water level)
 Pond Capacity Available below primary spillway **4.04 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

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|-----|---|-----|-------------------------------------|-------------------------------------|
| 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 _____ | Yes | <input checked="" type="checkbox"/> | No |
| 10. | Monitoring instrumentation _____ | Yes | No | <input checked="" type="checkbox"/> |

Comments: **Sediment accumulation in 3 areas = 0.18 ac-ft. No significant sediment change since 2015**

2018 ANNUAL IMPOUNDMENT INSPECTION

Mine: **New Horizon 2 Mine**

Owner's Rep.: **Frank Ferris, Mine Manager**

Pond Name: **Pond 013**

Pond Type: **Partly Incised**

NPDES Permit & Outfall #: **CO-0000213**

CDRM & S #: **C-1981-008**

Date Inspected: **12-December-2018**

Date Last Examined: **25-October-2017**

Location Description: **2 miles West of Nucla**

Legal Location: **Sec 36 of T47N R16W**

Inspector's Name: **Frank Ferris**

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**

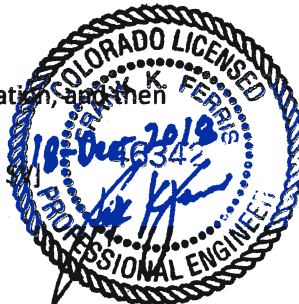
Sediment Volume (SV) at Inspection: **no change since as-built**

Surface Water elev. **5552.4** As Built Pond Bottom elev. **5548.0** = Water Depth **4.4 feet**

Water Volume (WV) in Pond **2.87 ac-ft** (using as built capacity table & surface water elevation, and then subtracting sediment volume under water level)

Pond Capacity Available below primary spillway **3.27 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

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|-----|---|---|--|-----|
| 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 |
| | Flume in place & functioning | | | |

Comments: **Revised data from as-built**