

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk

NPDES ID. No.: Pond #1

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This pond is located West of the industrial building and serves as a mine water settling and water storage pond.

EMBANKMENT

- | | | | | |
|---|-----------|-----------------|-----|-------------|
| 1. Adequacy of the vegetative cover: | Excellent | <u>Moderate</u> | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes | _____ | No | <u>X</u> |
| At the principal spillway inlet? | Yes | _____ | No | <u>X</u> |
| 4. Erosion of the downstream toe of the embankment? | Yes | _____ | No | <u>X</u> |

Cause of erosion can be attributed to: _____

- | | | | | |
|--|-----|-------|----|----------|
| 5. Is seepage occurring through the dam? | Yes | _____ | No | <u>X</u> |
|--|-----|-------|----|----------|

Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

- | | | | | |
|--|-----|----------|----|----------|
| 1. Is the principal spillway system in working order? | Yes | <u>X</u> | No | _____ |
| 2. Is the inlet free of debris and restrictive material? | Yes | <u>X</u> | No | _____ |
| 3. Is the discharge outlet free of restrictive material? | Yes | <u>X</u> | No | _____ |
| 4. Is erosion occurring at the discharge outlet? | Yes | _____ | No | <u>X</u> |

Evaluate the severity: Extensive Moderate Just Starting None

EMERGENCY SPILLWAY

1. Does it appear that the emergency spillway has discharged water since the last inspection?

YES _____ NO X _____

2. Is erosion occurring at any section of the emergency spillway?

YES _____ NO X _____

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?

YES _____ NO X _____

Explain: No sediment in pond

OTHER OBSERVATIONS

Pond liner is in good working condition at time of inspection. Pond was holding water at time of

Inspection. Mine dewatering in the Bates Portal is currently underway so the water level is rising

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk

NPDES ID. No.: Pond #4

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This sediment control pond lies west of the Development Waste Pile. The majority of run-off from this waste pile flows to this pond. It has never received sufficient inflow to discharge.

EMBANKMENT

- | | | | | |
|---|------------------|----------|----------|-------------|
| 1. Adequacy of the vegetative cover: | <u>Excellent</u> | Moderate | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes _____ | | No _____ | X _____ |
| At the principal spillway inlet? | Yes _____ | | No _____ | X _____ |
| 4. Erosion of the downstream toe of the embankment? | Yes _____ | | No _____ | X _____ |

Cause of erosion can be attributed to: _____

5. Is seepage occurring through the dam? Yes _____ No _____ X _____

Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

- | | | |
|--|-------------------|------------------|
| 1. Is the principal spillway system in working order? | Yes _____ X _____ | No _____ |
| 2. Is the inlet free of debris and restrictive material? | Yes _____ X _____ | No _____ |
| 3. Is the discharge outlet free of restrictive material? | Yes _____ X _____ | No _____ |
| 4. Is erosion occurring at the discharge outlet? | Yes _____ | No _____ X _____ |

Evaluate the severity: Extensive Moderate Just Starting None

EMERGENCY SPILLWAY

1. Does it appear that the emergency spillway has discharged water since the last inspection?

YES _____ NO X _____

2. Is erosion occurring at any section of the emergency spillway?

YES _____ NO X _____

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?

YES _____ NO X _____

Explain: Visual observation.

OTHER OBSERVATIONS

Pond is holding very little amount water but is not close to discharging.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk

NPDES ID. No.: Pond #7

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This sediment control pond lies east of the preparation plant and pond #6. It receives run-off from the majority of the active surface facilities area lying south of State Highway 12.

EMBANKMENT

- | | | | | |
|---|------------------|----------|----------|-------------|
| 1. Adequacy of the vegetative cover: | <u>Excellent</u> | Moderate | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes _____ | | No _____ | X _____ |
| At the principal spillway inlet? | Yes _____ | | No _____ | X _____ |
| 4. Erosion of the downstream toe of the embankment? | Yes _____ | | No _____ | X _____ |

Cause of erosion can be attributed to: _____

5. Is seepage occurring through the dam? Yes _____ No _____ X _____

Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

- | | | |
|--|-------------------|------------------|
| 1. Is the principal spillway system in working order? | Yes _____ X _____ | No _____ |
| 2. Is the inlet free of debris and restrictive material? | Yes _____ X _____ | No _____ |
| 3. Is the discharge outlet free of restrictive material? | Yes _____ X _____ | No _____ |
| 4. Is erosion occurring at the discharge outlet? | Yes _____ | No _____ X _____ |

Evaluate the severity: Extensive Moderate Just Starting None

EMERGENCY SPILLWAY

1. Does it appear that the emergency spillway has discharged water since the last inspection?

YES _____ NO X _____

2. Is erosion occurring at any section of the emergency spillway?

YES _____ NO X _____

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?

YES _____ NO X _____

Explain: Visual observation. Pond cleaned in early 2017.

OTHER OBSERVATIONS

Pond is holding some water, not near the decant level. The pond has about 6 inches of sediment.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk

NPDES ID. No.: Pond #8

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This pond lies north of Highway 12 at the base of the refuse disposal area. The pond receives run-off from the refuse disposal area.

EMBANKMENT

- | | | | | |
|---|-----------|-----------------|-----|-------------|
| 1. Adequacy of the vegetative cover: | Excellent | <u>Moderate</u> | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes | _____ | No | <u>X</u> |
| At the principal spillway inlet? | Yes | _____ | No | <u>X</u> |
| 4. Erosion of the downstream toe of the embankment? | Yes | _____ | No | <u>X</u> |

Cause of erosion can be attributed to: _____

5. Is seepage occurring through the dam? Yes _____ No X

Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

- | | | | | |
|--|-----|----------|----|----------|
| 1. Is the principal spillway system in working order? | Yes | <u>X</u> | No | _____ |
| 2. Is the inlet free of debris and restrictive material? | Yes | <u>X</u> | No | _____ |
| 3. Is the discharge outlet free of restrictive material? | Yes | <u>X</u> | No | _____ |
| 4. Is erosion occurring at the discharge outlet? | Yes | _____ | No | <u>X</u> |

Evaluate the severity: Extensive Moderate Just Starting None

EMERGENCY SPILLWAY

1. Does it appear that the emergency spillway has discharged water since the last inspection?

YES _____ NO X _____

2. Is erosion occurring at any section of the emergency spillway?

YES _____ NO X _____

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?

YES _____ NO X _____

Explain: Visual observation. Sediment cleaned out in May 2018

OTHER OBSERVATIONS

Pond is holding water, not near the decant level. No new sediment has been deposited.

There is very little sediment in the pond.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk Pond 6

NPDES ID. No.: None

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

Pond 6 is a non-discharging facility designed to contain plant processing water. The plant has been idle since 1996 and the pond is now used to dewater other ponds prior to clean-out

EMBANKMENT

- | | | | | |
|---|-----------|-----------------|-----|-------------|
| 1. Adequacy of the vegetative cover: | Excellent | <u>Moderate</u> | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes | | No | <u>X</u> |
| At the principal spillway inlet? | Yes | | No | <u>X</u> |
| 4. Erosion of the downstream toe of the embankment? | Yes | | No | <u>X</u> |
| Cause of erosion can be attributed to: _____ | | | | |
| _____ | | | | |
| 5. Is seepage occurring through the dam? | Yes | | No | <u>X</u> |
| Could this seepage cause potential instability? _____ | | | | |
| _____ | | | | |

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?
- YES _____ NO X _____

Explain: No design capacity.

OTHER OBSERVATIONS

Pond is holding water, not close to full.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk WP Containment #1

NPDES ID. No.: None

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This containment basin is a non-discharging facility designed to contain run-off from the West Portal Warehouse area.

EMBANKMENT

- | | Excellent | Moderate | Few | Poor |
|---|-----------|----------|----------|---------|
| 1. Adequacy of the vegetative cover: | Extensive | Some | Few | None |
| 2. Erosion forming Gullies: | | | | |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes _____ | | No _____ | X _____ |
| At the principal spillway inlet? | Yes _____ | | No _____ | X _____ |
| 4. Erosion of the downstream toe of the embankment? | Yes _____ | | No _____ | X _____ |
| Cause of erosion can be attributed to: _____ | | | | |
| _____ | | | | |
| 5. Is seepage occurring through the dam? | Yes _____ | | No _____ | X _____ |
| Could this seepage cause potential instability? _____ | | | | |

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed? YES _____ NO X _____

Explain: Visual observation.

OTHER OBSERVATIONS

Containment area has little water.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk WP Containment #2

NPDES ID. No.: None

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This containment basin is a non-discharging facility designed to contain run-off from the West Portal airshaft and manway areas.

EMBANKMENT

- | | Excellent | Moderate | Few | Poor |
|---|-----------|----------|----------|---------|
| 1. Adequacy of the vegetative cover: | | | | |
| 2. Erosion forming Gullies: | Extensive | Some | Few | None |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes _____ | | No _____ | X _____ |
| At the principal spillway inlet? | Yes _____ | | No _____ | X _____ |
| 4. Erosion of the downstream toe of the embankment? | Yes _____ | | No _____ | X _____ |
| Cause of erosion can be attributed to: _____ | | | | |
| _____ | | | | |
| 5. Is seepage occurring through the dam? | Yes _____ | | No _____ | X _____ |
| Could this seepage cause potential instability? _____ | | | | |

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?
- | YES | NO | X |
|-----|----|---|
| | | |

Explain: Visual observation.

OTHER OBSERVATIONS

Containment is empty.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk Containment #3

NPDES ID. No.: None

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This partially incised containment basin is a non-discharging facility designed to contain run-off from the area east of the RDA belt conveyor and south of Highway 12.

EMBANKMENT

- | | | | | |
|---|-----------|-----------------|-----|-------------|
| 1. Adequacy of the vegetative cover: | Excellent | <u>Moderate</u> | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes | | No | <u>X</u> |
| At the principal spillway inlet? | Yes | | No | <u>X</u> |
| 4. Erosion of the downstream toe of the embankment? | Yes | | No | <u>X</u> |
| Cause of erosion can be attributed to: _____ | | | | |
| _____ | | | | |
| 5. Is seepage occurring through the dam? | Yes | | No | <u>X</u> |
| Could this seepage cause potential instability? _____ | | | | |
| _____ | | | | |

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?
- YES _____ NO X

Explain: Visual observation.

OTHER OBSERVATIONS

Containment Area is dry.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk Containment #4

NPDES ID. No.: None

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This partially incised containment basin is a non-discharging facility designed to contain run-off from the area west of the RDA belt conveyor and south of Highway 12.

EMBANKMENT

- | | | | | |
|---|-----------|-----------------|-----|-------------|
| 1. Adequacy of the vegetative cover: | Excellent | <u>Moderate</u> | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes | | No | X |
| At the principal spillway inlet? | Yes | | No | X |
| 4. Erosion of the downstream toe of the embankment? | Yes | | No | X |
| Cause of erosion can be attributed to: _____ | | | | |
| _____ | | | | |
| 5. Is seepage occurring through the dam? | Yes | | No | X |
| Could this seepage cause potential instability? <u>No embankment, this is an incised containment basin.</u> | | | | |

SEDMIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?
- YES _____ NO X

Explain: Visual observation.

OTHER OBSERVATIONS

Containment Area is dry.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: New Elk Containment #5

NPDES ID. No.: None

Inspection Period: First Quarter 2021

Inspection Date: 3/17/2021

General Description or Reference to Site Plan:

This partially incised containment basin is a non-discharging facility designed to contain run-off from the RDA belt conveyor area north of Highway 12.

EMBANKMENT

- | | | | | |
|---|------------------|----------|----------|-------------|
| 1. Adequacy of the vegetative cover: | <u>Excellent</u> | Moderate | Few | Poor |
| 2. Erosion forming Gullies: | Extensive | Some | Few | <u>None</u> |
| 3. Is wave action causing erosion: | | | | |
| On the upstream embankment? | Yes _____ | | No _____ | X _____ |
| At the principal spillway inlet? | Yes _____ | | No _____ | X _____ |
| 4. Erosion of the downstream toe of the embankment? | Yes _____ | | No _____ | X _____ |
| Cause of erosion can be attributed to: _____ | | | | |
| _____ | | | | |
| 5. Is seepage occurring through the dam? | Yes _____ | | No _____ | X _____ |
| Could this seepage cause potential instability? <u>No embankment, this is an incised containment basin.</u> | | | | |

SEDIMENT STORAGE CAPACITY

1. Has the design storage capacity of the reservoir been surpassed?
YES _____ NO X _____

Explain: Visual observation.

OTHER OBSERVATIONS

Containment Area is empty. Sediment was cleaned in quarter 2 of 2020.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT
New Elk Mine- March 17, 2021



Pond 1



Pond 4



Pond 6



Pond 7



Pond 8



Containment Area #1



Containment Area #2



Containment Area #3



Containment Area #4



Containment Area #5

Certification

This inspection was conducted by Vince Massarotti, a qualified professional and MSHA certified inspector of earth and rock-fill embankments, waste banks and impoundments, under the direction of Mr. Randal S. Simpson, a registered professional engineer licensed in the State of Colorado.

This is to certify, to the best of my knowledge and belief, that maintenance, since the previous certification and as determined during this inspection and discussions with mine personnel, is in accordance with designs as approved by the Division of Reclamation, Mining and Safety.

Vince Massarotti
Inspector

3-24-2021
Date



Randal S. Simpson
Professional Engineer

03-24-2021
Date

Inspections completed in compliance with Rule 4.09.1(11)(b) must be submitted to the Division within two weeks of completion.