

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito
NPDES ID. No.: Pond #5
Inspection Period: Second Quarter 2017
Inspection Date: 6/16/17

General Description or Reference to Site Plan:

This pond is located West of the area of mining scheduled for 2001-02. The pond is partially incised into bedrock and the embankment keyed into bedrock. Side slopes are less than 2H:1V. The primary discharges south into Cow Canyon drainage.

EMBANKMENT

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

PRINCIPAL SPILLWAY

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

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

Yes _____ No ✓

Describe extent: _____

SEDIMENT STORAGE CAPACITY

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

Yes _____ No ?

Explain: _____

Pond 5 should be surveyed to determine storage capacity.

OTHER OBSERVATIONS

Pond 5 was constructed prior to mine closure and final reclamation. Only limited disturbance occurred within the pond 5 drainage basin. Access is limited for equipment needed for sediment removal and disposal, and may require a permit revision.

Ronald L. Hays

MSHA Qualified Impoundment Inspector

6/16/2017

Date

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito
NPDES ID. No.: Pond #6
Inspection Period: Second Quarter 2017
Inspection Date: 6/16/17

General Description or Reference to Site Plan:

This pond is located South of the area of mining scheduled for 2001-02. The pond is partially incised into bedrock and the embankment keyed into bedrock. Side slopes are less than 2H:1V. The primary discharges south into Jeff Canyon drainage.

EMBANKMENT

- 1). Adequacy of the vegetative cover: Excellent Moderate Few Poor
- 2). Erosion forming Gullies: Extensive Some Few None
- 3). Is wave action causing erosion:
 On the Upstream embankment? Yes _____ No ✓
 At the principal spillway inlet? Yes _____ No ✓
- 4). Erosion of the downstream toe of the embankment? Yes _____ No ✓
 Cause of erosion can be attributed to: _____

- 5). Is seepage occurring through the dam? Yes _____ No ✓
 Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

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

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

Yes _____ No ☒

Describe extent: _____

SEDIMENT STORAGE CAPACITY

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

Yes _____ No ☒

Explain: _____

Pond was cleaned out prior to recent inflows.

OTHER OBSERVATIONS

Pond was nearly full of water but several
inches below lowest weep-hole

Ronald L. Thayer

MSHA Qualified Impoundment Inspector

6/16/2017

Date

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito
NPDES ID. No.: Pond #7
Inspection Period: Second Quarter 2017
Inspection Date: 6/16/17

General Description or Reference to Site Plan:

This pond is located south of the area of mining scheduled for 2001-02. The pond is partially incised into bedrock and the embankment keyed into bedrock. Side slopes are less than 2H:1V. The primary discharges south into Jeff Canyon drainage.

EMBANKMENT

- 1). Adequacy of the vegetative cover: Excellent Moderate Few Poor
- 2). Erosion forming Gullies: Extensive Some Few None
- 3). Is wave action causing erosion:
 On the Upstream embankment? Yes _____ No ✓
 At the principal spillway inlet? Yes _____ No ✓
- 4). Erosion of the downstream toe of the embankment? Yes _____ No ✓
 Cause of erosion can be attributed to: _____

- 5). Is seepage occurring through the dam? Yes _____ No ✓
 Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

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

2). Is erosion occurring at any section of the emergency spillway?
Yes _____ No ✓

Describe extent: _____

SEDIMENT STORAGE CAPACITY

1). Has the design storage capacity of the reservoir been surpassed?
Yes _____ No ✓

Explain: Based on prior observations prior to
pond filling with water from recent precipitation.

OTHER OBSERVATIONS

Pond is nearly full but not discharging
at time of inspection.

Ronald J. Thompson
MSHA Qualified Impoundment Inspector

6/16/2017
Date

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito
NPDES ID. No.: Pond #8
Inspection Period: Second Quarter 2017
Inspection Date: 6/16/17

General Description or Reference to Site Plan:

This pond is located north of the area of mining scheduled for 2001-02. The pond is partially incised into bedrock and the embankment keyed into bedrock. Side slopes are less than 2H:1V. The primary discharges north into a small drainage.

EMBANKMENT

- 1). Adequacy of the vegetative cover: Excellent Moderate Few Poor
- 2). Erosion forming Gullies: Extensive Some Few None
- 3). Is wave action causing erosion:
 On the Upstream embankment? Yes _____ No ✓
 At the principal spillway inlet? Yes _____ No ✓
- 4). Erosion of the downstream toe of the embankment? Yes _____ No ✓
 Cause of erosion can be attributed to: _____

- 5). Is seepage occurring through the dam? Yes _____ No ✓
 Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

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

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

Yes _____ No ✓

Describe extent: _____

SEDIMENT STORAGE CAPACITY

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

Yes _____ No ✓

Explain: Based on past surveys and visual
observations before pond filled with water.

OTHER OBSERVATIONS

Pond was full but not discharging at
time of inspection. Minor erosion in
embankment outslope may require
future maintenance and should be
watched.

Ronald H. Thompson
MSHA Qualified Impoundment Inspector

6/16/2017
Date

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito
NPDES ID. No.: Pond #9A (South)
Inspection Period: Second Quarter 2017
Inspection Date: 6/16/17

General Description or Reference to Site Plan:

This pond is located south-east of the area of mining scheduled for 2001-02. The pond is partially incised into bedrock and the embankment keyed into bedrock. Side slopes are less than 2H:1V. The primary spillway discharges south into Jeff Canyon.

EMBANKMENT

- 1). Adequacy of the vegetative cover: Excellent Moderate Few Poor
- 2). Erosion forming Gullies: Extensive Some Few None
- 3). Is wave action causing erosion:
 On the Upstream embankment? Yes _____ No ✓
 At the principal spillway inlet? Yes _____ No _____
- 4). Erosion of the downstream toe of the embankment? Yes _____ No ✓
 Cause of erosion can be attributed to: _____

- 5). Is seepage occurring through the dam? Yes _____ No ✓
 Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

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

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

Yes _____ No ☒

Describe extent: _____

SEDIMENT STORAGE CAPACITY

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

Yes _____ No ☒

Explain: _____

Based on recent observations prior to recent inflows.

OTHER OBSERVATIONS

Pond was nearly full but not discharging
at time of inspection. Embankment was in
good condition, fairly well vegetated with
no seepage observed

Ronald M. Thompson

MSHA Qualified Impoundment Inspector

6/16/2017

Date

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito
NPDES ID. No.: Pond #9 (North)
Inspection Period: Second Quarter 2017
Inspection Date: 6/16/2017

General Description or Reference to Site Plan:

This pond is located north-east of the area of mining scheduled for 2001-02. The pond is partially incised into bedrock and the embankment keyed into bedrock. Side slopes are less than 2H:1V. The primary spillway discharges north into a small unnamed drainage.

EMBANKMENT

- 1). Adequacy of the vegetative cover: Excellent Moderate Few Poor
- 2). Erosion forming Gullies: Extensive Some Few None
- 3). Is wave action causing erosion:
 On the Upstream embankment? Yes _____ No ✓
 At the principal spillway inlet? Yes _____ No ✓
- 4). Erosion of the downstream toe of the embankment? Yes _____ No ✓
 Cause of erosion can be attributed to: _____

- 5). Is seepage occurring through the dam? Yes _____ No ✓
 Could this seepage cause potential instability? _____

PRINCIPAL SPILLWAY

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

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

Yes _____ No ✓Describe extent: _____
_____**SEDIMENT STORAGE CAPACITY**

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

Yes _____ No ✓

Explain: _____

Based on previous observations prior to recent inflows.**OTHER OBSERVATIONS**Pond has nearly filled with recent precipitation
but was not to point of discharging. No
evidence of recent discharge flows at
the primary monitoring flume

_____Ronald L. Thayer
MSHA Qualified Impoundment InspectorDate 6/16/2017