QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #5

Inspection Period: First Quarter 2020

Inspection Date: 3/5/2020

General Description or Reference to Site Plan:

This pond is located West of the area of mining scheduled for 2001-2002. 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 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? _____

PRINICIPAL 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]

NPDES ID. No.: 5

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

SEDMIMENT STORAGE CAPACITY

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

   YES_____ NO X

   Explain: Sediment in pond does not appear to be over capacity by visual inspection.

OTHER OBSERVATIONS

Pond is empty.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #6

Inspection Period: First Quarter 2020

Inspection Date: 3/5/2020

General Description or Reference to Site Plan:

This pond is located south of the area of mining scheduled for 2001-2002. 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__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? _____

   _____

PRINICIPAL 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]

NPDES ID. No.: 6

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

SEDMIMENT STORAGE CAPACITY

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

   YES_____ NO X

   Explain: Visual observation

OTHER OBSERVATIONS

Pond is holding water. Water level is well below the decant.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #7

Inspection Period: First Quarter 2020

Inspection Date: 3/5/2020

General Description or Reference to Site Plan:

This pond is located south of the area of mining scheduled for 2001-2002. 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	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? _____

_____

PRINICIPAL 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]

NPDES ID. No.: 7

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

SEDMIMENT STORAGE CAPACITY

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

   YES_____ NO X

   Explain: Visual observation

OTHER OBSERVATIONS

Pond empty at time of inspection.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #8

Inspection Period: First Quarter 2020

Inspection Date: 3/5/2020

General Description or Reference to Site Plan:

This pond is located south of the area of mining scheduled for 2001-2002. 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	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?				

PRINICIPAL 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]

NPDES ID. No.: 8

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

SEDMIMENT STORAGE CAPACITY

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

   YES_____ NO X

   Explain: Visual observation

OTHER OBSERVATIONS

Pond empty at time of inspection.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #9A (South)

Inspection Period: First Quarter 2020

Inspection Date: 3/5/2020

General Description or Reference to Site Plan:

This pond is located south of the area of mining scheduled for 2001-2002. 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.

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__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? _____

   _____

PRINICIPAL 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]

NPDES ID. No.: 9A

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__

SEDMIMENT STORAGE CAPACITY

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

   YES_____ NO__X__

   Explain: Visual observation

OTHER OBSERVATIONS

Pond was not holding water at time of inspection.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #9 (North)

Inspection Period: First Quarter 2020

Inspection Date: 3/5/2020

General Description or Reference to Site Plan:

This pond is located south of the area of mining scheduled for 2001-2002. 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 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__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? _____

   _____

PRINICIPAL 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]

NPDES ID. No.: 9

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__

SEDMIMENT STORAGE CAPACITY

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

   YES_____ NO__X__

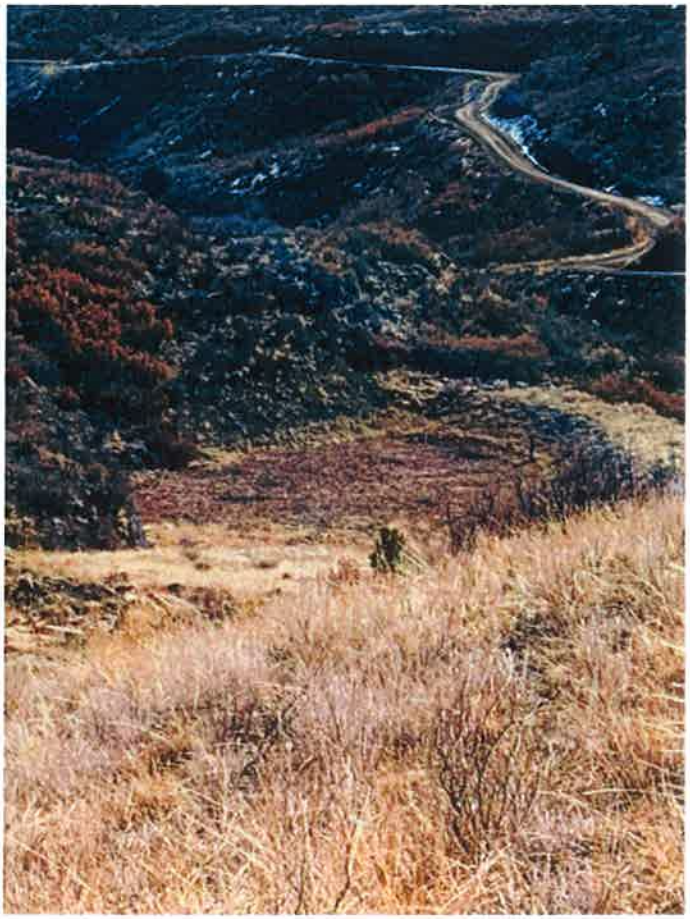
   Explain: Visual observation

OTHER OBSERVATIONS

Pond empty at time of inspection.

QUARTERLY SEDIMENTATION POND INSPECTION REPORT
Lorencito Canyon Mine- March 5, 2020

Pond 6



Pond 7

Pond 8

Pond 9

Pond 9a

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. Charles McGlothlin, 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

3-11-2020
Date

Charles W. McGlothin
Professional Engineer

3/23/20
Date

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