

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #5

Inspection Period: Fourth Quarter 2019

Inspection Date: 11/26/2019

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

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 ☒

SEDIMENT STORAGE CAPACITY

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

YES ☐ NO ☒

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

OTHER OBSERVATIONS

Pond is empty.



MSHA CERTIFIED IMPOUNDMENT INSPECTOR

Date: 11-26-2019

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #6

Inspection Period: Fourth Quarter 2019

Inspection Date: 11/26/2019

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

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 ☒

SEDIMENT STORAGE CAPACITY


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

YES
NO ☒

Explain: Visual observation

OTHER OBSERVATIONS

Pond is holding a small amount of water. Water level is well below the decant.



MSHA CERTIFIED IMPOUNDMENT INSPECTOR

Date: 11-26-2019

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #7

Inspection Period: Fourth Quarter 2019

Inspection Date: 11/26/2019

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

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 empty at time of inspection.



MSHA CERTIFIED IMPOUNDMENT INSPECTOR

Date: 11-26-2019

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

NPDES ID. No.: Pond #8

Inspection Period: Fourth Quarter 2019

Inspection Date: 11/26/2019

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

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 empty at time of inspection.

Vincent Massaro

MSHA CERTIFIED IMPOUNDMENT INSPECTOR

Date: 11-26-2019

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

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

Inspection Period: Fourth Quarter 2019

Inspection Date: 11/26/2019

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:	<div>Excellent</div>	Moderate	Few	Poor
2. Erosion forming Gullies:	<div>Extensive</div>	Some	Few	<div>None</div>
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
			<div>None</div>

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 was holding no water at time of inspection.



MSHA CERTIFIED IMPOUNDMENT INSPECTOR

Date: 11-20-2019

QUARTERLY SEDIMENTATION POND INSPECTION REPORT

CDMR Rule 4.05.9(17)

Mine: Lorencito

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

Inspection Period: Fourth Quarter 2019

Inspection Date: 11/26/2019

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?				

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 empty at time of inspection.



MSHA CERTIFIED IMPOUNDMENT INSPECTOR

Date: 11-26-2019

QUARTERLY SEDIMENTATION POND INSPECTION REPORT
Lorencito Canyon Mine- November 26, 2019



Pond 6



Pond 8



Pond 9a



Pond 9

