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December 1, 2014

Ref.: 2010-084

Mr. Jonathan Heyl
On-Scene Coordinator
USDA Forest Service, Region 6
1220 Southwest 3rd Avenue
Portland, Oregon 97204

Technical Memorandum
November 2014 Site Inspection Report
Blue Ledge Mine
Rogue River-Siskiyou National Forest

Dear Mr. Heyl:

Engineering/Remediation Resources Group, Inc. (ERRG) is submitting this technical memorandum summarizing the site inspection performed on November 22, 2014 at the Blue Ledge Mine site. ERRG performed the site inspection in accordance with the operations, maintenance, and monitoring (OM&M) requirements for the Blue Ledge Mine site under U.S. Department of Agriculture Forest Service (Forest Service) Contract No. GS-10F-0294R, Delivery Order No. AG-0489-D-10-0126. For a full list of elements inspected, please see the attached site inspection checklist ([Enclosure 1](#)), overall site plan ([Enclosure 2](#)), and photographic log ([Enclosure 3](#)).

Background

In 2010, ERRG was contracted to perform a removal action to remove waste rock from four waste rock piles (WRPs) near the mine adits. The waste rock was relocated to a newly constructed onsite repository. The repository was capped after the waste rock had been removed from the WRPs. Disturbed soil areas within the reclamation areas were revegetated with native species. Nine pH treatment and sediment basins were constructed below the WRPs to capture sediment and to treat mine drainage prior to discharge into Joe Creek. ERRG was contracted to perform OM&M of the repository cap and structures constructed to control erosion and treat mine drainage, as outlined in the Removal Action Work Plan (RAWP)¹. The RAWP specifies that site inspections will be performed after rain events generating greater than 0.5 inches of precipitation, as recorded by nearby representative weather stations, and on a monthly basis when the site is accessible, which is generally between April through October. The site was inspected in November because it was still accessible due to lack of snow, there had been several rain events that were over 0.25 inches but less than the 0.5 inch basis to inspect the site for erosion, and to inspect the condition of the repository surface and grass growth after completion of the leachate evaporation work.

During each site inspection, ERRG reviews the following elements:

¹ ERRG, 2010. "Removal Action Work Plan, Non-Time-Critical Removal Action for Former Blue Ledge Mine Site, Siskiyou County, California."

- Integrity of the reclamation areas
- Areas where erosion or deterioration has occurred since the last site visit
- Condition of the erosion control and sediment control measures
- Integrity of constructed site elements (documented via photographs)
- Condition of reclamation plantings
- Needed maintenance and repairs

Summary of Site Inspection

ERRG inspected all reclamation areas during the November 2014 site inspection. There was approximately 0.24 inch of precipitation in the 24 hours prior to the inspection. The reclamation areas were observed to be intact and in good functioning condition. The BMPs to control erosion were in good condition. No new erosion was observed on the incoming Forest Road 1060 and haul roads. The stockpile areas and WRPs 1, 2, 3, and 4 were observed to have no snow and no new erosion. Repository drain outlets were inspected and were found to not be plugged and the heavy duty galvanized screen on all drain outlets was found to be intact. Water was observed to be discharging from the southernmost repository cap drain outlet. This is consistent with previous observations after rain events. No water was observed from other repository cap drain outlets or the discharge pipe from the underdrain beneath the repository. See photos in [Enclosure 3](#).

The following table shows the pH of the water in the Sediment Treatment Basins. Water was observed in all basins as a result of the recent storm event. Sediment accumulation is minimal in all basins and consists of a coating of fine sediment on the rocks in the basins.

Table 1. pH of Sediment Treatment Basins

WRP-1		WRP-2		WRP-3	
Below 1A (in Joe Creek)	7.7	2A-below	NS	3-below	NS
1A	4.6	2A-above	7.4	3-above	6.8
1B	4.2	2B-below	NS		
1C	4.0	2B-above	6.9		
1D	4.0				
1E	3.9				
1F	3.9				
1F-above	4.7				

NS: Not Sampled

The acid seep previously entering the east side of basin 1F is being captured by the USEPA acid seep collection basin. The pH in the USEPA acid seep basin was not measured. The USEPA acid seep basin overflow spillway is functioning. The USEPA pilot treatment system is disassembled at the time of this inspection.

Reclamation plants and grass were inspected in all areas. Most trees and shrubs show good overall growth since being planted in November 2011. There is an adequate number of surviving plants at all areas. Grasses are established at all reclamation areas.

The surface of the repository had no new erosion. The majority of repository grasses are continuing to show new regrowth after application of leachate for evaporation and being dormant for the summer. The grass in a roughly 20 foot diameter area around the former leachate evaporation sprinkler heads as located by rebar stakes in the photos shows little to no grass regrowth at this point. The depth to water in the repository sump was measured at 268.5 inches below the rim, which is 3.5 inches higher than the measurement from the October 2014 Site Inspection. The total depth to the bottom of the sump is 326 inches. Therefore there is 57.5 inches of water in the sump. The sump is 60 inches total depth. The pH of the water in the sump was measured at 6.0. This is the same as the pH measurement recorded during the October 2014 Inspection.

Site access gates and locks are in good condition, and no evidence of unauthorized access was observed during this site inspection. For a full list of elements inspected, please see the attached site inspection checklist ([Enclosure 1](#)), and photographic log ([Enclosure 3](#)).

If you have any questions please contact me at brian.wetzsteon@errg.com.

Sincerely,

A handwritten signature in black ink that reads "Brian Wetzsteon".

Brian Wetzsteon
Project Manager

BW

Encl.: [Enclosure 1](#) – November 2014 Blue Ledge Mine Inspection Checklist
[Enclosure 2](#) – Overall Site Plan
[Enclosure 3](#) – November 2014 Site Inspection Photographic Log

cc: ERRG Project File

Enclosure 1. November 2014 Blue Ledge Mine Inspection Checklist

**BLUE LEDGE MINE
INSPECTION CHECKLIST**

MONTHLY INSPECTION
Month: November, Year: 2014

BLUE LEDGE MINE MONTHLY INSPECTION CHECKLIST

Month: November Year: 2014

**Blue Ledge Mine Removal Project
Siskiyou County, California
Operation, Maintenance, and Monitoring Period**

NOTE: All photographs associated with this checklist were taken on November 22, 2014; Refer to Enclosures 2 and 3 in the inspection letter.

Repository

1. Inspect the silt fence, wattles, and other BMPs at the Repository and Repository Stockpile Area (see Enclosure 2). Do BMPs require repair or replacement? Yes* No

**If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: All SWPPP controls are in place and functioning. No evidence of any erosion.

2. Inspect repository cover soil. Is there evidence of excessive or preferential erosion (see Enclosure 2)? Yes* No

**If yes, notify project manager and place temporary BMPs to minimize further erosion until a solution can be found. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Straw wattles and bark are functioning properly.

3. Inspect the repository access road (see Enclosure 2). Are there any areas of excessive erosion or other areas where the road requires repair? Yes* No

**If yes, notify project manager of potential need for repair.*

Comments: _____

4. Inspect repository leachate sump tank and cap (see Enclosure 2). Is the sump and cap in good condition and locked? Is liquid present in the sump? Yes No*

**If no, take several pictures of damage and make repairs to fix or secure prior to leaving site (if possible). If liquid is in the sump, measure the depth (requires a minimum 30-foot tape measure). Collection of a liquid sample may be required for profiling and disposal.*

Comments: Leachate sump cap is locked. pH of the water in the sump was 6.0 and depth to water is 268.5 inches below the rim.

5. Inspect anchor trench drainage pipes and the repository underdrain where they daylight (see Enclosure 2). Is the screening damaged or is there evidence of the pipes being blocked? Yes* No

**If yes, unblock pipe and/or repair screen.*

Comments: The anchor trench drain pipe screens are intact. Water is flowing from the south cap drain. No water is flowing from the other cap drains. The underdrain is not blocked, screen is intact, and no water is flowing from the pipe.

6. Inspect the repository stormwater drain ditch (see Enclosure 2). Is the stormwater drain ditch damaged or is there evidence of any portion of the stormwater drain ditch being blocked? Yes* No

**If yes, unblock ditch.*

Comments: _____

7. Inspect plants in the repository and repository stockpile area (see Enclosure 2). Is there evidence that animals have browsed on the plants? Yes* No

**If yes, reapply Big Game Repellant to prevent further browsing. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: Shrubs appear healthy but are small as a result of browsing by deer.

8. Have plants died in the Repository and Repository Stockpile Areas (see Enclosure 2)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at the repository and repository stockpile areas are shown in the RACR.*

Comments: _____

9. Inspect Flexterra and grass seeded areas on the repository (see Enclosure 2). Are any repairs needed or invasive species present? Yes* No

**If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: The grass is beginning to turn green in most areas. There is rust colored staining on the soil near some of the leachate evaporation sprinkler heads. The grass is not green near the sprinkler heads.

North Storage Area

1. Inspect road leading to the Repository and North Storage Area (see Enclosure 2). Is there evidence of excessive erosion? Are the water bars damaged? Yes* No

**If yes, apply temporary BMPs and make recommendations for repair. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

2. Inspect the silt fence, wattles, and other BMPs at the North Storage Area (see Enclosure 2). Do BMPs require repair or replacement? Yes* No

**If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

3. Inspect Flexterra and grass seeded areas on the North Storage Area (see Enclosure 2). Are any repairs needed or any invasive species present? Yes* No

**If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: _____

4. Inspect plants in the North Storage Area (see Enclosure 2). Have animals browsed on the plants? Yes* No

**If yes, reapply Big Game Repellant to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

5. Have any plants died in the North Storage Area (see Enclosure 2)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at the North Storage Area is shown on Enclosure 2.*

Comments: Plants look healthy.

South Storage Area

1. Inspect the silt fence, wattles, and other BMPs at the South Storage Area (see Enclosure 2). Do BMPs require repair or replacement? Yes* No

**If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

2. Inspect plants in the South Storage Area. Have animals browsed on plants? Yes* No

**If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

3. Have any plants died in the South Storage Area (see Figure P-5)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at the South Storage Area is shown on Figure P-5.*

Comments: _____

4. Inspect Flexterra and grass seeded areas along Joe Creek (see Figure P-5). Are any repairs needed or any invasive species present? Yes* No

**If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: _____

Rock Stockpile Area

- 1. Inspect the silt fence, wattles, and other BMPs at the Rock Stockpile Area (see Figure P-6). Do BMPs require repair or replacement? Yes* No

**If yes, repair or replace damaged components and make recommendations to reduce future damage. A listing of approved BMPs for implementation is shown in Appendix H of the SWPPP.*

Comments: There is no existing silt fence. The ground is vegetated and appears to be stable.

- 2. Inspect plants in the Rock Stockpile Area (see Figure P-6). Have animals browsed on the plants? Yes* No

**If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: Plants look good.

- 3. Have any plants died in the Rock Stockpile Area (see Figure P-6)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at the south storage area is shown on Figure P-6.*

Comments: _____

- 4. Inspect Flexterra and grass seeded areas (see Figure P-6). Are any repairs needed or any invasive species present? Yes* No

**If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: _____

Forest Service Roads and Haul Roads

- 1. Are there areas of Forest Service Road 1060 that have experienced excessive erosion? Yes* No

**If yes, document road condition with photographs and install temporary BMPs to help minimize further erosion. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

- 2. Are culverts along Forest Service Road 1060 marked and draining properly? Yes No*

**If no, perform necessary maintenance or repair to culvert to return to good working condition.*

Comments: _____

- 3. Inspect haul roads 1, 2, 3, and 4; the miner’s trail parking area; and the decommissioned haul roads 2 and 4 (see Enclosure 2). Are there areas of excessive erosion? Are water bars damaged? Yes* No

**If yes, place temporary BMPs and repair damaged water bars. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

4. Inspect BMPs along Haul Roads 1, 2, 3, and 4; the miner's trail parking area; and the decommissioned Haul Roads 2 and 4 (see Enclosure 2). Are BMPs in good condition? Yes No*

**If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

5. Inspect areas of Haul Roads 1, 2, 3, and 4; the miner's trail parking area; and the decommissioned Haul Roads 2 and 4 (see Enclosure 2). Record grass growth progress. Are there bare areas that require reseeding? Yes* No

**If yes, reseed bare areas. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

Waste Rock Pile 1

1. Inspect log wattles, straw wattles, and other BMPs at the reclamation areas on WRP-1 (See Enclosure 2). Are all BMPs in good condition? Yes No*

**If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Straw wattles are in good condition and in place.

2. Inspect Flexterra and grass seeded areas at the reclamation areas on WRP-1 (see Enclosure 2). Are any repairs needed or any invasive species present? Yes* No

**If yes, identify areas for repair or pull weeds and dispose of properly.*

Comments: _____

3. Inspect plants at the reclamation areas on WRP-1 (see Enclosure 2). Have animals browsed on the plants? Yes* No

**If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: The riparian plants (alders) in this area are growing well.

4. Have any plants at the reclamation areas died on WRP-1 (see Enclosure 2)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at WRP-1 is shown on Enclosure 2.*

Comments: The upper tier of the reclamation area is devoid of plants, likely due to seepage of acidic mine drainage from the adjacent bedrock. This area is approximately 20 feet by 30 feet and no plants have survived. The remaining alders are growing very well.

5. Are there areas of excessive erosion on WRP-1 (see Enclosure 2)? Yes* No

**If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

6. Inspect each sediment treatment basin at WRP-1 (see Enclosure 2). For each basin, record the volume of sediment accumulated (as a percentage of capacity), the amount of fouled limestone (in inches), and the pH of water as listed below (if any). Record and photograph any excessive erosion in or around the sediment basin.

Sediment Treatment Basin 1A (closest to Joe Creek):

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 1A: 4.6

pH below basin 1A: 7.7 in Joe Creek

Water depth: overflowing the spillway due to rain event

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1B:

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 1B: 4.2

Water depth: overflowing the spillway

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1C:

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 1C: 4.0

Water depth: overflowing the spillway

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1D:

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 1D: 4.0

Water depth: overflowing the spillway

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1E:

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 1E: 3.9

Water depth: overflowing the spillway

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1F:

Accumulated sediment: <5%

Fouled limestone: not observed

pH in basin 1F: 3.9

pH above basin 1F: 4.7

Water depth: overflowing the spillway

Excessive erosion around the basin? Yes* No

Waste Rock Pile 2

1. Inspect wattles, silt fence, and other BMPs at the reclamation areas on WRP-2 (see Enclosure 2). Are all BMPs in good condition? Yes No*

**If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

2. Inspect plants at the reclamation areas on WRP-2 (see Enclosure 2). Have animals browsed on the plants? Yes* No

**If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

3. Have any plants at the reclamation areas died on WRP-2 (see Enclosure 2)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at WRP-2 is shown on Enclosure 2.*

Comments: _____

4. Are there areas of excessive erosion on WRP-2? Yes* No

**If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

5. Inspect each sediment treatment basin at WRP-2 (see Enclosure 2). For each basin, record the volume of sediment accumulated (as a percentage of capacity), the amount of fouled limestone (in inches), and the pH of the water as listed below (if any). Record and photograph any excessive erosion in or around the sediment basin.

Sediment Treatment Basin 2A:

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 2A: 7.4

pH above basin 2A: Not measured

Water depth: overflowing the spillway due to rain event

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 2B:

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 2B: 6.9

pH above basin 2B: Not measured

Water depth: overflowing the spillway

Excessive erosion around the basin? Yes* No

Waste Rock Pile 3

1. Inspect log wattles, straw wattles, and other BMPs at the reclamation areas on WRP-3 (see Enclosure 2). Are all BMPs in good condition? Yes No*

**If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: Straw wattles are in place.

2. Inspect plants at the reclamation areas on WRP-3 (see Enclosure 2). Have animals browsed on the plants? Yes* No

**If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

3. Have any plants at the reclamation areas died on WRP-3 (see Enclosure 2)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at WRP-3 is shown on Enclosure 2.*

Comments: _____

4. Are there areas of excessive erosion on WRP-3? Yes* No

**If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

5. Inspect the sediment treatment basin at WRP-3 (see Enclosure 2). Record the volume of sediment accumulated (as a percentage of capacity), the amount of fouled limestone (in inches), and the pH of the water as listed below (if any). Record and photograph any excessive erosion in or around the sediment basin.

Sediment Treatment Basin 3:

Accumulated sediment: <1%

Fouled limestone: not observed

pH in basin 3: 6.8

pH below basin 3: not measured. not accessible.

Water depth: overflowing spillway due to rain event

Excessive erosion around the basin? Yes* No

Waste Rock Pile 4

1. Inspect log wattles, straw wattles, and other BMPs at the reclamation areas on WRP-4 (see Enclosure 2). Are all BMPs in good condition? Yes No*

**If no, repair and/or replace BMPs as necessary. A listing of approved BMPs for implementation is shown in Appendix G of the SWPPP.*

Comments: _____

2. Inspect plants at the reclamation areas on WRP-4 (see Enclosure 2). Have animals browsed on the plants? Yes* No

**If yes, reapply Big Game Repellent to prevent further browsing. A listing of grass seeds, fertilizers, animal repellents, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

3. Have any plants at the reclamation areas died on WRP-4 (see Enclosure 2)? Yes* No

**If yes, estimate number of plants and record it in the comments. The total number of plants installed at WRP-4 is shown on Enclosure 2.*

Comments: Plants looks healthy.

4. Are there areas of excessive erosion on WRP-4? Yes* No

**If yes, apply temporary BMPs. A listing of grass seeds, fertilizers, animal repellants, and other reclamation products is shown in Appendix G of the SWPPP.*

Comments: _____

5. Inspect the reinforced slope stability fabric area at WRP-4 (see Enclosure 2). Is the fabric in good condition? Yes No*

**If no, perform maintenance or repair.*

Comments: _____

Additional Notes (Time, temperature, wind direction, evidence of unauthorized access, condition of green gate, locks, and other observations)

11/22/14. Cloudy with rain showers, temperature 40°F.

Jeremy Podvin as told to Brian Wetzsteon
Name of Inspector(s)

Engineering/Remediation Resources Group, Inc. (ERRG)
Company



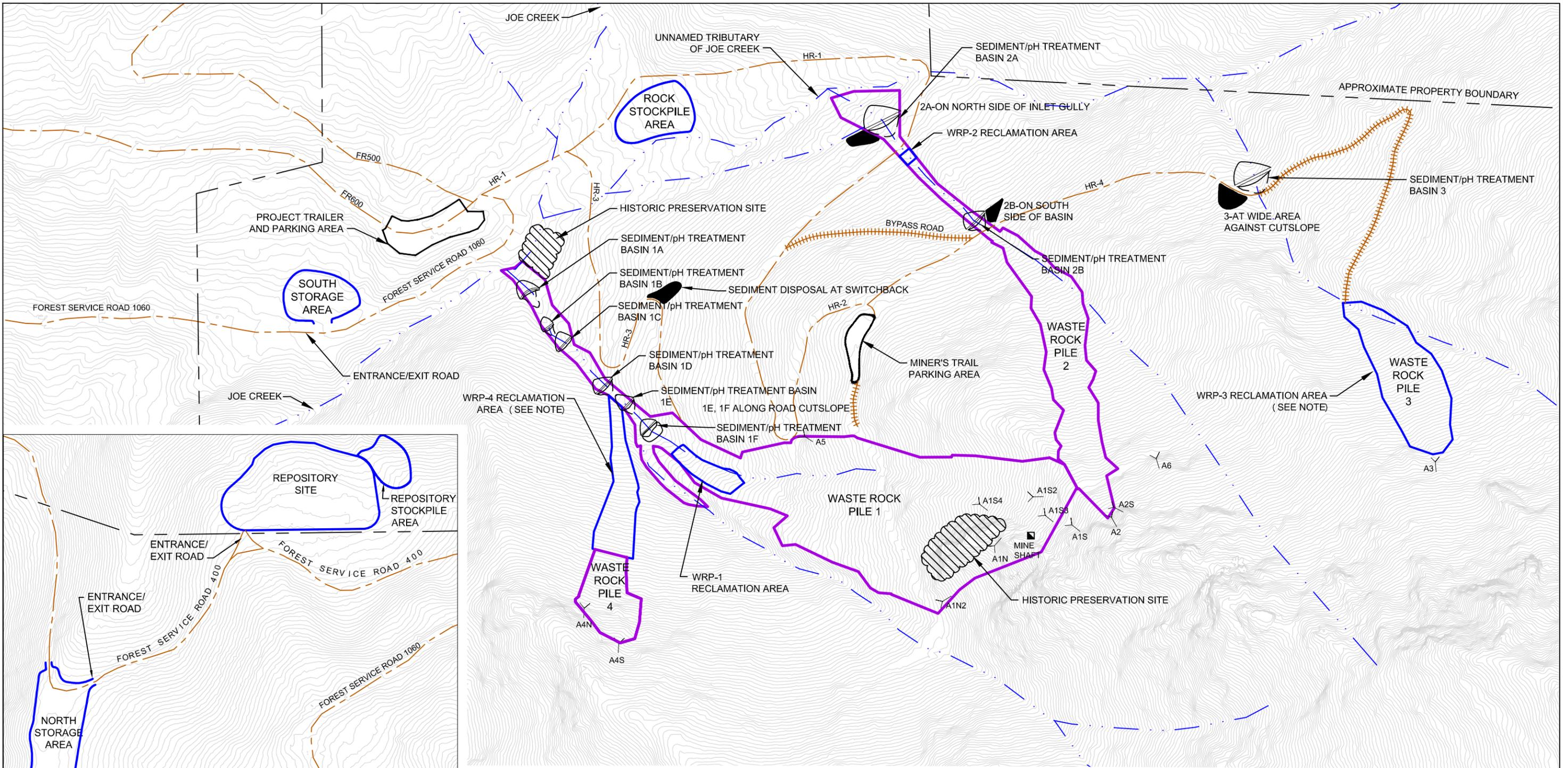
Signature of Inspector

November 22, 2014

Date of Inspection

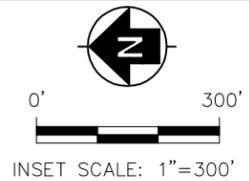
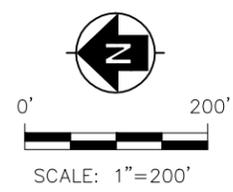
Enclosure 2. Overall Site Plan

FILE NAME: N:\Graphics\2010\2010-084 USFS Blueledge Mine\N_Maps and Drawings\Final Report\Sediment Disposal Locations.dwg LAYOUT NAME: 2 PLOTTED: Wednesday, August 28, 2013 12:35pm



- LEGEND:**
- FOREST SERVICE/HAUL ROAD
 - DECOMMISSIONED HAUL ROAD
 - PROPERTY BOUNDARY
 - RECLAMATION AREA
 - STREAM
 - WASTE ROCK BOUNDARY REMOVAL LIMIT
 - APPROXIMATE LOCATION OF ADIT
 - APPROXIMATE LOCATION OF MINE SHAFT
 - SEDIMENT PLACEMENT AREA

NOTES:
 WRP-3 AND WRP-4 RECLAMATION AREAS ARE ALSO THE WASTE ROCK BOUNDARY REMOVAL LIMITS.
 FR = FOREST SERVICE ROAD
 HR = HAUL ROAD



SOURCE: URS BLUE LEDGE MINE REMOVAL ACTION, DRAWING NO. 101, SHEET 7 OF 60, CAD FILE NO. 101, DATED: 2/2010.

Engineering/Remediation Resources Group, Inc. 616 First Ave. Suite 300 Seattle, Washington 98104 (206) 282-4749	CLIENT: USDA FOREST SERVICE	SEDIMENT DISPOSAL LOCATIONS		
	LOCATION: BLUE LEDGE MINE REMOVAL ACTION	DRAWN BY: RDB 9/26/12	CHECKED BY: JGS 9/27/12	PROJECT NO. 2010-084

Enclosure 3. November 2014 Site Inspection Photographic Log



Photograph 1: Top of repository, facing north.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 2: Repository slope facing north.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 3: Sediment/pH Treatment Basin 1A.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 4: Sediment/pH Treatment Basin 1B.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 5: Sediment/pH Treatment Basin 1C.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 6: Sediment/pH Treatment Basin 1D.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 7: Sediment/pH Treatment Basin 1E.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 8: Sediment/pH Treatment Basin 1F.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 9: Sediment/pH Treatment Basin 2A.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 10: Sediment/pH Treatment Basin 2B.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 11: Sediment/pH Treatment Basin 3.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Annica Nord (ERRG)

Date: November 22, 2014



Photograph 12: WRP-1 Reclamation Area.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 13: WRP-3 reclamation area.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 14: WRP-4 Reclamation Area.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 15: View of southernmost repository cap drain discharging water after rain event.

Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014



Photograph 16: View of grass at leachate evaporation sprinkler head area on repository.

Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Jeremy Podvin (ERRG)

Date: November 22, 2014