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September 27, 2013

Ref.: 2010-084

Mr. Pete Jones
On-Scene Coordinator
USDA Forest Service, Region 6
645 Washington Street
Ashland, Oregon 97520

Technical Memorandum
September 2013 Site Inspection Report
Blue Ledge Mine
Rogue River-Siskiyou National Forest

Dear Mr. Jones:

Engineering/Remediation Resources Group, Inc. (ERRG) is submitting this technical memorandum summarizing the site inspection performed on September 25, 2013 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.

During each site inspection, ERRG reviews the following elements:

- 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)

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

- Condition of reclamation plantings
- Needed maintenance and repairs

Summary of Site Inspection

ERRG inspected all reclamation areas during the September 2013 site inspection. The reclamation areas were observed to be intact and in good functioning condition. The BMPs to control erosion were in good condition. No additional erosion had occurred since the August 2013 inspection in all reclamation areas.

The repository had no additional erosion. No additional erosion was observed on the incoming Forest Road 1060 and haul roads. Overall, the roads were in very good shape. The stockpile areas and WRPs 1, 2, 3, and 4 were observed to have no new erosion. All sediment basins have no accumulated sediment. Repository drain outlets were inspected and were not found to be plugged. No water was observed to be discharging from the drain outlets with the exception of the underdrain under the repository. The screen at the anchor trench drain outlet which was observed to be damaged was repaired during the Stormwater Site Inspection on August 30, 2013 along with two other drain outlets observed at that date to have a hole in the screen. A second layer of galvanized mesh screen was placed over the three drain outlets.

The following table shows the pH of the EPA treatment basin, above basin 1F through 1B and above basin 3. No water was observed in basin 1A, from WRP-2 to basins 2A and 2B, or in basin 3, thus no samples were collected from these locations during this site inspection.

Table 1. pH of Sediment Treatment Basins

WRP-1		WRP-2		WRP-3	
Joe Creek	7.19	2A-below	NS	3-below	NS
1A	NS	2A-above	NS	3-above	6.44
1B	5.34	2B-below	NS		
1C	5.18	2B-above	NS		
1D	4.12				
1E	5.40				
1F	5.31				
1F-above	4.53				

Note:

NS = no sample was collected at that location because there was no evidence of water.

The pH of the water in the WRP-1 drainage entering basin 1F was higher than concentrations measured in September 2012. The limestone in the basins appears to be successful in raising the pH prior to entry into Joe Creek.

The acid seep previously entering the east side of basin 1F is being captured by the USEPA acid seep collection basin. The water seeping from adit A1N2 has been diverted by the USEPA to flow down the face of the WRP-1 bedrock to run to the acid seep collection basin. The pH in the USEPA acid seep basin was measured at 3.49, which is 0.12 lower than the August 2013 measurement. The water in the acid seep collection basin is diverted into piping which runs into the treatment building before discharging above basin 1D. The overflow spillway is currently not functioning as all water entering this basin is being diverted through the treatment system.

Reclamation plants and grass were inspected in all areas. A count of dead plants is no longer required for each area since the completion of the 1 year inspection period. Plants appear to be alive. The grass has turned brown on the repository and the north storage area but appears to be well established. A few plants on the north storage area were brown, however, new growth was also observed on other plants. There is an adequate number of surviving plants at all areas. Grasses are becoming established at all reclamation areas.

The depth to water in the repository sump during the site inspection on September 25, 2013, was measured at 250 inches below the rim which is 1 inch higher than the measurement from the August 2013 Site Inspection. The total depth to the bottom of the sump is 326 inches. Therefore there is 76 inches of water in the sump. pH of the water is 4.52.

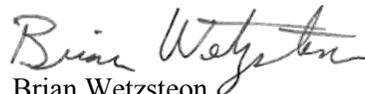
Site access gates and locks are in good condition, and no evidence of unauthorized access was observed during this site inspection. For a full list of elements inspected, please see the attached site inspection checklist ([Enclosure 1](#)), and photographic log ([Enclosure 3](#)).

If you have any questions or need additional information, please do not hesitate to contact Brian Wetzsteon at brian.wetzsteon@errg.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Annica Nord".

Annica Nord, LG
Project Geologist

A handwritten signature in black ink, appearing to read "Brian Wetzsteon".

Brian Wetzsteon
Northwest Construction Manager

AN/bw

Encl.: [Enclosure 1](#) – September 2013 Blue Ledge Mine Inspection Checklist
[Enclosure 2](#) – Overall Site Plan
[Enclosure 3](#) – September 2013 Site Inspection Photographic Log

cc: ERRG Project File

Enclosure 1. September 2013 Blue Ledge Mine Inspection Checklist

**BLUE LEDGE MINE
INSPECTION CHECKLIST**

MONTHLY INSPECTION
Month: September, Year: 2013

BLUE LEDGE MINE MONTHLY INSPECTION CHECKLIST

Month: September Year: 2013

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

NOTE: All photographs associated with this checklist were taken on September 25, 2013; 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: Wattles, Flexterra, and bark are functioning on the repository.

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: Depth to water is 250 inches from the rim, bottom of sump is 326 inches, total water depth 76 inches. pH of the water is 4.52.

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 southernmost anchor trench drain pipe is not blocked but no water is flowing from the drain. The screen has been repaired with a second layer of screen over the pipe. The underdrain is not blocked and a small trickle of water is flowing out.

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: Plants appear healthy and green. Grass is brown as a result of the lack of rain over the summer.

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: The grass appears to be well established. Currently the grass is brown as a result of the lack of rain during the summer.

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 appears to be well established. Currently the grass is brown as a result of the lack of rain over the summer.

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: The water bars are in good condition.

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: Grass is brown from the lack of rain over the summer but appears to be established.

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: This area has sufficient live plants. Plants look healthy. Only a few plants appear to be dying. 90% of the plants are alive.

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: The uphill fence is no longer needed and was previously removed.

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: Plants are growing and becoming established.

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: The plants are green and appear healthy.

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 appear healthy.

- 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: The grass is tall. The grass is brown as a result of the lack of rain over the summer.

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: The culverts have been marked and are clear for drainage.

- 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: Grass is growing on the roads.

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: _____

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: Plants appear healthy.

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: 0%

Fouled limestone: N/A

pH in basin 1A: N/A. There was no water in basin 1A.

pH below basin 1A: 7.19 (measured in Joe Creek. There was no access to water after basin 1A and before Joe Creek)

Water depth: No water in the basin

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1B:

Accumulated sediment: 0%

Fouled limestone: N/A

pH in basin 1B: 5.34

Water depth: 7 inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1C:

Accumulated sediment: trace amounts

Fouled limestone: N/A

pH in basin 1C: 5.18

Water depth: 3 inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1D:

Accumulated sediment: trace

Fouled limestone: N/A

pH in basin 1D: 4.12

Water depth: 3 inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1E:

Accumulated sediment: 0%

Fouled limestone: N/A

pH in basin 1E: 5.40

Water depth: 2 inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1F:

Accumulated sediment: trace

Fouled limestone: N/A

pH in basin 1F: 5.31

pH above basin 1F: 4.53

Water depth: 3 inches

Excessive erosion around the basin? Yes* No

USEPA Acid Seep Collection Basin:

pH in basin: 3.49

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: Silt fence on the north (upper) side of sediment basins 2A and 2B were previously removed.

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: 0%

Fouled limestone: N/A

pH in basin 2A: Not measured; no water in the basin

pH above basin 2A: Not measured; no water in the basin

Water depth: No water in the basin.

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 2B:

Accumulated sediment: 0%

Fouled limestone: N/A

pH in basin 2B: Not measured; no water in the basin

pH above basin 2B: Not measured; no water in the basin

Water depth: No water in the basin.

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. Silt fence on the south (upper) side of sediment basin 3 was previously removed.

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: Grass is brown from the lack of rain over the summer but appears to be stable.

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 each sediment treatment basin at WRP-3 (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 3:

Accumulated sediment: 0%

Fouled limestone: N/A

pH in basin 3: Not Measured. No water in basin

pH above basin 3: 6.44

Water depth: No water in basin

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)

Time 12:09pm to 3:34 pm. The weather was sunny with rain showers, temperature 41°F, 11 miles per hour north-northeast wind. The gates and locks were in good condition with no unauthorized access noted. The site is in very good condition. Streams appear to be running clear. A small amount of water was flowing through basins 1F through 1A and into basin 3. Basins 2A, 2B, and 3 were dry.

EPA treatment system above basin 1F appears to be functioning. Rob Randall (EPA) was on site to install a new water level sensor in the repository sump.

Annica Nord
Name of Inspector(s)

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



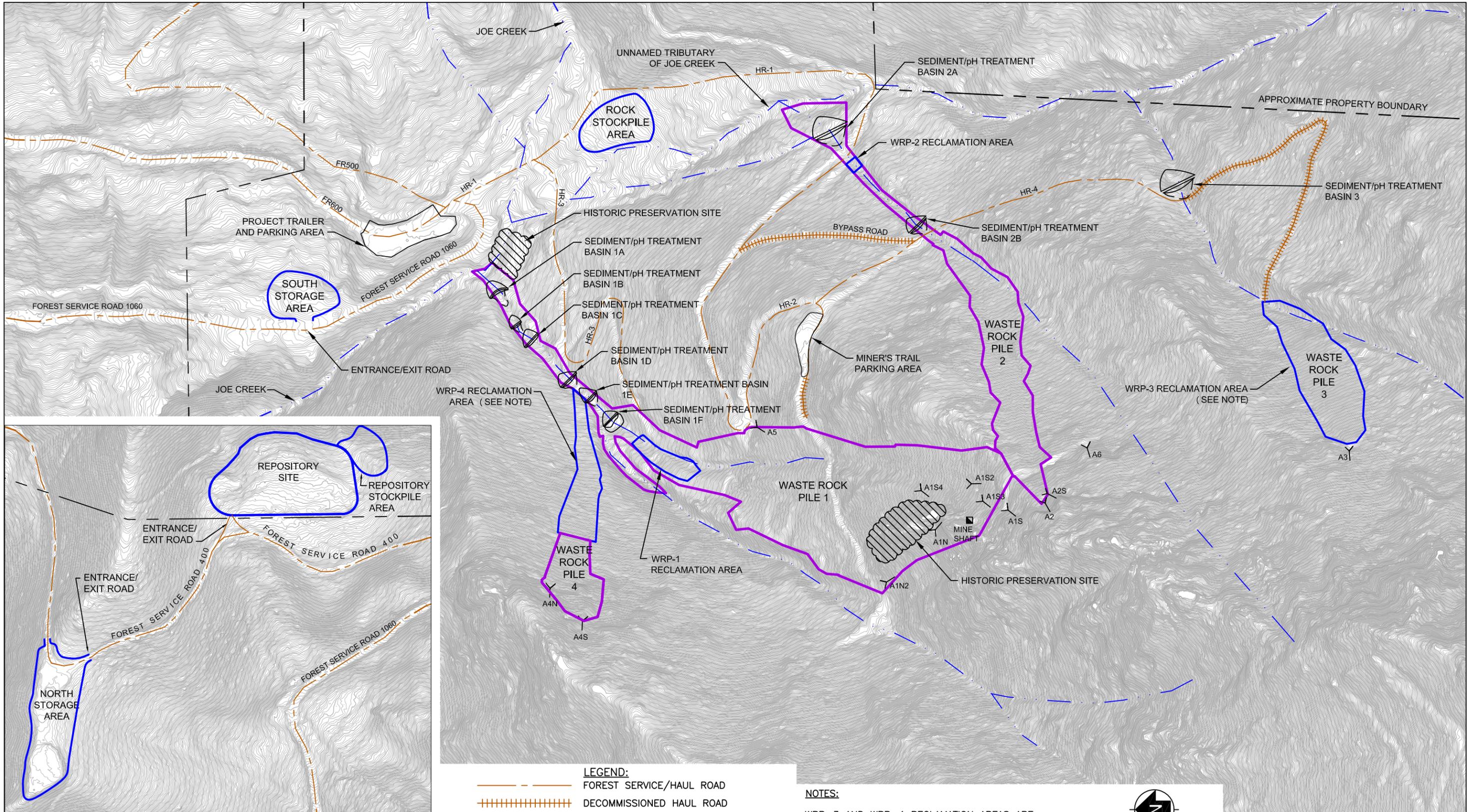
Signature of Inspector

September 25, 2013

Date of Inspection

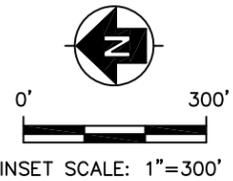
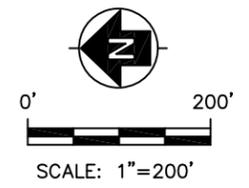
Enclosure 2. Overall Site Plan

FILE NAME: N:\Graphics\2010\2010-084 USFS Blueledge Mine\N_Maps and Drawings\Final Report\Overall Site Plan 2.dwg LAYOUT NAME: 2 PLOTTED: Tuesday, May 29, 2012 - 11:08am



- 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

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.

ERRG Engineering/Remediation Resources Group, Inc.
 4585 Pacheco Blvd, Suite 200
 Martinez, California 94553
 (925) 969-0750

CLIENT:	USDA FOREST SERVICE	OVERALL SITE PLAN			
LOCATION:	BLUE LEDGE MINE REMOVAL ACTION	DRAWN BY:	CHECKED BY:	PROJECT NO.	ENCLOSURE
		RDB 11/18/11	JGS 11/21/11	2010-084	2

Enclosure 3. September 2013 Site Inspection Photographic Log



Photograph 1: Top of Repository looking south.
Blue Ledge Mine, Rogue River-Siskiyou National Forest, CA
Photographed by: Annica Nord (ERRG) Date: September 25, 2013



Photograph 2: Repository slope and access road, facing south.
Blue Ledge Mine, Rogue River-Siskiyou National Forest, CA
Photographed by: Annica Nord (ERRG) Date: September 25, 2013



Photograph 3: Repository stockpile looking south. Good plant and grass growth.
Blue Ledge Mine, Rogue River-Siskiyou National Forest, CA
Photographed by: Annica Nord (ERRG)

Date: September 25, 2013



Photograph 4: Anchor trench drain outlet, south end of repository. No water.
Damaged screen has been repaired.
Blue Ledge Mine, Rogue River-Siskiyou National Forest, CA
Photographed by: Annica Nord (ERRG)

Date: September 25, 2013



Photograph 5: North Storage Area looking west.

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

Date: September 25, 2013



Photograph 6: South Stockpile Area looking east.

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

Date: September 25, 2013



Photograph 7: WRP 1.

Blue Ledge Mine, Rogue River-Siskiyou National Forest, CA

Photographed by: Annica Nord (ERRG)

Date: September 25, 2013

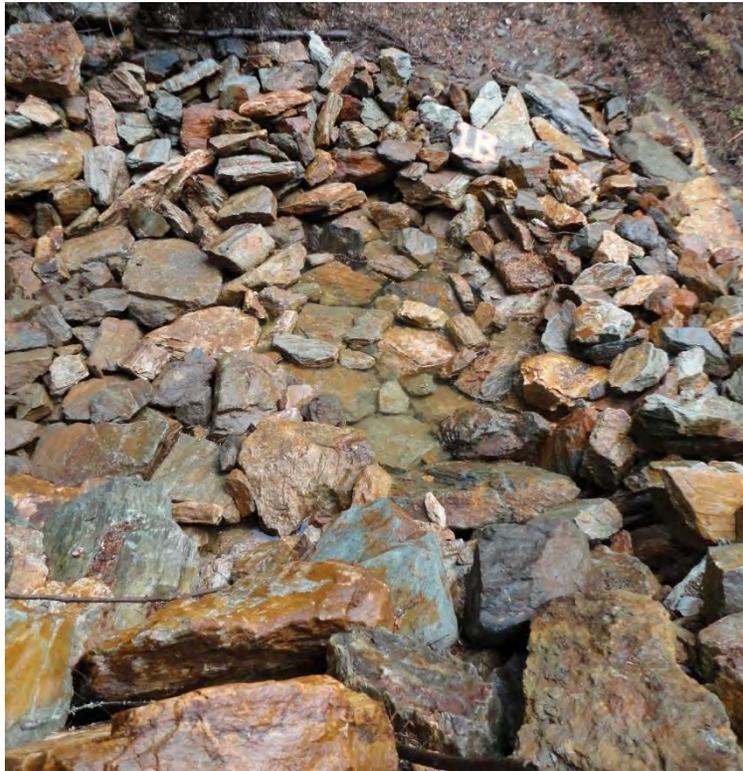


Photograph 8: Sediment/pH Treatment Basin 1A.

Blue Ledge Mine, Rogue River-Siskiyou National Forest, CA

Photographed by: Annica Nord (ERRG)

Date: September 25, 2013



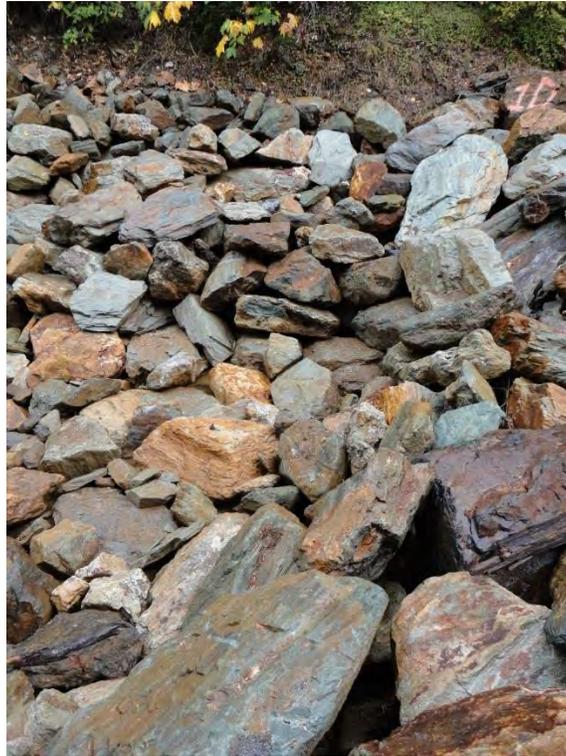
Photograph 9: Sediment/pH Treatment Basin 1B.
Blue Ledge Mine, Rogue River-Siskiyou National Forest, CA
Photographed by: Annica Nord (ERRG)

Date: September 25, 2013



Photograph 10: Sediment/pH Treatment Basin 1C.
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Photograph 11: Sediment/pH Treatment Basin 1D.
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Photograph 12: Sediment/pH Treatment Basin 1E.
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Photograph 13: Sediment/pH Treatment Basin 1F.
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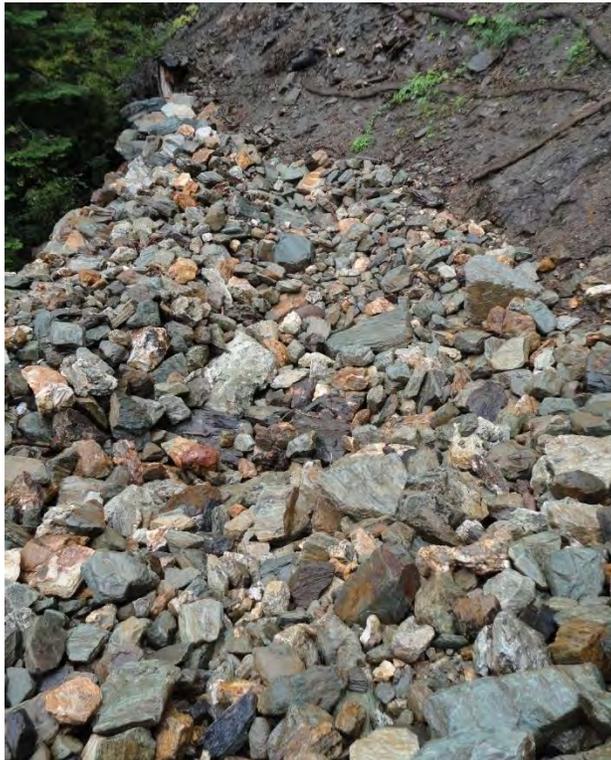
Photograph 14: Sediment/pH Treatment Basin 2A.
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Photograph 15: Sediment/pH Treatment Basin 2B.
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Photograph 16: Sediment/pH Treatment Basin 3.
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Photograph 17: WRP-3.

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Photograph 18: WRP-4 reclamation plants and grass.

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Photograph 19: Rock stockpile area, looking west. Good plant and grass growth.

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