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November 9, 2012

Ref.: 2010-084

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

Technical Memorandum
November 2012 Planting and 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 reclamation planting and the site inspection performed on November 1, 2012 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

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

- Integrity of constructed site elements (documented via photographs)
- Condition of reclamation plantings
- Needed maintenance and repairs

Site Reclamation Planting

ERRG performed the 1 year inspection of all reclamation planting areas during the September 25, 2012 site inspection. All reclamation areas, with the exception of the repository and repository stockpile areas were documented to have an adequate number of live plants. A minimum of 1,640 replacement shrubs were required for the repository slope and 50 plants were required for the repository stockpile area. A total of 1,700 Oceanspray shrubs for the repository, and 40 Ponderosa Pine and 20 Douglas Fir for the repository stockpile area were delivered to the site on October 30 and stored in an enclosed trailer. Big game repellent was applied to the plants while they were protected in the trailer. ERRG planted the replacement plants on October 31, 2012 and November 1, 2012. Plant roots were soaked in water containing mycorrhizae before planting. Planting holes were augered and a 5 gram fertilizer tablet was placed in the bottom of the hole. The plants were placed in the augered hole and native soil used to fill around the root ball. Bark was spread around the plant stem to prevent grass competition. Existing plants that survived from the fall 2011 planting were left undisturbed. A final application of big game repellent was applied on November 2, 2012 to all replacement plants and to existing plants on the repository, repository stockpile, and north storage area. This completes the requirements for site reclamation planting and maintenance for 2012.

Summary of Site Inspection

ERRG inspected all reclamation areas during the November 2012 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 October 2012 inspection in all reclamation areas.

Approximately 0.70 inch of rainfall has occurred since the October 15 inspection. The repository had no new erosion. No additional erosion was observed on the incoming Forest Road 1060 and haul roads. The stockpile areas and WRPs 1, 2, 3, and 4 had no new erosion. All sediment basins had no accumulated sediment other than a coating of silt on the rocks.

The following table shows the pH for water visible above or below the sediment/pH treatment basins. A small flow of water was observed flowing from WRP-1 through basins 1A through 1F, from WRP-2 through basins 2A and 2B, and from WRP-3 through basin 3.

Table 1. pH of Sediment Treatment Basins

WRP-1		WRP-2		WRP-3	
Entering Joe Creek	4.6	2A-below	NS	3-below	NS
1A	4.2	2A-above	5.7	3-above	6.3
1B	4.2	2B-below	NS		
1C	3.8	2B-above	6.3		
1D	3.8				
1E	3.6				
1F	4.1				
1F-above	4.1				

Note: NS = no sample was collected because water was not visible at that location.

The pH of the water in the WRP-1 drainage entering basin 1F remained consistent since the October 2012 inspection. 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 3.3, which is 0.1 pH unit less than the October measurement.

The USEPA acid seep basin overflow spillway is functioning due to the recent rainfall runoff being more than the pilot treatment system piping inlet can handle. The 3.3 pH overflow water is running through the rip rap into basin 1E and comingling with the 4.1 pH water coming down the main drainage and flowing through basin 1F. This is likely why the pH in basin 1E is lower than basin 1F. There is effectively a split flow of water between the main drainage into basin 1F and the overflow of the USEPA acid seep basin that does not fully comingle until it reaches basin 1E. Basins 1D through 1A subsequently raised the pH by one unit from 3.6 to 4.6 before entering Joe Creek. The USEPA pilot treatment system discharges at a low flow rate through multiple outlet pipes into the drainage just above basin 1D. The USEPA pilot treatment system discharges were not tested. There is no measurable pH change in the water flowing through the basins due to the USEPA pilot treatment system discharge.

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. There is an adequate number of surviving plants at all areas except the repository and the repository stockpile area. Replacement plants were installed at these two areas as described above. Grasses are becoming established at all reclamation areas.

The depth to water in the repository sump was measured at 264 inches below the rim. The total depth to the bottom of the sump is 326 inches. Therefore there is 62 inches of water in the sump. Water will be removed from the sump during the next site maintenance period in 2013.

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 me at (206) 512-3171 or brian.wetzsteon@errg.com.

Sincerely,



Timothy S. McCormack, LG
Regional Technical Manager



Brian Wetzsteon
Northwest Construction Manager

MH/kj

Encl.: [Enclosure 1](#) – November 2012 Blue Ledge Mine Inspection Checklist
[Enclosure 2](#) – Overall Site Plan
[Enclosure 3](#) – November 2012 Site Inspection Photographic Log

cc: ERRG Project File

Enclosure 1. November 2012 Blue Ledge Mine Inspection Checklist

**BLUE LEDGE MINE
INSPECTION CHECKLIST**

MONTHLY INSPECTION
Month: November, Year: 2012

BLUE LEDGE MINE MONTHLY INSPECTION CHECKLIST

Month: November Year: 2012

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

NOTE: All photographs associated with this checklist were taken on November 1, 2012; 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. Rain totaling 0.24 inch fell from October 31 through November 1, 2012 as recorded at Squaw Peak. 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: Water bars on the access road are functioning in the recent rain.

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 264 inches from the rim, bottom of sump is 326 inches, total water depth 62 inches.

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: A small trickle of water is draining from the southernmost anchor trench drain pipe due to the recent rain (see photo log). All other drain pipe outlets are dry.

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: _____

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: 1,640 replacement plants (oceanspray) were planted on the slope above the repository road and below the road along the south end. Douglas fir and Ponderosa pine replacement plants were planted on the repository stockpile area. Big game repellant was sprayed on the plants while stored in the delivery trailer before planting and again on November 2 after planting.

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 top deck hydroseeded area is showing new grass sprouts. The existing grass on the slope is turning green with the fall rain. No erosion from recent rain.

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: Big game repellant was applied on November 2.

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 from the rain.

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: This area has sufficient live plants.

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: _____

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: _____

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: This area has sufficient live plants.

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: Very good grass growth in this area.

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 cleared 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: Previously repaired rills are plugged with rocks and slash to prevent further erosion.

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: _____

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: This area has sufficient live plants. Maples are turning color.

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% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 1A: 4.2

pH below basin 1A: 4.6

Water depth: 4 inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1B:

Accumulated sediment: 0% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 1B: 4.2

Water depth: 6 inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1C:

Accumulated sediment: 0% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 1C: 3.8

Water depth: 3 inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1D:

Accumulated sediment: 0% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 1D: 3.8

Water depth: N/A - empty

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1E:

Accumulated sediment: 0% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 1E: 3.6 Note: EPA acid basin overflow water is mixing below basin 1F and enters 1D.

Water depth: 3inches

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 1F:

Accumulated sediment: 0% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 1F: 4.1

pH above basin 1F: 4.1

Water depth: N/A – empty. A small flow of water is coming down the drainage into the basin.

Excessive erosion around the basin? Yes* No

USEPA Acid Seep Collection Basin:

pH in basin: 3.3

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: This area has sufficient live plants. Maples are turning color.

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 below basin 2A: N/A = No water visible through the rocks.

pH above basin 2A: 5.7 for water trickling down the bedrock gully above the road crossing.

Water depth: N/A - empty

Excessive erosion around the basin? Yes* No

Sediment Treatment Basin 2B:

Accumulated sediment: 0% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 2B: N/A = no water visible through the rocks.

pH above basin 2B: 6.3 for water trickling down the bedrock above the Haul Road crossing.

Water depth: N/A - empty

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: _____

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: This area has sufficient live plants.

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: Wattles are in place. No erosion noted.

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% (only a film of sediment on the rocks)

Fouled limestone: N/A

pH in basin 3: 6.3

pH above basin 3: 6.3 for water entering the basin from the drainage.

Water depth: 4 inches

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: This area has sufficient live plants.

4. Are there areas of excessive erosion on WRP-4? 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: _____

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 8 am to 12 pm. The weather was cloudy, occasional rain sprinkles, temperature 44°F, light wind. It rained 0.24 inches from October 31 through November 1 as recorded at Squaw Peak. The gates and locks were in good condition with no unauthorized access noted. The site is in very good condition. No maintenance is required. Streams are running clear after yesterday's rain. Drainages are running clear water into the basins.

Brian Wetzsteon
Name of Inspector(s)

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



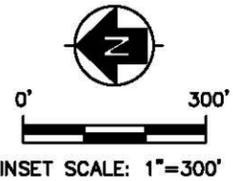
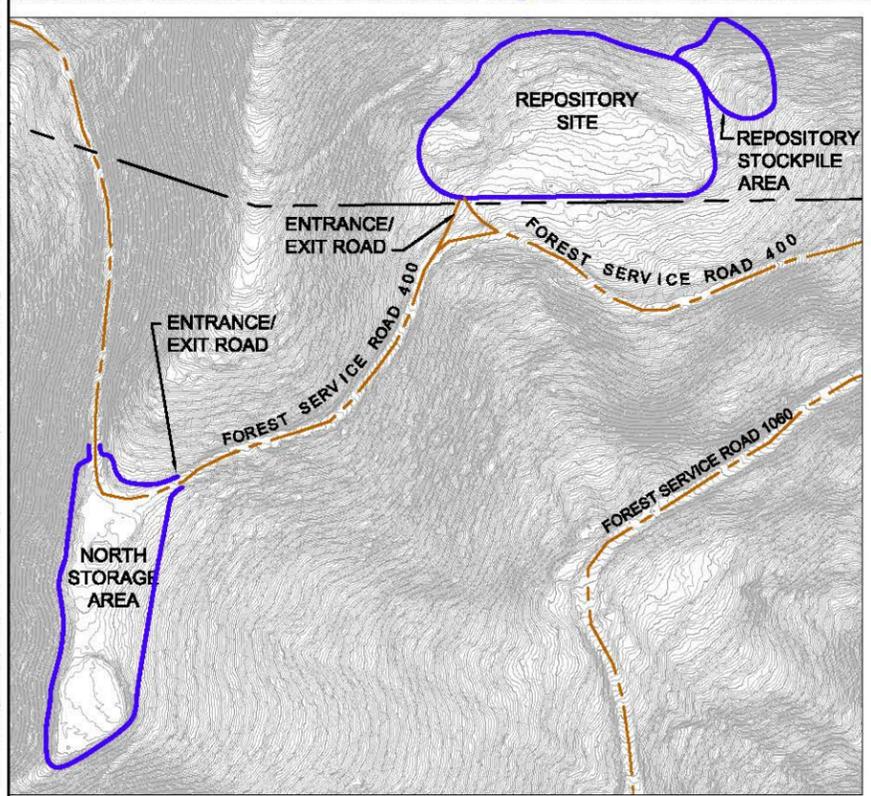
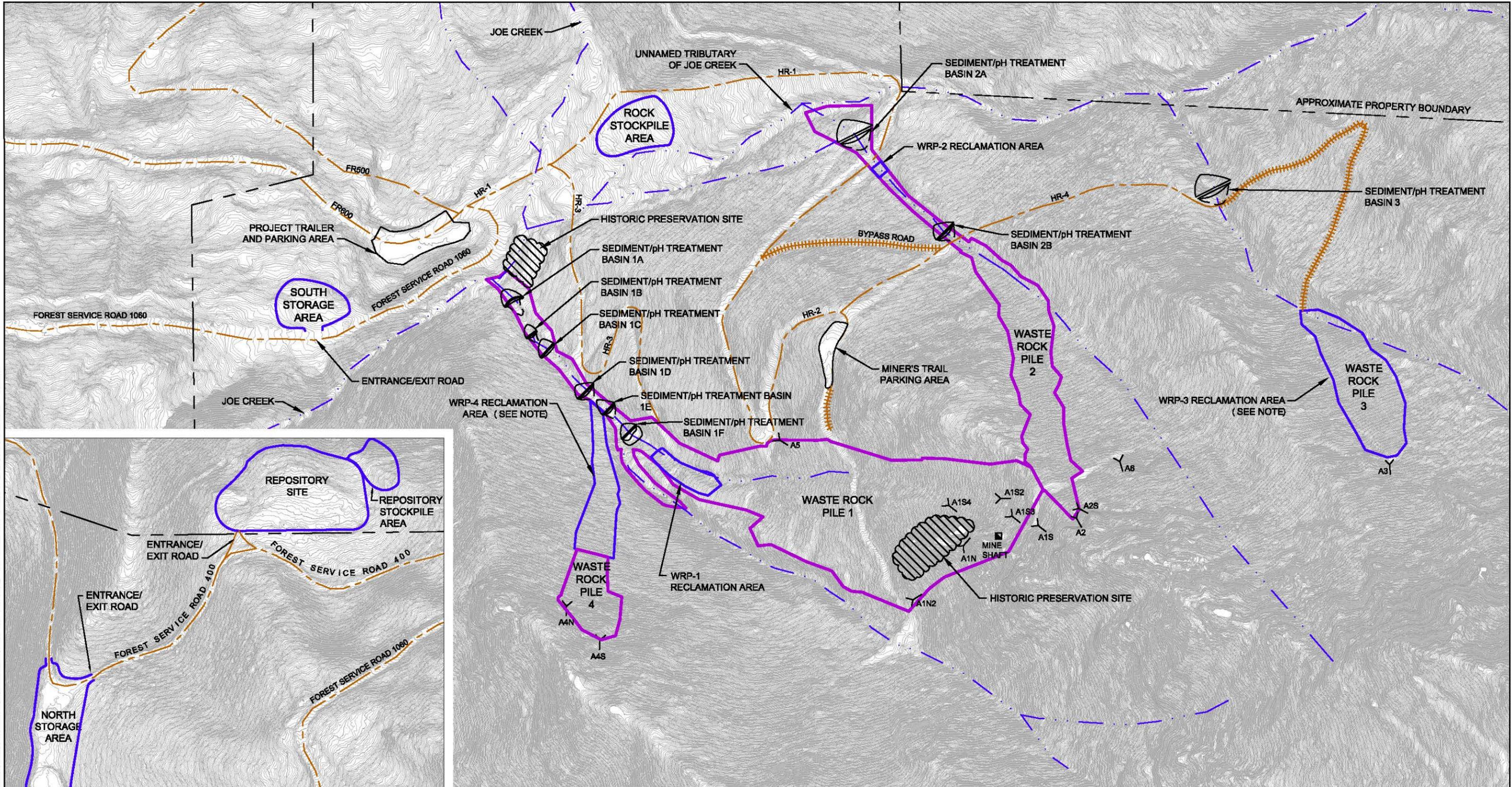
Signature of Inspector

November 1, 2012

Date of Inspection

Enclosure 2. Overall Site Plan

FILE NAME: N:\Graphics\2010\2010-084 USFS Blueledge Mine\Maps and Drawings\Final Report\Overall Site Plan 2.dwg LAYOUT NAME: 2 PLOTTED: Tuesday, May 26, 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

0' 200'
 SCALE: 1"=200'

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. 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: RDB 11/18/11	CHECKED BY: JGS 11/21/11	PROJECT NO. 2010-084

Enclosure 3. November 2012 Site Inspection Photographic Log



Photograph 1: Top of Repository looking south.

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

Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 2: Soaking plants in mycorrhizae and coated with big game repellent.

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

Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 3: Planting Oceanspray on repository slope, looking south.

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

Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 4: Plants on repository slope above access road, south end looking west.

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

Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 5: Live Scoulers Willow plants below repository perimeter road, looking north.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Brian Wetzsteon (ERRG) Date: November 1, 2012



Photograph 6: Anchor trench drain outlet water discharge, south end of repository.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Brian Wetzsteon (ERRG) Date: November 1, 2012



Photograph 7: Ponderosa Pine replacement plant on Repository Stockpile Area.

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

Date: November 1, 2012



Photograph 8: North Storage Area looking west.

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

Date: November 1, 2012



Photograph 9: South Stockpile Area looking east.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 10: Sediment/pH Treatment Basin 1A and 1B.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 11: Sediment/pH Treatment Basin 1C.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
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Date: November 1, 2012



Photograph 12: Sediment/pH Treatment Basin 1D.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 13: Sediment/pH Treatment Basin 1E.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 14: Sediment/pH Treatment Basin 1F and EPA acid seep collection basin.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
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Date: November 1, 2012



Photograph 15: Sediment/pH Treatment Basin 2A.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
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Date: November 1, 2012



Photograph 16: Sediment/pH Treatment Basin 2B.
Blue Ledge Mine, Rogue River - Siskiyou National Forest, CA
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Date: November 1, 2012



Photograph 17: Rock Stockpile reclamation plants and grass looking south.

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

Photographed by: Brian Wetzsteon (ERRG)

Date: November 1, 2012



Photograph 18: Sediment/pH Treatment Basin 3.

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

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Date: November 1, 2012



Photograph 19: WRP-1 reclamation plants and grass.
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Date: November 1, 2012



Photograph 20: WRP-2 reclamation plants and grass.
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Photograph 21: WRP-3 reclamation plants and grass.
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Photograph 22: WRP-4 reclamation plants and reinforced erosion fabric.
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Date: November 1, 2012