COMMUNITY RELATIONS PLAN

for the

Roba and York Mine Sites

Malheur National Forest, Grant County, Oregon

Prepared by

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Contents

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Roba and York Mines, Grant County, OREGON

I. OVERVIEW OF COMMUNITY RELATIONS PLAN

This community relations plan identifies issues of community concern regarding the Roba and York Mine sites on the Blue Mountain District of the Malheur National Forest and outlines community relations activities to be conducted during the engineering evaluation/cost analysis (EE/CA) phase of site remediation. In general, community concern about these sites is low, residents more or less have accepted the presence of mining in their community since gold was discovered in 1862 as well as other precious metals.

The start of remedial activity at these Sites may cause some concern in the community. An effective community relations program should, therefore, prepare for this potential interest and attempt to educate, without alarming, residents so that they can better understand the remedial process.

This community relations plan has been prepared to aid the Malheur National Forest in developing a community relations program tailored to the needs of Grant County residents. The Malheur National Forest provides public involvement opportunity to ensure that the public has input to decisions about planned activities and is informed about the progress of those actions. These sections follow:

- Capsule Site Description
- Community Background
- Highlights of Program
- Techniques and Timing
- References
- Appendices

The information in this plan is based primarily on the "Roba and York Mines Preliminary Assessment Reports," prepared by Cascade Earth Sciences, discussions during February and March 2003 with the Grant County Judge, Grant County Health Department, References, and the Mayors of John Day, and Canyon City.

The U.S. Department of Agriculture, Forest Service is responsible for managing the Engineering Evaluation/Cost Analysis for the Roba and York Mines. The Malheur National Forest Office of Public Affairs will oversee community relations activities for these sites.

II. CAPSULE SITE DESCRIPTION

The Roba mine is located in Section 6, and the York mine in Section 7, both are in Township 16 South, Range 29 East of the Willamette Meridian. Underground mining and processing took place at the Roba Site. Surface, underground mining, and ore processing, took place at the York Site.
These Sites are located approximately 30 miles southwest of John Day in the Aldrich Mountain Range, and in the jurisdiction of the Blue Mountain Ranger District on the Malheur National Forest.
Signs warning of potential risks associated with the mines are posted at these Sites. The primary contaminants of concern associated with these Sites are mercury and arsenic. Other human health and ecological contaminants of concern or interest include antimony, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, selenium, and zinc.

Secondary sources of contamination include the contaminated soils adjacent to the equipment, and related debris. Contaminants at the site have the potential to affect humans (hikers and campers) and terrestrial and aquatic organisms (Martin et al., 1998).

(Exhibit 1 illustrates the location of the Sites, and surrounding geographical landmarks.)

The Roba mine (also known as the Roba-Westfall Prospect, and Dear Creek Prospect), is located on a west slope near the ridgetop at approximately 5,300 feet above mean sea level, and encompasses an area of approximately 2.9 acres. The area is moderately vegetaed with large pine, brush, and grass undergrowth.

The claim was discovered by Lawrence Roba in 1947. Eight flasks were recorded as produced, four from development rock in 1951, three in 1952, one in 1953, and possibly another four. The ore was processed in a 30-inch by 8-foot rotary retort obtained from the Bear Creek mine in Jefferson County. In early 1953 a Defense Minerals Exploration Administration (DEMA) development contract and loan was obtained. Under this contract the shaft was extended on an 80 degree incline to a depth of 123 feet and levels containing about 20, 95, and 100 feet of workings were turned at depths of 25, 60 and 120 feet respectively. Water stood in the shaft to within 35 feet of the collar. The mineshaft was bulldozed shut by the Forest Service in the late 1990's.

No production has occurred since 1953, and no work other than assessment was made to the property since expiration of the DEMA contract in 1955. According to State Bureau of Land Management office electronic records, the last activity was a notice of location in September 2, 1982 by Precious Minerals Unlimited

Results of samples collected from the Site indicated that most of the 13 priority pollutant metals analyzed were present at the Site in concentrations indicative of native soils or at elevated concentrations typical of a mine site. Antimoney and Beryllium were almost absent in concentrations above the laboratory method detection limit. As would be expectd from a mercury mine and mill, mercury was present in all of the samples collected and indicated the widest range of concentrations from 1.0 to 5,500 mg/kg. Aresnic, thallium, and selenium were also quite variable. All other metals fell within a fairly limited range and were generallly near the range for the corresponding metal analyzed in the background samples. Saturated paste pH ranged from 5.7 to 7.3 standard units (std. units). The samples collected from the soil and waste was nearly the same at 6.3 and 6.2 (std. unit) Soil and waste were less acidic 6.3 (std. units) on average compared to the samples collected from background

locations 6.1 (std. units). Because mercury-laden soil and waste material are not highly acidic, the potential for leaching metals to groundwater is low.

Arsenic was dected in all of the samples collected from the Site. Concentrations ranged from 3.1 to 94.5 mg/kg, with background soil samples between a concentration range of 3.3 to 13.6 mg/kg. The source for the arsenic in the area can not be determined, although based on the correlation of high arsenic with high mercury, it is likely a metal of an associate mineral of the cinnabar ore body. The very high concentrations of aresenic (over 90 mg/kg) found in the burnt ore tailings are probably due to the enrichment processes associated with milling the ore.

Mercury was detected in all of samples collected from the Site with concentrations ranging from 1.0 to 5,500 mg/kg. The highest concenrtrations detected from non-background samples were found in the ore tailings near the minesha ft (5,500 mg/kg), soil 6 feet south (2,140 mg/kg) and 6 feet north (910 mg/kg) of the retort, and the burnt ore tailings (625to 886 mg/kg). All of the areas exceeded the Preliminary Remediation Goal (PRG) industrial standard of 610 mg/kg. Low concentrations of mercury were indicated in the soil on the hillside north of the retort, and downslope of the burnt ore tailings, soil 30 feet north of the retort, and waste material inside the retort foundation. Background samples indicated a very wide range from 1 to 3,600 mg/kg. The sample at 3,600 mg/kg was collected from an undisturbed vegetated area on the hillside south, upslope, and between the ore tailings pile and the mill area. In additon, it is across a trough at a higher elevation than the base of the ore tailings pile. Based on this, the elevated mercury concentration is presumably from the occurrence of the cinnabar ore body, which traces across the local ridge. According to Mr. Roba, cinnabar can be found fairly consistently, over a large area along the ridge with localized areas giving stronger showings (DOGAMI, 1952).

The York mine prospect (aslo known as the Broadway Prospect, York prospect, Rannells prospect) was a cinnabar operation and located on a southeast slope near the ridgetop, at approxima tely 5600 feet above mean sea level, in a moderately vegetated large pine, brush, and grass undergrowth. The site encompasses an area of approximately 5.5 acres. There are no records of mercury production for this operation, however there is evidence that the equipment was operational on site and did process some ore. Mercury contamination exists in various pieces of equipment, and in the soil in the vicinity for the equipment.

This prospect is said to have been descovered by Homer York and Cecil Rannells in about 1940 with Stanley Reffett obtaining interest in recent years. In the 1960's the claim was leased to Reeves and Farrin of Prineville, Oregon. They set up the retort of which some of the portions remain today. Construction of the retort was in progress in 1965 and was finished by 1968. The retort was then moved onto the Site from an inactive mine in the Prineville area. About 2000 pounds of ore from the shaft was treated at the Roba-Westfall retort during the early 1950's, and about 21 pounds of quicksilver was recovered. The property was developed by a shaft 60 feet deep and several nearby dozer trenches, small pits, loading dock, road system for hauling ore from shaft to retort, bins and hoppers, dust collector, condenser tubes and tray, rotary furnace and a small cabin. Numerous pieces of equipment still remain on site and are in disrepair. The mineshaft was bulldozed shut by the Forest Service in the late 1990's. Based on records with the Oregon Water Resources Department, no registered water wells are located within 1 mile of he Site. Furthermore, no permanent residences are located within 4 miles of the Site (USFS, 2001.

Results of samples collected from the Site indicated that most of the 13 priority pollutant metals analyzed were present at the Site in concentrations indicative of native soils or at elevated concentrations typical of a mine site. Lead and Silver were almost absent in concentrations above the laboratory method detection limit. As would be expectd from a mercury mine and mill, mercury was present in all of the samples collected and indicated the widest range of concentrations from 11.0 to 7,300 mg/kg. All other metals fell within a fairly limited range and were generallly near the range for the corresponding metal analyzed in the background samples. Arsenic and mercury exceeded the applicable residential Department of Environmental Quality Soil Cleanup Rules (SOCLEAN) and Preliminary Remediation Goal (PRG)

Mercury was detected in all the samples collected from the Site with concentrations ranging form 0.11 to 7,300 mg/kg. The highest concentrations were found in the area of the fan housing (7,300 mg/kg), condenser tray (1.020 mg/kg), and soil below the condenser tray (950 mg/kg.) All of these areas exceeded the industrial standard for SOLCLEAN of 600 mg/kg and industrial standard for PRG of 610 mg/kg. Other areas with elevated concentrations include the ore below the crushing area, soil below the loading dock, residue in the exhaust hood clean-out, ore near the mineshaft, and the soil between the upper and lower bench roads. Low concentrations of mercury (0.11 to 0.36 mg/kg) were indicated in the soil below the crushing area (3.44 mg/kg), the waste or tailings in the burnt ore bin (1.73 mg/kg), and the channel of a dry creek adjacent to and below the Site (0.69 mg/kg). .

Arsenic was detected in all of the samples collected from the Site. It ranged from 2.8 to 11.1 mg/kg, well above the listed residential SOCLEAN and PRG standard of 0.4 mg/kg. Most of the samples exceeded the arsenic industrial standard for SOCLEAN (3.0 mg/kg) and PRG (2.7 mg/kg). Background samples indicated a range of 2.0 to 5.9 mg/kg.

The source of the arsenic in the area can not be determined, although it is likely a weathering component of the local geology of the area. The most common of the arsenic minerals is arsenopyrite (FeAsS), which is found associated with many types of mineral deposits, especially those including sulfide mineralization. Arsenic concentrations in soil across the state of Oregon can vary from 1.1 to 12.0 mg/kg.

Saturated paste pH ranged from 5.9 to 7.7 standard units (std units). The samples collected from the soil were slightly acidic on average compared to the samples collected from the waste (7.0 std units). The two most acidic samples were from the background locations. The most basic sample collected from the soil between the upper and lower bench roads. Because mercury-laden soil and waste material are not highly acidic, the potential for leaching metals to the groundwater is low.

SITE LOCATION MAP

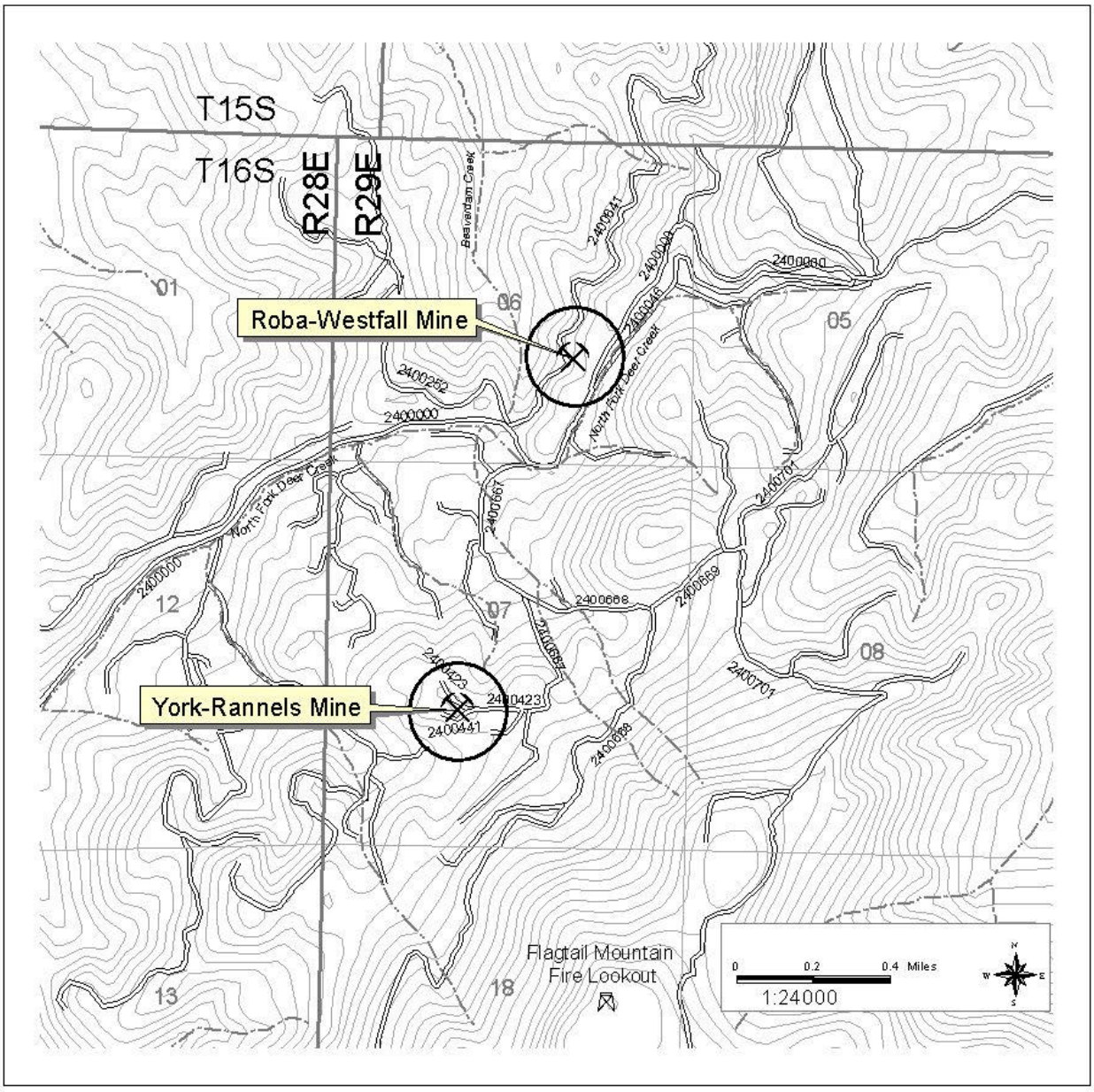

Figure 1: Location of Site within State and Surrounding Geographical Landmarks

III. COMMUNITY BACKGROUND

A. Community Profile

The City of John Day, was incorporated in 1888 is located in Grant County and has a population of approximately 1,930.

The Malheur National Forest was established by President Taft on June 13th, 1908. It was created out of the larger Blue Mountains Forest Reserve which was established two years earlier. The purpose of the Forest Reserve and National Forest system, as expressed in the Organic Act of 1897, was to protect water flow and to ensure a continuous supply of timber.

The discovery of gold in Canyon Creek in June, 1862 was the beginning of an era which saw $26,000,000 in gold mined from the Canyon City - John Day area. The towns of Canyon City and John Day were born during this time, with Canyon City named as the county seat when Grant County was formed two years later.

Hundreds of Chinese immigrated to this area during the gold rush to work in the mines. The 1879 Census lists 960 whites and 2,468 Chinese miners in the gold fields of Eastern Oregon. While most were shunned by the white community, a few of the Chinese were accepted.

In the same year that the gold rush began, F. C. Trowbridge filed the first homestead claim in what was to become Grant County. As the population of the area grew, the demand for supplies grew with it and more farms and ranches sprang up around the county. By the 1870s and the 1880s the areas around Fox, Izee, Long Creek, Ritter, Seneca and Silvies had been settled. Commercial gold mining activity lasted only a short time. Several cinnabar mines were in operation the first half of the 20th century, with the bulk of the activitiy occurring between the 1920s and 1940s. Mining is a minor part of the area's economy today.

Logging and sawmilling surpassed agriculture and ranching as the county's primary industry in the 1940s and is still the largest employer in the county.

In general, the Grant County community reflects a "rural" agricultural atmosphere, insulated from the rapid development of other surrounding areas.

B. Chronology of Community Involvement

Due to the small size and age of these mines, local officials have described community concern about mercury contamination, from these Sites as "very little to non-existent."

No community groups have been formed to participate in the investigation of the Sites, or to voice an opinion as to how they should or could be addressed.

C. Key Community Concerns

Community concern about mercury contamination at the York/Rannells and Roba Westfall mines appears to be nonexistent or very low, possibly because:

- These Sites are old, and have been abandoned for many years.

- Most citizens believe mercury contamination at these Sites have no direct effect on them.

· The presence of mercury mines is a part of the community's history.

The continuing low level of community concern about the mine's, should not be construed as indifference to environmental hazards. The community does not view the mine's as a hazard.

IV. HIGHLIGHTS OF PROGRAM

The community relations program for the mines should be designed to allow the community to learn about and participate in the remedial process, without disrupting the community's confidence that the Site's poses no new or immediate hazards. To be effective, the community relations program must be gauged according to the community's need for information, and its interest and willingness to participate in the remedial process.

The community relations program should take the following approaches:

1. Enlist the support and participation of local officials in coordinating community relations activities. Appropriate officials to involve in a community relations program include the Grant County Court, and the Mayors of Canyon City and John Day, Oregon. These officials are visible and trusted leaders in the community, and are therefore a valuable resource in the effort to understand and monitor community concern. To gain the support of local officials, inform them regularly and fully of site activities, plans, findings, and developments.

2. Provide explanations about sampling and test results and any decisions and actions taking place regarding the Site's. Concise and easily understood information should be available to all residents on the schedule of technical activities, their purpose, and their outcome. If some information cannot be released to the public, explain clearly and simply why the information must be withheld. Public Affairs staff should also attempt to identify special situations or concerns where more specialized information may be required, or where certain types of information is needed by single individuals or groups. Finally, to ensure that inquiries from the community are handled efficiently, and consistently, a single contact (Public Affairs, Malheur National Forest) should be established for these Sites.

3. Educate area residents and local officials about the need for the clean up and how it is being paid for. To dispel some of the current confusion about why there is a need to clean up mercury, since it occurs in the area naturally, make an effort to circulate basic information to the community about why the contaminants at the mine site are different from the mercury naturally present in the cinnabar in the area. The financial aspects of the process also need to be clearly communicated to the community.

4. Let the people "set the pace" for the community relations program. Be aware that federal involvement in local issues is not always well-regarded by townspeople. Federal, and even State, programs are seen as excessively bureaucratic and insensitive to the realities of local government

budgets and planning. Therefore, do not "overdo" or overplan community relations activities in a way that might discourage community participation.

V. TECHNIQUES AND TIMING

1. Establish and maintain information repositories: Fact sheets, technical summaries, site reports, and the Engineering Evaluation/Cost Analysis will be available at the Malheur National Forest, Supervisors Office in John Day.

2. Establish an information contact: The public affairs staff person for the Malheur National Forest will be responsible to respond directly to public inquiries regarding site activities.

3. Meet with local officials and telephone them periodically. Meetings with local officials should be held at the following technical milestones:

    - Completion of the final work plan.
    - Before remedial action starts.

4. Prepare fact sheets and technical summaries.

5. Provide news releases to local media: Prepared statements can be released to local papers, such as the Blue Mountain Eagle, Juniper Press, and KJDY radio to notify the community of any public meetings or to inform citizens of any decisions or actions at the site.

6. Hold public meetings when necessary.

REFERENCES

Brooks, Howard. 1963. *Quicksilver in Oregon, Bulletin #55*. Oregon Department of Geology and Mineral Industries.

Cascade Earth Sciences, 2001. *Preliminary Assessment Report, York and Rannells Mine Site, Malheur National Forest, Grant County, Oregon.* March 21, 2001.

Cascade Earth Sciences, 2001, *Preliminary Assessment Report, Roba and Westfall Mine Site, Malheur National Forest, Grant County, Oregon.* May 4, 2001.

Malheur National Forest. York-Rannells and Roba-Westfall Primary *Responsible Party research*. July 31, 2002.

Oregon Department of Environmental Quality. 1997. *Numerical Soil Cleanup Levels (OAR 340-122-045) aka SOCLEAN.*

APPENDIX A

LIST OF CONTACTS

A. Federal Elected Officials

Senator Gordon Smith 131 NW Hawthorne, Suite 208 Bend, OR 97701	(541) 318-1298 (503) 326-3386
Senator Ron Wyden 131 NW Hawthorne, Suite 107 Bend, OR 97701	(541) 330-9142
Congressman Greg Walden 843 East Main, Suite 400 Medford, OR 97701	(541) 776-4646

B. State Elected Officials

Ted Kulongoski Governor 254 State Capitol Salem, OR 97310-0370	(503) 378-3548 1-800-322-6345
Representative Ted Ferrioli State Capitol, Room 269 Salem, OR 97310	(503) 986-1200 (503) 548-1215

C. Local Officials

Hon. Dennis Reynolds, Grant County Judge Courthouse 201 S. Humbolt St., Suite 280 Canyon City, OR 97820	(541) 575-0059
Boyd Britton, Grant County Commissioner P.O. Box64 John Day, OR 97845	(541) 575-0435
Scott Myers, Grant County Commissioner Courthouse 201 S. Humbolt St., Suite 280 Canyon City, OR 97820	(541) 575-0059

Don Mooney, Canyon City Mayor
City Hall
P.O. Box 276
Canyon City, OR 97820
(541) 575-0509

Roger Simonsen, John Day Mayor
City Hall
450 E. Main
John Day, OR 97845
(541) 575-1890(H)
(541) 575-0028(O)

D. State and Local Agencies

Eastern Region
Division of State Lands
Kevin Herkamp
20300 Empire Ave., Suite 1
Bend, OR 97701
(541) 388-6345
oregonstatelands.us

Grant County Health Department
528 E. Main
John Day, OR 97845
(541) 575-0429

Grant County Emergency Services
David Carrey
Courthouse
201 S. Humbolt St.
Canyon City, OR 97820
(541) 575-2623

Department of Human Services
Dr. David Stone
800 NE Oregon St., Suite 608
Portland, OR 97232-2162
(503) 731-4015
dave.stone@state.or.us

E. Community Organizations, Environmental Groups, and Citizens' Groups

Grant County Chamber of Commerce
281 W. Main
John Day, OR 97845
(541) 575-0547
1-800-769-5664

F. Media

The Blue Mountain Eagle
177 Canyon Blvd.
John Day, OR 97865
(541) 575-0710

KJDY Radio (541) 575-1400
413 NW Bridge
John Day, OR 97845

APPENDIX B

LOCATIONS FOR INFORMATION REPOSITORIES

1. Malheur National Forest Supervisors Office (541) 575-3144
   P.O. Box 909
   John Day, OR 97845

2. Grant County Public Library (541) 575-1992
   507 S. Canyon Blvd.
   John Day, OR 97845