Response to Comments
Upper Basin Repository Locations
Osburn and Star Tailings Impoundments
Shoshone County, Idaho
May 17, 2010

Introduction

Cleanup of metals-contaminated soil is continuing in the Upper South Fork Coeur d'Alene River Basin. The waste material produced as a result of the cleanup operations is currently transported to the Big Creek Repository for disposal. Since the Big Creek Repository is getting full, another place to dispose of the waste is necessary. The Upper Basin repository site selection process to find other places to dispose of the waste has been ongoing since October 2008. Two sites have been proposed for repositories: the Osburn and Star mine waste tailings impoundments. The proposed repositories would be located on inactive, dry portions of these tailings storage facilities. This document was prepared to address public comments received on two proposed repository sites.

Citizen participation and input was valuable to the repository site location process. The public will also have a chance to comment on the 30% Design Reports for each repository. The current plan is to complete design of the Osburn Repository first, then follow up with design of the Star Repository. This means there will be one more formal public review and comment period at the 30% Design stage for each site.

In between the formal comment periods, the public is invited to stay involved by attending outreach opportunities, including Citizens Coordinating Council meetings, Basin Commission meetings and other repository-specific meetings held to encourage public awareness and education.

At this point the repository site selection process has identified the above-noted two sites as most suitable for repository construction. The next important step is to continue discussions with the property owners for each site so that the planned work may proceed.

As noted, EPA and IDEQ have been searching for new repository locations in the Upper Basin since October 2008. During this time, the public has been helpful in suggesting sites for potential repositories, and in communicating the important issues the agencies should consider when siting repositories.

The agencies substantively used the public's input in the site selection process. Guided by this public input, and using some factors important to the agencies, two locations were proposed for future use as repository sites. The two locations are Osburn Tailings Impoundment and Star Tailings Impoundment.

The two locations were presented in an Open House held in Wallace on March 25, 2010. The public was encouraged to ask questions and provide written comment on the proposed repository locations. The comment period ran from March 25 to April 25. During this time, IDEQ received 13 comment letters. This document summarizes the comments and provides responses to them.

The responses are divided into three sections. Comments specific to Osburn or Star Tailings Impoundments are in separate sections; a third section addresses comments not identified with either location. Many of the commenters identified the same issues. The exact language from each commenter was not used here; the responses were grouped by subject. The commenters will recognize their concerns among the subjects.

This comment period meets requirements concerning repository locations as stated in Item 3 of Section 12.5, Operable Unit 3 (OU-3) Record of Decision (ROD) for these activities:

> *Public Input/Notification – Concurrent with the technical evaluation, a public outreach effort will be initiated. Affected citizens and stakeholders will be given an opportunity to comment on the proposed repository location and design.*

Osburn Tailings Impoundment Comments

Osburn Comment 1. Danger to kids, pedestrians, and pets from truck traffic

Response: The repository would result in increased truck traffic on the western portion of Nuchols Gulch Road. In order to minimize truck traffic through the residential area on the eastern portion of Nuchols Gulch Road and Stein Lane, a new access road is proposed that would route the trucks off of Nuchols Gulch Road. The attached Figure 1 shows the location of the proposed truck route and new access road. The new access road would bypass the residential area and decrease the risk to kids, pedestrians and pets. The closest house would be about 400 feet from the access road, instead of less than 50 feet away as is the current condition.

The route to the new repository would be clearly marked with signs. The signs would direct repository-bound traffic to take the new access road instead of driving through the Stein Lane neighborhood.

Construction of the new repository would actually ease traffic flow in this area. Currently, US Silver uses the Nuchols Gulch/Stein Lane route to access their active

tailings impoundments. The plan is to have both the remediation contractors and US Silver use the new access road to get to the tailings pond site. This would significantly decrease truck traffic through the neighborhood, thus reducing the danger to kids, pedestrians and pets.

Osburn Comment 2. Damage to the road and Two Mile Bridge

Response: More truck traffic would increase the wear and tear on both the Two Mile Bridge and Nuchols Gulch Road. During the Repository Design Investigation, IDEQ would inspect and inventory the current condition of the bridge and road. If the review concludes the bridge and/or road is unsafe and require immediate improvements, then EPA and IDEQ would work with government and private concerns to develop an action plan to address these features. We would coordinate this work with the Shoshone County Public Works Department and the Idaho Transportation Department.

Our experience with hauling to Big Creek and East Mission Flats Repositories indicate that the county roads hold up well. Nearly all of the material received by the repository would be transported during the summer and early fall months, when the roadway subsurface is least susceptible to damage. If required to work in the late fall, winter or spring, the remediation contractors would abide by seasonal weight limits that apply to all truck traffic.

Osburn Comment 3. Noise and dust

Response: The trucks carrying waste to the repository would generate noise and stir up dust on the roads. The noise issue would be improved by constructing an access road as illustrated in Figure 1. This would move the road away from the residential area by more than 400 feet. The current access road passes within 50 feet of many residences along the Nuchols Gulch/Stein Road haul route.

For Superfund cleanup waste disposal, the repository would typically be open from May through October. For Institutional Controls Program (ICP) waste disposal by community members, at least one Upper Basin repository would be available every day of the year.

For Superfund cleanup waste disposal the plan is to normally operate the repository on weekdays from about 7:00 AM to 5:00 PM, so evening and night-time noise would not change over existing background levels. Note that traffic on Interstate 90, immediately across the river, rolls night and day 365 days per year. Traffic noise would not be a new condition with the repository operation.

The Repository Operations Plan would address dust control. If nuisance dust was observed coming from the haul trucks or from the waste pile, the Disposal Contractor would take immediate steps to control the dust. If the dust generated from the project was judged excessive, hauling may be temporarily suspended until conditions improve.

If dust from the repository site was an issue in the future, we would recommend that concerned citizens contact the Kellogg IDEQ office at (208) 783-5781.

Dust control may include multiple passes with a water truck, application of appropriate dust suppressants such as tackifiers and fiber mulch, magnesium chloride, or other dust suppression methods.

EPA and IDEQ would only be responsible for dust generated by the Superfund cleanup traffic on the access road and at the repository site. The site is located amidst other industrial-use properties that may also be a source of nuisance dust. Each property owner is obligated to control dust originating from their property. The repository would be operated in manner that responsibly addresses dust concerns.

Osburn Comment 4. Roadway erosion and water over the bridge

Response: The paved surface on Nuchols Gulch Road is not likely to erode as a result of the traffic from repository operations. The new access road would be graded and surfaced to minimize erosion during precipitation and flooding resulting from the predicted 100-year flood. Observation of the roadway surface would be a regular part of repository operations. Repairs to the access road would be made as necessary. Repairs to Nuchols Gulch Road would be coordinated with the Shoshone County Public Works Department.

With respect to water over the bridge: According to the Shoshone County Public Works Department, the latest Division of Highways Structure Inventory and Appraisal Update performed on the bridge in 2009 indicates the bridge meets current structural integrity criteria (ITD, 2009). This includes evaluation of waterway adequacy. The Two Mile Bridge meets the minimum requirement for this criterion (ITD, 2009). Based on this information, “water over the bridge” does not appear to be an issue.

Star Tailings Impoundment Comments

Star Comment 1. Surface Water Contamination/Stormwater Management

Response: The plan is to dispose of metals-contaminated waste on top of the existing closed mining waste tailings impoundments. The Superfund-generated waste would be disposed of on the dry impoundments located north of Gray’s Bridge Road. The impoundments south of Gray’s Bridge Road would not be a part of the repository. The proposed footprint of the repository is illustrated in Figure 2.

The water within Canyon Creek is currently impacted by metals originating from historic mining and milling wastes (CH2M Hill, 2010a). Although contaminated topsoil was removed from the floodplain near Woodland Park in the mid-1990’s, a great deal of contamination remains in this area and ends up in the creek.

Repository design features would minimize the potential for spreading contaminants from the proposed repository site. For example, the stormwater retention ponds on the existing Big Creek and East Mission Flats repositories have proven to be good methods to control stormwater runoff. They prevent stormwater collected from disposal areas from leaving the site. Contaminated soil placed in the Osburn and Star repositories would also be carefully managed to prevent it from eroding and leaving the site. This would be done two ways: (1) erosion control; and (2) stormwater control. These controls are discussed in detail below. These are typical erosion and stormwater control practices employed at the Big Creek and East Mission Flats repositories. These would likely be included in the design reports of the new repositories to comply with Clean Water Act requirements.

1. Erosion control strategies are designed to keep the soil in place. These include a number of items:

- Compacting the waste material to between 90 and 95 percent maximum density. This would result in a hard, durable surface;
- Gently sloping the compacted waste soil so rainwater and snowmelt would not rush off and erode the waste material;
- Construction of surface water features to control runoff and prevent run-on;
- Placing fiber rolls on exposed contaminated soil faces. The fiber rolls would slow down surface water runoff and capture dislodged soil particles;
- Once the final shape of the waste soil is achieved, the contaminated soil would be covered with a clean cap. The cap has not been designed yet, but these typically are covered with native vegetation to help stabilize the clean soil surface.

In addition to these erosion control measures, silt fences would be erected around the entire area of surface disturbance. The silt fence would trap sediment from surface water runoff before it leaves the property.

2. Stormwater controls are designed to: (a) retain stormwater on-site; and (b) minimize contact of clean water with contaminated soil.

Stormwater retention ponds would collect stormwater on-site and let the suspended contaminated sediment settle out. The site would be graded to direct water to holding areas within the repository perimeter.

Once a portion of the repository is complete, the clean soil cover would be constructed. Drainage features incorporated in the clean soil cover would be sloped to convey clean (non-contact) water off the repository to on-site retention ponds.

Standard inspection and maintenance practices would be applicable to Osburn and Star repositories. The erosion and sediment control features would be inspected weekly during the construction season, and monthly during the winter closure periods. In

addition, the site would be inspected after significant precipitation events to check that the controls are operating as planned. If a control feature is damaged and in need of repair, the Operating Contractor would work in coordination with DEQ to make the repairs.

Star Comment 2. Groundwater contamination

Response: Groundwater in the vicinity of the proposed Star Repository is already contaminated by lead, arsenic, zinc, cadmium and other metals (CH2M Hill, 2010a). The existing contamination originates from mine waste materials in and around the Star tailings site and from sources upstream of the Woodland Park area. The repository is planned to go on top of the dry surface of some closed mining waste tailings impoundments. The closed tailings impoundments also appear to be contributing to the groundwater contamination (Figure 3-28, CH2M Hill, 2010b).

An effective design and careful construction would decrease the amount of contaminants migrating to groundwater beneath the repository footprint. Examples of design features that would decrease infiltration through the waste materials and underlying old tailings include:

- The waste material on the outside surfaces would be compacted to 95% of maximum density. This would result in a hard, durable surface that would be difficult for water to penetrate;
- The repository top and sides would be graded (sloped) to encourage water runoff and prevent ponding;
- Prior to winter closure each year, exposed faces would be stabilized with a clean soil cover or a spray-on tackifier. The tackifier is like a spray-on glue that would inhibit infiltration and resist erosion; and
- When a section of repository is completely full and graded, the repository would be covered with a low-permeability cap and vegetated. The cap may consist of a thick soil layer to trap water, or a low permeability clay or synthetic liner to exclude water entirely. The type of cap to use would be selected during the repository design process. The cap would minimize the seepage of surface water into the waste material and potential transport of contamination from the waste material into groundwater.

These design and construction features should result in a repository that acts like an umbrella covering the waste material and underlying tailings. Experience with this approach at Big Creek indicates that it protects groundwater from impacts due to the repository construction process.

Star Comment 3. Exposure to dust

Response: The dust management measures for the Star Repository would be the same as at the Osburn Repository. The Osburn Repository dust management approach is

outlined in the response to Osburn Comment 3. While no site-specific plans have been prepared for either Star or Osburn repositories, dust management plans are incorporated in the Operation Plans for both Big Creek and East Mission Flats repositories. The dust suppression plans have proven successful at controlling nuisance dust at both repositories.

Star Comment 4. Exposure to truck traffic, noise and air toxics from diesel exhaust

Response: The Star Repository would be located adjacent to Highway 4 - Burke Road. Trucks hauling waste to the repository would take this road to the entrance. The proposed entrance to the repository is northeast of Woodland Park as illustrated on Figure 2. This entrance location would intercept truck traffic coming down-canyon before it passes through Woodland Park on Highway 4 – Burke Road.

The truck traffic and associated noise would be considered during operation of the Star Repository. Highway 4 – Burke Road passes very close to many residences on its way from Wallace to Woodland Park. To avoid running Star-bound trucks past these residences, the primary source of repository wastes is planned to be from sites in the immediate vicinity of Woodland Park and mine and mill sites up-canyon from the repository. This truck-routing approach assumes: (1) the Osburn Repository would be operational prior to starting cleanup work on the South Fork Coeur d'Alene River contaminated floodplains; and (2) mine and millsite cleanup work in Canyon Creek would not begin before the Star Repository is open to receive waste.

This is possible because there would be two repositories to receive waste generated in the South Fork Coeur d'Alene River valley: Big Creek (currently open) and Osburn (in the planning phase). Because there would be operating repositories in the South Fork valley, it would not be necessary to transport waste generated in the South Fork valley to the Star Repository. This plan would largely avoid putting loaded trucks on the road between Wallace and Woodland Park.

The potential exposure to diesel exhaust is not believed to be a significant concern for the Star Repository operation for two reasons: (1) most of the loaded trucks would not run on the populated portion of the road between Wallace and Woodland Park; and (2) canyon winds would naturally disperse the truck exhaust, minimizing the risk to humans and wildlife from exposure.

Star Comment 5. Storage of hazardous materials will impact people and wildlife

Response: The proposed repository site is currently contaminated. The repository would improve existing conditions through management of the facility. Soils would be stabilized, dust would be controlled, runoff and run on would be routed safely, and the property would be fenced. Trespassing would not be allowed on site where currently trespassing is not enforced.

People and wildlife could be exposed to the contaminants stored at the repository. The most likely exposure routes for people and wildlife to the metals-laden waste stored in the repository are: (1) eating the contaminated soil; (2) drinking contaminated water; and (3) breathing the dust generated at the repository site.

Direct contact with the waste material would be discouraged by installation of appropriate access control measures that would make it difficult for people and wildlife to gain access to the exposed waste material. Warning signs would be posted to inform the public that hazardous waste is present. Limiting direct contact to the waste would decrease the likelihood of exposure due to exposure routes 1 and 3.

The potential for exposure from drinking water contaminated by waste materials stored at the repository (route 2) is addressed in Star Comment 2, and exposure via dust inhalation (route 3) is addressed in the response to Osburn Comment 3.

Star Comment 6. Decreased property value

Response: The repository would be located in an area previously used to store milling waste materials. This proposed use would be an extension of previous activities. Therefore the use of this site as a Superfund waste repository is consistent with previous use for contaminated mine waste storage.

The proposed design would seek to minimize impacts to the public and wildlife by methods described in previous responses. The proposed use as a repository is in compliance with current Shoshone County zoning regulations. IDEQ and EPA would be good neighbors in operating the Star Repository.

Although surrounding activities can influence property values, many attributes contribute to the value of any given property, most of which are related to the attributes of the property itself. The impact of development of the Star Repository is unknown; it may increase, decrease or have no impact on property values.

Star Comment 7. Mapped fault beneath the repository

Response: An unnamed mapped fault may cross a portion of the proposed repository (Gott and Cathrall, 1980). The fault runs nearly perpendicular to the axis of Canyon Creek. Review of recent literature on this topic indicates there is no evidence of movement on the fault within the last two million years (Idaho Digital Atlas, 2010). Geologists consider these faults inactive. Special design features or land use zoning restrictions are not required due to the presence of inactive faults.

The concern with the presence of faults would be addressed in the design report. The seismic risk analysis in the design report would accommodate for settlement and slope stability risks associated with ground shaking from earthquakes.

Star Comment 8. Fully Divert Canyon Creek, flood control and slope stability

Response: The repository would be perched on top of the existing dry tailings impoundment materials. Review of the current FEMA flood maps indicates the repository is located outside of the floodway *and* floodplain of the 100-year flood. Based on this information, it would not be necessary to divert part or all of Canyon Creek to avoid 100-year flood impacts.

The design process would include a slope stability analysis. The design would reflect the conclusions of the analysis. The repository would be designed to have stable slopes, just like at the Big Creek and East Mission Flats repositories.

Star Comment 9. Adequate public participation

Response: The requirements for public participation are specified in Section 12.5 of the OU-3 ROD and summarized in the Introduction section of this document. In addition to this requirement, EPA and IDEQ have participated in and advertised public outreach. EPA and IDEQ participated in the following meetings focused wholly or in part upon repository issues in the Coeur d'Alene Basin:

- Basin Environmental Improvement Project Commission (BEIPC) public meetings held quarterly from November 2008 through January 2010;
- Citizen Coordinating Council (CCC) meetings for all citizens held quarterly from October 2008 through April 2010;
- Repository Project Focus Team (PFT) meetings open to citizens for information, held in February and August 2009 and February 2010;
- Open House citizen meetings in Wallace in May and June 2009 and March 2010;
- An availability session with the EPA Assistant Administrator Mathy Stanislaus on August 18, 2009 in Coeur d'Alene;
- Meetings with US congressional representatives, Shoshone County Commissioners, and Silver Valley mayors; and
- Informal meetings with citizens and citizen groups as requested by IDEQ/EPA staff or by citizens or citizen groups.

The nine criteria used in the repository siting evaluation process were developed as a direct result of input from the public at the May and June 2009 public meetings in Wallace.

The weighting of the nine criteria was accomplished in collaboration with Shoshone County Commissioners and designated representatives, Silver Valley mayors from Pinehurst to Mullan, the Coeur d'Alene and Spokane Tribes, citizens representing the CCC, and public agency representatives from the Idaho Transportation Department, EPA and IDEQ.

EPA and IDEQ heavily advertised the public outreach opportunities through a variety of media. The agencies utilized: direct mailings, newsletters, newspaper ads, EPA, IDEQ, and Basin Commission website postings, local television and AM and FM radio announcements, and flyers posted in public areas throughout the Silver Valley.

EPA and IDEQ believe this public outreach effort fully meets our obligation to solicit meaningful public input on the repository siting process. We also continue to encourage the public to come forward with new ideas for effective outreach.

This cross-section of the community is believed to be representative of the opinions of the affected public. However, this does not mean that the site selection process resulted in conclusions that were satisfactory to everyone involved. The agencies cannot satisfy everyone, but they are responsible for letting everyone know why and how the repositories are sited. This process provided an opportunity for EPA and IDEQ to fully explain and document their responses and rationale for site selection to the general public. The public outreach effort has and will continue to be responsive to public input, and incorporate local interests as repositories are sited and designed.

Star Comment 10. Additional consideration for Cole/Larson Road site

Response: The citizen criteria site ranking process resulted in this numeric ranking:

1	Osburn Tailings Impoundment	82.6
2	Star Tailings Impoundment	63.4
3	Cole/Larson Road	61.5
4	Burns –Yaak	53.4
5	Willow Creek - East Mullan	46.7
6	Former Smelterville Gun Range East	44.2
7	Government Gulch	42.7
8	Vacant RV Park, Smelterville	41.6

Osburn Tailings Impoundment was clearly most suitable using the nine citizen criteria, while the difference between the Star Tailings Impoundment and Cole/Larson Road site was relatively small. This ranking was made without incorporating new elements specific to the Cole/Larson Road site.

As stated in the Citizen Criteria Repository Site Ranking Summary (CH2M Hill, 2010c):

"The Cole and Larson Roads site rated 3rd of 8 sites . . . There are two issues not explicitly modeled that affect its relative desirability." The two issues are the potential for existing contamination at the Cole/Larson site and location of the site relative to the cleanup activities.

This passage notes that the factors of existing contamination and location relative to the cleanup activities were *not explicitly modeled* for Cole/Larson or any of the potential

repository sites. The Cole/Larson site was not evaluated by a different set of criteria than the other sites.

The repository siting location results summarized in the CH2M Hill report (CH2M Hill, 2010c) are solely based on: (1) the nine criteria developed by citizen input; and (2) weighting of the nine criteria by elected officials and their designated representatives, the Tribes, and citizen group and public agency representatives. No other factors were used in ranking the sites.

The passage cited above from the CH2M Hill report was a discussion of the relative merits of Cole/Larson outside of the nine criteria evaluated. The agencies used factors such as these to evaluate whether to carry forward Cole/Larson in the site evaluation process along with the Osburn and Star sites. Ultimately the agencies decided not to include the Cole/Larson site through the characterization process, in part due to consideration of the two factors mentioned above and in part to the responsibility to expend public funds wisely. It would not be reasonable to site a repository on clean ground a long way from the majority of the intended users.

Star Comment 11. Costs not included in rating system, additional public comment on costs necessary

Response: The criteria used in the citizen site selection process were developed directly from citizen input. Costs were not expressed as a concern in the citizen criteria and thus were not included in that part of the selection process.

A preliminary site development cost estimate was prepared for the top two sites identified by the citizen criteria ranking process: the Osburn and Star tailings impoundment sites. After evaluation of the preliminary cost estimate and consideration of other factors including access and right-of-way, ease of site acquisition, and operational logistics, EPA and IDEQ believe that the citizens' top two choices can be developed for a reasonable cost. No deviations from the citizen ranking process are foreseen. The agencies believe no additional public comment period is necessary on the site section process.

This public comment period concludes the first step in the public involvement process for repositories siting and design. The next public comment period will be in regard to the proposed 30% Design.

General Comments

General Comment 1. Remove Burns Yaak from list of candidate sites; Why include Burns Yaak, RV Park and former Gun Range on list? Sites included on list (Burns Yaak, RV Park and former Gun Range) would be more suitable for economic development, using them to store mining waste would be a crime.

Response: The Burns Yaak, the Smelterville RV Park and former Gun Range sites were carried through the site evaluation process because they met the first two screening criteria: (1) capacity greater than 500,000 cubic yards; and (2) currently inactive. Sites were not removed from consideration simply because an individual did not like the location. If we did that, there would be no sites available for repositories.

Not having repositories to contain Bunker Hill Superfund Site cleanup waste would hinder the cleanup by making it much more costly and result in potential impacts to other communities where waste would be transported. This would not be a responsible position to take for the agencies tasked with protecting public and environmental health. EPA and IDEQ have a track record of safely siting and operating repositories within the Bunker Hill Superfund site.

The siting process was a two-step activity:

- Identify sites that met basic requirements (capacity greater than 500,000 cubic yards and currently inactive); and
- Develop the citizen criteria and evaluate the remaining eight sites.

Step 1 was designed to pare the original list of 94 sites down to a short list for further evaluation. Step 2 incorporated the values of the community and applied those to the eight short-listed sites. The two sites selected as a result of the process, Osburn and Star tailings impoundments, were favored in part because they had lower values for economic development and fewer nearby residents so overall impacts were lower. We acknowledge there is no perfect location for a repository, but believe that the siting process incorporated met the needs of both the public and the agencies, and resulted in identification of the two sites most suitable for repository development.

General Comment 2. Purchase and develop both sites

Response: The intent of the agencies is to work with the current property owners to acquire and develop both sites. During public meetings held in 2009, EPA and IDEQ received several requests to simultaneously evaluate and site as many potential repository sites as would be needed for long-term cleanup. Repository siting is challenging, and the general opinion is that the public would prefer siting multiple repositories in a single process rather than one repository at a time. The Upper Basin repository siting process was designed to achieve this objective.

At this time, IDEQ and EPA estimate that the Osburn and Star repositories would provide a total waste capacity of about 3.6 million cubic yards. Based on the current waste projections, this would be adequate to service the Upper Basin waste volume needs for decades.

General Comment 3. Where is tailings water from mines going to go?

Response: The two sites are located on former mining waste tailings impoundments. The impoundments have been taken out of use and revegetated. Although there is an expired NPDES permit for a portion of the Star tailings complex, there are currently no active mines in Canyon Creek in need of tailings impoundment capacity. EPA and IDEQ will work with the property owners of the Star tailings impoundment repository to discuss future land uses that may occur at the proposed repository site. At the Osburn site, the agencies are working in coordination with the mining company to accommodate the need for additional tailings storage.

General Comment 4. Repositories should not be within city limits or seen from any highway or well traveled road

Response: The citizen criteria captured the concerns related to locating a repository within city limits. The impacts to people living and working in the area, and the redevelopment potential were all considered as the most- or very important in the weighting process. The results of the citizen site ranking process reflected this bias; the four sites located within city limits – Burns Yaak (Osburn), Government Gulch (Kellogg), and the former Gun Range and vacant RV Park (Smelterville) ranked 4th, 7th, 6th and 8th respectively in the final rankings.

The repositories would be visible from highways and well travelled roads. One of the primary goals of the siting process is to make disposal convenient for the public. Locating repositories in remote areas difficult to access and far from where people live would discourage people from using them. This would not be a wise policy.

The Silver Valley is a rugged landscape with natural features such as mountains and valleys, and man-made features such as roads, gravel pits, tailings impoundments and waste rock piles, clear cuts, and power lines. How the repositories would fit within the existing setting is one thing the agencies would investigate during the design process. In order to do this, visual simulations would be developed. The simulations would compare pre- and post-construction views of the repository sites to show what the finished repository would look like.

The sides of the repositories would be graded out to a gentle slope and revegetated with a native seed mix. The repositories would not be tiered in “layer cake” fashion, or left as bare soil hillsides. They would also be managed during operation and after they are full to make sure they are not eroding and forming scarred hillsides.

The results of the visual simulations would be included in the 30% Design Report. The public would have an opportunity to comment in the 30% Design Report, so input at that time would be welcome as the final repository design takes shape.

Public comment on the appearance of a repository is important and can lead to design changes. For example, as a result of comments received at the 30% Design stage of the East Mission Flats repository, the planners reduced the height of the repository from 64 to 32 feet high. Your continued participation in the repository siting and design process is encouraged.

General Comment 5. Design review – will public be able to comment on repository design? No information on capacity and height of new repositories; design stage is too late to formulate substantive comments.

Response: There are two stages to the public review process: one comment opportunity on site selection; and the second comment opportunity on design features and challenges. The public would have an opportunity to review each repository at the 30% Design stage. Comments from the public at the 30% Design stage would be considered in developing the final 90% Design for each site. At this time there is no plan to produce a 60% Design Report and public comment period at either repository.

Simple three-dimensional block models were created to estimate preliminary repository capacity since repository capacity was one of the citizen selection criteria. The preliminary estimates are given on Exhibit C, Line 9 of the CH2M Hill report (CH2M Hill, 2010c). The Star site waste capacity is listed as 1.6 million cubic yards, and Osburn site waste capacity is listed as 2.8 million cubic yards.

Since the original estimates were made, the agencies have decided to pursue a smaller repository at the Star site. The current waste capacity estimate for the Star site is 800,000 cubic yards.

Preliminary design work is currently being conducted at the Star and Osburn sites. Based on the above preliminary volume estimates, the height of the waste at the Star Repository would be 50 feet; the height of the waste at the Osburn Repository would be 140 feet.

General Comment 6. I am in agreement with the two locations (Osburn and Star Ponds) for repositories because they are not parcels that are highly desirable for future economic development.

Response: Comment noted.

Conclusion

Your comments are appreciated. The repository siting and design process will yield a better product as a result of public input. If you have questions about this process please contact:

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References

CH2M Hill, 2010a, Updated Woodland Park Components of Ecological Alternatives 3 and 4; *in* Appendix E, Focused Feasibility Study Report, CH2M Hill, February 2010.

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Figure 1

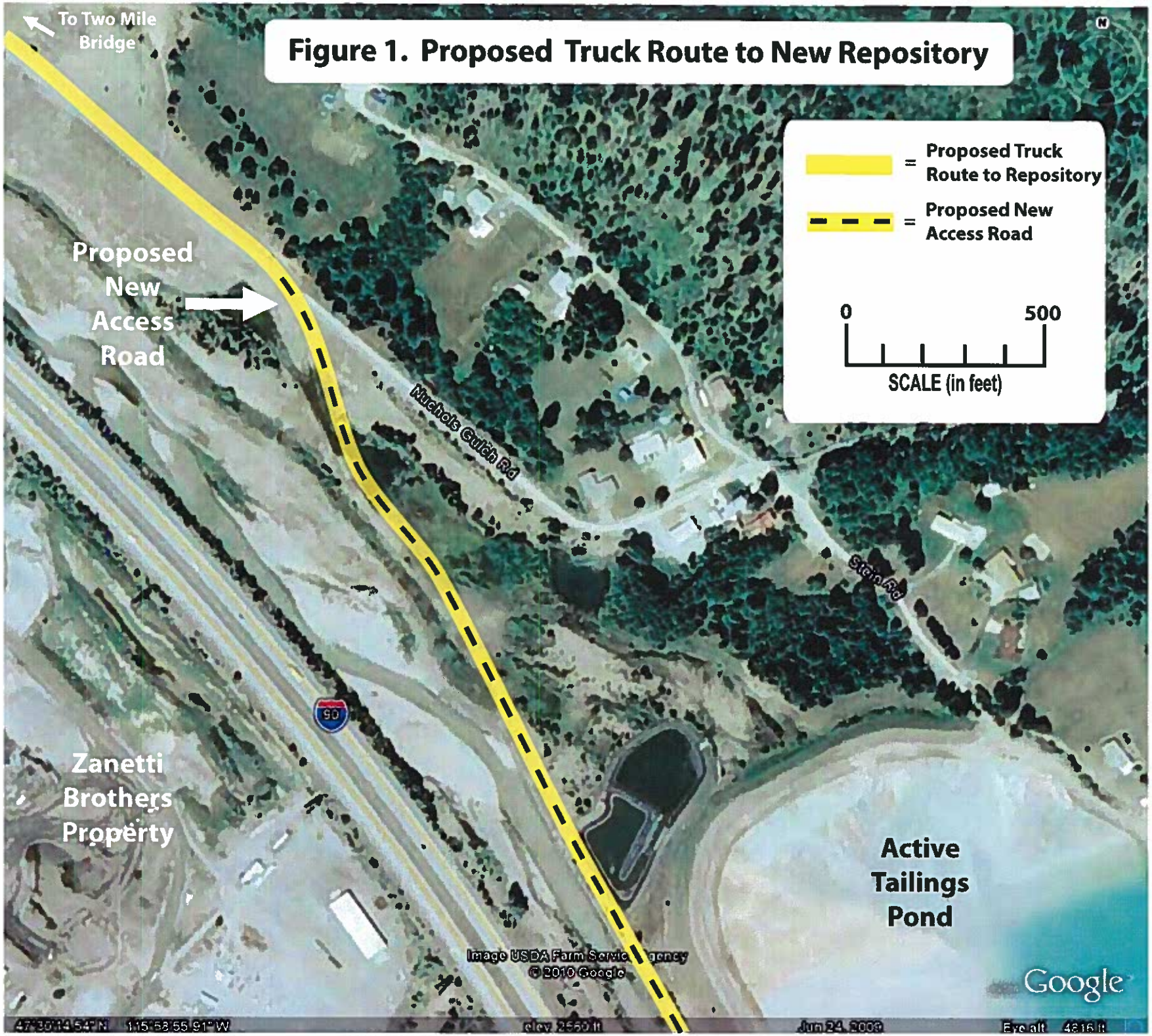

Figure 1. Proposed Truck Route to New Repository

Figure 2

Figure 2. Proposed Star Tailings Impoundment Repository