



East Mission Flats Waste Repository Frequently Asked Questions



October 2009

What is Covered in this Fact Sheet?

People are asking questions about the East Mission Flats Repository (EMF), west of Cataldo, Idaho. Below are some of those questions with answers from the Environmental Protection Agency (EPA) and the Idaho Department of Environmental Quality (DEQ).

The design for the repository is final. For a copy of the site's 90% Design Report, contact Andy Mork, Idaho Department of Environmental Quality, at 208-373-0141, or andy.mork@deq.idaho.gov. Or, find the report's briefer Executive Summary at: www.basincommission.com or http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/east_mission_flats_repository

Note from the Agencies

EPA and DEQ understand why some people have concerns about the EMF Repository. Some people may not have all the information or facts about what the agencies are doing. Others may not agree with the agencies' decisions and actions related to the Superfund cleanup. This fact sheet helps to set the record straight.

We, as federal and state environmental agencies, are obligated to make sound scientific decisions. We are dedicated to our mission to protect public health and the environment, even if our actions are unpopular. If we are missing something or have made a technical error, we want to know and will listen to all comments. However, there are times that we don't agree with the input we receive and don't feel that we should change our decisions. For all of our cleanup work, we recognize the importance of explaining our rationale and will continue to look for ways to improve our public involvement. This fact sheet is another opportunity for us to share timely information with the public.

Current Status of East Mission Flats Repository

What activities are currently underway at EMF?

Site preparation at the EMF repository is essentially complete. Part of the site has been cleared of vegetation, and a safe, convenient access for vehicles and equipment is being constructed close to Exit 39. Trees removed from the site have been donated to the Kellogg School District to fuel the Middle School boiler. Clean soil, known as structural fill, was brought in to construct a temporary ramp for heavy equipment access. Workers are now building a new access bridge at Exit 39, which involves pile driving and bridge-deck placement.

The site began to receive contaminated residential waste soil in late August 2009 as part of site preparation activities. This soil forms a 14,000 cubic-yard pad that will support the decontamination facility. The pad needed to be built right away to allow enough time for the material to settle before concrete is placed on top of the pad. The settling time is about 4-5 months. Then it will take another few months for the decontamination facility to be built. With this

timeline, the repository will be fully operational in the 2010 construction season. Contaminated soils from the property cleanups are currently being disposed in a small area adjacent to the decontamination facility pad. This disposal will continue until bad weather shuts down the cleanup. Before winter closure, soil placed in the EMF repository will be stabilized to resist winter erosion and spring rain, snowmelt, and flooding.

**Office of
Inspector
General
Review
Complete**

What is the status of the Office of Inspector General review?

The EPA Office of Inspector General (OIG) reviewed the agencies' community involvement work for the repository siting and design. It also reviewed technical issues related to flooding at EMF. The OIG endorsed the agencies' community involvement efforts. The OIG also made recommendations for more technical review of the potential for metals to leach from the repository during flood events. The agencies did careful and thorough work to respond to the OIG recommendations, seeking two independent technical reviews. Both independent reviews concluded that the design was adequate and made no recommendations for design changes.

On August 12, 2009, the EPA Office of Inspector General (OIG) accepted EPA Region 10's action plan for the East Mission Flats Repository. The OIG stated that the "planned corrective actions address the remainder of our concerns." The plan is to do enhanced monitoring at the repository. This additional step will address technical uncertainties identified by the OIG. DEQ will prepare an Enhanced Monitoring Plan which will outline the agencies' plans to monitor moisture conditions within the repository and water levels in the ground below the repository. The goal of preparing this Enhanced Monitoring Plan is to provide a performance check to see if conditions at the repository are as anticipated in the design studies. The OIG did not require any changes to the repository design. The OIG did not request a moratorium on the repository construction.

**Agencies Will
Seek Public
Input on
Enhanced
Monitoring
Plan**

Will there be public review of the draft Enhanced Monitoring Plan?

Yes. DEQ will prepare the Enhanced Monitoring Plan with input from EPA and the public. That input for the plan will incorporate any comments from the independent Region 10 hydrogeologist who reviewed the repository design based on the OIG's request. The public review period will run from October 13 to November 12. A community open house about the monitoring plan will take place on October 29, 2009. To give the public more time to review the plan, EPA has requested an extension to the deadline before submitting it to the OIG.

**No Moratorium
Requested by
OIG**

Why didn't you stop work on the repository until the OIG investigation was completed?

The OIG did not say the East Mission Flats repository location was inappropriate. They did not recommend that work at EMF stop. The OIG recommended that an independent technical review be performed to assess the assumptions and conclusions of the site geochemical and physical conditions presented in the 90% Design Report. That verification was completed and sent to the OIG on July 23, 2009. The technical review concluded that the site has little to no potential for leaching metals to groundwater and that the review effectively completed the tasks necessary to address the OIG recommendation. Therefore, EPA and DEQ had full confidence that the OIG concerns could be addressed while site preparation occurred. The August 12 OIG response

confirmed the agencies' position and approved the corrective action plan to develop an enhanced monitoring program.

EPA Assistant Administrator Decides EMF will Proceed

EMF Receives "Go-Ahead" for Further Development and Construction

In 2009, EPA Administrator Jackson received a number of inquiries about the Bunker Hill Superfund site and, specifically, EMF. Some people asked the Administrator to review the Region's decision-making, some asked for a moratorium at EMF, and some expressed support for moving forward with repository construction.

Administrator Jackson asked Mathy Stanislaus, Assistant Administrator for EPA's Office of Solid Waste and Emergency Response (OSWER), to visit the site and directly assess the situation. The national Superfund program resides in OSWER.

On August 18 and 19, 2009, the Assistant Administrator visited the Bunker Hill site to meet with stakeholders and see the cleanup, including EMF. Mr. Stanislaus listened carefully to a wide range of perspectives. He heard from local residents who strongly oppose EMF. He also heard from local residents who support the need for siting repositories, including EMF, so residential cleanups can continue as quickly as possible. Mr. Stanislaus reviewed the OIG findings, including its acceptance of EPA's corrective action plan. He heard from DEQ. After carefully weighing all of this information, Mr. Stanislaus made the decision on September 28, 2009 that EMF would proceed. He noted that developing repository sites remains an important priority and a way to greatly reduce health hazards in the Coeur d'Alene Basin. At the same time, he concurred with the OIG's recommendation to develop the Enhanced Monitoring Plan for East Mission Flats.

Protecting Human Health

Why are the agencies placing a repository at East Mission Flats?

It is true that, at first take, East Mission Flats does not look like a good place to put a repository. It floods. It's near a historic landmark in a culturally significant area. There are wetlands nearby. There is clean groundwater under the site. Because we shared these concerns and have a mandate to protect human health and the environment, we took great care in selecting this site. Technical studies show that we can engineer this site to withstand floods, protect groundwater, and protect nearby wetlands. We coordinate with the Tribe and the State Historic Preservation Office to ensure sensitivity about cultural resources. We changed the planned height of the repository so it won't be easily seen from the Mission.

The agencies are cleaning up properties as part of a Superfund project to protect the health of people and the environment. Cleanup started over 20 years ago due to a public health crisis. Hundreds of children and families had elevated blood lead levels. Because of the cleanup, there have been major reductions in blood lead levels. Part of the cleanup involves disposing of contaminated materials, mostly from cleanup of residents' yards and community areas. Repositories are designed and managed to contain those contaminated materials safely, which reduces exposures for people and animals. EPA and DEQ searched for other sites for the repository, but East Mission Flats was found to be the most viable location in the lower Basin.

Repositories make good sense. There is contamination all over the place. The

cleanup primarily consists of scraping up contamination from all over the Coeur d'Alene River Basin and putting it into repositories. Here, the contaminants are managed and secured in place. When the repositories are full, they are capped over with clean material. Repositories reduce the footprint of contamination. They protect people and wildlife.

Location and Appearance of Repository

Will the repository affect the Old Mission or its grounds? Will it be visible?

The repository is not located at the Old Mission. The repository is located across Interstate 90, about 0.35 mile away, as measured from the steps of the Old Mission to the closest point of the repository. The repository footprint is roughly triangular and covers about 14 acres. No waste will be brought to the Mission or its grounds. The repository will not be easily visible from the Mission. In fact, it may not be visible at all. The trees and vegetation already in place obstruct views of the repository from the Old Mission. In order to further screen the view from the Old Mission, in 2008 DEQ planted 420 trees on the south side of the EMF property between EMF and the Old Mission. As the trees grow they will add to the existing trees that block the view from the Old Mission. The site will be vegetated with a native seed mix as it reaches full design height, to blend in with the natural surroundings. It will not look like a cube, a block, or steps.

Criteria Used to Select EMF

What criteria were used to select EMF? Are there other more suitable sites nearby?

Starting in 2002, DEQ and EPA surveyed possible sites in the Coeur d'Alene Basin for a new repository. The agencies identified a list of over 250 sites in the Upper and Lower Basin. Many of the sites were found to be unsuitable because they were in a floodway. A floodway is an active channel for fast-moving flood waters. Sites were also found to be unsuitable because they were existing wetlands, or not easy to reach from Interstate 90. These sites were removed from the list, as were sites in the Upper Basin, which were too far away to effectively serve the Lower Basin cleanup.

After this first screening, a second more detailed screening was done. This second screening looked at whether the site was relatively flat; how near the site was to wetlands; whether the area around the site was previously contaminated by mine waste; how close the site was to Lower Basin cleanup areas; how big the site was and how much waste it could hold; whether the site was outside the floodway; how easy it was to access the site; what were adjacent land uses; and possible impacts on neighbors.

East Mission Flats remained a potential site after the second screening. The property owner was willing to sell, and the agencies began studies in 2004 to find out if the site was suitable for a repository. (See Q&A below on the timing of public involvement.) The site was purchased by the State in August 2006. Since then, extensive technical studies have confirmed EMF is a suitable, safe place to contain contaminated soils. Studies show the area under EMF's footprint has at least three feet of contaminated soils already. EPA and DEQ prefer to place contaminated soils in areas already contaminated. No clean land will be used for this repository.

Consequences of Delaying a New Lower

What if there was no new repository in the Lower Basin? Or the siting was delayed?

**Basin
Repository**

Residential property cleanup is key to protecting people from exposure to lead and other harmful contaminants, particularly high-risk groups like young children. If EPA and DEQ delayed placing a new repository in the Lower Basin for two or three more years, the Superfund cleanup would have to slow down. Some workers would be laid off. Fewer yards in the Lower Basin would get cleaned up. This is because the agencies currently have limited places to put the waste soils from the cleanups. For example, the existing Big Creek Repository is being used mainly to take residential waste soils from Upper Basin communities. Big Creek is the only other Basin Superfund repository, and it's expected to be filled by mid-summer 2010.

**Siting
Repository in a
Floodplain**

Why are DEQ and EPA placing the repository in a floodplain?

EPA and DEQ would not build a repository that spreads contamination. EPA and DEQ concluded that the repository can be safely built and managed in this location. The agencies have done extensive studies and public outreach to get input. Flood concerns were addressed early in the design. The repository is being engineered to prevent metals from getting into the groundwater under the site. The repository is also designed to prevent sediments from eroding during floods. The sides of the repository will have an engineered surface designed to resist erosion from flowing water, even during the 100-year flood event. Plus, the soil will be very tightly compacted so that most water will just run off the sloped repository sides. This means that even in a flood, the soil in the repository will remain dry except around the outer edges. Water will not be flowing through the repository picking up contaminants.

The site is mostly flat and shielded from fast-flowing water during floods. It is protected by 1-90 to the south, Canyon Road to the north, and the Dredge Road to the west. During flooding, water will fill the site gradually like a reservoir, instead of flowing quickly through the site. Erosion controls will help ensure that materials do not get eroded by rain or snowmelt. For extra protection, the lower slopes of the repository will be armored with rock or vegetation to make it stable during floods.

The native soil under the site also reduces the chance of metals leaching. DEQ studies find the soil can selectively remove metals from water percolating through the waste soil. This is called "sorption." DEQ expects that piling waste soil on top of the native soil will not stop this naturally-protective process.

**Protecting
Groundwater,
Drinking Water**

The groundwater under EMF currently meets safe drinking water standards. Could the repository contaminate it?

The groundwater beneath the repository property currently meets safe drinking water standards and needs to be protected. Although the water under EMF is not being used as a drinking water source, nearby groundwater is used by residents in the area for drinking water.

The agencies believe the underground water will not be contaminated by the repository. The technical studies indicate that groundwater won't rise up into the repository soil. And, as noted above, native soils and engineering features will reduce the chance that contaminants will leach into groundwater. The agencies will continue to check on water quality in and around the EMF repository as part of the monitoring program.

Results from the groundwater monitoring wells already in place show that groundwater beneath the repository meets drinking water standards for metals. However, water west of the site has shown arsenic concentrations above the drinking water standard in two out of four quarterly sampling events. These arsenic "hits" have been measured at a groundwater monitoring well located about 1,700 feet west of EMF, along Dredge Road. The last sampling event was performed in August of this year, prior to the start of placing contaminated residential soils at the EMF repository. There are no drinking water wells near the contaminated monitoring well.

Based on the information discussed in the previous paragraphs, the agencies believe that activity at EMF could not have influenced water quality at the monitoring well because: 1) there are no arsenic exceedances in groundwater samples from EMF; and 2) water levels at the contaminated monitoring well are four to five feet higher than at EMF. The higher water level in the contaminated monitoring well means water would have to flow uphill from EMF to influence water quality at the monitoring well. Water does not flow uphill.

The agencies recognize that there is widespread contamination in the Lower Basin floodplain, in areas underlying and adjacent to the EMF repository. This includes some areas where data indicate that groundwater is contaminated. At this time, it is not known how widely the groundwater in the Lower Basin is contaminated. However, the agencies know that much of the groundwater in the Upper Basin is very contaminated and cannot be used safely for drinking water. The agencies are spending lots of resources to clean up contaminated water and provide safe drinking water to people living in the area. We would not build a repository that contaminates clean water. The agencies are doing what is needed to ensure that cleanup actions, such as the development of the EMF repository, do not result in spreading contamination to clean areas.

The existing monitoring network tells us a lot about groundwater conditions in and around EMF. The Enhanced Monitoring Plan will provide even more information to help understand the site. As part of the Enhanced Monitoring Plan, DEQ will install additional monitoring wells within the waste soil mass, and water levels and water quality will be monitored if and when the repository becomes saturated. This will be an early warning system to identify potential problems with metals leaching from the repository. If the monitoring well data indicate an increase above background in metals concentrations in groundwater, corrective action would be initiated immediately. This could include remedies such as installation of drainage or aeration systems, or water extraction systems. This could also include remedies up to and including discontinuing waste disposal at EMF until the source of the problem is identified. In this instance, continuing disposal at EMF would occur only if corrective actions could be implemented to maintain protection of human health and the environment.

Repository Placement – Opportunities

When did DEQ take comments on whether to site the repository at East Mission Flats?

There were a number of opportunities for public input over the last few years.

**for Public
Input**

In 2005, the agencies prepared a Frequently Asked Questions document and went door-to-door to discuss East Mission Flats with some people living close to EMF. Also in 2005, the agencies held a public meeting about East Mission Flats at the Mission. The Autumn 2005 edition of the EPA newsletter, the Basin Bulletin, solicited ideas for repository locations. In 2006, another public meeting was held at Canyon School about East Mission Flats. After making several presentations to the Basin Commission and its committees, DEQ purchased the site in August 2006. In 2007, the public raised many questions and concerns. The agencies held more community meetings, hosted a site tour, gave presentations, mailed updates, made media announcements, and participated in other outreach efforts. To provide the public an opportunity to give input on the repository design, DEQ made the 30% and 60% Design Reports available to the public. Written responses to public input on the 30% and 60% Design Reports were issued in September 2007 and October 2008, respectively.

The OIG endorsed the agencies' public involvement efforts. At the same time, some citizens do not believe they were adequately informed nor had enough chance to comment on the site selection. Not everyone got a knock on the door, or received a mailing, or read the papers, or attended a meeting. The agencies are listening. We believe we could have done a better job, and are working hard to improve our communications. EPA is renewing its investment in a Community Liaison position for the Bunker Hill site. The liaison will be placed in the area to improve communications and agency accessibility. As always, EPA welcomes additional ideas for continuing to improve its public involvement program.

**Repository
Shape and Size**

How much waste will go into the repository?

The repository will cover about 14 acres of the 23-acre property. It is about 650 feet long on the northwest side, 1,650 feet long on the southwest side, and 1,350 feet long on the northeast side. EPA and DEQ estimate that, when full, the repository will hold about 445,000 cubic yards (cy) of material. Of the 445,000 cy of material, 30,000 cy will be the clean cover.

**Cultural
Resources**

How are DEQ and EPA addressing concerns about protecting sacred cultural resources?

Protecting sacred cultural resources is very important to both EPA and DEQ. The agencies recognize the historic importance of this area. To date, DEQ has consulted with the Coeur d'Alene Tribe, State Historic Preservation Office (SHPO), and local sources about the site's cultural significance. An archaeological evaluation was completed for the site under the National Historic Preservation Act. The evaluation did not turn up any artifacts in the repository area. SHPO approved the project, with the condition that an archaeological expert will monitor excavation activities described in the evaluation. If the archaeologist detects the presence of cultural resources, work will be halted until a thorough evaluation can be done.

**Protecting
People and
Wildlife**

Will the repository pose a risk to people and wildlife when it's finished?

DEQ and EPA have carefully engineered the repository to reduce the risk to people and wildlife. Similar to the residential cleanup, the risks will not be

completely eliminated because wastes will remain in place. However, the site will be capped with clean soil and re-vegetated to offer a clean and safe surface for wildlife. The contents will be stable and monitored by DEQ for the long term, which is required by Superfund law when contaminants remain in place. Moreover, the risk to the health of people and wildlife is greatly reduced when contaminated soils are removed from the places people live and put in secure repositories.

Dust Controls

What will be done to keep dust from blowing off the repository?

DEQ will monitor dust levels at the repository. When EMF is active, the interior roads will be watered or treated to control dust. Measures also will be taken to ensure that dust does not blow off work vehicles carrying materials to the site. During the inactive portion of the year, the exposed soil surfaces will be stabilized to prevent wind and water erosion and creating a dust hazard. After the repository is full, it will be covered with clean soil and reseeded with a native seed mix to minimize the chance for wind erosion. DEQ will monitor the site long after the site is full to ensure that contaminated materials placed in the repository stay in the repository.

Dust is common in this area due to large areas of bare ground west of the Dredge Road where people commonly drive recreational vehicles. The property west of Dredge Road is not owned by EPA or DEQ, but has "No Trespassing" and "Health Warning" signs, posted by the property owner. If dust from the property west of Dredge Road is a problem, the public is encouraged to contact the Panhandle Health District at 208-783-0707.

Wetlands

Will the repository harm wetlands?

No. The repository design has been adjusted to protect the nearby wetlands. At first, the property owner had offered to sell 90 acres. DEQ eventually purchased a total of 23 in two parcels after studying where the wetlands are and how they might be affected. A study was used to develop a repository "footprint" which will not fill in any designated wetlands.

EMF, like the other repositories, will be closely managed to keep contaminated soil out of waterways. Soil placed on the repository will be compacted to make it hard for water to wash it off the repository. The side slopes of EMF will be sloped to prevent erosion. Water channels on EMF will be lined with clean rock to prevent contact with the underlying contaminated soil. Silt fences and other erosion controls will be placed around the disturbed ground to catch fine material in water running off the repository. There will be regular inspections and maintenance to check up on these erosion control measures. If any part of EMF is found to be eroding, the erosion will be stopped.

Site Studies

Are all the required studies for this site complete?

Yes. All technical and administrative analyses are now complete, with the exception of the Enhanced Monitoring Plan, described above, being completed as part of the agencies' corrective action plan. The public will have an opportunity to give input on the monitoring plan. The plan will improve the

agencies' understanding of the site's vertical groundwater gradients and monitor moisture conditions inside the repository. DEQ expects the plan to be completed in November 2009.

**Protecting
Roads**

Will heavy trucks carrying materials to the repository tear up the local roads and the old Highway 10 bridge?

No. The contractors hired by DEQ for the yard cleanup program will not be allowed to use the Old Cataldo Bridge on Canyon Road for heavy loads. All contractors hauling materials to the site are required to comply with highway weight limits. All work will be performed in coordination with the Institutional Controls Program as described in the Record of Decision.

The trucks operated by the DEQ yard cleanup contractors will continue to meet local weight and speed limit restrictions. The trucks are owned by local contractors that pay the Idaho State fuel tax when purchasing fuel, just the same as other heavy trucks, such as those involved in construction, logging and mining activities.

A new bridge at Exit 39 will minimize truck traffic on Dredge and Canyon Roads. Most heavy truck traffic will enter East Mission Flats on the southwest side, immediately off I-90 Exit 39. However, some limited truck traffic on Canyon and Dredge Roads will be necessary when cleanup starts on properties near Tamarack Ridge Road, South River Road, and several other smaller areas.

DEQ and EPA do not control traffic patterns of individual ICP users. Although highway signs will direct ICP users to Exit 39, undoubtedly some ICP users will cross the Old Bridge.

Get Involved

How can I become more involved in the cleanup?

You are invited to participate in the Citizens Coordinating Council, or CCC. The CCC is a forum for citizens interested in the Coeur d'Alene Basin Superfund cleanup project. You can learn about issues, share your concerns and comments, and provide advice to the Basin Environmental Improvement Project Commission. To learn more, contact Jerry Boyd, CCC Chair, at 509-455-6000 or go to www.basincommission.com/ccc.asp

**More
Information**

Where can I find out more about the cleanup?

In addition to the CCC discussed above, we encourage you to sign up to get EPA's free Basin Bulletin. This newsletter provides regular updates on cleanup activities in the Basin and opportunities to get involved. To be added to the mailing list, contact Andrea Lindsay or Debra Sherbina (contact information below). Information is also available at the listed websites and at local libraries. For more information, contact Terry Harwood, Basin Commission Executive Director, at terry.harwood@deq.idaho.gov or 208-783-2528.

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**Websites for
Documents
and
Information**

Basin Environmental Improvement Project Commission:
www.basincommission.com

U.S. Environmental Protection Agency:
http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/east_mission_flats_repository
Alternative formats are available. For reasonable accommodation, please call Debra Sherbina. TTY users, call the Federal Relay Service at 800-877-8339.
