

**Enhanced Monitoring Plan Summary  
East Mission Flats Waste Repository  
October 2009**

The Idaho Department of Environmental Quality (DEQ) is developing an “Enhanced Monitoring Plan” for the East Mission Flats Repository, in Cataldo, Idaho. The plan is being done in response to the U.S. Environmental Protection Agency's (EPA) Office of Inspector General's (OIG) recommendation. You are invited to share your suggestions on the draft plan by **November 12, 2009**.

**Why was the Enhanced Monitoring Plan recommended?**

Because East Mission Flats lies in a floodplain that gets high water every year, the OIG recommended that EPA and DEQ enhance the existing monitoring plan to ensure the repository is safely storing waste soil. The enhanced monitoring plan is an early warning system to make sure metals in the repository's waste soil don't contaminate the groundwater. When finished, the plan will be added to Appendix M of the East Mission Flats Repository 90% Design Report.

**Why are DEQ and EPA putting the plan in place?**

DEQ and EPA want to be sure that the assumptions they made during the design process are accurate. One of the assumptions that they want to carefully watch is if water builds up within the contaminated soil pile of the repository. DEQ is putting the plan into action with EPA oversight. The agencies have a mandate to protect people's health and the environment, and are building in this extra level of monitoring to make sure the repository does not put people or animals at risk. The EMF site is currently ringed with a network of six groundwater monitoring wells. The wells have been sampled every quarter since December 2007 and will be sampled during construction and after the repository is full. The enhanced monitoring plan will add more wells to the sampling program.

**The Enhanced Monitoring Plan also will:**

- Monitor to find out if water is seeping into the repository soil;
- Help the agencies learn more about pathways for water to move between the shallow and deep water-bearing zones at the repository;
- Help the agencies learn more about how water levels in the Coeur d'Alene River affect groundwater levels at the repository, including during flood events; and
- Determine if the repository monitoring results show trends that indicate release of metals from the repository is occurring.

**Measuring waste soil moisture:**

In early spring 2010, two new wells, or "piezometers," will be put in to monitor free water within the waste soil. The piezometers will be installed in the contaminated soil of the “decontamination pad” at the west end of the repository near Exit 39. The wells will have electronic devices called “transducers” to measure if water is present in the contaminated soil. If water is found, a probe will replace the transducer to record water

level, pH, dissolved oxygen, and oxidation-reduction potential. The probe will record this data at least once per day for as long as there is water in the piezometers.

**Checking on water migration pathways:**

A third new well, called “MW-C-Deep,” will be installed near a monitoring well already in place. The new well will be constructed or “screened,” into the deep water-bearing zone under the East Mission Flats Repository. DEQ chose this place because it is down-gradient from the repository and the existing well is the closest monitoring location to the new piezometers. The new well will measure the direction of water flow (vertical gradient) between the shallow and deep water-bearing zones under the repository. The well will also measure how the vertical gradient changes over time.

**Surface water flow:**

Sampling will also be done to study the way surface water flow influences groundwater levels. The data will look at whether high water in the Coeur d’Alene River has a connection to high groundwater levels at East Mission Flats repository.

**Making information available to the public:**

Water quality data collected and described above will be available to the public. Every three months, it will be posted on EPA’s Water Quality Exchange webpage: <http://www.epa.gov/storet/wqx.html>. DEQ will include a yearly summary of water monitoring data and the groundwater quality trend analyses in the EMF Annual Operations Report. A draft of this report is due to EPA on April 1, 2010.

**Citizens Coordinating Council meetings:**

Come to the quarterly CCC meetings to learn more about the quarterly monitoring results because the results will be presented at the CCC meetings. Participation in CCC meetings is also a great way to get involved in the Bunker Hill Superfund Site cleanup. Meetings are held each quarter. For more information: <http://www.basincommission.com>

**Find the draft Enhanced Monitoring Plan, and other EMF information, online:**

[http://yosemite.epa.gov/r10/cleanup.nsf/sites/east\\_mission\\_flats\\_repository](http://yosemite.epa.gov/r10/cleanup.nsf/sites/east_mission_flats_repository) or [www.basincommission.com](http://www.basincommission.com)

**Do you have input on the plan?**

Send your ideas by **November 12, 2009** to Andy Mork, DEQ, 1410 N. Hilton, Boise, ID 83706, [Andy.Mork@deq.idaho.gov](mailto:Andy.Mork@deq.idaho.gov)