STORM WATER

Results for 2003

This program monitors point source discharges of storm water from Department of Energy facilities to waters of the U.S. as required under the Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES). The program covers parameters in storm water listed in the "Final Modification of the NPDES Storm Water Multi-Sector General Permit for Industrial Activites"(General Permit). The INEEL implemented the analytical monitoring requirements of the 1998 General Permit starting January 1, 1999. The General Permit was reissued in October 2000, and the INEEL gained coverage under this permit in January 2001. The General Permit requires visual monitoring during the first, third, and fifth years of the permit's duration and both analytical and visual monitoring on the second and fourth years, and only when a qualifying storm has occurred. A qualifying storm is a rain storm that has accumulated at least 0.25 cm (0.1 in.) of precipitation preceded by at least 72 hours without measurable precipitation (<0.25 cm [<0.1 in.]) to allow pollutants to build up then be flushed from the drainage basin.

QUICK FACTS

Four storm water analytical monitoring points

- 2 INEEL site areas
- 14 storm water samples were collected
- Regulations: National Pollutant Discharge Elimination System (NPDES)

FOR MORE INFORMATION

Visit our Web site at:
http://cleanup.inel.gov/monitoring/

Read the 2003 Annual Site Environmental Report that is available in DOE Public Reading Rooms or at our Web site.

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In a letter dated October 27, 2003, the EPA Region 10 determined that three sites at the INEEL (Radioactive Waste Management Complex [RWMC], Idaho Nuclear Technology and Engineering Center [INTEC], and the north part of the INEEL property near Birch Creek) do not have a reasonable potential to discharge storm water to waters of the United States. A subsequent letter on December 15, 2003, from the DOE Idaho contract officer to the BBWI Prime Contracts manager directed BBWI to cease expending further resources on Storm Water Pollution Prevention Plan for Industrial Activities, Storm Water Pollution Prevention Plan for Construction Activities, and Spill Prevention Control and Countermeasures Programs at the three sites discussed in the letter from EPA. The letter further directed BBWI to conduct a technical analysis to determine any other areas at the INEEL that would also have the same or less potential to discharge storm water to waters of the United States. As a result of this direction by DOE Idaho, construction and industrial storm water inspections, data collection, and reports have ceased for projects located at those facilities.

The remaining projects will be evaluated through the technical analysis requested by DOE Idaho to determine potential to discharge. Required storm water inspections and reporting will continue for these projects until the technical analysis is completed. At that time, inspections and reports at any additional projects that have no reasonable potential to discharge to waters of the United States, as determined through the technical analysis, will cease.

The Storm Water Monitoring Program monitored the following facilities or activities:

- Borrow sources (nonmetallic mineral mining, Sector J)
- INTEC (hazardous waste treatment, storage, and disposal, Sector K – ceased monitoring in December 2003)
- Landfills I, II, and III Extension at the CFA (Landfills, Sector L)
- RWMC (Sector K and Sector L – ceased monitoring in December 2003)
- Specific Manufacturing Capability (transportation equipment manufacturing, Sector AB – ceased monitoring in December 2003).

In addition to the above-discussed NPDES permit-required monitoring, the program monitors storm water to deep injection wells to comply with State of Idaho injection well permits.

Information regarding permit limits and location-specific parameters can be found in the *2003 Annual Site Environmental Report* on our Web site at http://cleanup.inel.gov/monitoring/

RESULTS SUMMARY

Visual Monitoring

During 2003, 68 visual storm water examinations were performed at 22 locations. No rainfall, snowmelt, or discharge down injection wells was observed at 14 monitoring points; therefore, no visual examinations were performed or analytical samples collected at those locations. The visual examinations performed in 2003 showed satisfactory implementation of the *INEEL Storm Water Pollution Prevention Plan for Industrial Activities*, and no corrective actions were required or performed during the year.

Analytical Monitoring

Although the potential for discharge to waters of the United States exists for the following locations, there was no indication that such a discharge occurred for these events.

Radioactive Waste Management Complex (RWMC)

1. Runoff from RWMC Operations Area (RWMC-MP-1/2):
   - Storm Water Description: Runoff from a paved area with office buildings and equipment storage.
   - Type of Monitoring: NPDES benchmark monitoring.
   - 2003 Results: Concentrations of total suspended solids, iron, and magnesium exceeded benchmark concentrations. Benchmark concentrations are not effluent limits, and exceedances are not considered violations of the General Permit.

2. Runoff from RWMC Operations Area (RWMC-MP-4/1):
   - Storm Water Description: Runoff from a paved area with office buildings, equipment storage, and landfill entrance.
   - Type of Monitoring: NPDES benchmark monitoring.
   - 2003 Results: Concentrations of total suspended solids, iron, magnesium, and chemical oxygen demand exceeded benchmark concentrations. Benchmark concentrations are not effluent limits, and exceedances are not considered violations of the General Permit.

Test Area North (TAN)

1. Runoff from TAN T-28 North Gravel Pit (TAN-MP-1/1):
   - Storm Water Description: Inflow to T-28 North Gravel Pit.
   - Type of Monitoring: NPDES benchmark monitoring.
   - 2003 Results: No benchmark concentrations were exceeded at the T-28 North Gravel Pit inflow.

2. Runoff from TAN T-28 North Gravel Pit (TAN-MP-2/1):
   - Storm Water Description: Outflow from T-28 North Gravel Pit.
   - Type of Monitoring: NPDES benchmark monitoring.
   - 2003 Results: No benchmark concentrations were exceeded at the T-28 North Gravel Pit outflow.