

The State Fish Advisory, implemented in 1996, will continue to be enforced until the fish are determined to be acceptable for consumption. Areas covered by the advisory include Chapman Pit, Green Pond, Greenlaw Brook, and the LMR and its tributaries from the Madawaska Dam Reservoir south to the Aroostook River.

The No Further CERCLA Action alternative was selected for the LMR because there was no unacceptable risk associated with surface soil, sediment, and surface water. The No Further CERCLA Action alternative includes an environmental monitoring program and five-year site reviews to assess whether human health and the environment continue to be adequately protected.

#### **8.9.2.4 Remedy Implementation**

##### **Removal and Disposal Action**

The Removal and Disposal Actions for OU 13 were initiated in late 1997 and were completed in 1998. The 1997 remedial actions consisted of sediment removals in the FLDD, the FLDD Wetland, Drainage Ditch G12, the EBGB , EBGB Wetland, two drainage ditches west of the NDA, and a wetland south of the former Underground Transformer Site (UTS). Sediment removal in Drainage Ditch G06 was also anticipated; however, pre-design sampling indicated there was no unacceptable risk to receptors, and remediation was unnecessary. OU 13 sediment remedial actions (i.e., EBGB) at Loring AFB were completed during the 1998 construction season. Compensatory mitigation was initiated to restore over 35 acres of wetlands excavated during the removal of contaminated sediments.

##### **Monitoring**

Implementation of the OU 13 LTM Program was initiated in 2001. In 2001, the OU 13 LTM sampling and analysis was completed in accordance with the OU 13 Long-Term Monitoring Plan (HLA, 1998). PCB concentrations were detected in fish tissue above the OU 13 fish tissue monitoring goal; therefore, additional sediment sampling and analysis was performed along the FLDD/EBGB in 2002. Sediment sampling was conducted within the FLDD/EBGB restoration area and downstream of the former LAFB boundary. **Based on the 2002 sediment**

sampling and analysis results, only one sample detected PCBs slightly above the OU 13 remediation goal.

As recommended in the *OU 13 2001 Long-Term Monitoring Report* (Woodlot, 2002) and approved by the EPA and MEDEP, the focus of OU 13 efforts in 2003 was to gather additional information regarding pesticide and PCB concentrations in fish tissue, and sediment at the areas included in the OU 13 LTM Program, at the areas not influenced by Air Force activities (i.e., background locations), and at historically sampled waterbodies that may have been inadequately characterized due to high laboratory detection limits.

Results from the 2003 OU 13 monitoring confirmed PCB concentrations in fish tissue were elevated above the OU 13 monitoring goal and established pesticide and PCB background concentrations in fish tissue. Results of the OU 13 2003 sampling and analysis were presented in the *OU 13 2003 Monitoring Report* (Woodlot, 2004). Based on the results of OU 13 LTM in 2001 through 2003, the AFRPA, EPA, and MEDEP agreed that the OU 13 LTM Plan would be revised to document required revisions to the OU 13 LTM Program. A Draft revised OU 13 LTM Plan was issued to MEDEP and EPA in April 2005; however, Maine Bureau of Health (MBOH) is currently considering revising fish consumption advisory action levels. These revised action levels will be reviewed prior to initiating future OU 13 LTM, which is currently scheduled for 2008.

Subsequent to the OU 13 removal actions in 1997/1998, the wetland mitigation/restoration component of OU 13 was transferred to the Loring Wetlands Management Program. Wetland mitigation monitoring was initiated in 1998. Wetland mitigation monitoring includes monitoring vegetation, wildlife, soil, wetland hydrology, and wetland functions and values. Results from the 2004 wetlands monitoring indicate each area has met or will meet the site specific mitigation goals and objectives.

### **8.9.3 Implementation of Recommendations from Last Five-Year Review**

The *First Five-Year Review Report* (AFBCA, 2000), concluded that the remedies for OU 13 remained protective of human health and the environment. The following recommendations were included in the *First Five-Year Review Report* (AFBCA, 2000):

In addition, several compounds currently have toxicity factors available that were not available at the time of the risk assessment. Estimated noncarcinogenic risks due to exposure to these compounds would not be significant if currently available toxicity factors are used.

Unlike human health risk assessments, EPA does not recommend specific toxicity reference doses for constituents in ecological risk assessments. The toxicity factors used in the ecological risk assessment are considered protective of the environment.

Changes in Risk Assessment Methods: The human health risk assessment was conducted following EPA Headquarters and EPA Region 1 guidance. There has not been any significant change in EPA guidance, which could result in significant revisions to the remediation goals.

The EPA has issued several guidance documents on conducting ecological risk assessments since 1997. However, the ecological risk assessment that was conducted is consistent with current guidance and changes in guidance would not result in significant revisions to remediation goals.

Expected Progress Toward Meeting RAOs: The RAOs for OU 13 that address contaminated sediment and restoration of wetlands have been met through removal actions and wetland construction. The RAO for OU 13 that addresses preventing the human ingestion of contaminated fish has also been met through the implementation of the fish consumption advisory.

#### **8.9.4.3 Question C**

**Question C: Has any other information come to light that could call into question the protectiveness of the remedy?**

No other information has been identified that would call into question the protectiveness of the remedy.

#### **8.9.4.4 Technical Assessment Summary**

As described above, the remedy at OU 13 is functioning as intended by successful removal of contaminated sediment and implementation of long-term environmental monitoring as well



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**5 Year Review Report (2000 to 2005)**

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