

limitations, unless a waiver is invoked; a requirement that EPA select a remedial action that is cost-effective and that utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and a preference for remedies in which treatment which permanently and significantly reduces the volume, toxicity or mobility of the hazardous substances is a principal element over remedies not involving such treatment. Response alternatives were developed to be consistent with these Congressional mandates.

Based on preliminary information relating to types of contaminants, environmental media of concern, and potential exposure pathways, remedial action objectives were developed to aid in the development and screening of alternatives. These remedial action objectives were developed to mitigate existing and future potential threats to public health and the environment. These response objectives were:

#### Human Health Objectives

1. Mitigate mercury contamination in sediment in areas where accidental ingestion and dermal contact with contaminated sediments may result in unacceptable human health risks.
2. Mitigate mercury contamination in sediment in order to reduce mercury levels in fish, which may be consumed by fishermen.
3. Mitigate mercury contamination in sediment in the Continuing Source Areas in order to prevent continued migration of contamination to the Sudbury River.

#### Ecological Objectives

1. Mitigate mercury contamination in sediment to achieve an increased level of protection to environmental receptors in the Continuing Source Areas; one which is approximately equal to that found in background areas.
2. Mitigate mercury contamination in sediment in Continuing Source Areas in order to prevent continued migration of contamination to the Sudbury River.
3. Restore any wetland habitat disturbed during remediation.

#### B. Technology and Alternative Development and Screening

CERCLA and the NCP set forth the process by which remedial actions are evaluated and selected. In accordance with these requirements, a range of alternatives was developed for the Study Area.

The first OU addressed the primary source control at the Site through the excavation, consolidation, and capping of on-Site soils, sludges and sediments. The second OU addresses management of migration through an interim remedy to pump and treat contaminated groundwater. The remedy selected in this ROD provides additional source control through remediation of the Continuing Source Areas.

With respect to OU III source control, the RI/FS developed a range of alternatives in which treatment that reduces the toxicity, mobility, or volume of the hazardous substances in the Continuing Source Areas is a principal element. This range included an alternative that removes or destroys hazardous substances to the maximum extent feasible, eliminating or minimizing the need for long term management. This range also included alternatives that treat the principal threats posed by the Site but vary in the degree of treatment employed and the quantities and characteristics of

**EPA Superfund  
Record of Decision:**

**NYANZA CHEMICAL WASTE DUMP  
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OU 03  
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