

Frequently Asked Questions (FAQs)

Nyanza Chemical Waste Dump
Operable Unit 4 (Sudbury River)
February 2013

In September 2010, EPA announced a final clean-up decision for the Sudbury River component of the Nyanza Chemical Waste Dump site. Since that time, members of the public have raised additional questions about the selected remedy. These FAQs are intended to respond to some of the more frequently asked questions.

Why is EPA placing 6 inches of sand over an 84-acre portion of Framingham Reservoir No. 2?

The Sudbury River, particularly the section of river behind the Framingham Reservoir No. 2 dam, contains significantly-elevated concentrations of mercury. Corresponding to the elevated mercury in sediment, fish from this portion of the river also have the highest concentration of mercury. The addition of sand (or thin-layer "sand capping") is a technique used to more quickly bury the mercury and remove it from the most biologically-active zone (i.e., the top 6 inches). This will reduce mercury in the food chain, resulting in lower concentrations of mercury in fish.

Who is eating the fish?

People are eating the fish. It is often not the individual you might see on a boat or canoe that is fishing for food, rather the shore fisherman whom you might not see. EPA has, on numerous occasions, observed individuals fishing for food all along the river. Interviews with local fisherman by MetroWest Regional Collaborative, sponsors of the Fish for Fun, not Food" campaign, revealed that numerous fishermen bring home their catch from the Sudbury River - regardless of the numerous warning signs posted along the river. EPA will continue to evaluate different ways to educate the local community as long as fish consumption advisories are needed.

What are the adverse health effects from mercury?

[Excerpt from the Center for Disease Control] Mercury can cause effects on the nervous system and the developing fetus. Mercury exposure can begin to cause harm before symptoms arise. Once symptoms do arise, health problems related to mercury poisoning can include tremors, changes in vision or hearing, insomnia, weakness, difficulty with memory, headache, irritability, shyness and nervousness. Pregnant women and their fetuses are especially vulnerable to the toxic effects of mercury because it readily passes from the placenta to the fetus.

What alternatives did EPA evaluate?

EPA evaluated multiple mitigation techniques from monitoring only to dredging large portions of the river. EPA, by statute, must evaluate each alternative against 9 criteria: Protectiveness, Compliance with existing laws, Implementability, Short-term effectiveness, Long-term effectiveness, Reduction in Mobility/Toxicity/Volume, Cost, State acceptance, and Community acceptance. On balance, EPA found capping to be as effective as dredging at only a fraction of the estimated cost with significantly less impact to the environment. Numerous comments were received during the Public comment period and EPA's responses are documented in a Responsiveness Summary. This is located as Part III of the Record of Decision published in 2010 and available on EPA's website.

Where else has sand capping been performed?

Sand capping is being selected more frequently as a viable alternative to more invasive dredging. A partial list of projects which have or will rely in whole or in part on sand caps include:

- *Lake Onondaga (Region 2)*
- *Atlantic Wood Industries (Region 3)*
- *Plymouth Wood Treating Plan – Welch Creek (Region 4)*
- *Fox River – Little Lake Butte des Morts (Region 5)*
- *Commencement Bay – Middle Waterway (Region 10)*
- *Old Navy Dump/Manchester Lab (Region 10)*
- *Puget Sound Naval Ship Yard (Region 10)*
- *Ketchikan Pulp Company (Region 10)*

Did EPA consider the impacts of remedy construction on the environment in their selection of the remedy?

Yes. One of EPA's top priorities is to evaluate the effects on the local environment and local community. EPA is required to select the least-damaging practical alternate to abate or mitigate an adverse health risk. In other words, EPA acknowledges that there is a trade-off between short-term impacts and long-term risk reduction. EPA will do everything it can to minimize these impacts including: conducting all capping operation on state-owned land; implementing dust and noise mitigation; complying with local ordinances; and restoring the site.

How long will the project last?

Ideally work will be initiated at the end of a construction season (August – November) to clear staging areas, and build project infrastructure necessary to conduct the actual sand placement. EPA would begin placing the sand cap in the subsequent construction season. EPA's goal is to complete the actual placement of sand in one (1) construction season.

Is there currently funding in place to carry out this work?

Not yet. The Remedial Action Work Plan (i.e. the "Remedial Design") is complete. It is not uncommon to wait for project funding for several years.

Once work gets underway, what will I see and hear?

EPA intends to use two areas of State-owned land adjacent to the river. The first is very close to residents on Pincushion Lane. This land will be used less frequently for getting equipment on/off of the reservoir. The second area is larger, and will be used for the majority of land-side operations (sand stockpiling and mixing with water). This parcel abuts railroad tracks, the river, and Fountain Street. Abutters across the reservoir are approximately 600 feet away. The vast majority of residents in surrounding communities of Ashland and Framingham will not be affected at all by construction and might occasionally be able to view activities from Fountain Street itself. Abutters to the portion of the reservoir that will be capped will see a barge (30 x 40 feet) moving back and forth (in travel lanes) applying a sand/water mixture that is pumped to the barge along a flexible floating tube. Equipment used (pumps/mixers) are estimated to have a decibel rating of 50 – 70db which is very slightly louder than a normal conversation (60db). Noise and dust mitigation measures will be employed.

Where can I get more information?

Visit the official Site Repository (Ashland Public Library). Convenience copies of more recent reports are also located at the Framingham Public Library. On-line access to reports and information at <http://www.epa.gov/region1/superfund/sites/nyanza>. Questions can also be sent to Pamela Harting-Barrat at harting-barrat.pamela@epa.gov or (617) 918-1318.