Beyond the Headlines: Cleveland Harbor

Headline: "Just dump the crud from the bottom of the river into the lake. What could go wrong?" (Cleveland Plain Dealer editorial on January 16, 2014)

Statement: *"In its latest affront to environmental stewardship, the U.S. Army Corps of Engineers proposes to dump contaminated dredge from the upper Cuyahoga River shipping channel straight into Lake Erie."*

Response: Dredged sediments in Cleveland and all USACE-Buffalo District commercial harbors are routinely sampled, tested and evaluated to identify placement alternatives and locations that are environmentally acceptable according to Clean Water Act Section 404(b)(1) Guidelines. A thorough and comprehensive evaluation of upper Cuyahoga River Channel sediments was recently performed indicating that the dredged sediments are suitable for open lake placement. A significant improvement in sediment quality in this area of Cleveland Harbor was originally evidenced in 2011. The recent evaluation included advanced testing, and was performed in a manner that is consistent with other sampling and testing efforts at other harbors. Such efforts typically follow established protocols and guidelines contained in the joint U.S. Environmental Protection Agency (USEPA/USACE Great Lakes Dredged Material Testing and Evaluation Manual (1998) and Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S.—Testing Manual (1998).

It is not unusual or unique that the upper Cuyahoga River Channel sediments have become suitable for open lake placement. In fact, it is an expected result. Cleveland is the last of eight Federal commercial harbors in Ohio to require confined disposal facility (CDF) placement for regularly dredged Federal navigation channels. Toledo, Huron and Lorain Harbors once required CDF disposal but have all since transitioned to open lake placement as a result of the material cleaning up.

Statement(s): "One of the two suggested dump sites is just west of the intakes for the municipal drinking water treatment plants that service the Greater Cleveland metropolitan area...The Corps also fails to explain adequately its decision to dump right next to Cleveland's drinking-water intake".

Response: The locations of water intakes were taken into account in the selection of the proposed open-lake placement areas, which was coordinated in advance with the U.S. Fish and Wildlife Service, Ohio Environmental Protection Agency and Ohio Department of Natural Resources. Initially, four potential open lake areas were investigated. Two areas were eliminated from consideration when field sampling revealed a potentially high relative value for aquatic habitat in those areas. The two remaining sites are Cleveland Lake Area-1 (CLA-1), which is located nine miles from the Cleveland Harbor entrance, and Cleveland Lake Area-4 (CLA-4), which is located five miles from the harbor entrance.

Four potable water intakes (PWIs) for public water supplies are located in Lake Erie just offshore of Cleveland, including the Crown, Morgan, Baldwin and Nottingham structures. The center of CLA-1 is located approximately 11.8 miles from the Crown PWI, 6.9 miles from the Morgan PWI, 6.7 miles from the Baldwin PWI and 5.8 miles from the Nottingham PWI. The

center of CLA-4 is located approximately 3.8 miles from the Crown PWI, 3 miles from the Morgan PWI, 3.7 miles from the Baldwin PWI and 11.5 miles from the Nottingham PWI.

Extensive sampling, analysis and modeling efforts were undertaken to determine whether the placement of dredged material at either CLA-1 or CLA-4 would have the potential to adversely affect the quality of public water supply sources. These efforts indicate that no meaningful contribution of suspended solids, dissolved constituents or contaminants from dredged material placement operations at CLA-1 and CLA-4 would be expected at any PWI, and there is no potential to compromise water quality standards.

Statement: *"The proposal, developed using suspect methodology without adequate consultation or collaboration with the Cleveland-Cuyahoga County Port Authority or with environmental officials, who appear dumbfounded by the idea, and without regard to more reasonable dredge proposals the port is considering, should be dumped".*

Response: USACE utilized sampling, testing and evaluation protocols as prescribed in the joint USEPA/USACE Great Lakes Dredged Material Testing and Evaluation Manual (1998) and Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S.—Testing Manual (1998). This methodology is based on requirements pursuant to Section 404 of the Clean Water Act.

USACE initially communicated the potential for open lake placement of this dredged material with appropriate environmental resources and regulatory agencies, as well as the Port Authority, several years ago (see timetable below). The sampling and analysis plan, data from which form the basis of the recent dredged material evaluation of the upper Cuyahoga River Channel sediments, was directly coordinated with OEPA, ODNR and the Port Authority in early 2012. The extensive USACE collaboration regarding dredged sediment management and the potential for open lake placement is detailed below:

- February 2010 January 2013: USACE regularly presented current plans and management options at monthly Port Authority Dredged Sediment Task Force meetings.
- March 17, 2011: Plain Dealer article reports on USACE/Port Authority discussions and issues with option for open lake placement and the planned sampling in 2012.
- March 2012: The USACE's sediment sampling/analysis plan was provided to OEPA, ODNR, and the Port Authority for review.
- May 2, 2012: USACE provided a specific update of sampling/open lake placement status during the Dredged Material Management Task Force meeting.
- August 2013: Draft sediment evaluation was provided to OEPA for their review in advance of the application for Section 401 Water Quality Certification.
- August 2013: National Environmental Policy Act (NEPA) open lake placement scoping document released.
- September 2013: USACE presentation on open lake suitability at River Symposium in Cleveland.
- December 2013: USACE released Clean Water Act Section 404(a) public notice for 30-day public review/comment.

- Various meetings with individual stakeholders, including: Dike 14 Nature Preserve, Cleveland Water, and Ohio Environmental Counsel.
- February 2014: Release of Draft Environmental Assessment and Finding of No Significant Impact for 30-day public review/comment.

Statement: "Peck raised a "major concern" with the methodology, stating that the project proposes to dredge sediment in depths of feet, but the sampling was only conducted to a depth of inches".

Response: Surface grab samples were used to represent the dredged material because the channel sediment is dredged regularly. The upper Cuyahoga River Channel is the most frequently dredged Federal navigation channel on the Great Lakes. Such material is typically homogenous and is not expected to be layered with respect to contamination. The shoal material is new and is predominantly comprised of sediment that has washed down from the upper reach of river. Therefore, there is no reason to believe that the shoal would be layered with respect to contamination such that vertical profiles would provide any additional useful information. This approach to sampling channel material that is regularly dredged is consistent with Federal guidance, and is applied at all other harbors dredged by USACE-Buffalo District.

Statement: "Yet at the same time, the Port Authority is moving ahead with a plan to increase the capacity at its largest confined disposal facility by Burke Lakefront Airport so it can hold more dredged sediments. "It will have up to a million cubic yards of capacity," said Will Friedman who helms the port. "There is no emergency here. No reason to rush to open lake disposal".

Response: Confined disposal facilities (CDFs), such as those currently in Cleveland Harbor, are engineered structures designed to contain sediment that do not meet Federal guidelines for open lake placement. CDFs are one of the most widely used technologies for managing such sediments, but were never intended to be permanent solutions for the placement of dredged material.

The USACE is required under Section 148 of Public Law 94-587 to utilize management practices to extend the useful life of CDFs such that the need for new disposal areas is kept to a minimum. Filling CDFs with dredged sediment that is suitable for open lake placement is a poor management practice and an unnecessary loss of valuable CDF capacity.

The USACE is continuing to work with the Port Authority and other stakeholders to advance various options at the existing CDFs to accept additional sediments not suitable for open lake placement. The Port Authority's plan to provide CDF capacity is one of several options currently being evaluated by the Federal government to assess feasibility and cost. Though all of the plans are still preliminary, it is anticipated that CDF placement will annually cost taxpayers approximately \$2.5 million more than current dredge costs (this is just for the CDF space alone and would require additional costs for material handling).

A USACE determination that dredged material can be placed in the open lake establishes the "Federal Standard" for the material. That standard is defined in 33 CFR PART 335.7: "*Federal Standard means the dredged material disposal alternative identified by the Corps which represents*

the least costly alternative consistent with sound engineering practices and meeting the environmental standards established by the 404(b)(1) evaluation process." It is USACE policy to assure that dredged material disposal occurs in accordance with the Federal Standard per 33 CFR PART 336.1(c)(1).

Statement: "The state EPA wrote a scathing 35-page critique last October of the Corps' evaluation, describing its methodology as "contrary to the best available science and guidance." The presence of PCBs and other toxins in the dredged muck "pose[s] an unacceptable risk of toxicity to aquatic organisms and to human, wildlife, and avian consumers of fish," the Ohio EPA found".

Response: The USACE has provided OEPA with a detailed response addressing each of OEPA's concerns. All of the data, assessments and responses to comments received on this topic have been compiled by USACE and are currently available in a Draft Environmental Assessment at:

http://www.lrb.usace.army.mil/Missions/CivilWorks/PublicReviewDocuments.aspx

To date, the USACE has not been told of any specific water quality standard that is not being met.