



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

March 1, 2016

RE: CLEVELAND HARBOR DREDGING 2016
PERMIT - INTERMEDIATE
CORRESPONDENCE
401 WETLANDS
CUYAHOGA
DSW401144574

Mr. Ronald Kozlowski, PMP, CGFM
Chief, Programs and Project Management
U.S. Army Corps of Engineers, Buffalo District
1776 Niagara Street
Buffalo, New York 14207-3199

CERTIFIED MAIL

Subject: Cuyahoga County / City of Cleveland
401 Certification Application Cleveland Harbor Dredging 2016
Ohio EPA ID No.154844

Dear Mr. Kozlowski:

We have conducted an initial review of the United States Army Corps of Engineers' (USACE) application for water quality certification (WQC) for the 2016 dredging of Cleveland Harbor. USACE has once again proposed disposal of the dredged material at open-water site CLA-1, approximately nine miles offshore of Cleveland. USACE's proposal also identified a contaminated hot spot in the vicinity of site CLA-1, a portion of which USACE has proposed to cap with the dredged material from Cleveland Harbor in order to bury toxic sediments and hopefully improve the benthic habitat in that area.

As with the two previous 401 water quality certifications submitted by USACE for maintenance dredging of Cleveland Harbor, USACE is proposing to open lake dispose 180,000 cubic yards of contaminated Harbor sediments into the open waters of Lake Erie based on its unilateral finding that such a proposal is the least costly, environmentally acceptable alternative, i.e. the federal standard.

On the basis of the available data and the applicable laws and regulations, Ohio EPA continues to have serious concerns and reservations about the water quality impacts of the USACE's proposal. These are the same concerns that led to past certifications by Ohio EPA requiring the USACE to place dredged material into confined disposal facilities and has also led to ongoing litigation between our respective organizations.

A summary of the main technical points of concern are listed below.

PCBs and Bioaccumulation

- All of the PCB data sets (including USACE 2012 and 2014, and Ohio EPA 2015) show that the Cleveland Harbor sediments have a higher PCB bioaccumulation potential than the Lake Erie background sediments. In general, the harbor sediments show up to 5 times as much PCB bioaccumulation potential as the background sediments.

- Two of the three data sets (USACE 2012 and Ohio EPA 2015) show that the Harbor sediments have a higher bioaccumulation potential than sediments at disposal site CLA-1. However, CLA-1 and CLA-14, the historic disposal sites, exceed Lake Erie background for PCB bioaccumulation.
- USACE has provided evaluations concluding that Harbor sediments do not exceed CLA-1 or background for PCB bioaccumulation. However, this was accomplished by including Tier 2 values, i.e. modelled estimates, into the Tier 3 data set. We do not agree that this approach is appropriate and do not believe it yields valid conclusions.

PAH Contamination, the Lake Erie “Hot Spot,” and Proposed Beneficial Use of Dredged Material

- Both Ohio EPA and USACE have observed that there is a highly contaminated region of sediments in the vicinity of the historic disposal site CLA-1. Please see attachment. Ohio EPA has observed sediment PAH concentrations as high as 400 parts per million in this area. USACE concludes that at least some areas are highly toxic to benthic organisms, with predicted mortality as high as 100% for organisms exposed to some Lake sediments. USACE proposes to use the dredged harbor sediments to cap a portion of the contaminated zone; however, USACE can only cap the zone that lies within site CLA-1 at this time due to lack of NEPA and 404(b)(1) approval for sites outside of CLA-1. The most heavily impacted zone lies outside of CLA-1 and could not be capped at this time.
- These new data also help validate concerns that we have raised in the past. Ohio EPA has previously raised concerns to USACE regarding their inappropriate use of contaminated reference sites multiple times over the past 2 ½ years. The new USACE and Ohio EPA data confirm the significant PAH sediment contamination within the former disposal areas.
- Previously, USACE dismissed Ohio EPA’s concerns on CLA-1 being a contaminated reference site. USACE has repeatedly stated, including in their February 5, 2014 letter to Chris Korleski, U.S. EPA Great Lakes National Program Office, that USACE’s “assessment is that the open-lake reference areas selected for the Upper Cuyahoga River Channel dredged material evaluation are representative of Lake Erie background sediment contaminant levels present offshore of other harbors, and that the toxicity of sediments at these areas is insignificant.” In contrast, this same letter from USACE also stated that CLA-1 was a “dredged material open-lake placement area which is estimated to be covered with at least one foot of sediment since it was last used over 45 years ago.” A man-made disposal site is not and cannot be appropriate “background” reference by which to base the comparative analysis with harbor/river sediments. As stated previously CLA-4 represents the true background for Cleveland Harbor. When river sediments are compared to the CLA-4 reference site they fail for open lake disposal.
- Both USACE’s and Ohio EPA’s 2014 and 2015 sediment data have documented highly contaminated sediment in and beyond historic disposal site CLA-1. USACE has changed their position from stating that “there is no reason to believe that the bottom sediment at either open-lake area are unacceptably toxic in terms of their use as open-lake reference areas,” to now, in the 2015 Sediment Evaluation, recommending CLA-1 be capped due to its sediment toxicity.

- Although Ohio EPA concurs that there is significant contamination within CLA-1, as well as further contamination beyond CLA-1 to the south and east, the remedial activities that may be needed have not been adequately evaluated. At a minimum, the nature and extent of sediment contamination in both areas first needs to be more accurately defined. Once the nature and extent of contamination has been determined, a thorough study should be completed to properly evaluate remedial alternatives in accordance with U.S. EPA guidance. Currently, the technical review provided by USACE is approximately one page, which is an insufficient analysis to support this remediation project.
- Further sampling is necessary to get a better handle on the true nature and extent of the contamination, since the sediment is clearly migrating from CLA-1. Based on the available data, we estimate that there are about two square miles of sediments with PAH levels in excess of 100 ppm, and a larger area with lower (but still elevated) PAH levels. Due to the elevated PAH levels recently documented, further sampling, including total petroleum hydrocarbons (TPH) analyses, should be conducted to more fully evaluate the contamination. Cleanup goals will also need to be developed specific to this project.

These concerns will clearly impact Ohio's ability to issue a 401 water quality certification application for the activity you have requested. We will, however, continue to review the application and consider public comments as part of our review.

If you have any immediate questions regarding this letter, please do not hesitate to contact me at (330) 963-1204.

Sincerely,



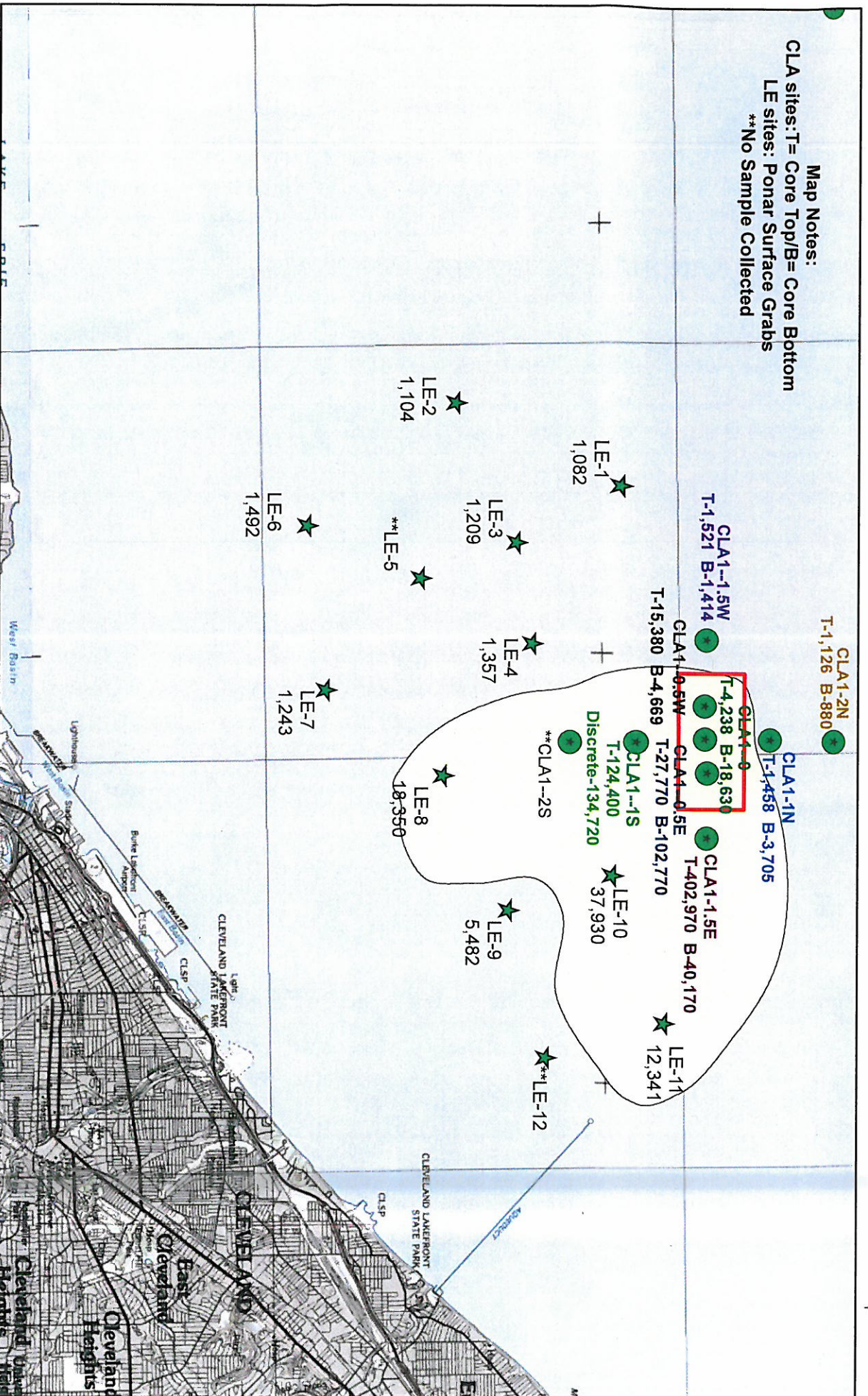
Kurt M. Princic
District Chief
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KMP/ams

Attachments

ec: Rich Blasick, Environmental Manager, Ohio EPA, NEDO, DSW
Bill Fischbein, Attorney, Ohio EPA, Central Office, Legal
Joe Loucek, Environmental Specialist, Ohio EPA, NEDO, DSW
Tiffani Kavalec, Division Chief, Ohio EPA, NEDO, DSW

2015 Lake Erie Total PAH Concentrations ug/kg



Legend

- Ponar Grab Samples
- Multicore Samples
- CLA-1
- PAH AOC

Total PAHs represent the sum of the 16 priority pollutant PAHs.
 All non-detects were assigned a value one-half RL.

