

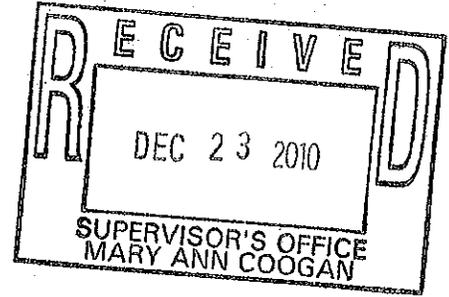


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

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DEC 20 2010

Mary Ann Coogan
Supervisor
Town of Camillus
4600 West Genessee Street
Syracuse, New York 13219



Dear Ms. Coogan:

I am writing in response to your letter of May 6, 2010 expressing concerns about the placement of material dredged from Onondaga Lake at a containment facility located on an existing wastebed in the Town of Camillus, New York and as a follow up to our July 2010 meeting.

In your letter you indicated that many Town residents are concerned about siting the containment facility near existing homes and planned developments. The New York State Department of Environmental Conservation (NYSDEC) and the Environmental Protection Agency's (EPA's) selection of on-site disposal of the contaminated sediment that will be dredged from Onondaga Lake was made after careful analysis of on- and off-site disposal options. The options were evaluated by considering several criteria, among them protection of human health and the environment, short- and long-term effectiveness, compliance with federal and state environmental laws, implementability, and cost. Extensive oral and written comments that were received from the public during two public comment periods, which took place between November 29, 2004 and March 1, 2005 and between April 1 and April 30, 2005, were considered during the evaluation process, as were the views of the Onondaga Nation and other key stakeholders.

Although EPA believes that placing contaminated sediments dredged from Onondaga Lake in the Sediment Consolidation Area (SCA) on Wastebed 13 will not pose a threat to human health, due to the public's concerns related to the SCA, EPA conducted a supplemental human health risk assessment in 2010. This assessment, which was completed in June, supplements the December 2002 baseline human health and ecological risk assessments which were completed as part of the remedial investigation for the Onondaga Lake Bottom Subsite to determine if there was a basis upon which to take a Superfund action. The supplemental risk assessment looked at risks associated with direct contact with sediment and with exposure to contamination through the air at the SCA. For both scenarios, the supplemental risk assessment found that all predicted risk and hazard estimates were within levels identified by EPA as acceptable. The findings of the supplemental risk assessment were presented to the public at a meeting on July 8, 2010. A Question and Answer (Q&A) fact sheet, which responded to all of the oral and written comments and questions, was also made available on July 19, 2010. The supplemental risk assessment, July 8 PowerPoint presentation, and the Q&A fact sheet are available on EPA's website at www.epa.gov/region02/superfund/npl/onondagalake/docs.html.

In your letter, you indicate that the Town is highly skeptical that the supplemental risk assessment accurately assesses risks without a plan that specifies how the activities will be conducted. As specific examples, you indicate that emissions would vary significantly depending upon whether soil screening and wastewater treatment operations are enclosed or conducted in the open air, and that emissions would vary due to the different estimates in the volume of contaminated material to be dredged. The supplemental risk assessment applied many conservative health-protective exposure assumptions to evaluate the potential risks, and, as a result, it is more likely that the estimated risks were overestimated rather than underestimated. For example, under the inhalation scenario, air concentrations in the work zone perimeter were assumed to be the maximum annual average concentrations allowable for all contaminants of concern. This approach likely overestimates the risk even if operations are not enclosed, since it assumes that site boundary concentrations are at the maximum level for all chemicals, when in reality, only one or two chemicals may approach this level while the majority of the chemical concentrations would be significantly below the criteria. It also should be noted that the soil screening operations will be enclosed to capture potential emissions and that wastewater treatment operations will be inside a building. Emissions from both the screening operations and the wastewater treatment plant will be treated prior to discharge.

In your letter, you also express concern about how an exposure assessment can be made when the estimate of the volume of contaminated material that will require transport might vary greatly. The current estimate of sediment volume to be dredged from the lake is 2,172,000 cubic yards (cy), which includes the current base volume estimate of 1,926,000 cy and a contingency volume of 246,000 cy (the 2005 Record of Decision estimate was 2,653,000 cy). The dredging project is being designed to be completed within 4 years, which is a conservative estimate. The supplemental risk assessment assumed an even more conservative duration of 5 years. Under these remediation time frames, the estimated cancer and noncancer risks and hazards would be within EPA's acceptable levels and no adverse health effects would be expected.¹

Your letter states that Town residents have serious doubts about the safety, efficacy, and regulatory compliance of the proposed use of only a single geomembrane liner for the SCA. There are several considerations that support the use of a single composite liner for the SCA. The SCA's design requirement for the drainage material above the liner is 1,000 times more permeable than the minimum 6NYCRR Part 360 closure requirements. This will result in increased efficiency in the liner system's containment abilities by minimizing the hydraulic head above the liner system during operations. In addition, the design incorporates the use of the proven technology of geotextile tubes rather than a sediment basin (as was originally proposed) to ensure a more effective and efficient sediment dewatering operation, and to better address potential odors/emissions. The geotextile tubes themselves also afford another level of containment for the lake bed sediments in the SCA. In addition, unlike most solid waste disposal facilities, the SCA will only need to be operational for a relatively short period of time (5-6 years) before it is capped and closed. The use of the geotextile tubes in combination with the SCA's single liner system will greatly reduce the length of time that the SCA will need to be open in comparison to the sediment dewatering basin approach. The dredged sediments upon

¹ It should be noted that Hazard Indices, which are developed in risk assessments to evaluate potential noncarcinogenic health risks, are based on each exposure rather than over the duration of the exposure. As such, they would not change even if the dredging project were to be extended for any period of time.

reaching the SCA will also, for the most part, meet the State's industrial soil cleanup objectives under 6 NYCRR Part 375. In addition, as part of the final design for the SCA, the liner system will be enhanced by the addition of a geosynthetic clay liner between the geomembrane and the compacted clay barrier in the sump areas to increase the level of containment in the areas where hydraulic heads will be the greatest. It also should be noted that the SCA will be placed above approximately 50 to 70 feet of Solvay waste materials which are of low permeability and which provide some added protection from any potential leakage in the unlikely event that leakage were to occur.

Your letter noted that the precise method of transporting the "pre-dredge" debris from the lake and precautions to prevent the release of sediment or contaminated water during transport have not been specified. You also asked if the debris will be stored in a separate stand-alone containment cell. We recently received a design submittal on debris management from Honeywell that NYSDEC has also passed on to your consultant, Barton and Loguidice, for consideration. The draft plan, which includes the establishment of a two-acre debris management area on the SCA, is under review by NYSDEC and EPA.

Your letter indicated that Town residents are concerned about the absence of a written contingency plan for the operation of the SCA. Please note, however, that a Sediment Management Operations Contingency Plan will be prepared as part of the Draft Final Sediment Management Design. This plan will outline procedures for management of remedial activities and implementation of contingency measures under various scenarios involving the dredging, conveyance, dewatering, and water treatment systems. These include contingences for mechanical problems that may result in shutdowns of dredging equipment, booster pumps, sediment processing units, geotextile tub dewatering operations, and the water treatment plant. Procedures will also be developed for wet weather/Onondaga County Metropolitan Wastewater Treatment Plant shutdowns, air quality phased response actions, spill control, noise abatement response actions, winter shutdown, and spring startup. It is anticipated that the draft Final Sediment Management Design will be available in early-2011. In addition, an Operations Community Health and Safety Plan will specify the protective measures that will be taken during operations associated with the implementation of the lake remedy. This plan will be available in late 2011.

In your letter, you suggest the performance of a full-scale pilot test at the lakeshore prior to implementing the remedy. As you are aware, extensive testing has been conducted during the preliminary design investigation to evaluate and optimize the designs of the dredging, conveyance, dewatering, and water treatment systems. These include investigations involving bench wind tunnel testing, flux chamber testing, odor characterization studies, collection of site-specific meteorological data, and modeling to predict potential emissions and odors from the SCA. In addition, hanging bag geotextile tube dewatering tests were performed on sediment samples. The results from the above-noted investigations indicate that the SCA will be protective of the nearby residences and the community. Also, as noted in the *Frequently Asked Questions (FAQs)*, *Onondaga Lake Dredging Project Sediment Consolidation Area at Wastebed 13*, responses # 14 and 15 at www.dec.ny.gov/docs/regions_pdf/scafaq.pdf, the dredging, conveyance, and containment systems being designed to secure dredged material for the lake are very similar to those employed at other sites and have been demonstrated to be effective. Based

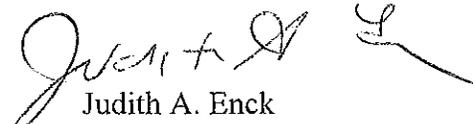
on the above, NYSDEC and EPA do not believe that a full-scale pilot test needs to be conducted as part of the design for the project.

In your letter, you also request that EPA seek a temporary stay of the current remedial schedule from the Court given the technical and operational uncertainties associated with the remedial plan. The presence of some uncertainties before the design is complete is common with any large and complex project, and would not provide justification for a delay in the project. It is also worth noting that Onondaga Lake is a valuable resource and its cleanup will revitalize Syracuse and the other surrounding communities. Seeking a stay as the Town has suggested would delay the implementation of the remedy and would unnecessarily postpone the benefits that the cleanup of the lake would bring to the Central New York community. For these reasons, EPA does not believe that a temporary stay of the remedial schedule is warranted or needed.

As you know, several meetings between the Town's technical representatives, NYSDEC, and EPA have been held over the past few months to discuss and consider the Town's concerns. At the most recent meeting on December 10, 2010, the debris management submittal mentioned above and how secondary containment will be addressed and incorporated in the Sediment Management Draft Final Design, were discussed. Additional meetings will be held as the design of the Lake Bottom remedy proceeds in order to ensure that your concerns and comments are considered and incorporated into the plans, as appropriate.

Should you have any additional questions or concerns regarding remedial plans and designs for the Onondaga Lake Bottom site, please contact Robert Nunes of my staff at (212) 637-4254.

Sincerely,



Judith A. Enck
Regional Administrator