Mr. Richard L. Caspe, Director<br>Emergency \& Remedial Response Div. USEPA, Region II<br>290 Broadway, $19^{\text {th }}$ Floor<br>New York, NY 10007-1866

## RE: Size of Environmental Dredging Projects

Dear Mr. Caspe:
At a recent public meeting (February 6, 2001, at the Marriott in Albany) on the Hudson River EPA preferred remedy, you disputed GE's finding that EPA's proposed dredging project is approximately 15 times greater than the largest environmental dredging project completed to date. As evidence for this, you referenced a Commencement Bay project of 1.3 million cubic yards in size. I offer the following information to help clarify the situation.

The basis of the 15 times greater assertion is that, by late last fall, the information we had assembled indicated that the largest environmental dredging project completed to date was at Bayou Bonfouca, LA, and just recently, at Cumberland Bay on Lake Champlain in New York. At Bayou Bonfouca, 169,000 cy were removed and incinerated; at Cumberland Bay, reportedly 195,000 cy of sediment have been removed and landfilled. When compared to the EPA proposed project, which is estimated to remove 2.65 million cubic yards of sediments, you can see how the 15 times greater was calculated. We are not aware of any larger environmental dredging projects that have been completed.

While it is not entirely clear what dredging project in Commencement Bay you were referring to, the only one that seems possible to us is the Sitcum/Blair Waterway project done in 1993-1994. This project is a bad analogy for the Hudson because it is largely a navigational dredging and port development project. A few facts to consider:

- The Sitcum Waterway is located between the Blair Waterway and the Milwaukee Waterway, in the Commencement Bay Superfund Site. The Sitcum Waterway is a deep navigational waterway $3,000 \mathrm{ft}$. long by 750 ft . wide created by the dredging of native mudflats starting in 1910. In 1990, the Port of Tacoma developed longdiscussed plans to partially fill and pave over the abandoned Milwaukee Waterway
to expand marine container terminal facilities. EPA suggested that the Port combine the Sitcum cleanup and Milwaukee development in order to expedite and increase the overall cost-effectiveness of both projects, and to address the limited availability of disposal sites. An agreement between EPA and the Port of Tacoma became effective in 1991, providing for the Port to evaluate remedial options. A Consent Degree was agreed to in 1993 settling major elements of the Sitcum Waterway cleanup and providing for implementation of the cleanup, and the payment by the Port of Tacoma of $\$ 12$ million for natural resource damage claims.
- The combined navigational and cleanup dredging project was implemented from October 1993 to December 1994. A total of 2.83 million cubic yards of sediment was dredged by a combination of hydraulic and clamshell dredges and moved to the abandoned Milwaukee Waterway. The total included 2.4 million cubic yards of clean sediments from the Blair Waterway and 425,000 cubic yards of potentially coritaminated sediments from the Sitcum Waterway. Contaminants of concern were heavy metals and PAHs. Reportedly, only about 30\% of the sediments from the Sitcum Waterway proved to be contaminated (about 130,000 cubic yards of sediment). After placement of the dredged material into the Milwaukee Waterway, and a multi-year period of settling, the filled waterway was paved over, bridging the gap between an existing terminal and providing added container storage space.
- The mouth of the Milwaukee Waterway was bermed to 60 feet high with clean material from the Blair Waterway, and an overflow weir and discharge pipe was installed. The normal water level was present when filling started. The material dredged by clamshell was placed into barges and moved by barge to the Milwaukee Waterway, upwards of a mile distance. The hydraulic dredges pumped directly to the disposal cell. Material from the Sitcum was placed in the cell first, then material from the Blair. The Milwaukee Waterway was filled from the land end toward the mouth and the displaced water was allowed to overflow into the Bay.
- One objective in the Sitcum Waterway was to dredge the potentially contaminated sediment plus two additional feet, for conservatism and to achieve navigational depths. The objective in the Blair Waterway was to achieve navigational depths. The Blair Waterway did not require cleanup as part of the Commencement Bay Superfund site.
- Removal volumes broke-down as follows:
- Material from the Blair Waterway for berm construction: 163,000 cubic yards of sediment
- Material from the Blair Waterway used for construction of 23.5 acres of new subtidal habitat: 868,000 cubic yards of sediment
- Potentially contaminated material from the Sitcum Waterway, plus two additional feet: 425,000 cubic yards of sediment

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Total of the above was 1.456 million cubic yards of sediment. The pre-dredging estimate for these three categories was 1.284 million cubic yards of sediment and this, we expect, is the 1.3 million cubic yards of sediment you referred to at the Albany meeting.

- Also, 1.369 million additional cubic yards of sediment were removed from the Blair Waterway and all but 200,000 cubic yards of this sediment was able to "fit" into the Milwaukee Waterway. The excess 200,000 cubic yards of sediment were taken to an open water disposal site in the Bay.
- Final project cost was $\$ 6.20$ per cubic yard - - a typical navigational dredging cost.

Your characterization of this project as one that removed 1.3 million cubic yards of contaminated sediments is not supported by the facts. We request you modify your public statements to more accurately represent this project. If you need more information on environmental dredging sites and other contaminated sediment remediation projects, I suggest you search the exhaustive database compiled on GE's behalf. This has been previously submitted to the EPA and is available on the GE website at www hudsonvoice.com. Please let me know if you have any questions about the material presented in this letter I would also appreciate if you would include this letter as a comment on the proposed remedy and place a copy into the site Administrative Record.


cc: Michael O'Toole, NYDEC William McCabe, USEPA<br>Douglas Tomchuk, USEPA<br>Allison Hess, USEPA<br>Douglas Fischer, USEPA

