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TAMS

INTEROFFICE CORRESPONDENCE

To	Hudson River File	Location	NJO	Date	June 12, 2001
From	Jennifer Higgins, John Szeligowski	Location	NJO	Job No.	6395
Subject	Saginaw River	Reference	Phone Conversation with PM		

A phone conversation was held with Bill Rito regarding Saginaw River removal operations on May 30, 2001 at 11:30 am. Bill Rito is presently the USACOE Project Manager for the Saginaw River.

Production Rates

Mr. Rito indicated that 205,000 cy of contaminated soil was removed in the year 2000 over a period of 35 calendar weeks. This corresponds to a production rate of 900 cy/day. Mr. Rito indicated that the dredge did not work every day during this period. Weather delays were experienced in April and at the end of the dredging year. Generally, every other day was lost (no dredging occurred) in November. This implies that there was 50% downtime during the month of November. Other delays during this year were associated with debris and buried piling. In areas where debris or piles were observed, dredging was halted until the debris was removed from the location. Debris was removed with either a backhoe or clamshell.

Removal operations continued this year, beginning in April 2001. A total volume of 50,000 cy was removed during the month of April. This corresponded to a removal rate of 1,000 cy/day during this month. During the month of May, they used the Cable Arm bucket for most of the work. Mr. Rito said they are getting great production but was unable to quote a production rate at this time. Dredging this year is required to be completed by August 17, 2001 but Mr. Rito stated that, based on current production rates, they expect to complete the work ahead of schedule, and probably be finished by July 31, 2001.

Production rates were targeted at 1,500 cy/day, on average, when dredging began during the 2000 season. Mr. Rito believes that this rate could have been met if they did not have to switch buckets. Whenever hard material was encountered or debris such as pilings was encountered, virtually no production occurred. This is because no sediment was being taken out when piles were being removed. He stated that the average production achieved was 980 cy/day.

Delays and Downtimes

Other than downtime associated with debris removal, as discussed above, dredging was also interrupted by the presence of commercial vessels. Dredging was halted and the equipment was moved from the channel to allow commercial vessels to pass. Mr. Rito suggested that a downtime of 2 hours per commercial vessel passing by was experienced. This resulted in a decrease in the targeted production rates.

Access dredging occurred in shallower targeted areas. The equipment draft was approximately seven to nine feet (cable arm system). In shallower areas, extra material was removed to allow access to shallow areas (the dredge dredged its way in). This delay was included in the productivity and computed by dividing the volume

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of dredging by the number of days. Substantial piling was encountered in many of the shallower areas. Thus sediment removal did not occur when piling was removed. This impacted production rates as well.

Dredging Process/Pattern

Only one dredge operated on this site due to the constraints imposed by an off-loading area that lead into a CDF. Mr. Rito stated that (2) dredges would have caused the need for additional and larger sized equipment at the off-loading area. Off-loading operations generally consisted of a crane to remove the sediment, placement in a truck, and final placement from the truck into a CDF. If (2) dredges were used, a larger off-loading platform would have been required to support (2) cranes. As well, more trucks would have been needed..

Dredging was typically conducted in an upstream to downstream direction. Dredging specifications required that the most-heavily contaminated material be removed first followed by cleaner material. This would allow for the most-contaminated material to be placed on the bottom of the CDF so cleaner material would ultimately be on the top of the CDF when dredging was completed.

Water Quality

Water quality samples were collected during dredging. Thus far, results have not indicated any problems associated with negative impacts to water quality in the river. Mr. Rito does not have the actual data however, he suggested that John Fagioli of Region 5 EPA could be contacted to obtain resuspension and remobilization data.

Air Quality

Air samples were collected during dredging. Results indicated low levels of PCBs on the order of barely detectable.

Dredge Selection/Dredge Technology

We inquired as to why the project selected a mechanical dredge as compared to a hydraulic dredge. He stated that a mechanical dredge was selected because it results in less water being handled at the off-loading facility. Since material was placed in a CDF, the dredge technology was selected based on the amount of water it entrained. The greatest water depth at the dredging site was 24 feet. Mr. Rito suggested this may be another reason the crane with bucket was selected over a hydraulic excavator. As well, he suggested that the dredge technology was selected based on bucket design. He believes the Cable Arm bucket was selected due to the flat cut it achieves and, as well, low demonstrated resuspension rates due, in part, to venting of the bucket