GE Corporate
Environmental Programs

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Douglas J. Tomchuk
Emergency and Remedial Response Division
U. S. Environmental Protection Agency
26 Federal Plaza, Room 747
New York, NY 10278

RE: HUDSON RIVER REASSESSMENT RI/FS

Dear Mr. Tomchuk:

I would like to voice a concern with the manner in which information related to implementation of the Hudson River Reassessment RI/FS project is made available to interested parties. The General Electric Company (GE) is interested in obtaining copies of documents that describe the data collection programs planned by U.S. EPA, prior to the formalization of the program plans and clearly before implementation. Unfortunately, the field sampling plans, quality assurance project plan (QAPP's) or other documents that describe in detail the data collection effort being performed by the U.S. EPA or its contractors, only become available to interested parties either just before the sampling occurs or in most cases after the data has been collected. Additionally, these documents are released only after a number of requests. It is only in these documents that the detailed objectives of the programs are articulated and the data collection and analysis procedure described.

A recent example of this is illustrated by GE's attempts to obtain the project plans for low resolution coring and the analysis of archived Hudson River samples. At the last Science and Technical Committee meeting in the Fall of 1993, GE learned that the U. S. EPA was proceeding with these activities and requested the associated project plans. These plans were not made available to GE, and GE again requested these documents in December as part of a Freedom of Information Act request. To date we have not received a response to our request that comments on these documents be allowed prior to implementation. During the review of the Commerce Business Daily (CBD), it was learned that TAMS (U. S. EPA's project consultant) was soliciting bids for the low resolution coring work and proposing a sole source contract with vendors for archived sediment analysis. The CBD announcement stated solicitation packages, that presumably-describe the work in more detail, could be obtained from TAM's. When the existence of this information became known, GE requested during a telephone call on January 27, that a copy of the packages be made available. Additionally, O'Brien & Gere on GE's behalf also requested the material from TAM's. In response to these requests, form letters dated February 18 were received from TAM's stating that TAM's was "not yet in a position to send out these packages; they will be sent out as soon as possible".

By letter dated April 22, 1994 from TAM's, GE did receive a partial bid package for the project. While the package did contain some information on the project the Appendices that contain the documents that have been sought since the Fall of 1993 were not provided. Specifically:

* Appendix V:	Phase 2B Volume 3 SAP/QAPP	11/9/93
* Appendix VI:	Phase 2B Volume 4 SAP/QAPP	10/27/93

This example clearly illustrates the extremes to which GE must go to obtain information on this project. Additionally, the information will again only be provided after the U.S. EPA has decided its course of action, thereby giving the public no opportunity for meaningful involvement. Based on information gleaned from the documents obtained, it is clear that this is a significant data collection effort where approximately 200 core samples will be obtained and costs for collection and analysis may exceed $200,000. It appears U. S. EPA has known the essentials details of the low resolution coring project since November 1993, over 6 months ago, yet refused to allow comment, when requested, even though sufficient time was available to do so.

The opportunity for problems encountered with obtaining the above project documents, and the lack of comment on these documents would be less an issue if they were isolated incidents This is just one example of a recurring problem. Another recent example is the U. S. EPA decision to implement a data collection program during the Spring of 1994 that had not been described until the meeting of the Science and Technical Committee meeting of March 25, 1994. Specifically, it was proposed that sampling of total suspended solids and organic carbon in the water column occur during high river flow conditions in the spring of 1994. At the meeting we were told the sampling would begin the following week. A copy of the appropriate field plan was requested. On April 28, a copy of the revised Sampling and Analysis/Quality Assurance Project Plan was provided, nearly a month after the project began. GE again was not allowed to comment on what could potentially be an important data collection effort. Based on GE's review of the project plans the following issues should have been considered.

1.) **Sampling Locations**

The sampling stations identified within the Thompson Island Pool may produce data which underestimates the contributions from the Snook Kill and Moses Kill tributaries and overestimate the resuspension of solids from the Hudson River bottom. The stations within the Thompson Island Pool include:

*Moses Kill
*Snook Kill
*Rogers Island
*Upstream of the Snook Kill (western shore)
*McDonald's dock downstream of Snook Kill (eastern shore)
*Thompson Island Dam (western shore)

Tributary solids loading during spring high flow periods of 1990 and 1991 produced visual plumes from the Moses Kill and Snook Kill. These plumes traveled downstream along the confluent shoreline. This absence of lateral mixing during high solids loading periods complicates the sampling and analysis effort and indicates that the McDonald property, located on the eastern shore of the river, is an inadequate sampling station for identifying downstream impacts of solids loadings from the Snook Kill. Solids from the Snook Kill missed at the McDonald property station would appear in samples collected from the western shore of the Thompson Island Dam and potentially be attributed to sediment resuspension. Therefore, the sampling program contains a bias for overestimating the resuspension of sediments from the Thompson Island Pool.

2.) Sampling Frequency

The sampling frequency identified in the sampling plan may be insufficient to characterize a resuspension event in the upper Hudson River. The sampling plan identifies a sampling frequency as five times per week for approximately five weeks during the spring high flow season. This is less than one sample per day. This sampling frequency may miss the critical flow period defined as the time at which river flows initially produce critical shear stress values which result in sediment resuspension. This typically occurs over a short period during the initial flow increase of a high flow event. Additional increases in flow beyond this initial period generally produce less sediment resuspension due to sediment armoring. That is, the deeper consolidated sediments require higher energy flows to produce a resuspension event.

The process of sediment resuspension and armoring occurs rapidly as demonstrated by TSS monitoring conducted by the US Geological Survey during the early 1980s (see attached figure). The USGS study involved the collection of samples every four to six hours. Similarly, the Thompson Island Pool TSS study conducted by General Electric in 1991 involved the collection of TSS samples every six hours. A sampling frequency of approximately every six hours would be better able to characterize a spring high flow resuspension event.

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Throughout the entire data collection effort, on what is now reported to be an $11,000,000 RI/FS, GE and other interested parties have not had an opportunity to review the numerous field sampling plans and associated QAPP's. U. S. EPA has continually referenced the extensive outreach program that purportedly is intended to allow meaningful participation, yet when details on the project are requested or questions asked at the infrequent public meetings the agency response is generally to defer the response to a later date and the requests or questions are never fully addressed.

It has been over 1 1/2 years since the U. S. EPA has voluntarily released project documents for the public to review, yet significant activities have been performed without any meaningful input by parties outside of the U. S. EPA. GE would like to again reiterate its request that project documents archived sediment analysis programs be released for review and

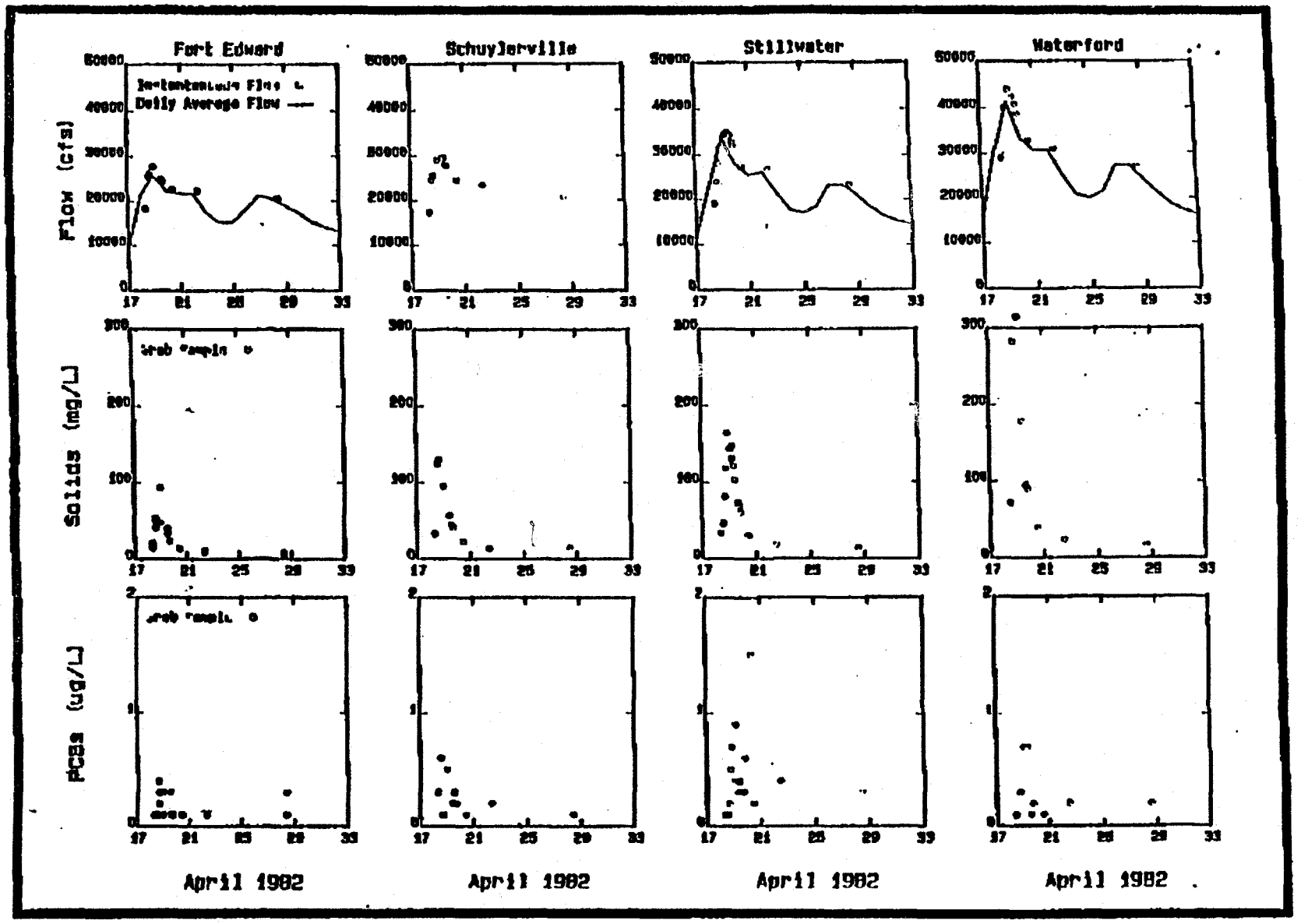
comment prior to implementation by the agency. The project is entering a critical phase of data interpretation and remedy analysis that is of great interest to all parties. The U. S. EPA needs to build a program that allows meaningful public participation.

A timely response to these requests would be appreciated. Please place a copy of this letter into the Hudson River Administrative record.

Yours truly,

John G. Haggard
Engineering Project Manager

cc: Paul Simon



Historical Flow Rate, Suspended Solids, and PCB Concentration for a Spring Flood (April 1982, USGS)