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| Post-It™ brand fax transmittal memo 7671 | | # of pages * | |
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July 30, 1992

Mr. Douglas Tomchuk
U.S. Environmental Protection Agency
Region II - Room 747
26 Federal Plaza
New York, NY 10278

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Dear Mr. Tomchuk:

Please accept the following as our comments on the Phase 2 Work Plan and Sampling Plan for the Hudson River PCB Reassessment RI/FS:

Timeline for completion of the Reassessment

We were distressed to learn, upon the release of the Phase 2 Work Plan, that EPA is now planning to produce a Record of Decision on this project in mid-1994. What started as an eighteen month review, according to EPA officials at the time the reassessment was announced, has now become a four and a half year project. Given that this extensive lag of the schedule has happened during just the first of three phases, the likelihood of further delays exacerbates our concern.

PCB contamination of the Hudson River is one of the most studied environmental catastrophes in this country. While we recognize the necessity of basing a cleanup decision on sound information, at some point it has to be recognized that there will always be some uncertainty associated with this situation, and any course of action EPA chooses to follow. The value of further study must be balanced against the very real harm of further delay.

PCB-laden sediments remain a "time-bomb" in the bottom of the Thompson Island Pool, waiting the inevitable flood which will send them coursing downriver in concentrations orders of magnitude higher than current dispersion, resulting in increased availability to the food chain, including humans. As PCBs are dispersed, the opportunity to take any effective remedial action diminishes accordingly. Human exposure to PCBs through fish consumption continues, and perhaps worsens, even as the information on the associated health risks to current and future generations becomes more compelling. And with each passing year the Hudson River commercial fishery moves one step closer to

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the Hudson River commercial fishery moves one step closer to extinction.

We urge EPA to take every possible step necessary to expedite this process, including taking a critical look at each element of the Phase 2 Work Plan. Each element should be evaluated as to whether it will provide the answer to a specific question that has been determined to be critical in reaching a decision.

Human Health Risk Assessment

The discussion in Sect. 6.1.2.2 (Non-Cancer Toxicity) of the Work Plan raises the possibility that EPA may decide to not consider non-cancer toxicity of PCBs in its human health risk assessment ("Should the ECAO fail to establish an RfD for PCBs, then an evaluation of the potential non-cancer toxicities associated with exposure to PCBs in the Hudson River will not be reported.", P. 6-3).

There is ample and compelling evidence that PCBs have neurotoxicological effects and are reproductive and developmental toxicants. In a recent report the U.S. General Accounting Office identified PCBs as one of 30 widely recognized reproductive and developmental toxicants ("Reproductive and Developmental Toxicants; Regulatory Actions Provide Uncertain Protection," US General Accounting Office, October 1991).

The report found inadequate consideration of reproductive and developmental effects in most regulatory actions and concluded that as a result, there now exists uncertain protection against the reproductive and developmental effects of these chemicals. Despite the fact that CERCLA provides express authority regarding the prevention of reproductive and developmental disease, EPA's Office of Emergency and Remedial Response was specifically criticized for lack of consideration of these impacts.

The report recommended that regulatory agencies perform separate analysis for reproductive and developmental outcomes in for these chemicals. Of the experts surveyed by GAO for the report, 98% felt that reproductive and developmental data should be examined during risk assessment.

The International Joint Commission on Great Lakes Water Quality recently adopted a "weight-of-evidence approach" for the control of persistent, toxic substances, including PCBs. In discussing the reproductive and developmental effects of these substances in its sixth biennial report the Commission stated that, even though there may be criticisms of individual studies, "at some point, the emerging mass of data and information must be

accepted as sufficient to prompt...action against environmental contaminants."

The "weight-of-evidence" currently available makes it imperative that EPA not ignore the non-cancer risks of PCB exposure. According to the preliminary assessment provided in

the Phase 1 Work Report, EPA has calculated the non-cancer risks from consumption of Upper Hudson River fish to be 51 times the acceptable level. Even given some uncertainty, this level of risk is too critical to ignore. It is our understanding that EPA's Environmental Criteria Assessment Office (ECAO) is in the process of developing Reference Dose Values for various PCB arochlors and that, in fact, an RfD for Arochlor 1016 has already been entered into the Integrated Risk Information System (IRIS) (personal communication, John Cicmanic).

We recognize EPA's need to document a rational basis for its decisions, particularly in a case which involves such an aggressive "potentially responsible party" as GE, ready to challenge, on any grounds possible, a decision which they feel is not in its best interest. But EPA should not let bureaucratic obstacles, nor GE's lobbying, stand in the way of using the best information available in the interest of protecting public health. Instead, EPA should make an explicit and unequivocal commitment now that the non-cancer toxicities of PCBs will be considered as part of this reassessment.

Scope of the remedial action being considered.

Discussions at the recent Joint Liaison Group meeting on the Phase 2 Work Plan made it clear that there is still substantial confusion over the scope of both the Hudson River Superfund site and of the remedial action being considered.

To clarify this situation, EPA should consider dividing the site in to two or more "operable units." The first unit, the subject of the ongoing RI/FS, would be the Upper Hudson from Hudson Falls to the Troy Dam (now referred to as "Study Area B"). In evaluating the need for, and benefits of, remediation of this area, EPA should consider the impacts on air and water quality, human health risk and ecological risk caused by PCBs migrating from this site, regardless of where those impacts are occurring. Once this site has been remediated, EPA should separately consider the feasibility of remediating other areas of the river.

Goals of the remedial action being considered.

The Work Plan states, on page 1-3, that "...two of the major questions that the Reassessment will address are: what is the

reduction in PCB levels that meet human health criteria and; the ancillary question of which source areas, if any, may require remediation in order to achieve that reduction."

Clearwater believes there are two flaws with this statement, the appropriate resolution of which are critical for the validity of the reassessment outcome.

The first is the seemingly singular focus on human health criteria. We assume the criteria being referred to here is the FDA tolerance level of 2 ppm in fish flesh. This is not appropriate as a standard for restoration of the Hudson River. The FDA tolerance level is based in part on economic impacts and is, therefore, not as protective as would be a standard based solely on human health impacts. Furthermore, this standard does not consider ecological impacts.

NYS DEC has recommended a goal of .1 ppm in fish flesh as a goal for the Hudson River, based on DEC's wildlife protection criteria. This level would provide greater protection of human health and would be protective of wildlife that consume fish on a regular basis. EPA should adopt the .1 ppm fish flesh level as a goal for the Hudson River.

Our second concern is that EPA appears to be establishing as a criteria for approval of a remedial action that it must result in PCB fish flesh levels reaching the established goal. Clearwater does not believe that this is an appropriate measure of the effectiveness of a cleanup action. No possible action should be evaluated in terms of whether it, in isolation, will bring PCBs in fish flesh down to an established "acceptable level."

It is critical that EPA consider the possible remediation of hot spots, remnant deposits and dredge spoil areas in the appropriate context, ie. as one step among many that has been or can be taken to reduce PCB contamination of the Hudson.

This continuum of action began in 1977 with the cessation of G.E.'s discharges of PCBs to the Hudson, and includes the removal of 160,000 pounds of PCBs under NYS Department of Transportation channel maintenance dredging program (1975-1978), the remediation of seven PCB contaminated dumps in Washington County, and the interim capping of the remnant deposits. The cumulative impact of these actions has been a continuing downward trend, albeit very slight in recent years, in PCB levels in Hudson River fish.

EPA should instead be asking what remedial measures are feasible, and will these measures result in a decrease in PCB levels in Upper and Lower river fish. The concentrations of contaminated sediments in the Thompson Island Pool are clearly the most appropriate focal point for the next step in this

ongoing remediation, as they are the most clearly "actionable", known sources of PCBs in both the Upper and lower river. Again, we recommend that EPA identify this area as a distinct "operable unit" within the larger Superfund site. Once these sediments have been remediated, and the impact of their remediation evaluated, EPA can then turn its attention to other possible remedial actions that may help to achieve the ultimate goal of less than .1 ppm of PCBs in fish.

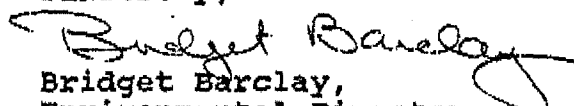
Feasibility Study

The Work Plan indicates that EPA will conduct engineering analyses and treatability studies during Phase 2 for use in the Phase Three Feasibility Study. Among the response actions and associated technologies which were considered in Phase 1 and retained for further evaluation are dredging and physical, chemical and biological sediment treatment. Many of these technologies have been the subject of laboratory and bench scale testing. We are also aware that pilot scale testing of some of these technologies has occurred, or is occurring, at other Superfund sites (ie. St. Lawrence River and Sheboygan River).

EPA should take advantage of the existing body of work and begin pilot scale testing on the Hudson River site as part of the Phase 2 Work Plan. The data these test would generate would allow objective analysis of the feasibility of various remedial options during Phase 3, resulting in significant time savings.

Thank you for your consideration of our comments and recommendations.

Sincerely,


Bridget Barclay,
Environmental Director