EXHIBIT 21

Hudson River PCBs Superfund Site

Date: May 12, 2006

To: Doug Garbarini (USEPA)

From: Ed Garvey, Juliana Atmadja and Cindy How

Subject: Comparison of Removal Areas and Volumes for Phase 1 Areas.

Using the footprint originally identified for Phase 1 areas (see attached figure from the GE Phase 1 Dredge Area Delineation Report [Phase 1 DAD, Feb. 28, 2005]), it is possible to compare the original ROD estimates of surface area, sediment volume and PCB mass for removal with those estimated by GE in the Phase 1 DAD. A similar calculation can be made using the results from the GE Phase 1 Intermediate Design Report (IDR, August 22, 2005).

For the Phase 1 areas comparison, we summed the dredging areas identified in Plate 13 of the ROD (attached for reference) that were contained within the Phase 1 boundaries shown on Figure 1-1 of the Phase 1 DAD. Only those areas of the ROD "footprint" that were contained within the Phase 1 areas were included in the summation. In a similar fashion, the GE Phase 1 DAD identified all areas for removal within these same Phase 1 boundaries. The GE values were obtained from Tables 6-1 and 6-2 of the Phase 1 DAD Report, which are also attached. The Northern Thompson Island Pool (NTIP) and East Griffin Island Area (EGIA) were separately compared in the analysis, which is summarized in Table 1. As part of the calculation, a volume-weighted average depth of sediment for removal was estimated as the quotient of volume over area. Note that for the PCB mass removed in the ROD estimate, the mass was calculated by a simple proportion of the total PCB mass to be removed from River Section 1, based on the volume in the summed areas relative to the total River Section 1 volume.[1]

From Table 1, it can be seen that GE's estimate of areas for remediation within the Phase 1 boundaries (154 acres) is about 25 percent greater than the original estimate in the ROD for this region (123 acres). Also evident in Table 1 is the difference in the depth of cut (DoC) associated

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1 This approach assumes that the PCB concentration in the Phase 1 areas is, on average, the same as that for all areas of the TI Pool. A more rigorous basis for estimating the PCB mass in Phase 1 areas can be developed using the original files developed for the ROD. This more rigorous calculation was not done because data collected as part of GE's design sampling program that suggests that the PCB concentrations in the Phase 1 areas are only slightly higher (10-15 percent) than the average for the TI Pool as a whole. Thus the estimate provided here is reasonable for the purpose of comparison.

with these areas. The ROD estimated a depth of cut of approximately 2.8 ft while GE's Phase 1 DAD estimated a DoC of 1.7 ft. Finally, the Total PCB mass estimate for the ROD (12,900 kg) is about 3 times lower than that obtained from GE's analysis (34,400 kg). Based on these results, it is evident that the PCB contamination in the Phase 1 areas is shallower, more spatially extensive and more concentrated than that estimated in the ROD. As a result, the removal of 265,000 cy from the final Phase 1 dredge areas will address more surface area and remove more PCB mass than originally anticipated.

Since the Phase 1 DAD was issued, GE revised its depth of contamination estimates based on an inverse distance weighted interpolation model (IDW) and included these estimates in the IDR. To confirm that these changes would not affect the above conclusion, we examined the areas and volumes of the IDR in a similar calculation. One of GE's goals in the preparation of the IDR was the refinement of the Phase 1 DAD areas into the final areas for the design. This reduced the total area under consideration and focused the IDR areas around Rogers Island and the East Griffin Island area.

The limits of the IDR removal areas were used to select the removal areas identified in the ROD. The IDR removal areas are shown in Figure 3-1 of the IDR, which is attached for reference. Summaries of the volume, area and PCB mass estimates based on the IDR limits for both the ROD removal areas and GE's removal areas are also included in Table 1. These estimates are not directly equivalent to the first two tabulations in the table since the IDR refined the Phase 1 areas to obtain a volume slightly over the target of 265,000 cy (*i.e.*, 276,000 cy).

GE's IDR estimates that 93 acres will be required to yield this volume, a 66 percent increase over the ROD-based estimate of 56 acres. Similarly, the depth of cut estimated from GE's results in the IDR (1.8 ft) is 38 percent shallower than the equivalent estimate from the ROD-based areas (2.9 ft) This confirms the observations made above, *i.e.*, the actual Phase 1 dredging will be shallower but will cover a substantively greater area than originally estimated in the ROD. A comparison of the PCB inventories to be removed also confirms that the Total PCB mass to be removed in Phase 1 (21,500 kg) will be about 3 times greater than originally estimated in the ROD for this area (6,100 kg).[2]

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[2] It should be noted that while it is clear that the Phase 1 areas will be spatially more extensive, this may not be the case for the entire remedy. Current data presented in GE's draft Phase 2 DAD suggest that the overall volume may be reduced and the overall area may remain roughly the same as that estimated in the ROD. However, the data also suggest that the overall mass of PCBs removed will be substantially greater than that estimated in the ROD. GE's Phase 2 DAD is currently under review by the US EPA.

Table 1
Dredge Area Comparisons

Phase 1 Area-Based Comparison

Phase 1 Estimates Derived from the ROD (2002)[1]

Location	Sum of Tri+ Mass (kg)	Sum of TPCB Mass (kg)	Sum of Total Area (acres)	Sum of Total Volume (cy)	Depth of Cut (ft)
NTIP	3,000	9,700	99	422,000	2.7
EGIA	970	3,100	25	136,000	3.4
TOTAL	**4,000**	**12,900**	**123**	**558,000**	**2.8**

1. Areas and volumes represent ROD dredge prisms contained within GE's Phase 1 candidate areas.

GE Estimates Presented in the Phase 1 DAD (February 2005)[2]

Location	Sum of Tri+ Mass (kg)	Sum of TPCB Mass (kg)	Sum of Total Area (acres)	Sum of Total Volume (cy)	Depth of Cut (ft)
NTIP	9,900	31,600	138	379,000	1.7
EGIA	900	2,800	16	32,000	1.2
TOTAL	**10,800**	**34,400**	**154**	**411,000**	**1.7**

2. Source: Tables 6-1 and 6-2 of the GE Phase 1 Dredge Area Delineation Report, February 28, 2005.

IDR Area-Based Comparison

IDR Estimates Derived from the ROD[3]

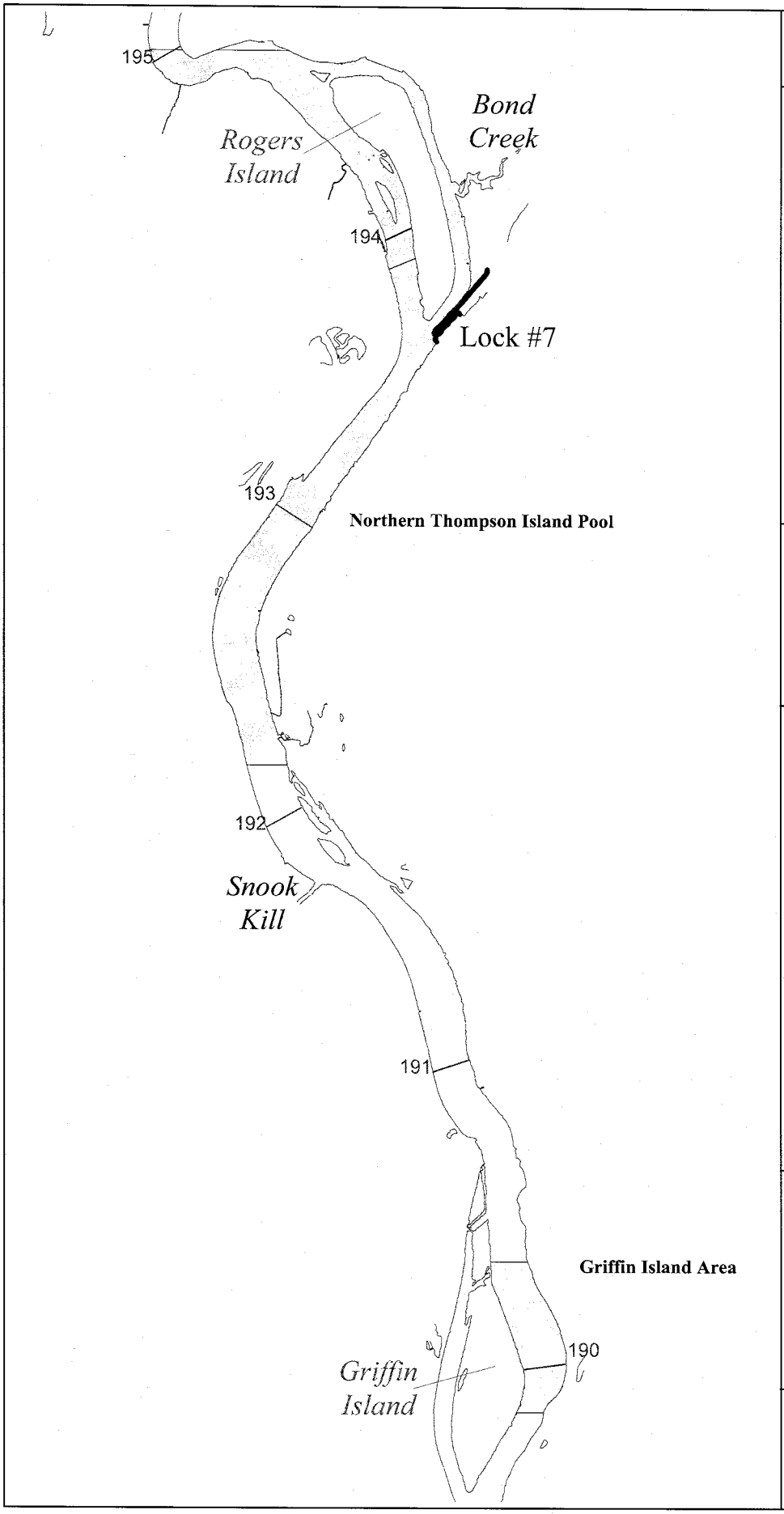
Location	Sum of Tri+ Mass (kg)	Sum of TPCB Mass (kg)	Sum of Total Area (acres)	Sum of Total Volume (cy)	Depth of Cut (ft)
NTIP	920	3,000	33	131,000	2.5
EGIA	940	3,100	24	133,000	3.5
TOTAL	**1,900**	**6,100**	**56**	**263,000**	**2.9**

3. Areas and volumes represent ROD dredge prisms contained within the same River Miles as the Phase 1 IDR areas.

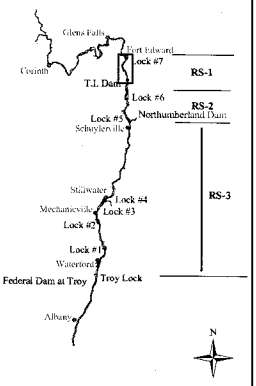
GE Estimates Presented in the Phase 1 IDR (August 2005)

Location	Sum of Tri+ Mass (kg)	Sum of TPCB Mass (kg)	Sum of Total Area (acres)	Sum of Total Volume (cy)	Depth of Cut (ft)
NTIP	5,900	18,900	79	238,000	1.9
EGIA	820	2,600	14	38,000	1.7
TOTAL	**6,700**	**21,500**	**93**	**276,000**	**1.8**

Note: Sums may not be exact due to rounding.



LOCATOR MAP OF THE UPPER HUDSON RIVER



GRAPHIC SCALE

0 0.3 Miles

LEGEND

- River Miles
- Shore Line
- Dams and Locks
- Phase 1 Areas

General Electric Company
Hudson River Project

Figure 1-1.
Map of Phase 1 Areas.

QEA Quantitative Environmental Analysis, LLC

GENrem 135 February 2005

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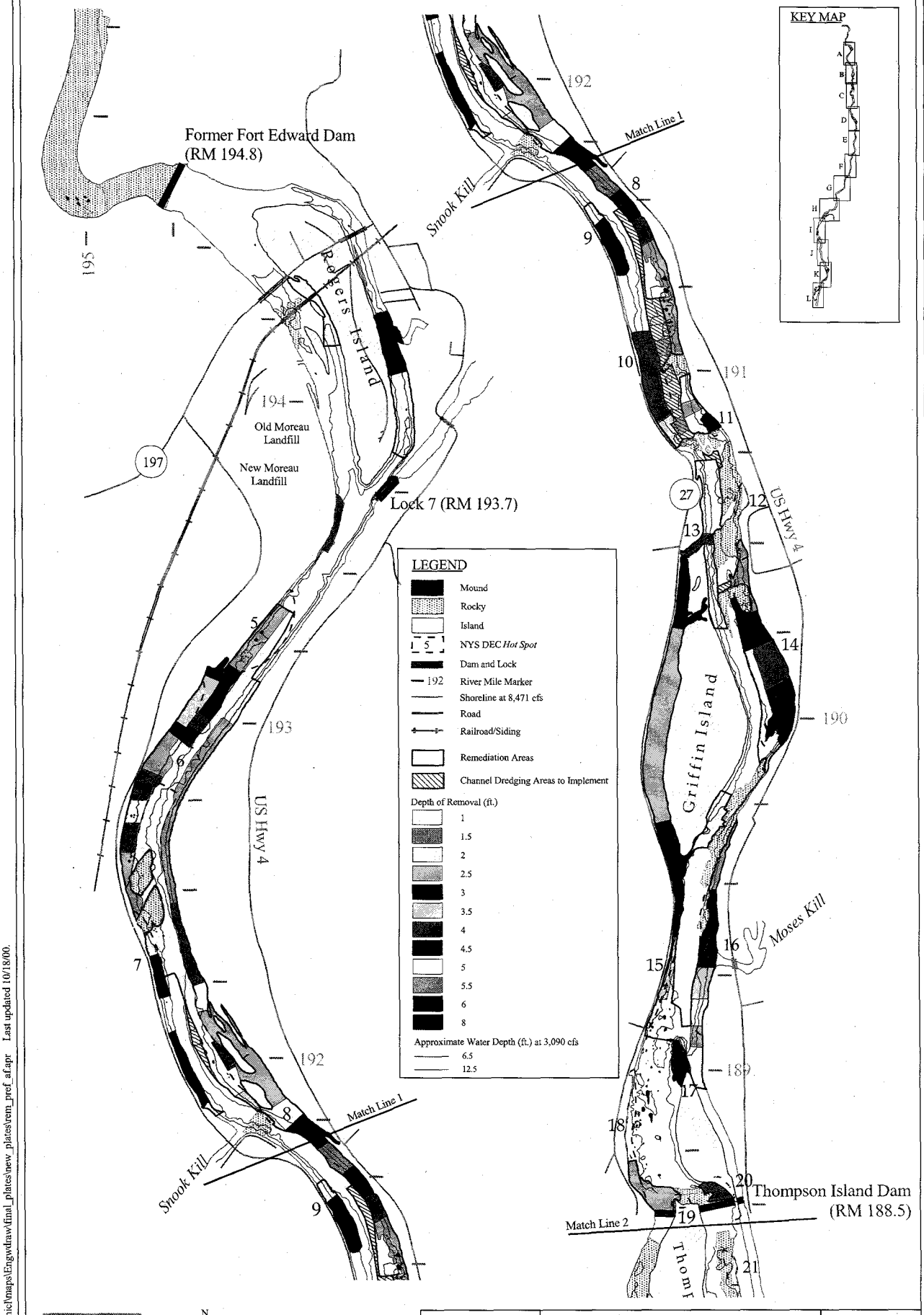

TAMS
TAMS Consultants, Inc.

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Scale in Feet
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Scale in Meters

Hudson River PCBs Reassessment Feasibility Study	Plate 13-1 Alternative REM - 3/10/Select Removal Areas and Depths	RM 194.8 - 188.5

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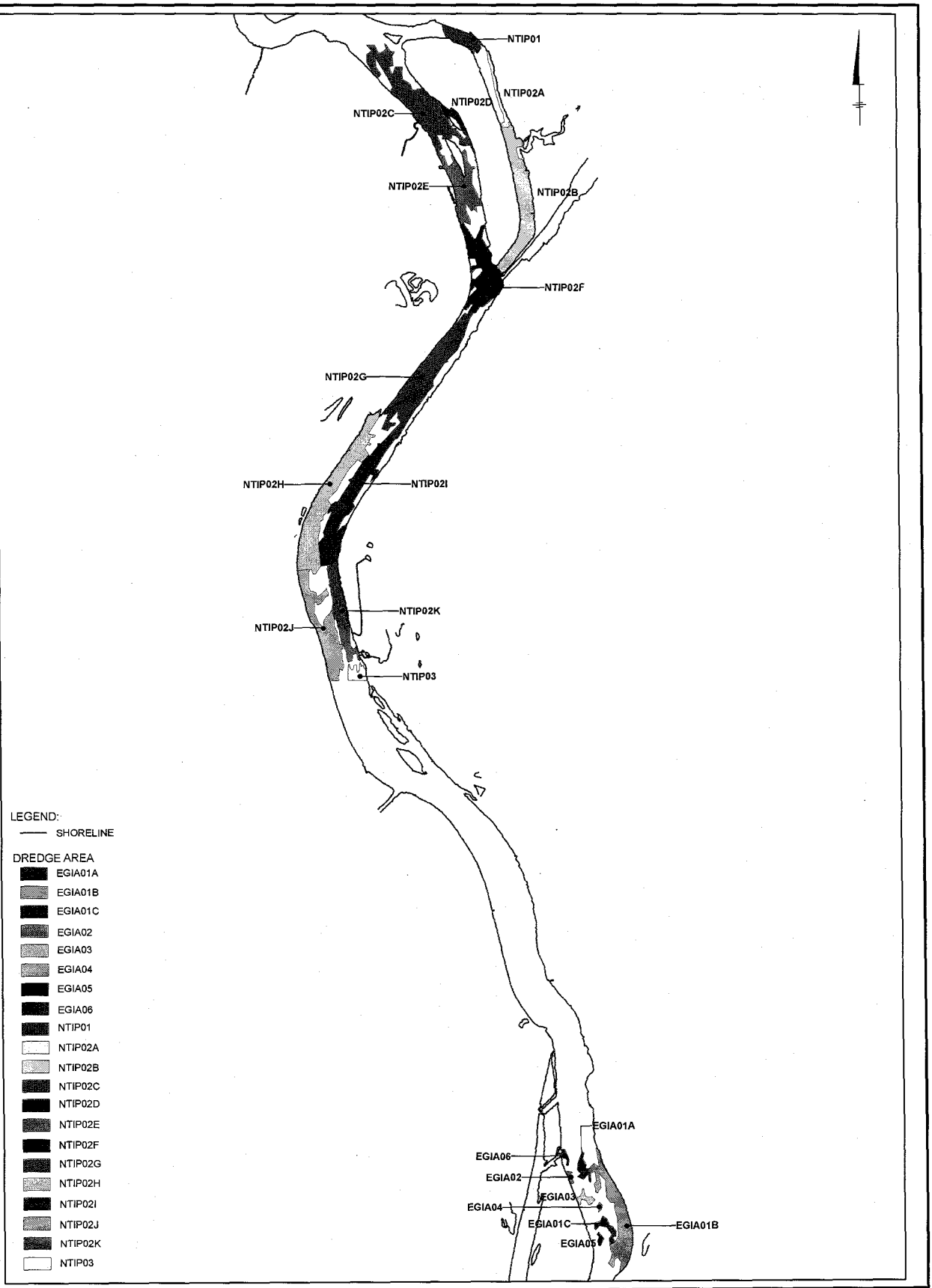
Table 6-1. Areas and volumes for Phase 1 Areas.

Name	Area (acres)					Volume (cy)			
	DoC <= 6 in.	6 in. < DoC <= 12 in.	DoC > 12 in.	Non-Dredge	Total	DoC <= 6 in.	6 in. < DoC <= 12 in.	DoC > 12 in.	Total
NTIP	6.9	27.1	104.0	67	205.0	4,100	33,800	340,600	378,500
EGIA	0.9	5.6	9.7	25	41.2	600	7,300	24,200	32,100

Table 6-2. Summary of PCB_{3+} Statistics for Phase 1 Areas.

Study Area	DoC Categories	Area (acres)	Number of MPA_{3+} cores	Number above dredge criterion	Average MPA_{3+} (g/m^2)	PCB_{3+} Inventory (kg)	Number of cores with surface sediment PCB_{3+} data	Number of cores where surface sediment PCB_{3+} exceeds criteria
NTIP	DoC <= 6 in.	6.9	59	4	3.9	110	50	29
	6 in. < DoC <= 12 in.	27.0	148	58	6.7	732	152	105
	DoC > 12 in.	104.2	685	593	21.5	9040	741	640
	Dredge Area Total	138.1	892	655	17.7	9882	943	774
	Non-Dredge	67.0	289	10	0.8	220	260	13
EGIA	DoC <= 6 in.	0.8	5	1	5.6	20	5	3
	6 in. < DoC <= 12 in.	5.6	36	13	6.9	154	36	31
	DoC > 12 in.	9.7	65	54	18.2	709	65	63
	Dredge Area Total	16.1	106	68	13.6	883	106	97
	Non-Dredge	25.0	143	4	0.8	78	142	11



NOTE:

1. DREDGE AREAS BASED ON FEBRUARY 28TH PHASE 1 DAD REPORT.
2. SHORELINE BASED ON AERIAL MAPPING PERFORMED BY CHAS H. SELLS, INC IN THE SPRING OF 2002.

0 1,600 3,200 Feet

GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
HUDSON RIVER PCBs SUPERFUND SITE
PHASE 1 INTERMEDIATE DESIGN REPORT

PHASE 1 DREDGE AREAS

BBL® BLASLAND, BOUCK & LEE, INC. engineers, scientists, economists

FIGURE 3-1

8/20/05 SYR-85 KEW KEW MTK
GE Hudson
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