

Remediation Management Services Company

150 W. Warrenville Rd. MC 200-1N Naperville, IL 60563

Office: 312.809.4117 john.frankenthal@bp.com

April 24, 2017

Mr. Peter Swiderski Mayor Village of Hastings-on-Hudson 7 Maple Avenue Hastings-on-Hudson, NY 10706

Dear Mayor Swiderski:

In accordance with Section 4.7 (a) of the 2016 Modification to the 2013 Consent Order between Riverkeeper, the Village of Hastings-on-Hudson and Atlantic Richfield Company attached is cost estimate from an "independent third party contractor" for the demolition of the Water Tower.

The attached estimate, provided by Envirocon includes a summary of the assumptions used to develop the demolition costs and costs by task totalling \$490,000.

Please feel free to contact me with any questions or if you require additional information.

Sincerely,

John A. Frankenthal

Liability Business Manager

Remediation Management Services Company

An affiliate of Atlantic Richfield Co.

Enclosure:

Envirocon Proposal



ENVIROCON, INC. 101 International Drive Missoula, MT 59808 (406) 523-1150 (406) 523-1197 FAX www.envirocon.com

21 April 2017

Remediation Management Services Company 150 W. Warrenville Road, MC 200 1N Naperville, IL 60563

Attention:

Mr. John A. Frankenthal

Liability Business Manager

Subject:

Hastings on Hudson AERL Site Water Tower Demolition

Dear Mr. Frankenthal,

In response to your request for a budgetary estimate for the demolition and disposal of the water tower located on the AERL Hastings on Hudson site, Envirocon offers the following:

The cost to cripple, drop, shear, and dispose of the HOH water tower is on the order of \$490,000. The cost is dependent on the agreement of BP to fall the tower by cripple method. Also, should BP require the water tower to be disassembled using a crane, this budgetary estimate is not applicable. We are providing this as an "average" figure, since the cost varies up or down, based on whether a separate mobilization is required (please see assumptions detail attached). As you know, there is demolition activity to occur this summer on Building 52 and that debris is being transported off-site for disposal via barge.

We'll be glad to work with you to refine this estimate further, should the project move forward.

Sincerely,

aland. Brell Alan Buell

Operations Director/BP Program Manager

Envirocon, Inc. 406-698-2012

abuell@envirocon.com

Attachment: Detail of costing assumptions

HASTINGS ON HUDSON AERL SITE WATER TOWER DEMOLITION

ENVIROCON'S ASSUMPTIONS FOR THE WATER TOWER DEMOLITION

- The cost to perform a demolition of the water tower is \$350,000, including setup, drop, shearing/sizing for disposal, and loadout
- General mobilization is already accomplished versus a separate project mobilization. If mobilized as a separate project, there is additional cost of approximately \$80,000.
- Drop method: cripple the structure, and cable it to the ground in a prepared drop area; the cable is 1-time use at ~\$8,000, and engineering for safe drop purposes is ~\$25,000. The sand pad is roughly 200 tons, which could be reused onsite, at @25/ton delivered, or \$5,000 total. If a separate machine is needed to spread the sand, that would cost all-up approximately \$2,000. Total cost is therefore \$40,000
- We would need at least a high reach man lift to attach the cables. The high reach costs about \$5,000 per week, plus mobilization. (See paint below.) Figure 2 weeks = \$10,000, plus mobe/demobe of \$3,000. Total cost is \$13,000.
- If we were to remove the materials via barge (as with the Building 52) and concurrent, the cost of transport to a transload point would be about \$108/ton; it would take 3-6 disposal "cans" on chassis, using the standard loading method, and assuming that it has enough PCB concerns to simply remove it to the same Heritage facility that the Building 52 materials are going. We had heard from Jacobs that if they were to truck the materials to a local scrapyard or disposal facility, the trucking transportation costs would be \$42/ton. Disposal at 120 tons would total ~\$13,000.
- There would need to be an assessment of the paint for two reasons: (1) is it PCBs?, and (2) is it flaking? This cost is \$2,000 for sampling and analysis. If it's PCBs, then the question is level, and in view of the Consent Order requirements, perhaps it would be prudent to assume it should go to a TSCA facility, and Heritage would be the logical choice, since they're set up for this work already.
- We assume that the paint is flaking, and lead-containing. To mitigate the potential for flakes to disperse during the work, we would bring in an abatement subcontractor for scraping and HEPA vacuuming to control the scraped material. After scraping, they would encapsulate the surface. This work is done using a high reach all-terrain articulating-bucket man lift. This total cost is approximately \$30,000, plus a week of the man lift (approximately \$5,000, but counted above as 1 of 2 weeks).

In summary:

- If mobilized already, total cost is approximately \$448,000
- If done as a separate project, total cost is approximately \$528,000

Thus, for an "average" budgetary figure, the total cost is approximately \$490,000.