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MEMORANDUM

21 December 2012 File No. 28612

TO: Atlantic Richfield Company

Allen Peterson

C: Atlantic Richfield Company

Paul Johnson

FROM: Haley & Aldrich

Keith M. Aragona, P.E., Wayne C. Hardison, P.E.

SUBJECT: Building 52 Stabilization for Potential Reuse and Occupancy

Per your request, the following provides information on the scope and cost of the minimum work required to stabilize (mothball) Building 52 for potential future reuse and occupancy. For this work, stabilization is defined as significantly reducing water and other weather impacts to prevent further deterioration for a period of eight years.

Background

In fall 2010, Haley & Aldrich, Inc. retained Robert Silman Associates (RSA) and James R. Gainfort, AIA, Consulting Architects (Gainfort) to complete a structural evaluation of Building 52 and, specifically, to consider the feasibility of future beneficial reuse. This evaluation included various field observations and tests.

The general results of the evaluation of the superstructure (including the roof, column bases, walls and floor) were that:

- The condition of the building continues to deteriorate due to exposure to water.
- The exact condition of some elements (e.g. the roof deck) cannot be determined without more extensive testing.
- The building does not comply with code requirements for any future use.

The most significant recommendation to reduce further deterioration was to make repairs to minimize water infiltration through the deteriorated roof, monitors, walls, columns, and windows.

An evaluation of the foundation was not prepared for the following reasons:

• Significant stabilization of the superstructure was necessary which precluded the need for foundation investigation.

- Wooden piles provide the majority of structural support on this property which was constructed using indiscriminate fill. The location of piles beneath Building 52 could not be readily identified and the level of effort to expose and test the piles would be significant.
- In order to complete a foundation evaluation, significant health and safety risk might be encountered when working below the water table and amidst impacted fill.

A copy of the report was provided to the Village by Atlantic Richfield.

2012 Evaluation

In the fall of 2012 Atlantic Richfield retained Haley & Aldrich and a construction contractor to reevaluate the minimal scope of work required to stabilize Building 52 for a period of eight years and to estimate the cost to complete the work. Additionally, since the interior walls and floor contain PCBs and lead from manufacturing operations, the cost to decontaminate the interior for safe reuse was included.

Scope

The minimum scope required for stabilization includes:

- 1. <u>Foundation Testing:</u> Screening of pile conditions and load testing. Additional testing not included in the cost may be required depending on the results.
- 2. Planning: Detailed roof deck inspection to determine required repairs, additional sampling of walls and slab, preparation of bid documents, bidding and procurement, work plan submittals to NYS Department of Environmental Conservation, NYS Department of Labor, USEPA (TSCA) and local authorities. Planning specifically includes development of plans and associated documents in conjunction with the selected contractor that are required to safely execute the work and securing approvals from various BP functions.
- 3. <u>Mobilization/Demobilization:</u> Initial site-specific training and orientation of all contractor and subcontractor staff in addition to equipment mobilization.
- 4. <u>Decontamination:</u> Removal of PCB impacted slab surfaces (1-2 inches) and interior brick surfaces (1/4 inch) as well as asbestos abatement. (Note: Dealing with these materials during a demolition scenario would be \$0.5 million less costly than in-place decontamination.)
- 5. Site Work and Disposal:
 - Monitor end wall repair
 - Patch roof holes and cover
 - Remove penetrations (pipes, steel, etc.) and patch
 - Masonry repair (tuckpointing, missing bricks, etc.)
 - Replace window coverings
- 6. Building Upkeep: Eight years of routine building maintenance



Likely Additional Scope

Additional scope may be required to bring the building to the point that reuse options could be implemented and should be considered if the building is mothballed. Some of these scope items include the following:

- Sump and pump system to keep floor slab dry after an impermeable barrier and fill is placed around the building as required by the State Consent Order and/or Federal Consent Decree;
- State, federal or local agency comment on preservation of an impacted structure that increases scope;
- Restoration of the slab or brick after decontamination;
- Upgrades to meet current building codes including floor elevation to avoid flood;
- Replacement of portions of roof deck;
- Reconstruction of a previously removed monitor;
- Installation of a roof system with a life expectancy longer than eight years;
- Additional foundation testing (if the initial is inconclusive) and repairs, and;
- Contingency for unknown conditions (e.g. more extensive wall or slab removal).

Estimated Cost

The estimated cost to complete a minimalistic approach to stabilize Building 52 for a period of eight years includes Scope Items 1 through 6 (below). As noted previously, careful consideration should also be given to the Likely Additional Scope items and associated costs that are likely to be incurred, but have not been included in our current cost estimates.

Scope Item	Cost (\$ million)
1. Foundation Testing	\$0.85
2. Planning	\$0.40
3. Mobilization/Demobilization	\$0.15
4. Decontamination	\$1.25
5. Site Work and Disposal	\$3.60
6. Building Upkeep	\$0.40
Total Scope Cost	\$6.65

