Hastings on Hudson
Building 52 Demolition Project
Project No. 35DK8801
Building 52 at 1 River Street
Hastings-on-Hudson, New York

Final Demolition Work Plan

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Figure D-1 – Building 52 Site Construction Layout
Figure D-2 – Building 52 Decommission Plan Miscellaneous Items

Attachment A – Project Schedule
Attachment B – EPA Approved TSCA Building 52 Self-Implementing Clean-Up Plan
Attachment C – Demolition Fact Sheet
1.0 PURPOSE

This plan provides instructions on the steps to be executed by Envirocon, under the supervision of Jacobs Field Services North America (JFSNA), to ensure the safe and compliant removal of Building 52 for Atlantic Richfield Environmental Remediation, Limited (AERL). A tentative project schedule is included as an attachment. Some additional task specific plans will be generated to support this work. Those task specific plans are identified in this plan where required.

2.0 PLAN TRAINING

All Envirocon and subcontractor/vendor personnel performing work on the Building 52 Demolition project site will be trained on this plan. Completion of training will be documented by signing the Work Plan Training attendance log.

3.0 SCOPE

This work plan covers the following activities:
- Staffing and Equipment Plan
- Pre-Demolition Activities
- Decontamination Approach
- Demolition process and sequence of work
- Site stabilization/restoration plan
- Dust Control
- Material Management
- Transportation
- Project closeout procedures

4.0 STAFFING AND EQUIPMENT PLAN

4.1 Staffing

Envirocon will report to Jacobs Field Services North America, Inc. (JFSNA), the Construction Manager for this Project. To complete this project Envirocon anticipates staffing of five management personnel, an Envirocon labor crew of 10 people, and use 4 Subcontractors (Miller’s Launch for barging operations, Naber Electric for electrical relocation at the site, Coastal Environmental or another contractor for ACM abatement, and Clear-Span for storage structure installation). JFSNA will also be contracting with Heritage Environmental Services who will be responsible for waste disposal. AERL or JFSNA, as per applicable regulations, will be subcontracting a Third Party Air Monitoring firm during ACM abatement.
4.2 Equipment

Below is a table of the proposed equipment and resources required to complete this demolition project, and are subject to change depending on site conditions.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-490 Excavator</td>
<td>1</td>
<td>Hammer</td>
</tr>
<tr>
<td>PC-490 Excavator</td>
<td>1</td>
<td>MSD 3000/R</td>
</tr>
<tr>
<td>PC-490 Excavator</td>
<td>1</td>
<td>Grapple</td>
</tr>
<tr>
<td>PC-490 Excavator</td>
<td>1</td>
<td>Bucket and Thumb</td>
</tr>
<tr>
<td>WA480 Loader</td>
<td>1</td>
<td>Demo Bucket/HT</td>
</tr>
<tr>
<td>Water Truck</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Skid Steer</td>
<td>1</td>
<td>Grapple/forks</td>
</tr>
<tr>
<td>Concrete Saw</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pick-up Truck</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Tug Boat</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Transportation Barge</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Safety/Rescue Boat</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ottawa Tractor</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Large Forklift</td>
<td>1</td>
<td>5th Wheel Receiver</td>
</tr>
</tbody>
</table>

Note: all demolition heavy equipment should be equipped with demolition screens on all line of sight windows.

5.0 SAFETY

All work tasks covered in this plan will be implemented in accordance with all requirements included in the Site Specific HASP to be provided by Jacobs.

5.1 Minimum PPE

1. Hard hat
2. Safety glasses
3. Safety-toe boots
4. Gloves
5. Clothing that fully covers arms and legs
6. High visibility outer coat/vest/long sleeve shirt

5.2 Onsite Training and Orientation

Envirocon’s personnel will receive training upon site mobilization. Training will commence with Envirocon’s operations staff giving the project crew a brief overview of the project scope and sequence, and summarizing tasks, equipment and labor resources, and schedule. Envirocon Health, Safety and
Environment (HSE) personnel will then review the Hazard Identification and Task Risk Assessment (HITRA) in detail giving a review of the site hazards and some of the tasks requiring job hazard analyses. Following this classroom instruction, workers will take a tour of the site and will be shown the various work and staging areas. The group will then break up into smaller sub-groups by job assignment (ACM abatement workers, high burners, pipe breaking crew, etc.) to receive more individual instruction from the project superintendents and foremen. Orientation training will also be provided to suppliers and vendors, as well as subcontractors. The level of training will be contingent upon the suppliers and vendors extent of involvement with the site operations. Suppliers and vendors visiting the site for deliveries will require a minimum level of site awareness training. Subcontractors working onsite will be required to comply with the site HITRA and Health and Safety Program (HASP), including all of the regular site orientation procedures.

1. Site HITRA
2. Site HASP and Site Orientation
3. JSAs appropriate for the task
4. Craft Activity Plans (CAPs)

### 5.3 General Safety

1. Personnel entering established demolition exclusion zones (EZ) will only enter at designated entry points and will sign onto log in sheet listing name and time logged in. Once signed in, personnel will go to assigned task locations and complete crew activity plans. Personnel must sign out on the log sheet when exiting the demolition EZ.

2. Crew Activity Plans (CAPs) will supplement the HITRA process and are to be filled out by the performing crew, then reviewed with and approved by the superintendent or HSO at the start of each activity included in this plan and on a daily basis. Changes in conditions and stop works will be captured on the Field Authorization Form and on the CAP, and then the appropriate documents will be updated and will be reissued by the Superintendent or HSO.

3. Applicable Job Safety Analysis (JSAs) and HITRAs will be reviewed with the performing crews prior to the start of the Tasks identified in this plan.

4. Irregular surfaces will be painted to identify potential slips/trip or puncture hazards.

### 6.0 BADGING AND SECURITY

Workers will be issued identification badges upon completion of site-specific training and a review by the HSE staff of credentials and medical documents. Each identification badge will contain the employee’s full name and the name of their employer. A badge number will also be assigned to facilitate tracking via sign-in and sign-out at the guard station. All workers and visitors will be required to come through the Security Gate. As indicated in the plan, all fencing will be kept in good repair and security cameras will be reconfigured and kept operational as required.
7.0 PRE-DEMOLITION ACTIVITIES

7.1 Temporary Facilities

Envirocon will relocate a number of facilities as required by the contract documents. These relocated facilities include:

1. Site Gate Installation
2. Two (2) project trailers and associated decking
3. One (1) security trailer
4. One (1) bathroom trailer.
5. Conex box relocation
6. Temporary field crew trailer
7. Temporary restroom facilities
8. Reconfiguration of Site Security Cameras

Throughout the project, Envirocon will provide the labor and materials to clean and maintain the project temporary facilities.

7.1.1 Utility Location

Prior to beginning any demolition or construction activities, Envirocon will identify the locations of all utilities within the project work area. Based on a review of the drawings, it is anticipated that the utilities within the work area or adjacent to the work area will include electric, gas, water, and sanitary sewer. All electrical relocations, isolations and de-energizations will be performed by a licensed electrical subcontractor. These tasks are further detailed below. Any associated documentation will be maintained on the project site. As required by the Village of Hastings demolition permit, the Westchester County sewer line will be protected as discussed below in section 7.1.3. Envirocon will identify, disconnect, and cap any gas, water, and sewer connections in the building prior to beginning work.

7.1.2 Electrical Power Installation/Relocation

Naber Electric, a New York state licensed electrical contractor, who Envirocon has successfully worked with on this site previously, will perform this work. Envirocon will require Naber to obtain the electrical permits and provide the submittals required to perform this work immediately following the contract award. Electrical work will not be initiated until all submittals required for the execution of that phase of the work has been approved by JFSNA. The electrical work to be completed includes the following:

- Installation of new utility pole
- Installation of new service cables in conduit with weather heads
- Disposal of all debris generated from this activity
• Installation of new electrical service in accordance with the electrical specification including a new distribution panelboard, circuit breaker panelboards, feeder, conduit, cables, branch circuit wiring, conduit, conduit fittings, junction and pull boxes and all appurtenances etc. necessary to complete the work
• Relocation of existing electrical distribution system
• Installation of new weather heads on relocated electric lines
• Installation of lighting fixtures provided by JFSNA.

While this work is being completed, Envirocon will work with Naber to provide temporary electric power to maintain required electrical systems. Envirocon and Naber will provide the necessary coordination with electric utility company to ensure the equipment and materials required for the new incoming service connection are installed as required to allow the final tie-in by the utility company. Work required to be completed to support the new incoming primary and secondary electric service connections includes:

• Furnish and install concrete equipment pads
• Furnish and install secondary cables and conduit from building distribution board to weather head. Leave two-foot minimum pigtail for utility tie-in.
• Ground electric service equipment
• Furnish and install secondary cables from distribution board to weather head leave two-foot pigtail for utility tie-in
• Furnish and install final connections on secondary from building distribution to weather head
• Furnish and install meter pan, current transformers and cabinets
• Furnish and install meter wiring
• Furnish and install distribution equipment grounding and bonding.

Envirocon and Naber will coordinate with the utility company to insure work is completed per the project schedule. This includes the timing of when the utility company will come in to perform the following work:

• Furnish and install the service transformers
• Furnish and install the primary switchgear
• Furnish and install the network protectors
• Furnish/use the current transformers.

Upon completion of the installation of all electrical systems, the utility company will make all final connections to all primary equipment and perform a debugging beta test on all installations.

7.1.3 Utility Protection Plan

After the underground utilities have been located and identified, Envirocon will use florescent paint to mark and enhance the visibility of the locations. Where there are utilities identified in high traffic areas
and areas that may be impacted by demolition activities, additional measures may be employed. These measures may include the use of danger tape, demarcation with 48” traffic cones, demarcation with t-posts and orange safety fence and demarcation with t-post equipped with a fluorescent 10’ flagpole. In the case of hydrants, manholes and monitoring wells in close proximity to demolition activities, shielding may be required in the form of jersey barriers, road plate or steel enclosures. Additionally, crews will be made aware of utility locations on site at daily safety meetings and whenever new activities are planned. Monitoring wells are a significant part of AERL’s site characterization and remedial engineering; therefore, additional Jersey barriers will be positioned prior to any site activities to assure that these wells are protected. The main 42” storm water drainage culvert that proceeds from east to west at the south end of Building 52 will be identified and will be protected by road plate if crossed by heavy equipment. The Westchester County sewer line located parallel to the east side of the building will be located, marked and shielded (if applicable) during demolition activities.

### 7.1.4 Hazardous Waste Storage Building

Envirocon will install a Hazardous Waste Building. The Building will be a “Securall” prefabricated 42 x 8 x 8 foot 4 inch model BL8000 storage trailer with explosion proof interior lighting, fan, and exhaust system, with a 670 gallon secondary containment capacity, designed to temporarily store up to 60, 55-gallon drums of DNAPL collected during DNAPL collection events. The Hazardous Waste Storage Building is intended only for short term storage, with the DNAPL being transported off-site within 90 days of collection. A power feed will be run from the power feed distribution panel to the hazardous waste Building’s power-disconnect switch w/box. An appropriately sized Lock-Out/Tag-Out capable disconnect switch/fuse will also be installed. The hazardous waste building will be anchored in place to withstand straight line wind potential indigenous to the region. The planned location for the Hazardous Waste Storage Building is shown on Figure D-1.

### 7.1.5 Equipment Storage Facility

Envirocon will subcontract with ClearSpan to provide and install a fabric structure to be used as an equipment storage facility. Envirocon will obtain stamped engineering drawings from ClearSpan and submit them to JFSNA and the Village of Hastings building department for review and permitting, if required. This structure will be anchored to storage containers on either side by attaching beams along the top rail of the
container and will be anchored in place to withstand straight line wind potential indigenous to the region. The planned location for the Fabric Equipment Storage Facility is shown on Figure D-1.

7.1.6 Mobile Modular Truck Wash/Decontamination Pad Stations

A truck wash/decontamination station will be constructed using a Mobydick Conline 400 MC or equivalent. Envirocon will install a water line to the truck wash station from the metered fire hydrant located on the east side of the site. Our electrical subcontractor will install an electrical power feed to the truck station coming from the power feed distribution panel. A new power-disconnect switch with box with appropriately sized switch/fuses will also be installed. Water generated at the decontamination pad will be collected and stored in a frac tank. The collected water will be sampled and disposed of in accordance with the EPA Approved TSCA Building 52 Self-Implementing Clean-Up Plan (Attachment B).

7.1.7 Equipment Decontamination

Most equipment, at the completion of its utilization, is dry decontaminated (vacuuming, hand shoveling, scraping, broom sweeping) in its work area and then transferred to a designated equipment decontamination pad for a final pressure wash. If mobile pads are required, they will be constructed with wooden frames and plastic liners. Decontaminated equipment is then inspected, tested and approved for removal by JFSNA prior to leaving the site in accordance with the EPA Approved TSCA Building 52 Self-Implementing Clean-up Plan (Attachment B).

7.1.8 Personnel Decontamination

Envirocon will install mobile personnel decontamination stations in impacted work areas onsite. The mobile stations consist of a three-bucket boot wash system, eyewash, and a used Tyvek and glove receptacle. The stations are situated at the border of the Building 52 exclusion zone (EZ) and the contaminant reduction zone (CRZ). The stations are adjacent to traffic exit/entry points, but situated so that they will not be in the path of heavy equipment traffic. Boot covers will be used in areas where dry decontamination is preferable. The ACM subcontractor will also install personnel decontamination stations to support their work which will be further described in their Decontamination Plan.

7.1.9 Site Transportation Routes

Envirocon will establish the on-site transportation routes that are to keep trucks in designated pathways away from equipment operating areas and personnel walkways. A clearly delineated traffic route increases transportation efficiency, minimizes the potential for cross-contaminating clean areas, and decrease the likelihood of on-site traffic accidents. The planned site transportation routes are shown on Figure D-1.
All trucks entering the site will be logged in at the guard gate by the security guard or materials technician and directed to the proper loading area. Truck route, loading area, and speed limit will be clearly posted with signs and delineators. While most debris will exit the site via barge and tug transportation, limited truckloads will enter or leave the site over the road. Speed limits will be clearly posted with signs and delineators. Flaggers will be used at the site entrance and road approach to manage truck traffic as needed.

7.1.10 Erosion Control

Envirocon will construct an erosion control berm around the work area per the RFP specifications. Demolition, loading of debris and decontamination activities will be performed within the bermed asphalt or concrete pads to lessen the chance of contaminant migration. Initial erosion control measures will be established during project mobilization likely utilizing a skid steer. These control measures will be inspected on a regular basis by the project engineer or his designee, and repaired or augmented as required. As the project progresses, additional site erosion controls will be established in subsequent active work areas as required.

7.1.11 Housekeeping

Throughout the execution of this project the Project Superintendent will assign labor to perform site clean-up. By maintaining a clean work site, the following risks are reduced:

- The chance of litter leaving the worksite
- Tripping hazards
- Material interference with production
- The potential for processed material to impact wheeled equipment, adjacent property or the public

7.1.12 Structural Survey

The Project Superintendent, Site Safety Officer and other applicable subject matter experts will survey Building 52 for structural integrity including the condition of the existing roof. The building and its contents will also be inspected for potential hazards that may impact the demolition. Envirocon will verify and document that all electrical, hydraulic, pneumatic, water, sewer, natural gas and all other transmission lines extending through or supported by the building have been de-energized and all sources of energy are at a zero energy state by physically testing the sources. If required, temporary bracing may be installed to make structures safe for pre-demolition work.
7.2 Demolition Approach

Envirocon will employ a five step approach to the decommissioning and demolition of Building 52: Hazard materials abatement and removal; ACM abatement; loose PCB and lead paint removal; universal waste abatement; and building demolition.

7.2.1 Hazardous Materials Survey and Abatement

7.2.1.1 Hazardous Materials/Universal Waste Identification

Once the structure has been verified as safe to enter, and prior to beginning work activities, hazardous materials will be located. Hazardous/toxic materials and universal waste present in the building are shown on Figure D-2.

The Envirocon Project Superintendent and ACM subcontractor representative will inspect the structure, locate and clearly mark items identified on the contract documents and identify any additional items that will need to be addressed prior to demolition. The team will be looking for mercury ampoules located within thermostatic controls, fluorescent light ballasts and bulbs, mercury vapor lamps, refrigerants, paint cans, and other items that require removal prior to demolition. These items are marked on a footprint sketch made for each floor of the structure to be demolished. In the event that suspect asbestos containing material (ACM) are encountered which were not previously identified, the Licensed ACM Abatement Contractor will inspect and remove materials. Any suspect ACM will be sampled and the results will be forwarded to JFSNA.

Preparation, abatement, or demolition work will not occur in or around the building until it has been verified and documented in writing that the Hazardous Material/Universal Waste identification and removal is complete.

7.2.1.2 Asbestos Abatement

This general work plan presents the methods and procedures that Envirocon’s ACM subcontractor (Pinnacle) will employ in the removal, handling, and disposal of hazardous and potentially hazardous materials throughout the site. This work plan outline is not meant to represent the comprehensive work plan which will be provided prior to the ACM subcontractor mobilizing to project site. The comprehensive plan will provide detailed daily activities related but not limited to: ACM removal and packaging; ACM transportation and disposal; completion of waste manifests; PPE; and decontamination procedures. Proper National Emissions Standards for Hazardous Air Pollutants (NESHAP) notifications will be made and work will be completed in accordance with all state (12 NYCCR Part 56), federal and local regulations.
The intent of the following action plan is to provide a framework for the means and methods by which the ACM abatement contractor will execute the asbestos abatement work.

ACM is identified in the “Asbestos Containing Material Space by Space Summary” included in Building 52 Materials Summary Report. These materials include friable ACM in the form of electrical panel insulation and wire insulation. Non-friable ACM has been identified in roofing tar, window caulk and Transite.

The roofing tar will be removed via man-lift and workers on the edge of the roof. The outer east face of the building will be covered with Visqueen or equivalent opaque polyethylene sheeting. All windows will be removed from the interior of the building. The east-facing windows will be removed first, followed by the windows in the saw-tooth roof structures and the windows on the west face of the building. ACM waste from all abatement activities will be placed in double 6 mil bags and loaded into lined intermodal containers for disposal at Heritage Environmental’s Landfill in Roachdale, Indiana.

7.2.1.3 ACM Demolition Debris Transportation and Disposal

ACM material will be removed under “wet” demolition methods, and kept wet until loaded for disposal. The ACM material will be immediately covered when placed into the intermodal container for disposal. Per NESHAP regulations (Asbestos NESHAP - 40 CFR Part 61.150), zero visible emissions to the outside air from activity relating to the transport and disposal of asbestos waste will occur during the transportation and disposal of the intermodal containers with ACM waste.

7.2.1.4 ACM Crew Mobilization

The ACM subcontractor will establish a field office in one of the existing trailers to allow for on-site management to complete paperwork and coordinate the project needs with the general contractor and owner. The field office will handle all administrative and operational functions required to insure the smooth execution of the project. In conjunction with the asbestos containing material survey, each work area will be inspected for pre-existing safety hazards. Each safety hazard identified will be documented and corrected prior to abatement activities.

7.2.1.5 Regulated Areas

Regulated areas will be used for removal of friable and non-friable ACM. Proper signage and barrier tape will be placed at the entrance and limits of each work area. Workers entering these areas will be required to don the proper PPE.

Each worker leaving a regulated area will, at a minimum, HEPA vacuum their hands and hair, carefully remove their protective clothing, and place it into an asbestos disposal bag. Workers will then step out of the regulated area and onto a “step off” area constructed of a single sheet of 6 mil ply. The “step off” area
will have additional supplies of PPE and a vacuum. All ACM removed will be kept wet and placed in 6 mil bags or tri-wall boxes, properly labeled, taped closed, and taken out through the specific load-out area. All packaged material will be taken directly from the load-out area to a 6 mil lined drop box.

The ACM will be manifested from the site to the landfill. Throughout the project, a waste manifest log will be maintained and located in the ACM abatement subcontractor field office. All waste manifests will be made available for review by JFSNA and/or AERL throughout the duration of the project. At the completion of the project, all waste manifests will be added to the final close-outs documentation. Close out documentation will include waste shipment and tracking manifests and disposal receipts for all asbestos and hazardous material and/or components.

7.2.1.6 Air Monitoring and Personal Sampling

A third party air monitor contracted by AERL or JFSNA (as per applicable regulations) will be used as required to perform air monitoring of the active ACM work zones for this project. Daily personnel sampling, including excursions, will be collected by the third party. Sampling will represent the dirtiest worker of each task each day. Personal samples will be taken within the "breathing zone" of the employee (i.e., attached to or near the lapel near the workers face). All air monitoring will be performed in accordance with OSHA reference methods.

7.2.1.7 Respiratory / PPE Protection Initial Exposure Assessment (NEA)

The ACM abatement subcontractor Project Manager and Superintendent will conduct an Initial Exposure Assessment at the initiation of each specific operation to ascertain expected exposures during that operation. The assessment will be completed in time to comply with requirements which are triggered by exposure data or the lack of a Negative Exposure Assessment (NEA).

Respirators will be chosen based upon (1) Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for release; and (2) the results of initial exposure monitoring of the current job made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee covering operations which are most likely during the performance of the entire job to result in exposures over the PEL. Respirators are to be cleaned at the end of every work shift and properly stored in lockers, respirator bags, or storage boxes.

All abatement work will be conducted under the Department of Labor, OSHA, EPA, and NYS DEC rules and regulations. The waste will be transported by a licensed transporter to an approved landfill.
7.2.2 Building Decommissioning

In addition to ACM abatement, the ACM subcontractor will also be responsible to for removing loose PCB and lead based paint, and Universal waste. The following outlines the general approach to materials decommissioning:

7.2.2.1 Florescent Light and Ballast Removal

Areas will be accessed using scissor lifts and/or boom lifts. Ballasts and lights will be removed from fixtures and lowered down to the ground where they will be packaged, labeled and transported. PCB ballasts will be first identified by their markings. Marked ballasts saying “no PCBs” will be segregated from the suspect PCB ballasts. The suspect PCB ballasts will be packaged separately for disposal. Unmarked ballasts will be treated as PCB ballast containing PCB concentrations greater than 50ppm and disposed in labeled drums and containers following TSCA regulations.

Broken light tubes will be segregated and drummed separately and disposed as a hazard waste. Florescent light bulbs and high intensity lamps will be packaged in cardboard boxes acceptable to the disposal or recycling facility.

7.2.2.2 Mercury Containing Devices

Envirocon will station a mercury spill kit in each area where mercury containing devices are being handled. Undamaged mercury containing components will be placed in an appropriate sized DOT approved container. If the component is leaking, it will be placed into a separate container. Sludge or buildup from the mercury, inside or around the component, will be cleaned or removed if necessary.

Containers with mercury sludge or residue waste intended for disposal will be identified as D009 hazard waste. Should a spill occur, cleanup will be conducted immediately using the emergency spill kit, and the owner’s representative will be notified immediately.

7.2.2.3 Lead Based and PCB Paint Abatement

Envirocon will utilize a subcontractor to perform abatement of the loose and flakey paint and ceiling coating that contains lead and/or PCBs. The removal of loose, flaking paint will be completed prior to demolition. A task specific work plan will be developed prior to initiation of the work. Envirocon and the abatement subcontractor will identify all loose and flakey lead/PCB containing paint/coating prior to the start of abatement. All workers will have hazard awareness training including lead and PCB safety, hygiene issues, PPE, controls, and procedures training for loose and flaking paint/coating removal techniques that minimize airborne dust generation.
7.2.2.4 Drain Sumps

Envirocon will clean and drain sumps by removing the bulk liquid, solids and residue from sumps using a variety of methods, including hand shoveling, scraping and vacuuming.

Liquid waste will be disposed offsite in DOT approved containers following procedures outlined in the EPA Approved TSCA Building 52 Self-Implementing Clean-Up Plan (Attachment B). Tanks designed for liquid storage provided by Envirocon, will be adequate to hold the liquid for a period of 2 weeks for sampling analysis results. Envirocon will inspect containers prior to loading and verify that they are in good condition. Envirocon will verify each drum or container is tightly closed and labeled in accordance with applicable regulations. The cleaned sumps and any connected lines will be plugged and grouted to stop any future water intrusion.

8.0 Demolition Methods

The demolition methods described in this section provide the general approaches to be completed for safely demolishing Building 52. Once onsite, Envirocon will generate a task specific demolition plan for this structure that will clearly identify all steps and exact locations for separation cuts, hinge cuts and set cuts to properly implement the sequence outlined.
In general, the approaches Envirocon will use are “conventional” demolition techniques with some pre-cutting torch work. Conventional demolition consists of demolishing the facility using excavator mounted equipment. Excavators will be equipped with hydraulic attachments such as shears, grapples and hydraulic hammers. For Building 52 we will use the excavator mounted shear and excavator mounted grapple to bring the structure to the ground.

8.1 Pre-Demolition Inspection

The pre-demolition work performed prior to the demolition will be reviewed and approved by the Project Superintendent and verified by the Project Manager. At that time, Envirocon will invite a representative of JFSNA and/or AERL to perform the Pre-Demolition Inspection and verify that all work performed up to this point is considered satisfactory and approved. A punch list will be generated by Envirocon during this inspection and demolition will take place only after any punch list items identified have been adequately addressed. Once all punch list items have been addressed, Envirocon will proceed to the building demolition.

8.2 Building Demolition

The following Options summarize several of the anticipated sequencings for the demolition of Building 52. Demolition will follow ACM abatement, which is described in Section 7.2.1.2, above. Site conditions and/or health and safety concerns may require that sequencing or methods be modified prior to or during demolition. The sag and pull method will be used in all scenarios, with one wing excavator for sorting and separating material. This is an approved method by OSHA and the National Demolition Association. Dust control will be provided during the duration of this activity as identified below in Section 10.

Option 1: Building 52 demolition will start at the southwest corner and proceed to the north, first removing the west bay of Building 52, then the east bay.

Brick Removal

The first step in the demolition plan is to perform brick removal. The bullets below detail the anticipated sequencing for brick removal during demolition:

- Removal of the brick at the base of all columns on the K column line to allow room for installation of set cuts identified later in this plan.
- Removal of the brick on the south end of the structure using a PC-490 with grapple attachment and demolition protective screens over all line of sight windows to push the brick wall into the building footprint.
- Removal of the brick wall along the entire length of the west wall using a PC-490 with grapple attachment.
• A front end loader will be used to push brick into the footprint in a consolidated location to keep it under roof until loadout.
• A front end loader will begin loading intermodals with west wall brick when deemed safe to begin by the Superintendent.
• Removal of the brick on the north end of the structure using a PC-490 with grapple attachment to push the brick wall into the building footprint.
• A front end loader will complete loadout of brick material.

Separation Cut Line

After brick removal, precutting of the structure will be completed along the cut line to allow the west bay to be demolished while leaving the east bay intact. Precutting will consist of creating hinge points in the west bay roof trusses on the west side of the center columns. These cuts will be made by laborers using torches out of a man lift and will be marked in the field by the project superintendent and reviewed with the laborers performing the cuts.

Figure 8-1 West Bay - East Bay Separation Cut
South and North End Wall Column Removal

After the structural steel has been pre-cut, the structural steel on the south and north ends of the building will be removed. The bullets below detail the anticipated sequencing for the end wall removals during demolition:

- Starting at the South end the PC-490 with hydraulic shear attachment will cut and remove the eight (8) columns highlighted in figure 8-2.
- Once all of the south end columns have been removed, the PC-490 with hydraulic shear attachment will move to the North end and remove the eight (8) columns highlighted in Figure 8-2.
- Preparations for ensuring the safety of the adjacent tennis courts will be made prior to starting the work.

West Bay Removal

After the end columns have been removed, the west side of the building will be removed bay by bay to bring the structural steel and roof to the ground for processing. The bullets below detail the anticipated sequencing for west bay removals during demolition:

- Starting at the South end, the PC-490 with hydraulic shear attachment will cut and pull column A-37 to the west causing the roof to sag.
- The PC-490 with Hydraulic shear attachment will then move to the next column, A-36, and cut and pull that column to the west.
- The PC-490 with grapple will assist pulling the previously cut column as required.
- This process will bring the roof section and structural steel frame down into the building footprint.
- The debris generated will be processed to the extent required prior to moving to the next column line.
This process will be repeated from south to north until the west side of the building has been removed.

Figure 8-3 West Bay Removal

East Bay Removal

After the west side of the building has been removed, the east side of the building will be demolished. The bullets below detail the anticipated sequencing for east bay removals during demolition:

- Laborers with burning torches will complete set cuts on the column line K as shown in figure 8-4. These pre-cuts are required to allow the K-Column line to Hinge to the west and fail into the footprint of the structure.
Starting at the south end of the building, the PC-490 with hydraulic shear attachment will cut and pull column F-37 to the west causing the roof to sag.

The PC-490 with hydraulic shear attachment will then move to the next column F-34 and cut and pull that column to the west.

The PC-490 with grapple will assist pulling the previously cut column as required.

This process will bring the roof section and structural steel frame down onto the building footprint away from the road and rail station.

The debris generated will be processed to the extent required prior to moving to the next column line.

This process will be repeated from south to north until the west side of the building has been removed.

Once the entire structure is on the ground, and the debris cleared, Envirocon laborers with cutting torches will cut all metal protrusions flush with the concrete slab.

Any pipe/conduit penetrations that could not previously be plugged will be filled with grout.

Option 2:

Option 2 will generally follow the sequence outlined in Option 1, except for the following:
• Brick will be removed as indicated above, except that brick will not be removed from the north end of Building 52.

• The west and east bay demolition method will be followed as outlined above, except that the demolition will stop aligned with interior column F-7 (Figure 8-4). Exterior and interior columns north of F-7 will be have set cuts oriented so that the remainder of the building can be pulled down to the south.

• The debris generated from the previous east and west bay removals will be processed to the extent required prior to demolition of the northern end.

• PC-490s will pull the southern-most columns toward the south, slowly pulling the remaining structure down within the footprint of the structure in one demolition action.

Option 3:

Option 3 will generally follow the sequence listed below:

• Prior to the start of full demo, the three internal bridge cranes will be pulled to the center of the structure by a PC-490 excavator.

• The crane rails will be cut and gravel or other bedding will be placed on the building pad to absorb the impact of the cranes as they are pulled off of the rails and onto the floor, where they will be sized and loaded out.

• Once the bridge cranes have been removed, removal of the brick at the base of all columns on the K column line will commence.

• The brick on the south end of the structure will be removed using a PC-490 with grapple attachment to push the brick wall into the building footprint.

• The brick wall along the first 3 to 4 columns on the west wall will be removed using a PC-490 with grapple attachment.

• A front end loader will be used to push brick into the building footprint in a consolidated location to keep it under roof until loadout.

• A front end loader will begin loading intermodals with brick when deemed safe to begin by the Superintendent.

• Brick will be removed far enough ahead of the structural steel removal and roof sagging technique to make this procedure efficient and safe.

• The structural steel and roof debris will be pulled down, sized, and loaded with the brick into intermodals as the demo proceeds.

• The same procedure above will be repeated on the east bay; then back to the west bay, etc.

• When the demolition has proceeded to within four column lines of the north end of the building, the remaining brick will be removed using a PC-490 with grapple attachment to push the brick wall into the building footprint.
- A front end loader will complete loadout of brick material.
- The remaining structural steel will be set-cut with torches; then pulled over to the west using the PC-490.
- The remaining debris would be sized and loaded for transport.

Figure 8-5 Option 3 Demolition Sequence
As decommissioning and demolition work progresses, and field conditions are assessed, alternate demolition plans other than those listed above may be developed or the options listed above may be modified, as needed. All change conditions will be approved by JFSNA prior to commencement of activities.

All debris will be handled as follows:

- Debris will be collected and disposed of as PCB remediation waste, per the EPA approved TSCA Building 52 Self-Implementing Clean-Up Plan (Attachment B). The debris will be loaded and staged within the existing erosion and sedimentation (E&S) control area prior to loading for shipping. Dust control will be performed using water and/or other dust suppression agents such as surfactant sprays. Dust control will be applied to the debris when stockpiled or during processing to avoid air borne migration off the debris into areas outside the demolition boundary.

- The demolished steel generated during the demolition will be cut into sections and staged within the existing E&S control area prior to loading for shipping as PCB remediation waste per the EPA approved TSCA Building 52 Self-Implementing Clean-Up Plan (Attachment B).

9.0 SITE STABILIZATION/RESTORATION PLAN

Once all debris has been loaded out, Envirocon will begin site stabilization and restoration activities.

9.1 Expansion Joint Removal

After the structure has been safely removed and the debris cleared from the building footprint, Envirocon will proceed with the removal of sections of the expansion joints as directed by JFSNA in accordance with the TSCA Self Implementing Clean-Up Plan. The plan calls for removal of expansion joints that contain PCB concentrations that exceed 430 ppm. Envirocon will establish a cut line 6” on either side of the edge of the caulking. A concrete saw will cut along this line to allow removal of the expansions joint and adjacent concrete. All debris from this activity will be staged within the existing E&S control area prior to loading for shipping. Grout will be used to fill in the areas where the expansion joints have been removed. The grout will be placed so the finish grade matches the adjacent concrete surface.

9.2 Concrete Pad Cleaning

Once all debris has been loaded out, Envirocon will double rinse the concrete pad using a power washer. The high pressure water blasting will be applied from a low volume high pressure washer reaching temperatures ranging from 70 degrees to 180 degrees F. The system will be capable of operation of pressures from 3,000 to 5,000 PSI. Rinse water will be collected, analyzed and disposed of per the EPA approved TSCA Building 52 Self-Implementing Clean-Up Plan (Attachment B).
9.3 Epoxy Coating

Envirocon will epoxy coat the areas of the pad identified with PCB impact that exceeds 50 ppm. The epoxy will be applied in two coats of contrasting color. Envirocon will also epoxy coat the expansion joints that were not removed (expansion joints where the PCB concentrations are less than 430 ppm) with two coats of contrasting color epoxy. The epoxy will be applied using rollers or similar method. Signage with the PCB Mₜ mark will be placed around the perimeter of the pad after the epoxy is applied.

9.4 Demobilization

Equipment decontamination will be completed as required in Section 7.1.7. Once the equipment is considered clean, in accordance with the EPA approved TSCA Building 52 Self-Implementing Clean-Up plan, the decontaminated equipment will be removed from the project site. Envirocon will remove all temporary facilities including portable scale, portable tire wash, and removal and disposal of all erosion control devices. Removal of the landing barge will be complete once all barging activities have been completed.

9.5 Dust Control

Envirocon understands the importance of minimizing the dust generation during the execution of this project. During the execution of this work, Envirocon will provide dust control as described in this section, including the use of “Dust Boss” water misting fans, water trucks, tarping of material, and spray surfactants. The “Dust Boss” water misting fans will be used during demolition activities such as brick removal, sag and pull demolition and activities and general work area dust control. A water truck may be used for larger sag and pull activities, and to control larger areas of dust on dry days. Tarping and other means of covering demolished debris stockpiles that may be left unattended for long periods of time (overnight or over the weekend) or if site conditions warrant. Surfactant sprays may be used to control dust and debris for short periods immediately following demolition and prior to loading material into intermodal containers.

9.5.1 Interior Demolition

Envirocon will be using a City of Hastings fire hydrant for interior dust control measures and will have all hydrant permits and equipment in place before starting the demolition. A 1-1/2 inch diameter fire hose will be used from the main, and a wye connection may be used for placing water in strategic areas.
of nuisance dust. Envirocon will place “Dust Boss” demolition water misting fans throughout heavy demolition construction areas where its onsite Safety Officer deems necessary.

9.5.2 Exterior Demolition

Envirocon will be again be using a City of Hastings fire hydrant for dust control measure on the exterior demolition with either a 1-1/2 inch fire hose and/or a 3 inch fire hose attached. Envirocon employees will apply dust control, as site conditions dictate, from multiple, strategic positions, including aerial lifts when the building structure is being collapsed. Water will also be used for dust conditions during debris processing. Also during these activities, Envirocon will place “Dust Boss” demolition water misting fans, or use water trucks, for the heavy demolition construction areas where its onsite Safety Officer deems necessary.

9.5.3 Dust Monitoring

Dust monitoring will be conducted throughout the project to ensure regulatory action levels for the protection of workers and the community are not exceeded as identified in the Community Air Monitoring Plan (CAMP). During pre-demolition activities (moving trailers, relocating electrical service, etc.), dust monitoring stations will be set up as designated and the CAMP, and visual inspections will be conducted to determine how nearby train traffic from Metro-North, Amtrak and commercial freight operations impact the movement of dust in and immediate to the Building 52 site. This information will be used to place dust control equipment in locations that will offer the most comprehensive dust control.

During demolition activities, structures will be lowered or partially dropped to the ground surface where feasible, rather than dropped, to minimize dust generation. Operational procedures will be adjusted during periods of high wind (greater than 20 mph) or if the primary wind direction is to the east and dust is visually observed to be leaving the work site. When containers or trucks are loaded with waste materials, the material will be placed in the receptacle in a controlled manner rather than dropped from a height. Containers will be covered when not being loaded. Trucks will tarp or otherwise cover their loads at the conclusion of loading operations, prior to barging operations or exiting the facility via River Street.

10.0 MATERIAL HANDLING PLAN

Characterization and tracking of material shipped offsite for disposal will be an important task. Envirocon will develop a material tracking system prior to beginning site activities. This system will be implemented during the project by the Project Engineer with oversight provided by the Project Manager. The Project Team will be responsible for characterization and inventorying materials in the structure or area onsite, and recording data in the computer tracking system. A detailed spreadsheet will be constructed showing the expected material classifications, (i.e. ACM, universal wastes, steel, construction debris, copper wire, etc.) associated with this project. This spreadsheet will be distributed to the demolition superintendent and demolition foreman prior to the commencement of demolition of that structure. The Project Team will
also be responsible for profiling, manifesting, inspecting, weighing, and recording loads of material leaving the site.

Offsite transportation of materials for disposal will occur throughout the project and must be managed efficiently to keep the project on schedule. Impacted materials, residual products, and construction debris will be transported as PCB remediation waste via barge to Heritage Environmental’s Subtitle C Landfill in Roachdale, IN. Envirocon’s barging subcontractors are chosen for their professionalism and excellent safety records.

PCB remediation waste will be loaded into pre-lined intermodal containers which are attached to a wheeled chassis, immediately covered with tarps, staged at the full intermodal storage area, and then loaded onto transport barges at the Hastings-on-Hudson site. The loaded barges will then be transported to the Van Bro facility on Staten Island by tugboats. The intermodal containers will be de-barged, then off-loaded from their carrying chassis’ and subsequently loaded onto railcars at the rail siding located at that facility. The waste will then be transported overland and disposed of at Heritage Environmental’s Subtitle C Hazardous Waste Landfill in Roachdale, Indiana.

Envirocon will establish procedures for barge decontamination should material spill from a loaded intermodal. A spill kit will be available on each barge. These procedures will include:

- Decontamination of trucks, trailers or barges exposed to a spill or leak and preventative measures to prevent any further releases.
- Decontamination of equipment used in the clean-up of a spill and the collection, storage and disposal of associated residue.
- Collection and disposal of impacted PPE

Items removed from buildings during hazardous material/universal waste removal will be packaged according to all federal, state, and local ordinances including DOT regulations. Typical hazardous items such as liquid waste, fluorescent light bulbs, pressurized gases, PCB ballasts, paints, and solvents will be containerized. Copies of hazardous waste disposal and transportation receipts and manifests will be made available to JFSNA and/or AERL. In addition, although the overall plan is for minimal ground disturbance, any minor volumes of subsurface materials (e.g. soils from fencepost holes or power pole holes) will be handled as hazardous materials and packaged in 55 gallon drums for characterization and disposal.

Containers will be labeled with waterproof print and permanent adhesive in accordance with NYSDEC, OSHA, DOT, and EPA regulations. Containers will consist of fiber drums, poly drums, over pack drums, bags, and roll-off boxes. DOT-approved containers will be used for any waste destined for on-site and off-site disposal. The following best management practices will be implemented for on-site containers:

- Containers will be in good condition and will be compatible with the waste;
• Containers will remain closed and covered except when adding or removing waste;
• Containers will be placed on pallets to prevent damage to underlying liners and to assist in loading/unloading operations;
• Aisles will be configured to allow for inspection;
• Storage area will be clearly marked;
• Liquid wastes will be stored in secondary containment;
• Spill Kits (and fire extinguishers if flammable wastes are stored) are required in the vicinity;
• All containers with a remediation waste require a remediation waste label; and
• DOT-approved containers will be used for on-site and off-site disposal.

Envirocon will remove fluorescent light tubes and mercury vapor lamps, as well as mercury switch ampoules to minimize any breakage. Work areas will be well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury. Removal of PCB-containing and non-PCB containing light ballasts will require added precaution where there are any indications of leaking ballasts. Containers for lamps, ballasts and ampoules will be closed, structurally sound, compatible with the items being packaged, and will not leak. Containers with lamps will be labeled or marked with their contents.

Envirocon is responsible for filling, loading, placing, and securing intermodal containers on dedicated transportation barges. Envirocon will install liners in the intermodals prior to loading. Envirocon will also set up and operate a certified scale on the project site. The scale is used to capture the emptied and filled weights of the intermodals prior to loading on the barge. We anticipate being able to load 20 - 25 intermodals per barge, per day. Envirocon will be using Miller’s Launch to provide barge services. Miller’s Launch is a mainstay tug and barge provider in the New York area.

Material quantities will be tracked by Envirocon’s Project Engineer and JFSNA’s Construction Manager using a Microsoft Excel spreadsheet which will be updated daily. All loads going off site will be received, weighed, and numbered. Back up documentation will include weight tickets, manifests, and bills of lading. A copy of all waste disposal documentation will be filed with Envirocon, the transporter, the disposal facility, and then given to JFSNA and AERL.

11.0 PUBLIC RELATIONS PLAN

Envirocon will conduct its work at the site consistent with the requirements of this demolition plan so as to reduce disruption to the community, to maintain the site in an orderly and professional manner, and to conduct the demolition in a way that protects the health and safety of the community and the environment.

As JSFNA’s contractor, Envirocon understands that all public interactions fall under JFSNA’s and AERL’s overall authority and any interactions with the community will be undertaken at the direction of AERL and/or JFSNA.
Consistent with AERL’s community relations plan, Envirocon will adhere to the following roles with respect to community relations:

- Envirocon will work with JFSNA to provide data and information to the public in a timely, understandable, and transparent manner, including providing data and information that can be posted on AERL’s website.
- Envirocon’s participation in public meetings, community information sessions, or other public events will be directed by JFSNA and/or AERL.

Pursuant to AERL’s community relations plan, regular updates, air monitoring information and any other important information will be posted by JFSNA on the project’s website: www.oneriverstreet.com. The website also provides a way for residents to communicate directly with AERL. A community fact sheet about the demolition is included as Attachment C.

12.0 TRANSPORTATION PLAN

Envirocon’s use of surface roads will be limited during the demolition. Transportation and Disposal (T&D) of demolition debris will primarily be conducted via barge. Envirocon will limit truck traffic times based on school schedules as well as peak usage at the Hastings-on-Hudson train station, which directly abuts the site.

12.1 Truck Transportation

All Envirocon vendors will be informed that truck traffic is to utilize the following haul route to access the site.

Envirocon identifies the following designated haul route for offsite transport.

1. Tappan Zee Bridge / Highway 87 E.
2. Exit 9 South to South Broadway West
3. Continue on US Highway 9
4. Turn right on Warburton Ave
5. Continue south to North Street turn right on North Street
6. Turn left on Maple Ave.
7. Continue to West Main and turn right.
8. Cross the bridge and turn left on River Street.

Transport delivery into the Village of Hastings-on-Hudson will be limited whenever possible to between 9:30 AM and 3:30 PM. Drivers must call 2 hours prior to arrival and place a second call at a pull-off area prior to crossing the Tappan Zee Bridge. The drivers will be required to have the proper PPE including hard hat, high visibility vest or jacket, safety glasses, long sleeve shirt, and gloves if they will be exiting the vehicle. Envirocon will provide flaggers to assist with bringing equipment to the site and negotiating
the Main Street Bridge. Envirocon will also provide wheel chocks for use while delivery vehicles are onsite.

12.2 Barge Transportation

Envirocon will be working with Miller’s Launch to prepare a marine assurance plan for the barging of all T&D from the project site. This plan will provide all of the detail required to ensure safe barging operations. A brief description is provided here to provide a general understanding of the barge transportation process.
Landing barges will be installed at both the Hastings-on-Hudson project site and the VanBro facility on Staten Island according to the Envirocon, Jacobs and AERL approved Project Marine Assurance Plan (PMAP). They will be placed on crane mats that Envirocon installs per the plan. The installation of the Dumb Spud Landing Barges will use a separate crane barge. There are five bridge sections that will be installed on land and then attached to the barge. The barge and bridge unit will be installed with proper angles for trucking, with a load limit of 50 tons.

Empty intermodal containers will be brought to the site by barge, along with all associated handling equipment. Envirocon will be responsible for filling, loading, placing, and securing intermodal containers on the dedicated transportation barges. Envirocon will also set up and operate the certified scale on the Building 52 project site to capture the emptied and filled weights of the intermodals prior to being loaded on the barge. The intermodals will be driven onto the barge using the pin chassis system. The intermodals will be weighed onsite and loaded to the prescribed weight with material, and then rolled onto the transportation barge and secured. No cranes will be used during the barge loading or unloading. Intermodal containers will be positioned on over-the-road pin chassis at the VanBro location prior to delivery by barge to the Hastings-on-Hudson (HOH) project site. Ottawa style yard trucks (two Ottawa trucks at each site, VanBro and HOH) and heavy forklifts with fifth wheel attachments will be used to drive the containers onto and off of the barges, as well as to move the containers around the project site during loading activities.

Envirocon will run two transportation barges. The first barge will be loaded and sent to the VanBro facility on Staten Island, where the containers will be off-loaded and received by Heritage Environmental Services (Heritage), the Transportation and Disposal Subcontractor. The VanBro facility has been used for similar transload operations for Heritage in the past. Heritage will be responsible for offloading the filled containers from the barge, placing them onto the intermodal rail cars, transporting them to the disposal facility via rail and disposal-site transload. Heritage will also be responsible for loading empty, lined and tarp-covered intermodals back onto the barge for transport back to the Building 52 worksite to be used the following work day. The second barge will be brought to the site with empty intermodals in preparation for the next day. Empty containers may be moored overnight, prior to unloading. The entire platform/barge system will be located well out of the shipping channel and lit at night, reducing the risk to shipping and recreational traffic in the Hudson River.
FIGURE D-1
Building 52 Site Construction Layout
NOTES:
1. DECON PAD, SCALE, TARPING STATION, TIRE WASH, LANDING BARGES AND RAMPS NOT TO SCALE.
FIGURE D-2

Building 52 Decommission Plan Miscellaneous Items
ATTACHMENT A

Project Schedule (TBD)
ATTACHMENT B

EPA Approved TSCA Building 52 Self-Implementing Clean-Up Plan
Introduction

Building 52 is located in the north east corner of the State Superfund Site #360022. The Site is approximately 28 acres, and is located on the eastern bank of the Hudson River within the confines of the Hudson River Valley. The Site was created by filling the Hudson River between the mid-1800s and the early 1900s with the placement of uncontrolled fill using a series of bulkhead walls of various construction types along the western edge. The ground surface at the Site is generally flat; ground surface predominantly ranges from approximately 3 to 11 feet mean sea level.

The Site began industrial operations in the mid to late 1800s and contained several individual businesses that produced diverse products including lumber, plaster, conduit, pipe, electrical cables, and pavement. Two electrical cable companies merged in 1896 and formed the National Conduit & Cable Company, which constructed Building 52 in 1911. Mergers with other business over the next 20 years resulted in the site being owned by the Anaconda Wire & Cable Corporation, which was a subsidiary of the Anaconda Copper Mining Company.

Anaconda Wire & Cable Corporation was awarded a contract from the United States Navy to manufacture electric cable for shipboard use during World War II. The contract required that shipboard cable be heat and flame resistant to withstand heat generated from conducting high electric currents and damage to vessels. PCB mixtures were used to manufacture these products during World War II; PCB use in the manufacturing of cable at the site ceased once the war ended.

After World War II, the Anaconda Wire & Cable Corporation produced electrical and television cable until it ceased operations in 1975. Atlantic Richfield purchased the Anaconda Wire & Cable Corporation in 1977, never operated the facility, and then sold the Site in 1978. In 1998, AR's affiliate, AERL, purchased the Site in order to facilitate environmental investigation and remediation efforts.

Multiple environmental investigations have been completed at the Site since the 1990s to determine the nature and extent of PCB contamination. Administratively, the Site has been separated into two operable units, OU-1 and OU-2. Based on Historical investigations, the New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) (March 2004) and a ROD Amendment (March 2012) to address onshore (OU-1), site wide impacts. The ROD and ROD Amendment requires Site-wide excavation of onshore soils containing PCBs greater than 10 ppm (parts per million), to a maximum depth of 9 to 12 feet and a two foot cover on the site. PCB releases occurred at the site prior to 1978; therefore, remediation of PCBs at “as found” concentrations less than 50 PPM are regulated by NYSDEC. Note that while Building 52 is located within OU-1, the ROD does not include activities associated with Building 52, including demolition and subsurface investigation beneath the slab.
Further background information was provided in the previously submitted Building 52 Demolition Waste Strategy Management Strategy Report, Haley and Aldrich, June 2016 (Demolition Report), as well as follow-up discussions and the draft response to comments provided to the EPA in December 2016. These follow-up conversations and correspondence are included as references attached to this plan.

**Nature and Extent of Contamination:**

The nature and extent of contamination, as well as the sampling overview including sampling and analysis plan, SOPs and overview of results are summarized in the Demolition Report (June 2016).

**Demolition Cleanup Strategy:**

This self-implementing cleanup plan only focuses on the strategy for waste generated during the demolition of Building 52 and the subsequent Transportation and Disposal (T&D) of the material, which is considered to be an interim action prior to the remedial construction outlined in the ROD and ROD Amendment. Building 52 is currently scheduled to be demolished during the 1st and 2nd quarters of Calendar Year 2017, with building demolition and associated T&D taking up to 13 weeks once all approvals are received and work commences.

Prior to demolition of the structure, existing sumps and floor drains will be cleaned out and the material containerized for disposal. The sumps and floor drains will then be grouted to prohibit intrusion of water into the subsurface during disposal activities.

The building will then be demolished, with demolition debris containing both bulk and remediation waste being loaded directly into lined intermodal containers for transport and disposal at the Heritage Environmental Services RCRA Subtitle C Landfill in Roachdale, Indiana (EPA ID: IND 880 503 890). Once the capacity of each intermodal container is reached, it will be covered and the closed container will be driven onto barges docked at a temporary docking facility on the AERL property directly west of the Building 52 footprint. Direct-loading of demolition debris onto the barges is not planned. The barges will be transported to the Vanbro Facility on Staten Island where the intermodal containers will be driven off the barges, loaded onto railcars and transported to the Heritage Facility listed above. As part of the demolition, expansion joint caulk within the building footprint with PCB concentrations of greater than 430 ppm will also be removed and the areas grouted.

After demolition of the building, the expansion joints and areas of the concrete pad where sampling indicated that concentrations in the concrete exceeded 50 ppm will be coated with epoxy per 40 CFR 761.30(p)(iii)(A).

Due to the nature of the demolition, and the thorough building characterization which was documented in the previously provided Demolition Report (June 2016), additional areas with higher concentrations of contamination are not anticipated to be encountered during demolition activities. However, if residual liquid is encountered in the pipes during demolition, the liquid will be collected in drums or other appropriate container, and analyzed by EPA method SW846/8082 to determine PCB concentrations (if any). If PCB concentrations are less than
50 ppm, and the liquid passes other disposal criteria, it will be disposed of at the Clean Harbors Cincinnati RCRA Technical Services facility (OHD000816629). If PCB concentrations exceed 50 ppm, the liquid will be disposed of at the Veolia Technical Solutions Port Arthur TSCA facility (TXR000036251).

During demolition, the exclusion zone will be contained using an erosion and sedimentation (E&S) control barrier which will filter storm water and incidental water used in demolition activities to remove particulate matter which may contain PCBs.

Once demolition is complete, the concrete pad will be double washed and double rinsed per 40 CFR 761, Subpart S. Prior to washing and rinsing the pad, the E&S controls in place for the demolition will be covered with an impermeable barrier (i.e., a geomembrane), and the wash water will be captured and transferred to a frac tank or similar vessel and analyzed for PCBs by EPA method SW846/8082. If PCB concentrations are less than 50 ppm, and the liquid passes other disposal criteria, it will be disposed of at the Clean Harbors Cincinnati RCRA Technical Services facility (OHD000816629). If PCB concentrations exceed 50 ppm, the liquid will be disposed of at the Veolia Technical Solutions Port Arthur TSCA facility (TXR000036251).

Upon completion of the demolition, the E&S barrier will be removed, loaded into an intermodal container, and disposed of consistent with debris generated during demolition activities at the site.

**Decontamination:**

AERL requests that the decontamination procedures listed below be approved as alternative decontamination procedures per 40 CFR 761.79(h).

To reduce the potential that materials potentially containing PCBs (i.e. building debris such as caulk, masonry, brick, etc) are incidentally entrained in tires or chassis, all trucks will go through an automatic truck tire wash to remove any residual material. To demonstrate that the procedure will adequately addresses any potential residual contamination, initially three (3) wipe samples will be collected on three separate pieces of equipment after they have passed through the truck tire wash and analyzed for PCBs by EPA method SW846/8082 on a rush turnaround basis. Subsequent wipe samples will then be randomly collected at a 10 percent frequency to ensure that the decontamination procedures are continuing to meet the stated goals. The water generated from the truck wash will be captured in a frac tank or similar container, and will be disposed of at the Veolia Technical Solutions Port Arthur TSCA facility (TXR000036251). Solids will be disposed with the demolition material.

Non-barging equipment used in demolition activities will be decontaminated by a combination of dry decon and passing through the mobile tire wash prior to demobilization. Three (3) wipe samples will be collected on each piece of equipment and analyzed for PCBs by EPA method SW846/8082. Equipment will not be removed from the site until analytical results indicate that the wipe concentrations are 10 µg/100 cm² or less.
Intermodal containers that will be used during T&D of the Building 52 material are lined with a one-use liner prior to loading material. When the material is off-loaded at the Heritage facility in Roachdale, Indiana, the liner is also removed and disposed of with the debris. PCB containing materials do not come in contact with the body of the intermodal container, so further decontamination is not needed.

Once the barging operation is complete, a decontamination pad will be constructed and the spuds will be pulled, laid on the decontamination pad and decontaminated. The rinseate will be collected in frac tanks or similar holding tanks. The pad will then be decommissioned and the spuds transported off-site.

While it is not anticipated that PCB debris will come into contact with the temporary metal dock structure or the barges, the following decontamination procedure is offered as a contingency if there are any releases on the dock or within the barges: Sorbent material will be placed on the perimeter of the barge(s) and the landing dock. The barge(s) and docks will be rinsed with a high pressure hot water sprayer, and the water will be collected via a skid mounted vacuum unit and combined with the spud decontamination rinseate, and disposed of at the Veolia Technical Solutions Port Arthur TSCA facility (TXR000036251). Wipe samples will be collected on each affected surface after rinsing to ensure that the surface meets the decontamination limit of 10 µg/cm² or less.
Building 52 Decommissioning and Demolition
Building 52 Demolition and Transportation and Disposal Self-Implementing Clean-Up Plan

References:
Documents (Previously Provided):

1. 2008 US Navy Settlement Agreement
3. Building 52 Alternatives, Haley and Aldrich, April 2014
4. Response to USEPA Comments Regard the Building 52 Demolition, AERL, December 2016
5. Building 52 Demolition and Transportation and Disposal Self-Implementing Clean-Up Plan, Rev. 0, Jacobs, January 2017

Meetings and Phone Calls:

1. Meeting in New York City to Discuss Building 52 Demolition. 2016-11-10.
2. USEPA Meeting in Hastings-on-Hudson to Discuss the AERL Site and Building 52. 2016-12-07.
3. Phone conversation to discuss Self-Implementing Clean-Up Plan Comments. 2017-02-16.

E-Mail Correspondence (attached):

1. Risk Based Disposal Application for the Former Anaconda Wire and Cable Company, NYSDEC Site #3-60-22. 2015-11-13 from Mr. Paul Johnson (AERL) to Mr. James Haklar (USEPA)
2. Building 52 Waste Strategy and Demolition Drawings – NYSDEC Site #3-60-022. 2016-06-23 from Mr. Keith Aragona (H&A) to Ms. Judith Enck (USEPA)
3. Re: Meeting to Discuss Building 52 Demolition. 2016-11-03 from Mr. Paul Johnson (AERL) to Mr. James Haklar (USEPA)
4. Follow up Items from our 11/10/16 meeting. 2016-11-11 from Mr. Paul Johnson (AERL) to Mr. James Haklar (USEPA)
5. Response to USEPA Comments on Building 52 Demolition Waste Management Strategy Report. 2016-12-02 from Mr. Paul Johnson (AERL) to Mr. James Haklar (USEPA)
6. Re: USEPA Meeting at Hastings Stie 12/7/16. 2016-12-02 from Mr. Paul Johnson (AERL) to Mr. James Haklar (EPA)
7. Hastings-on-Hudson Building 52 Demolition – TSCA Self Implementing Clean-up and Disposal Plan. 2017-01-23 from Mr. Paul Johnson to Mr. James Haklar
E-Mail Correspondence
Mr. Haklar,

On behalf of Atlantic Richfield Company, this email is to transmit the Toxic Substances Control Act (TSCA) Risk-Based Disposal Application for the Former Anaconda Wire and Cable Company, NYSDEC Site # 3-60-022 as required by 761.61(c). The application is separated into four volumes as described below.

- Volume 1, Application (includes the checklist as Appendix A)
- Volume 2, Basis for Remedial Approach and Design
- Volume 3, Human Health Risk Assessment
- Volume 4, Ecological Risk Assessment

Please find attached to this e-mail the cover letter to Volume 1. We will transmit two (2) copies of the application on DVD via mail to your office next week (hardcopies available upon request). A link to all documents is provided below except for Volume 2 Appendix I Lab Reports which are included on the DVD.

Download Link: https://haleyaldrich.sharefile.com/d-sfd6e6c2d9f8416db

Download contains:
  - V2 Appendix B-D: HOH_RBDA.2015-11-09. Volume 2_App_B-D.pdf
  - V2 Appendix I: HOH_RBDA.2015-11-09. Volume 2_App_I.pdf (Lab Reports Available on DVD only)

Thanks for your time and if you have any questions or comments on this submittal, please feel free to contact me.

-Paul J.
Paul G. Johnson
Operations Project Manager
Atlantic Richfield Co., a BP Affiliated company
Remediation Management
Office Number 832.619.5825
Mobile 630.731.4463
Fax 630.420.3738
paul.johnson4@bp.com
From: Aragona, Keith
To: Johnson, Paul
Subject: FW: Building 52 Waste Strategy and Demolition Drawings - NYSDEC Site #3-60-022
Date: Thursday, August 04, 2016 12:42:34 PM
Attachments: 2016_0622_KMA_Building 52 Materials Summary-F -Text.pdf

Keith Aragona
Senior Project Manager

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From: Aragona, Keith
Sent: Thursday, June 23, 2016 10:54 PM
To: enck.judith@epa.gov
Cc: NICK.PETERSON@bp.com; paul.johnson4@bp.com; haklar.james@epa.gov; Mustico, Richard (DEC) (richard.mustico@dec.ny.gov) <richard.mustico@dec.ny.gov>; Hardison, Wayne (WHardison@haleyaldrich.com) <WHardison@haleyaldrich.com>; Daneker, Michael (Arnold & Porter) <Michael.Daneker@aporter.com>; Greco, Chris <Chris.Greco@bp.com>; Lucari, James L <James.Lucari@bp.com>
Subject: Building 52 Waste Strategy and Demolition Drawings - NYSDEC Site #3-60-022

Ms. Enck,

On behalf of Atlantic Richfield Company, this email is to transmit the electronic version of the Building 52 Demolition Waste Management Strategy located at the Former Anaconda Wire and Cable Company, NYSDEC Site # 3-60-022 the Regional Administrator for EPA Region 2. Additionally, a link to electronic version of the Building 52 demolition drawings is provided below for your review. Hard copies of these documents will follow in the mail. Please contact me if you have questions.

Download link: Demolition Waste Management Strategy

Download link: Demo Drawings

Keith

Keith Aragona
Senior Project Manager
Jim;

As requested; please see our agenda below:

1. Introductions

2. Discussion of Comments Regarding Building 52 Demolition Waste Management Strategy
   a. DEC Sampling Plan Approval and Prior EPA Discussions
   b. Pre-1978 Discussion
   c. Historic Preservation Discussion
   d. Disposal and Demolition Approach
   e. Environmental Effects of Building Demolition
   f. Characterization of Floor Slab
   g. Removal of Sections of Floor Slab
   h. Characterization of Brick and Paint
   i. Hazardous Waste Storage Area

3. Building 52 Demolition Schedule Update

4. Path Forward to Respond to EPA’s Comments

5. Questions/Other Items

Also attached to this e-mail is the 2014 letter that we received from NYSDEC which includes the NY State Office of Parks, Recreation and Historic Preservation’s evaluation of Building 52 which may be helpful to review prior to our discussion.

Thanks for your time and we look forward to meeting with you.
Paul,  

Since you requested the meeting, could you please send us an agenda. I’m assuming that the focus of the meeting will be to discuss EPA’s comments.  

Thanks.
All;

First of all we would like to thank you for meeting with us and look forward to our future discussions.

In the meeting, 2 documents were requested to assist in your review and understanding of the Hastings Site.

Attached to this e-mail is the 2008 US Navy Settlement Agreement.

In addition, please find below a link to download the 2014 Building 52 Alternative Analysis Report in which contains the Silman Report (Attachment A) that includes some photos and analysis of the Building 52 floor slab.

https://haleyaldrich.sharefile.com/d-scdea40d61c2463c9

Thanks again for your time and we look forward to hearing from you shortly.

-Paul J.

Paul G. Johnson
Operations Project Manager
Atlantic Richfield Co., a BP Affiliated company
Remediation Management
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Mobile 630.731.4463
Fax 630.420.3738
paul.johnson4@bp.com
Jim;

As discussed; please find attached our responses to the USEPA comments received on October 11, 2016.

We appreciate your time in this matter and if you should have any questions or require additional information please contact myself.

-Paul J.

Paul G. Johnson
Operations Project Manager
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Fax 630.420.3738
paul.johnson4@bp.com
Hi everyone;

Below is an agenda for our meeting – note that all times are EST.

9:00 - Kickoff: Introductions + HSSE briefing

9:30 - Tour Building 52

10:00 - Building 52 Discussion

10:15 - Intro to Hastings

11:15 - Site Tour

12:00 - LUNCH

1:00 - Overview of PDI Results

1:30 - Overview of Baseline Results and TSCA Application

2:30 - Wrap-up/Q&A

We will also set up a call in number for convenience.

Thanks and enjoy the weekend.

-----Original Appointment-----

Wanted to get meeting on everyone’s calendars.

Meeting topics to follow.

Thanks and have a happy thanksgiving!
Jim;

As discussed; please find attached our TSCA Self-implementing Plan for the demolition of Building 52 in Hastings-on-Hudson, NY for your review.

We are also mailing hard copies to the Regional Administrator and others on the cc list.

Please let us know if you need additional information or have any questions and thanks for your time.

-Paul J.

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ATTACHMENT C

Community Demolition Fact Sheet
Demolition Fact Sheet – Draft

For a number of years now, Atlantic Richfield has been investigating and remediating the former Anaconda Wire and Cable Company manufacturing plant site located at One River Street in Hastings-on-Hudson. The plant produced PCB-coated wire and cable for the U.S. Navy during World War II, leaving a legacy of PCB impacts on the site. As part of that effort, Atlantic Richfield will be conducting demolition activities for Building 52.

Atlantic Richfield has a strong track record of safely working on this site, both through extensive investigations and the demolition of more than a dozen buildings. Just as in previous demolitions, Atlantic Richfield will focus on making this project safe both for workers on our sites, as well as for the community surrounding it.

The demolition process. Decommissioning of Building 52 is anticipated to start in mid-May, 2017 and be completed in November, 2017. Demolition and transportation and disposal of the debris will occur concurrently. Atlantic Richfield estimates the project will take up to six months, including pre-demolition activities, demolition of the building structure and removing the material from the site. The demolition activities will occur in stages. Pre-demolition activities will include: air monitoring to determine baseline site conditions and air quality during pre-demolition activities; movement of temporary site structures and erection of additional temporary storage structures; removal and disposal of certain specific waste items requiring special handling such as fluorescent light bulbs and thermostats; cleaning and sealing of sumps and pits within Building 52; removal of asbestos containing materials; and, removal of loose and flaky paint. It is anticipated that the pre-demolition activities will be completed in mid-August. Upon completion of the pre-demolition activities, demolition of the structure including the removal of brick walls, roof, and the interior steel structure will be performed. After the removal of the building is complete, post demolition activities will be performed on the concrete floor pad of the building including: washing of the floor pad; expansion joint removal; and the epoxy sealing of floor sections.

Demolition equipment will include excavators, front end loaders, roll-off containers, water storage containers, transportation trucks, shipping containers, barges and other general construction equipment. Soil excavation is not planned as part of Building 52 demolition activities.

Putting safety first. Atlantic Richfield is committed to protecting public health and safety during this demolition and removal process. To achieve this, we will be actively conducting air monitoring at a series of locations during site operations. We will also be segregating the material into the appropriate waste streams for loading and disposal. Any wastewater generated during the demolition process will be containerized, sampled and characterized to determine proper disposal requirements. The wastewater will be transported off-site to the proper waste disposal facility in accordance with all applicable regulations and the EPA approved Building 52 Self-Implementing Clean-Up Plan.

Dust generation will be monitored using real-time measurements. Dust will be controlled in real time, at a minimum, by wetting of debris, stockpiles and transportation areas with water, as needed. Site personnel will use the real-time air monitoring results to determine whether additional dust control measures are needed. In addition to real time dust monitoring, air samples will be collected during the daily demolition tasks to document air conditions at the site perimeter. These samples will be compared with background values.
Once the results have been properly analyzed and validated, they will be posted online at www.oneriverstreet.com.

**Minimizing impacts on the community.** Atlantic Richfield has worked with the Village of Hastings-on-Hudson to mitigate impacts on the community. The majority of the demolition waste will be transported from the River Street site via barges to a loading facility in Staten Island, minimizing direct impact on the local community. However, a few loads of supplies, equipment, or certain special wastes may need to be trucked through the Village. In that regard, a designated truck route has been established with the Village: Main Street to Maple Avenue to North Avenue to Route 9 North to Interstate 287. This limited truck transportation will occur from 9:00 am to 3:00 pm to mitigate impact on school hours and traffic during rush hour. In order to protect the community and those along the truck route, Atlantic Richfield will cover the material loaded into the trucks following Department of Transportation (DOT) waste transportation procedures.

In addition, Atlantic Richfield is taking steps to reduce noise or other inconveniences along the property’s border with Metro North. Building demolition activities on the exterior closest to the train station will take place between 9:00 am and 4:00 pm to minimize inconveniences for commuters at the Metro North station and along River street. Loading of the barges with demolition material will not take place earlier than 7:00 am, and will not continue past 7:00 pm in the evening.

**For more information:** For more information on PCBs we suggest you visit the Agency for Toxic Substances and Disease Registry’s website: http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=26

For more information, please visit www.oneriverstreet.com. You can also contact Atlantic Richfield through the Contact Us section of the website.