



September 8, 2017

Mr. Larry Vosh
Director of Engineering
Oak Mitsui
80 First Street
Hoosick Falls, New York 12090

**RE: Scope of Work for Limited Investigations of Alleged Buried Drums and Arsenic Acid Container
Oak Mitsui Hoosick Falls Plant
80 First St, Hoosick Falls, NY
CHA Project # 31861.**

Dear Mr. Vosh:

CHA is pleased to submit this Scope of Work to perform a Limited Investigation to confirm the presence or non-existence of alleged buried drums and an arsenic acid container at the Oak Mitsui Hoosick Falls Plant located at 80 First Street, Hoosick Falls, New York.

BACKGROUND

In 2017, an anonymous call was made to the New York State Department of Environmental Conservation (NYSDEC) in which the caller claimed approximately 50 or more pallets of 55-gallon drums were buried during the mid-1970's in the north/northwestern portion of the above referenced property. The alleged drums reportedly contained sludge from the onsite waste water system and other chemical mixtures that could not be disposed of at the time and therefore were said to be buried and paved over. A figure indicating the locations of the alleged buried drums was provided to the NYSDEC by the caller.

In addition, the caller also reported that a five-gallon container of arsenic acid was buried in a concrete footing during the construction of a recirculation tank in the former spent tank area of the onsite building. A hand drawn sketch indicating the location of the alleged arsenic acid container was also provided to the NYSDEC by the caller.

CHA proposes to complete a limited investigation in the areas identified by the caller to confirm the presence or non-existence of alleged buried drums and the arsenic acid container. This scope of work is based on in the information provided by the anonymous caller, our understanding of the project goals and our experience completing similar projects.

SCOPE OF WORK

Task 1 – Health and Safety Plan

Prior to investigation field activities, CHA will prepare a site- specific Health and Safety Plan (HASP) in accordance with all applicable state and federal requirements. All personnel will be required to meet the appropriate training as identified in 29 CFR 1910.120.

It is our understanding that Oak Mitsui will subcontract directly with National Response Corp. (NRC) to facilitate the installation of test pits for the limited investigation. It is assumed that NRC will be responsible for preparation of their own HASP. NRC will also be responsible for clearing any public and private utilities.

Task 2- Alleged Drum Disposal Area Limited Investigation

Oak Mitsui will subcontract directly with NRC to implement the limited investigation with the installation of test pits in the alleged drum burial area. CHA will oversee test pit installation activities, document the investigation activities and field observations. The test pit locations will be determined by Oak Mitsui and CHA in the field and marked out with spray paint. The test pits will be evenly spread out in a grid pattern and located a safe distance from existing monitoring wells and underground utilities and structures.

CHA will also implement the Community Air Monitoring Plan (CAMP) during the test pit installation activities by setting up the required air monitoring stations, calibrating the monitoring instruments, downloading and managing air monitoring data, collecting and documenting weather data to support the air monitoring data, and periodically discussing the results with Oak Mitsui, NRC or the NYSDEC (if needed). Additionally, CHA will utilize a handheld photoionization detector (PID) to monitor for organic vapors within the work zone.

NRC will utilize an excavator to install six to eight test pits in the identified area (see Figure 1) to an approximate depth of 10 feet (ft) below ground surface (bgs). The test pits are not expected to penetrate the groundwater table (approximately 11 ft bgs). The test pits will be approximately 8 ft by 8 ft in size or large enough to safely observe to a depth of 10 ft bgs within the test pit to determine if the alleged drums are present or not.

All excavated soils will be placed on 6-mil poly sheeting during the test pit installation activities. If buried drums are not encountered within the test pits, the soil removed from the test pits will be used as backfill to bring the test pits back to grade.

Task 3- Characterization and Removal Work Plan

If buried drums are encountered, the NYSDEC will immediately be notified of the findings via the NYSDEC Spill Hotline as well as the Department of Remediation Project Managers, Mr. Jim Moras and Mr. Will Shaw. In addition, CHA will prepare a Characterization and Removal Work Plan in accordance with NYSDEC DER-10: Technical Guidance for Site Investigation and Remediation



(DER-10), based on the findings and field observations, to characterize the drum disposal area and a removal/disposal plan in coordination with NRC. One or more of the following actions will be part of the scope of work and will be detailed in the Work Plan:

- Continue excavation to fully delineate the extent of the buried drums and any associated contaminated soils;
- Sampling of the drum contents for waste profiling purposes;
- Removal of the drums from the subsurface and placement in lined roll-off containers or over-pack drums for offsite disposal;
- Excavate obviously impacted soil (i.e. stained, odors) and stockpile on 6-mil poly sheeting for offsite disposal. Collection of waste characterization samples from the stockpile for waste profiling purposes in accordance with NYSDEC DER-10 ;
- Once all drums and obviously impacted soil has been removed from the subsurface, collection of confirmatory soil samples from the excavation side walls and bottom, in accordance with NYSDEC DER-10, to document all contaminated soils have been removed.
- If excavation penetrates the groundwater table and groundwater appears to be impacted, remove groundwater from excavation via vacuum truck for offsite disposal or pump groundwater into staged frac tank for onsite treatment or offsite disposal. Groundwater samples will be collected to determine concentrations and possible disposal or treatment options.
- Once there is confirmation that contaminated soils have been removed and remaining soils meet acceptable levels, the test pits will be backfilled in accordance with DER-10 requirements.

It should be noted that the Characterization and Removal Work Plan will be prepared and implemented in a fast-paced timeframe if drums are discovered, to prevent further impacts to the subsurface and to minimize exposure to associated contaminants.

Task 4- Alleged Arsenic Acid Disposal Area Limited Investigation

NRC will also implement the limited investigation associated with the alleged arsenic acid and CHA will oversee and document the CAMP activities, investigation activities and field observations (see Figure 1 for investigation location).

Based on recent conversations with Oak Mitsui personnel, there are three possible scenarios regarding the arsenic acid: 1.) the acid was included into the concrete mixture while the footing was being poured; 2.) the arsenic acid container was encased within the concrete footing; or 3.) the container was buried below the footing prior to the concrete being poured. The limited investigation will take into account these three possible scenarios by completing the following activities:

- NRC will break apart and remove the concrete footing, doing their best to minimize dust, and place it on 6-mil poly sheeting;
- Two chip samples of the concrete footing will be collected and analyzed for Arsenic for waste disposal purposes; and



- The soils below the footing will be inspected and screened to determine if any buried containers are present. Any soils removed from the excavation will be placed on 6-mil poly sheeting.

If the arsenic acid container is encountered, similar actions will be taken as listed under Task 3 above. The NYSDEC will immediately be notified of the findings via the NYSDEC Spill Hotline as well as Mr. Jim Moras and Mr. Will Shaw. Also, the removal/disposal plan for the arsenic container will be addressed in the Characterization and Removal Work Plan and completed in accordance with DER-10 and in coordination with NRC. One or more of the following actions will be part of the scope of work and will be detailed in the Work Plan:

- Sampling of the container contents for waste profiling purposes in accordance with NYSDEC DER-10;
- Removal of the container from the subsurface and placement in lined roll-off containers or over-pack drums for offsite disposal;
- Possible additional sampling of the concrete for waste profiling purposes; and
- Backfill the area in accordance with DER-10 requirements.

It should be noted, if there is no immediate threat of exposure to onsite personnel or obvious impacts to the subsurface, the soils within this area will be addressed at a later date as part of the remedial activities (i.e. hot spot removal). As mentioned above in Task 3, the Characterization and Removal Work Plan will be prepared and implemented in a fast-paced timeframe if a container is discovered, to prevent further impacts to the subsurface and to minimize exposure to associated contaminants.

Task 5- Final Report

CHA will prepare a letter report summarizing the findings of the limited investigations (and characterization/removal activities if completed) within three weeks following the field activities. The report will include the following information and data pertaining to the investigations:

- A narrative that summarizes the findings and results of the investigations, and if applicable, an analysis of the analytical results;
- Figure(s) showing the test pit locations and investigation areas, and if applicable, sampling locations and extent of contamination;
- Test pit logs and photographic documentation;
- If applicable, analytical data tables presenting the raw analytical results, including comparisons to appropriate standards, criteria, and guidance; and
- Recommendations regarding additional investigation/remediation, if required.

SCHEDULE

The field work is expected to begin **September 11, 2017**. CHA anticipates that the investigation can be completed within four field days (assuming no buried drums are encountered).

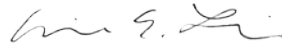


We look forward to working with you on this project. Please call me at 518-453-4733 or email at clocci@chacompanies.com if you have any questions or comments about this scope of work.

Sincerely,



Keith E. Cowan, CPG
Vice President





Cailyn E. Locci
Project Manager

Attachments

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Legend

-  Area of Alleged Buried Drums
-  Area of Alleged Arsenic Acid Container



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Figure 1 - Area of Limited Investigations
Oak Mitsui
80 First Street
Hoosick Falls, New York

Scale 1" = 150'

Project No.
31861

Image Courtesy of USGS and Earthstar Geographics SIO © 2014 Nokia ©
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