



Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, NY 12603

phone 845.452.1658 | fax 845.485.7083 | ecosystemsstrategies.com

October 18, 2013

Ms. Jamie Verrigni
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233-7016

via e-mail: jlverrig@gw.dec.state.ny.us

RE: Corrective Measures Work Plan for the Greyston Bakery Site, located at
104 Alexander Street, City of Yonkers, Westchester County, New York
VCP ID: V00361
ESI File: GY99143.72

Dear Ms. Verrigni:

Ecosystems Strategies Inc. (ESI) has prepared this Corrective Measures Work Plan (CMWP) on behalf of the Greyston Foundation (the Volunteer) to detail proposed corrective measures at the Greyston Bakery Site (hereafter referred to as the "Site"). Corrective measures have been developed to address areas of non-compliance related to the groundwater monitoring network at the Site as specified in the Site Management Plan (SMP).

ESI submitted a Periodic Review Report (PRR, dated July 2013) for the May 30, 2012 to June 29, 2013 reporting period to New York State Department of Environmental Conservation (NYSDEC) on June 29, 2013. A letter from NYSDEC, dated September 18, 2013, indicated the following areas of non-compliance:

- Monitoring well MW-3 requires repair or replacement regardless of the work performed by Con Edison on the Woodworth Avenue Manufactured Gas Plant. If repair is not feasible, MW-3 requires proper decommissioning.
- The one-inch PVC pipe encountered during groundwater sampling activities requires proper decommissioning.

Proposed Corrective Measures

Two corrective measures are proposed to address areas of non-compliance: proper decommissioning of monitoring well MW-3 and the one-inch PVC pipe; and installation, development and sampling of proposed monitoring MW-3R.

Monitoring Well Decommissioning

Monitoring well MW-3 and the one-inch PVC pipe in the northeastern portion of the Site will be decommissioned in conformance with NYSDEC's *CP-43: Groundwater Monitoring Well Decommissioning Policy*. The following decommissioning procedure will be implemented:

- The wells will be opened and screened with a photo-ionization detector (PID) to document residual vapors, if possible. The wells will be physically inspected to identify any obstructions or limitations to the intended closure work.



J. Verrigni
October 18, 2013
NYSDEC VCP Site ID: V00361
ESI File: GY99143.72
Page 2 of 3

- The well casings will be removed or cut a minimum of three feet below surface grade (bsg).
- Sterile sand or concrete slurry will be slowly introduced into the well column such that water present in the well will move laterally back into the surrounding soils.
- The concrete will be tremmied to remove voids. The concrete will be brought up to the surface and leveled to the surrounding surface. If the surrounding surface is landscaping, concrete will be brought to an elevation of six inches below surface grade and asphalt patch will be used to complete the grade.
- Photographs and proper recordkeeping will be conducted to document the decommissioning procedure.

Installation of Monitoring Well MW-3R

The proposed monitoring well will be constructed of two-inch PVC casing with 0.1-inch slotted PVC well screening across the water table. No glue will be used to thread the casing lengths. The wells will be constructed such that a minimum of 2.0 foot of screening will extend above the water table and approximately 8.0 feet of screening will extend below the water level. The annular space between well screen and the borehole will be backfilled with clean #1 silica sand to a depth of one to two feet above the well screen. A one-foot thick bentonite seal will be poured down the borehole above the sand pack and allowed to hydrate before grouting the remaining annular space with cement. Note: the length of the PVC screen, sand filter, and bentonite seal may be reduced (in that order) in order to accommodate a shallow water table.

The well will be completed as either stickup or drive-over wells, according to Site conditions, and will be protected by locked, metal casings. The well location and well construction log will be provided to NYSDEC in subsequent reporting.

Monitoring Well Development

Subsequent to installation, the well will be developed with a properly decontaminated mechanical pump and dedicated polyethylene tubing in order to clear fine-grained material that may have settled around the well screen and to enhance the natural hydraulic connection between the well screen and the surrounding soils. Prior to development, the monitoring well casing will be opened and the well column immediately screened with a PID to document the presence of any volatile organic vapors. Water removed from the monitoring well will be visually inspected for indications of petroleum contamination. Well water removed in the course of development will be containerized (disposal of collected groundwater will be based on the results of laboratory analysis).

Well development will begin at the top of the saturated portion of the screening to prevent clogging of the pump within the casing. The pump will be raised and lowered one to two feet within various portions of the screened interval to force water back and forth through the screen. Repeated surging and pumping at intervals of less than five feet will be performed to the bottom of the screen until the discharged water appears clear. Upon completion, the pump assembly will be removed while the pump is still running to avoid discharge of purged water back into the well.



J. Verrigni
October 18, 2013
NYSDEC VCP Site ID: V00361
ESI File: GY99143.72
Page 3 of 3

Monitoring Well Sampling

Groundwater sampling of monitoring well MW-3R will be conducted as specified in Section 2.1 of the SMP. A groundwater sample will consist of three 40-ml glass vials preserved with hydrochloric acid and one-liter amber jar with no preservative. Precautions will be taken to ensure that there are no air bubbles in the vials/jars during sample collection. All samples will be maintained at appropriate cold temperatures. After sample collection, the containers will be placed in a cool (approximately 4°C) dry place prior to their transport via courier to NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory. Proper chain of custody procedures will be followed. The collected sample will be analyzed for volatile organic compounds (VOCs, USEPA Method 8260) and polycyclic aromatic hydrocarbons (PAHs, USEPA Method 8270).

In the September 18, 2013 NYSDEC letter, the Department approved a modification to the groundwater sampling frequency for the Site. The modification consists of reducing the groundwater sampling frequency from annually to every other year. After the collection of a sample from monitoring well MW-3R, the next groundwater sampling event is anticipated in 2015.

Schedule of Implementation

ESI will start implementing the work outlined in this CMWP within 15 days of receiving approval from NYSDEC. It is anticipated that the work outlined in this CMWP will be completed in a four week period (including the 7-10 turnaround time of laboratory results). A letter report documenting the implementation of the activities outlined in this CMWP will be prepared within two weeks of the completion of the work. Subsequent to receiving approval from NYSDEC on the work performed, the PRR, incorporating all activities in regard to this CMWP, will be submitted to NYSDEC within 14 days.

Should you have any questions please do not hesitate to contact us.

Sincerely,

ECOSYSTEMS STRATEGIES, INC.

A handwritten signature in black ink that reads "Paul H. Ciminello".

Paul H. Ciminello
President

PHC/RAM:ndc:cla

cc: James Candiloro (NYSDEC)
Rosaura Andújar-McNeil (ESI)
Shelley Weintraub (Greyston Foundation)
Michael Brady (Greyston Bakery)