

July 17, 2018

**New York State Department of
Environmental Conservation**

625 Broadway, 12th Floor
Albany, NY 12233-7020

Attention: Tara Rutland, Project Manager

Re: Groundwater Sampling Plan
for Emerging Contaminants
31/32 LIC LLC/#C241182
37-25 31st Street
Long Island City, New York

Dear Ms. Rutland:

Introduction/Background

The New York State Department of Environmental Conservation (NYSDEC) is requiring the sampling of on-site groundwater monitoring wells at the 31/32 LIC LLC Site located at 37-25 31st Street, Long Island City, New York (the Site or Property). We understand from the NYSDEC that this sampling is being required as part of a statewide evaluation of remediation sites to identify “emerging contaminants” and associated health risks posed to the public and is not being requested because of any specific on-site issue. The NYSDEC’s “emerging contaminants” include 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS).

Historically, a number of groundwater monitoring wells were installed at the Site as part of a Remedial Investigation. The well locations and the general direction of groundwater flow is illustrated on Figure 1.

Scope of Work

Based upon the information and guidance documents provided by NYSDEC, CA RICH recommends the following scope of work for the “emerging contaminants” groundwater testing requested by the NYSDEC.

Groundwater Sampling

CA RICH will collect a groundwater sample from upgradient monitoring well MW-4 and downgradient monitoring well MW-2, provided these on-Site wells are still intact and representative samples can be obtained. If these wells are damaged or a representative sample

cannot be obtained, one of the other upgradient and/or downgradient wells may be substituted. The samples will be collected using the "High-flow" sampling method. Three to five well volumes will be purged from the well prior to sample collection via a Waterra inertial pump with a Hydrolift actuator, new high-density polyethylene (HDPE) tubing and a stainless steel foot valve. Monitoring well purge water will be disposed of on-Site. Groundwater samples will be collected directly from HDPE tubing directly into laboratory-issued containers. In addition, the following samples will be collected for QA/QC purposes: one trip blank, one field blank, one duplicate sample, one matrix spike, and one matrix spike duplicate. Samples will be stored on ice pending shipment to a New York State ELAP certified laboratory. All samples will be uniquely identified and all information associated with the samples will be recorded utilizing standard chain-of-custody sampling protocols.

Groundwater Sample Analysis

The groundwater samples will be analyzed for 1,4 dioxane via EPA Method 8270SIM with a detection limit no higher than 0.28 parts per billion (ppb), and PFAS via EPA Method 537MOD with a reporting limit of 2 parts per trillion (ppt). All analyses will be reported using NYSDEC ASP Category B deliverables.

Reporting

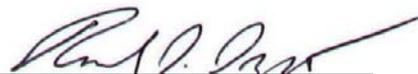
Once the laboratory results are obtained and verified, a summary letter report will be prepared for NYSDEC. At a minimum, the Report will include the following items:

- A description of the work performed and findings;
- Groundwater data summary tables with a comparison to NYSDEC Technical and Operation Guidance Series Class GA Groundwater Guidance Values (Ref. 3) where applicable;
- Monitoring Well/Sample location map;
- EDD submission; and
- Conclusions and Recommendations.

Upon your approval we will implement this groundwater sampling work plan. If there are any questions, please do not hesitate to call our Office.

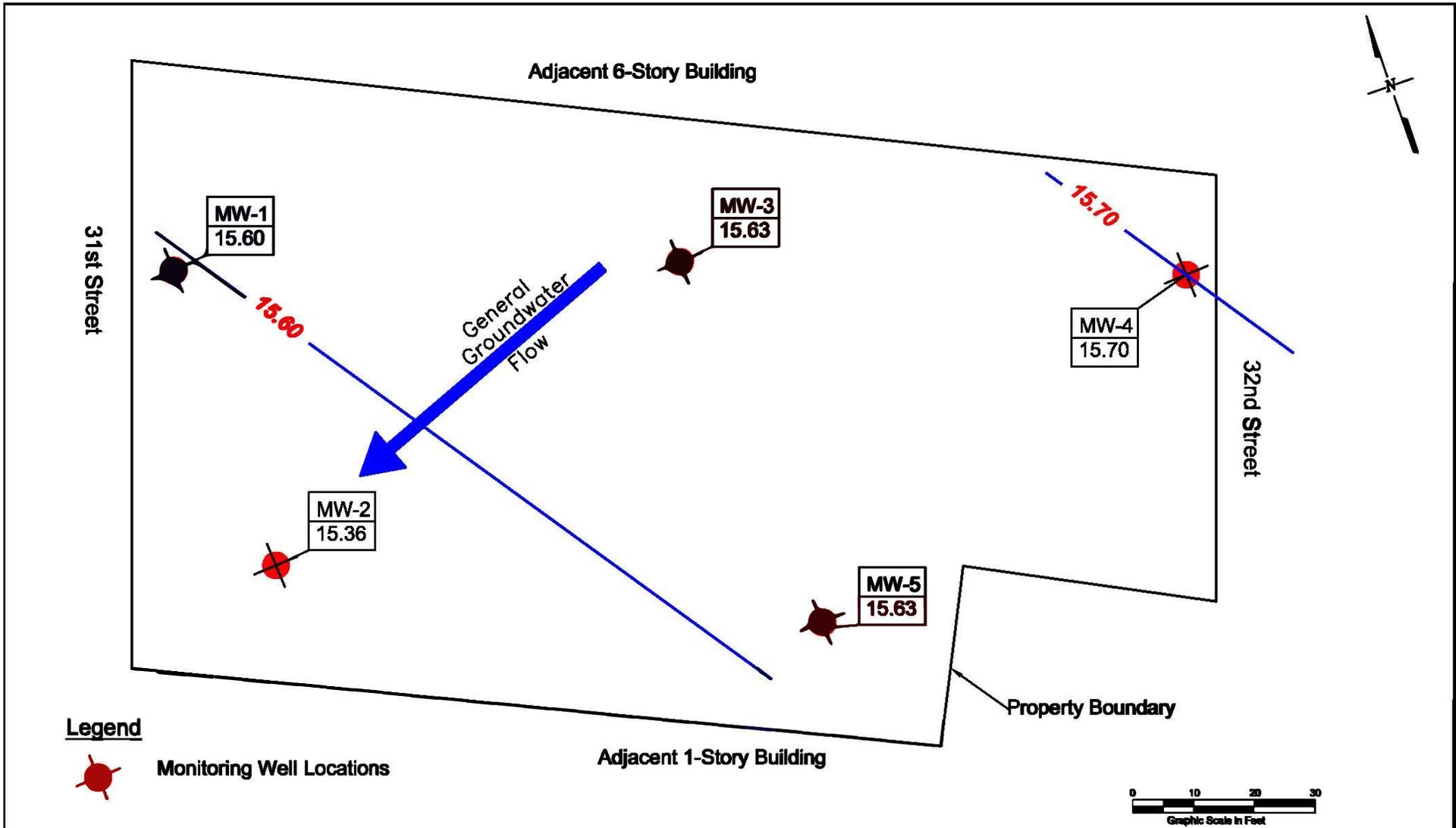
Sincerely,

CA RICH CONSULTANTS, INC.



Richard J. Izzo, PG, CPG
Vice President

cc: Fredric Oliver



Legend

 Monitoring Well Locations

 15.70 Groundwater Contour (dashed where inferred)

Well No.	Elevation Top of Casing (In Feet)	Depth to Water (In Feet)	Elevation of Water Table (In Feet)
1	38.50	22.90	15.60
2	38.37	23.01	15.36
3	38.44	22.81	15.63
4	39.04	23.34	15.70
5	38.00	22.37	15.63



CA RICH CONSULTANTS, INC.
 Environmental Specialists Since 1982
 17 Dupont Street, Plainview, New York 11803

TITLE: Groundwater Elevation Contour Map May 16, 2016		DATE: 5/24/2016
FIGURE: 1		SCALE: As Shown
DRAWING NO.: 2016-5	37-25 31st Street Queens, NY	DRAWN BY: J.T.C./T.R.B. APP. BY: J.E.P.