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ENVIRONMENTAL CONSULTATION & REMEDIATION
KPRG and Associates, Inc.

PFA AND 1,4-DIOXANE GROUNDWATER SAMPLING WORK PLAN

July 18, 2018

Mr. David Szymanski
New York State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Avenue
Buffalo, NY 14203-2915

VIA E-MAIL and FEDEX KPRG Project No. 21803.18

Re: Polyfluoroalkyl Substances and 1,4-Dioxane Sampling Work Plan
Prestolite Plant Site
Wyoming County, NY – Site No. 961009

Dear Mr. Szymanski:

On June 5, 2018, the New York State Department of Environmental Conservation (DEC) issued a letter to Motorola Solutions, Inc. (Motorola Solutions) requesting that a round of groundwater sampling be performed at the above referenced site for Polyfluoroalkyl substances (PFAs) and 1,4-dioxane, a set of emerging contaminants which have not been historically analyzed at this site. On behalf of Motorola Solutions, KPRG and Associates, Inc. (KPRG) is providing this Work Plan (WP) to DEC in response to the above-noted request. The WP identifies the wells proposed to be sampled for PFAs and 1,4-dioxane, the sampling procedures to be used, sample containers/preservatives, quality assurance/quality control samples, sampling frequency/schedule, the analytical requirements and subsequent reporting specifications. Each is discussed separately below.

Groundwater Sample Locations

Groundwater at the Prestolite Plant site is primarily impacted with residual concentrations of trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) and metals consisting of lead, chromium and cadmium. The site is currently in post-remediation semi-annual groundwater monitoring. The overall site investigation groundwater monitoring network and the current post-remediation groundwater monitoring network are shown on Figure 1.

To fulfill the DEC request to characterize potential PFA and 1,4-dioxane impacts, if any, KPRG has selected the following subset of monitoring wells that will provide data from upgradient (MW-

5), within the former source zones (MW-2A, MW-6Au and MW-9) and at the downgradient property boundary (MW-1, MW-12, MW-13 and MW-14). The proposed sampling locations and rationale are summarized in the attached Table 1.

Sample Collection Procedures

Samples will be collected and numbered/identified in accordance with the sampling procedures specified within Section 3.0 of the DEC approved Site Management Plan dated February 27, 2013. The sample collection will be completed by the TestAmerica Laboratories, Inc. Field Services group out of Amherst, New York which will be contracted to KPRG. Samplers will wash their hands and don a new pair of nitrile gloves prior to sampling at each location.

All samples will be correctly labeled, placed on ice and transported by the field crew directly back to the analytical laboratory under a properly completed chain-of-custody.

Sample Containers/Preservatives

Water samples will be poured directly into laboratory prepared, 250-milliliter polypropylene bottles fitted with polypropylene screw caps. Each sample bottle will include 5.0 g/liter of Trizma® as a buffering agent and to remove any free chlorine.

Quality Assurance/Quality Control Samples

For quality assurance/quality control (QA/QC) purposes, the following additional samples will be collected:

- Duplicate – One field duplicate sample will be collected from a randomly chosen well. The sample will be collected using the same method used for investigative sample collection. The sample will be identified in a manner so that the analytical laboratory will not know from which well the sample was collected.

- Field Reagent Blank (FRB) – One FRB will be handled along with the proposed PFA and 1,4-dioxane sample set. At the laboratory, a field blank sample bottle will be filled with reagent water and preservatives, sealed and transported to the site along with the other sampling bottles. In addition, an empty sample bottle with no preservatives will also be included in the shipment. At the sampling site, the sampling crew will open the sealed FRB, pour it directly into the empty sample bottle and then seal and label that bottle as the FRB. The FRB will be transported back to the laboratory along with the investigative samples and analyzed to ensure that PFAs or 1,4-dioxane were not introduced into the sample during sample collection/handling.

Sampling Frequency/Schedule

The proposed PFA and 1,4-dioxane sampling is at this time anticipated to be a one-time event for screening purposes as requested by the DEC. The sampling will be scheduled to occur concurrently

with the next round of standard semi-annual groundwater sampling to be completed in August 2018. Any additional potential future PFA and/or 1,4-dioxane sampling will be determined based on the results of this initial sampling event.

Analytical Requirements

The samples will be analyzed by TestAmerica Laboratories located in Amherst, New York. The PFA samples will be analyzed using Modified EPA Method 537 with a detection limit target of 2 nanograms/liter. The full list of PFA compounds to be analyzed is provided in Attachment 1.

1,4-dioxane will be analyzed for using EPA Method 8270 with a target method detection limit of no higher than 0.28 micrograms/liter.

The analytical laboratory will be requested to provide a full Category B deliverable package.

Reporting Specifications

With 30-days of receipt of the analytical data, the DEC will be provided with a data summary report. The report will include, but not be limited to:

- Objective of sampling;
- Documentation of field procedures;
- Data summary (tabular and descriptive form); and
- Conclusions/Recommendations.

A full hard copy of the analytical data package will be provided as an Attachment to the report. The data will also be submitted electronically meeting the requirements provided at https://www.dec.ny.gov/chemical/62440.html.

KPRG and Motorola Solutions appreciate the continued cooperative work with the DEC associated with the Prestolite Plant site. If there are any questions, please contact me at 262-781-0475 or Terry Lockwood of Motorola Solutions at 602-760-4763.

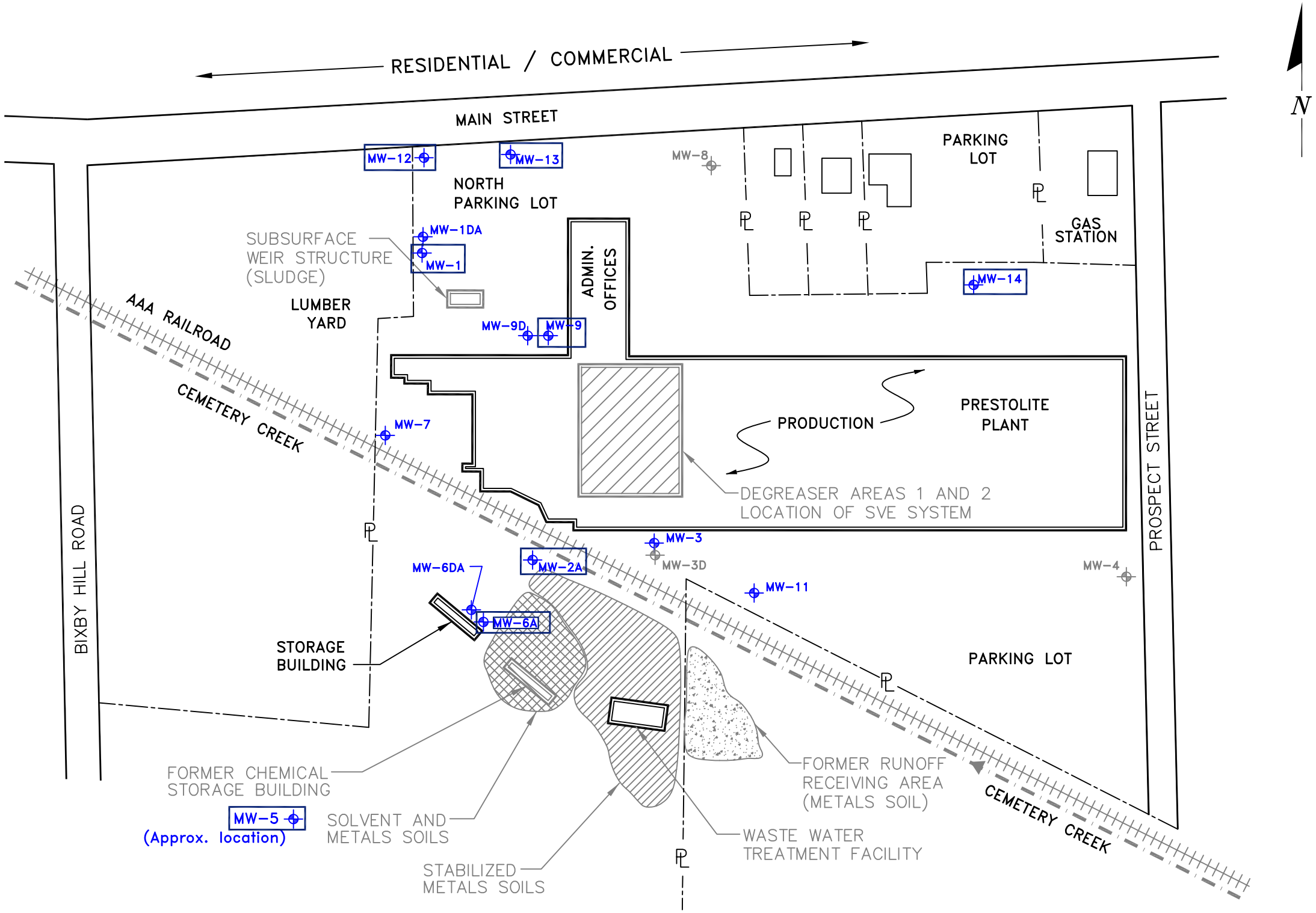
Sincerely,
KPRG and Associates, Inc.

Richard R Gnat

Richard R. Gnat
Principal

cc: Terry Lockwood, Motorola Solutions, Inc.
Attachments

FIGURE



LEGEND

- MW-11 — ACTIVE MONITORING WELL
- MW-4 — INACTIVE MONITORING WELL
- PROPOSED LOCATION FOR PFA AND 1,4-DIOXANE SAMPLING

0 200'
APPROXIMATE SCALE

All locations and dimensions are approximate.

ENVIRONMENTAL CONSULTATION & REMEDIATION

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MONITORING LOCATIONS

Motorola, Inc., Presolite Plant
Arcade, New York

Scale: 1" = 200' | Date: July 18, 2018

KPRG Project No. 21803.18 | FIGURE 1

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TABLE

Table 1. Prpoosed PFA and 1,4-Dioxane Sampling Locations and Rationale

Well Location	Rationale
MW-5	Upgradient well location outside of former source zone.
MW-2A	Immediately downgradient of stabilized metals area and former VOC storage area.
MW-6A	Downgradient of former VOC storage area.
MW-9	Immediately downgradient of former degreaser area.
MW-1	Downgradient property boundary well on west side.
MW-12	Downgradient northwest corner property boundary.
MW-13	Downgradient western portion of north side property boundary.
MW-14	Downgradient eastern portion of north side property boundary.

ATTACHMENT 1
NYSDEC List of PFAs for Analysis

Full PFAS Target Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	**Perfluorobutanesulfonic acid**	**PFBS**	**375-73-5**
	Perfluorohexanesulfonic acid	**PFHxS**	**355-46-4**
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanessulfonic acid	**PFOS**	**1763-23-1**
	Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoroalkyl carboxylates	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	**PFHpA**	**375-85-9**
	Perfluorooctanoic acid	**PFOA**	**335-67-1**
	Perfluorononanoic acid	**PFNA**	**375-95-1**
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane-sulfonamides	Perfluroroctanesulfonamide	FOSA	754-91-6
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Bold entries depict the 6 original UCMR3 chemicals