8976 Wellington Road
Manassas, VA 20109

August 22, 2019

Jessica LaClair
New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau E, 12th Floor
625 Broadway
Albany, New York 12233-7014

Re: Work Plan for Subslab Vapor and Indoor Air Quality Sampling
Building 339
Former IBM East Fishkill Facility
Hopewell Junction, New York
NYSDEC Site No. 314054

Dear Ms. LaClair:

The enclosed document presents a work plan to assess the concentrations of volatile organic compounds (VOCs) in indoor air and subslab soil vapor beneath B339 located at the former IBM East Fishkill Facility in Hopewell Junction, New York. Building 339 is currently owned by iPark East Fishkill LLC.

If you have any questions, please contact me at (703) 257-2583.

Sincerely yours,
International Business Machines Corporation

Dean W. Chartrand
Program Manager
Corporate Environmental Affairs

Enclosure:

Cc:	Julia Kenney	NYSDOH	(w/enclosure via e-mail)
	Mike Buckley	iPark	(w/enclosure via e-mail)
	Carl Monheit	iPark	(w/enclosure via e-mail)
	Gary Marone	Global Foundries	(w/enclosure via e-mail)
	David Shea	Sanborn Head	(w/enclosure via e-mail)

SANBORN HEAD ENGINEERING
Building Trust. Engineering Success.

20 Foundry Street
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Dean Chartrand
IBM Corporation
8976 Wellington Road
Manassas, VA 20109

August 22, 2019
File No. 2999.06

Re: Work Plan for Subslab Vapor and Indoor Air Quality Sampling
Building 339
Former IBM East Fishkill Facility
Hopewell Junction, New York
NYSDEC Site No. 314054

Dear Mr. Chartrand:

This letter presents a work plan to evaluate subslab vapor and indoor air quality at Building 339 (B339) of the former IBM East Fishkill facility located in Hopewell Junction, New York (the site). B339 is currently owned by iPark East Fishkill LLC (iPark), also referred to as National Resources. The location of B339 and the property subdivision lines are shown on Figure 1.

The work described herein will be conducted in general accordance with IBM's RCRA Facility Investigation (RFI) Work Plan[1], which was approved by the New York State Department of Environmental Conservation (NYSDEC) and the Department of Health (NYSDOH) (the Departments).

We understand the subject work plan will be submitted to the Departments for review and comment prior to IBM initiating the work.

BACKGROUND

Building 339 is believed to have historically been used to manage chemical waste associated with processes being conducted in B338, located just to the west of B339. Above ground tanks and process equipment have been removed from the building, and it is currently vacant and unoccupied.

The building is roughly split into three sections: the northern third is an open-top room that formerly contained an above ground storage tank (AST); the central portion appears to contain former containment curbing and an electrical room; and the southern third has a raised catwalk and formerly contained at least one AST. The concrete floors of the northern and southern thirds of the building are set approximately three feet below the concrete floor of the middle section.

[1] *RCRA Facility Investigation Work Plan, VOC Source Assessment, IBM East Fishkill Facility, Hopewell Junction, New York*, Sanborn, Head Engineering, P.C. and IBM Corporation, June 15, 2009.

A former tanker truck loading/unloading area is located to the east of the building. The open-top room and the loading/unloading area were covered with standing water during a site reconnaissance conducted by Sanborn Head on August 7, 2019. There are no active HVAC units within the building

We understand that iPark has a prospective tenant for B339. We are not aware of environmental sampling having been completed in B339 in the past. Therefore, the work described herein will be conducted to: 1) understand the current volatile organic compound (VOC) concentrations in subslab vapor and indoor air; and 2) assess whether vapor intrusion mitigation may be needed prior to occupancy.

WORK PLAN

The proposed scope of work for subslab vapor and indoor air sampling is described in the following sections.

Subslab Vapor Port Installation

One subslab vapor (SSV) monitoring port will be installed in each of the three general building areas at the approximate locations shown on attached Figure 2, for a total of three SSV ports. Proposed locations will be cleared for utilities and potentially asbestos-containing floor tile (if present at drilling locations) by a licensed asbestos handler prior to installation. SSV ports will be installed in general accordance with the 2006 NYSDOH Vapor Intrusion Guidance. Refer to Figure 3 for construction details of SSV ports. Given that the ports will be constructed through the concrete floor slab using grout sealants and gas-tight hardware, approximately 10% of locations will be leak-tested tested following installation to verify the integrity of the construction.

The SSV ports will be installed using a hammer drill, and an industrial vacuum equipped with a HEPA-filter will be used to collect concrete chips and dust generated during the installation.

The breathing zone will be screened for total VOCs using a photoionization detector (PID) during concrete drilling and port installation. If sustained PID readings exceed the action levels in Sanborn Head's site-specific health and safety plan, the slab will be temporarily covered using plastic sheeting or similar, and work will be discontinued until the situation can be re-assessed. Additional engineering controls, such as the use of exhaust fans, may be implemented as needed.

Subslab Vapor Sampling

SSV ports will be sampled using SUMMA® canisters equipped with 1-hour flow controllers and submitted to a laboratory certified by the NYSDOH Environmental Laboratory Approval Program (ELAP) for analysis in accordance with USEPA Method TO-15 for the analytes listed in IBM's RFI Work Plan. One blind duplicate subslab vapor sample will be collected for quality assurance/quality control (QA/QC) purposes.

Indoor Air Sampling

Indoor air samples will be collected in the southern two sections of the building. An indoor air sample will not be collected from the northern third of the building since it is currently open to the atmosphere. Indoor air samples will be collected proximate to the two southern subslab vapor sampling locations, as shown on Figure 2. In addition to indoor air sampling, an ambient outdoor air sample will be collected to assess ambient and background conditions outside B339.

Both indoor and outdoor air samples will be collected as 8-hour, time-integrated samples using Summa® canisters and submitted to a laboratory certified by the NYSDOH ELAP for analysis of 22 VOCs listed in the RFI Work Plan using modified USEPA Method TO-15 with a combination of full scan and selective ion monitoring (SIM) mode. One blind duplicate indoor air sample and one nitrogen field blank will be collected for QA/QC purposes.

CLOSING

The above work is planned to commence approximately two to three weeks following approval of this work plan by the Departments. A report documenting the results will be submitted approximately six to eight weeks following completion of the work.

Very truly yours,
SANBORN, HEAD ENGINEERING, P.C.

David Shea, P.E.
Principal Engineer

Jennifer H. Sanborn
Project Director

Encl. Figure 1 – Building 339 Location Plan
Figure 2 – Proposed Exploration Location Plan
Figure 3 – SSV Monitoring Port Construction Details

P:\2900s\2999.06\Source Files\201908 B339 SSV and IA WP\201908 -B339-WP.docx

FIGURES

Figure 1

B339 Location Plan

Building 339 Subslab Vapor and Indoor Air Quality Sampling Work Plan

Former IBM East Fishkill Facility
Hopewell Junction, New York

Drawn By: E. Wright
Designed By: J. Flood
Reviewed By: J. Sanborn
Project No: 2999.06
Date: August 2019

Figure Narrative

This figure shows the buildings at the former IBM East Fishkill facility. Building B339 is highlighted.

Legend

- Property Line
- Unlabeled features include wastewater treatment tanks, pump houses, trailers, and other structures and features not intended for human occupancy
- B339 — Indicates building number
- Indicates the location of B339

GlobalFoundries
Lot 1 GlobalFoundries U.S 2 LLC
Lot 5 GlobalFoundries U.S 2 LLC

i.Park
Lot 2 i.Park East Fishkill I LLC
Lot 3 i.Park East Fishkill I LLC
Lot 4 i.Park East Fishkill LLC
Lot 6 i.Park East Fishkill LLC
Lot 7 i.Park East Fishkill LLC
Lot 8 i.Park East Fishkill LLC

- Subdivision (GlobalFoundries U.S. 2 LLC)
- Subdivision (i.Park East Fishkill LLC)
- Subdivision (i.Park East Fishkill I LLC)

N
W E
S

200' 100' 0 200' 400' Feet

SANBORN HEAD ENGINEERING

File:P:\2900s\2999.00\Graphics Files\CAD\B339\B339_LocationPlan.dwg Plot Date: 8-15-19

Figure 2

Proposed Exploration Location Plan

Building 339 Subslab Vapor and Indoor Air Quality Sampling Work Plan

Former IBM East Fishkill Facility

Hopewell Junction, New York

Drawn By:	E. Wright
Designed By:	J. Flood
Reviewed By:	J. Sanborn
Project No:	2999.06
Date:	August 2019

Figure Narrative

This figure shows the proposed locations for subslab vapor sample port installation and sampling and indoor air quality sampling in B339. An indoor air sample will not be collected from the northern portion of the building because it is open to the exterior (i.e., no roof).

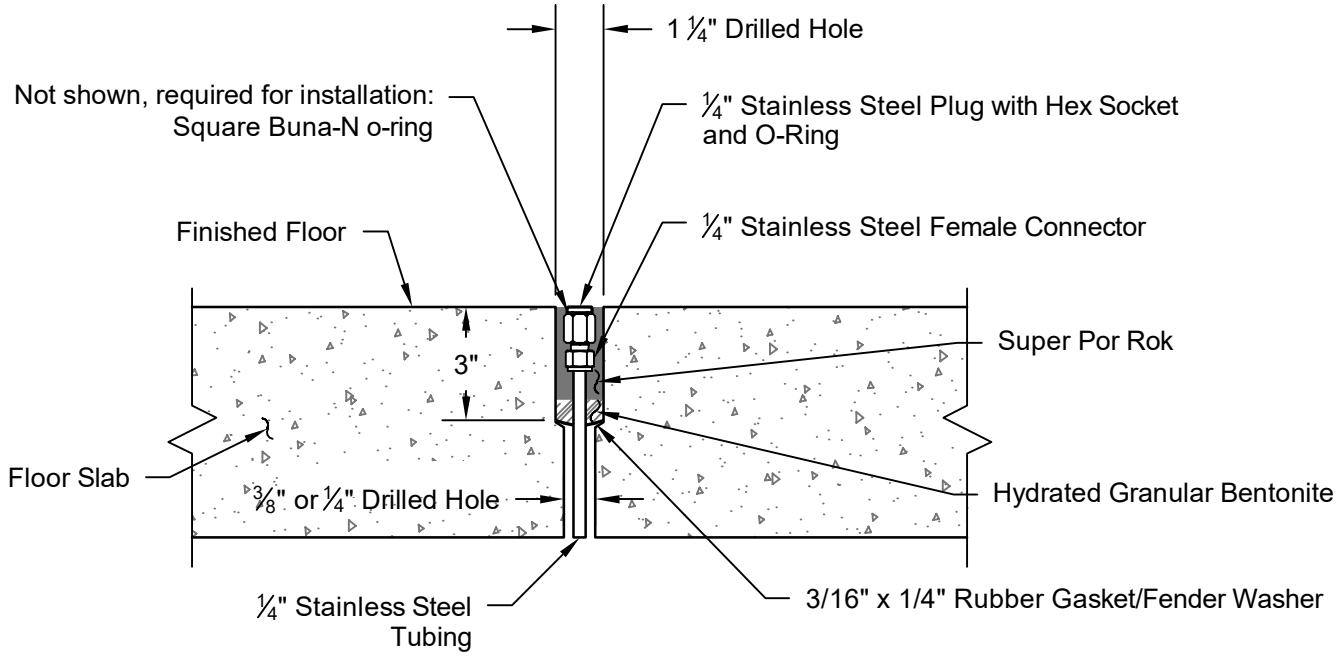
Legend

- Proposed subslab vapor port
- Proposed indoor air sampling location

N
W E
S

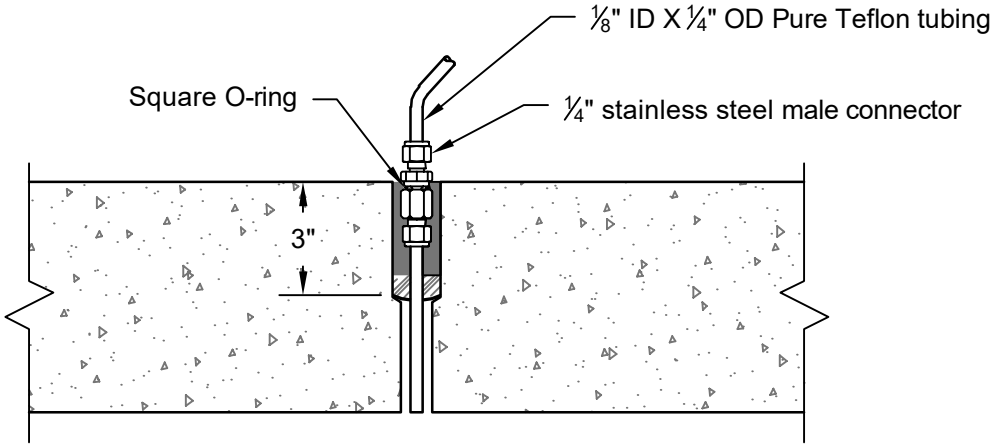
7.5 3.75 0 7.5 15 Feet

SANBORN HEAD ENGINEERING



1 Subslab Sampling/Monitoring Port

Not To Scale



2 Subslab Vapor Sampling Configuration

Not To Scale

Drawn By: E. Wright
Designed By: J. Flood
Reviewed By: J. Sanborn
Project No: 2999.06
Date: August 2019

Scale As Noted

SANBORN HEAD ENGINEERING

Figure 3

Subslab Vapor Sampling/ Monitoring Port Construction Details

Building 339 Subslab Vapor and Indoor Air Quality Sampling Work Plan

Former IBM East Fishkill Facility

Hopewell Junction, New York