



architects + engineers

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July 10, 2014

Steven M. Scharf, P.E.
Project Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

Re: Brownfield Cleanup Program Remedial Investigation
Bethpage Community Park Ice Rink Area – NYSDEC Site No.: C130212
Progress Report – July 2014

Dear Mr. Scharf:

On behalf of the Town of Oyster Bay (Town), H2M architects + engineers (H2M) is pleased to provide herein a progress report on the remedial investigation activity at the Bethpage Community Park Ice Rink Area pursuant to Appendix A, Section XI of the New York State Brownfield Site Cleanup Agreement (Index # C130212-01-12).

Tasks Initiated or Completed

Tasks recently initiated or completed include the following:

- Follow-up to the previous request was made to Northrop Grumman to utilize existing well BCPMW-6-1 in lieu of installing an additional permanent monitoring well on the Northrop Grumman Access Road. Temporary monitoring well point RI-TW-04 was installed on the Northrop Grumman Access Road, between Northrop Grumman's groundwater IRM extraction wells RW3 and RW4. The highest Freon-22 concentration (210 ug/l) from RI-TMW-04 was detected in the groundwater sample obtained from a depth of 95' bgs. Having reviewed recent Northrop Grumman groundwater monitoring reports, it is apparent that Northrop Grumman maintains existing monitoring well BCPMW-6-1 near to this location. Well BCPMW-6-1 also happens to be screened at the proper depth for purposes of this RI. Approval has not yet been received from Northrop Grumman.
- A Data Useability Summary Report (DUSR) associated with groundwater screening samples was received from a third party data validator. A copy of the DUSR is attached. The DUSR indicates that the data are useable.

Tasks to be Completed or Initiated During the Next Reporting Period

Tasks expected to be initiated or completed during the next reporting period include the following:

- Approval from Northrop Grumman to use well BCPMW-6-1.
- Sampling of groundwater from three (3) recently installed wells, four (4) existing Northrop Grumman's 200-series wells and, if approved, Northrop Grumman's BCPMW-6-1 well.

Mr. Steven M. Scharf
Brownfield Cleanup Program – Bethpage Community Park Ice Rink Area – NYSDEC Site No.: C130212
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Schedule

Schedule milestones related to the next reporting period are as follows:

- No milestones are expected to be reached in the next reporting period.

Deviation

- All investigation related field activities were scheduled to be completed by May 23, 2014. However, the Town is still waiting to receive approval from Northrop Grumman to use well BCPMW-6-1. Once received, the project schedule will resume.

If you should you have any questions or concerns, please contact me at (631) 756-8000 extension 1623.

Very truly yours,

H2M architects + engineers



Philip J. Schade, P.E.
Vice President

cc: Richard Betz, Commissioner of Public Works/Town of Oyster Bay
Matt Russo, Town of Oyster Bay
John Ellsworth, Cashin Spinelli & Ferretti
Steve Karpinski, NYSDOH
Rosalie Rusinko, Esq., NYSDEC
Terry Clark, Superintendent of Schools, Bethpage School District
Hardik Parekh, P.E., H2M

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
Facsimile 518-251-4428

May 13, 2014; Revised July 1, 2014

Hardik Parekh
H2M architects + engineers
538 Broad Hollow Rd.
Melville, NY 11747

RE: Validation of the Bethpage Community Park Analytical Data Packages
Chemtech SDG Nos. F1433, F1461, and F1661

Dear Mr. Parekh:

Review has been completed for the data packages generated by Chemtech Laboratories that pertain to aqueous samples collected between 02/19/14 and 03/12/14 at the Bethpage Community Center Site. Forty aqueous samples and four aqueous field duplicates were analyzed for volatile analytes (including Freon 12 and Freon 22) by method EPA 8260B. Tentatively Identified Compound (TIC) evaluation was also performed.

The data packages submitted by the laboratory contain full deliverables for validation, but this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

The following items were reviewed:

- * Data Completeness
- * Case Narrative
- * Custody Documentation
- * Holding Times
- * Surrogate and Internal Standard Recoveries
- * Method/Trip Blanks
- * Matrix Spike Recoveries/Duplicate Correlations
- * Field Duplicate Correlations
- * Laboratory Control Sample (LCS)
- * Instrumental Tunes
- * Initial and Continuing Calibration Standards
- * Method Compliance
- * Sample Result Verification

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c). The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found within the laboratory data packages.

In summary, results for target analytes are usable either as reported or with minor qualification.

Copies of the client sample identifications are attached to this text, and should be reviewed in conjunction with this report. Also attached are client EDD files, with recommended qualifiers applied in red.

Blind Field Duplicate

The blind field duplicate evaluations of aqueous samples RI-TMW-03 at 145', RI-TMW-01 at 100', RI-TMW-02 at 145', and RI-TMW-04 at 145' show acceptable correlations, indicating good precision.

Volatile Analyses by EPA8260B

Results for analytes initially reported with the laboratory "E" flag are derived from the dilution analyses of the samples, thus reflecting responses within the established linear ranges of the instruments.

Project sample holding time requirements were met, but the trip blank reported in SDG F1661 was processed well beyond the allowable holding time from fill. Those trip blank results have been qualified as estimated, and are of borderline usability. The evaluation for external contamination was not optimally performed.

Instrument tunes meet fragmentation requirements, and blanks show no contamination.

The matrix spikes of RI-TMW-01 at 100, RI-TMW-03 at 145, and RI-TMW-04 at 145 show acceptable recoveries, with the exception of the recoveries for chlorodifluoromethane (68% and 58%) in RI-TMW-03 at 145. The result for the compound in that parent sample has been qualified as estimated. That compound was not evaluated in the LCSs, and the data packages have been revised to clarify that.

The results for 1,4-dioxane are rejected due to low instrument responses in the associated calibration standards, inherent with the methodology. Other initial and continuing calibration standard (ICV and CCV) responses are within protocol and validation guidelines, with the following exceptions, results for which are qualified as estimated in the indicated samples:

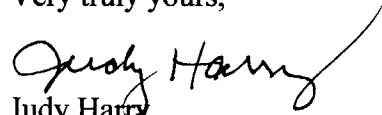
- cyclohexane and 2-butanone (21%D) in RI-TMW-03 at 145
- methyl acetate (31%D) in fifteen of the samples reported in SDG F1461
- 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene (26%RSD and 30%RSD) in the samples reported in SDG F1661

The laboratory reported all TICs with named identifications, some of which are not good matches, and should have been reported as "Unknowns". Many of the Tentatively Identified Compounds reported with a CAS number should have been flagged by the laboratory as "N" to indicate that the identifications are tentative. The EDDs reporting TICs have been qualified during validation with the "NJ" qualifiers.

Some of the results are reported to too many significant figures.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

- U** The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
- J** The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
- UJ** The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
- NJ** The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
- R** The data are unusable. The analyte may or may not be present.
- EMPC** The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs

Cover Page

Order ID : F1433**Project ID :** Bethpage Community Park BCP**Client :** H2M Associates**Lab Sample Number**

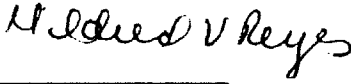
F1433-01
F1433-02
F1433-03
F1433-04
F1433-05
F1433-06
F1433-07
F1433-08
F1433-09
F1433-10

Client Sample Number

RI-TMW-01-AT-100
F1433-01MS
F1433-01MSD
RI-TMW-01-AT-95
RI-TMW-01-AT-85
RI-TMW-01-AT-75
RI-TMW-01-AT-65
RI-TMW-01-AT-55
TRIPBLANK
DUPLICATE

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :



Mildred V. Reyes, QA/QC Supervisor
2014.03.03 15:26:43 -05'00'

Date: 3/3/2014

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

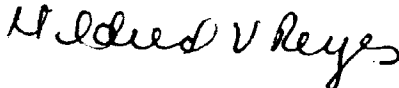
Cover Page**Order ID :** F1461**Project ID :** Bethpage Community Park BCP**Client :** H2M Associates**Lab Sample Number**

F1461-01
 F1461-02
 F1461-03
 F1461-04
 F1461-05
 F1461-06
 F1461-07
 F1461-08
 F1461-09
 F1461-10
 F1461-11
 F1461-12
 F1461-13
 F1461-14
 F1461-15
 F1461-16
 F1461-17
 F1461-18
 F1461-19
 F1461-20
 F1461-21
 F1461-22
 F1461-23
 F1461-24
 F1461-25
 F1461-26
 F1461-27

Client Sample Number

RI-TMW-03AT-145
 F1461-01MS
 F1461-01MSD
 RI-TMW-03AT-135
 RI-TMW-03AT-125
 RI-TMW-03AT-115
 RI-TMW-03AT-105
 RI-TMW-03AT-95
 RI-TMW-03AT-85
 RI-TMW-03AT-75
 RI-TMW-03AT-65
 RI-TMW-03AT-55
 TRIPBLANK
 DUPLICATE(2-20-14)
 RI-TMW-02AT-145
 F1461-15MS
 F1461-15MSD
 RI-TMW-02AT-135
 RI-TMW-02AT-125
 RI-TMW-02AT-115
 RI-TMW-02AT-105
 RI-TMW-02AT-95
 RI-TMW-02AT-85
 RI-TMW-02AT-75
 RI-TMW-02AT-65
 RI-TMW-02AT-55
 DUPLICATE(2-21-14)

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Mildred V. Reyes, QA/QC Supervisor
 2014.03.06 08:05:11 -05'00'

Signature : _____

Date: 3/5/2014

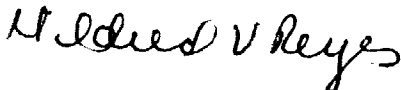
Cover Page

Order ID : F1661**Project ID :** Bethpage Community Park BCP**Client :** H2M Associates

Lab Sample Number	Client Sample Number
F1661-01	RI-TMW-04-AT-145
F1661-02	RI-TMW-04-AT-145MS
F1661-03	RI-TMW-04-AT-145MSD
F1661-04	RI-TMW-04-AT-135
F1661-05	RI-TMW-04-AT-125
F1661-06	RI-TMW-04-AT-115
F1661-07	RI-TMW-04-AT-105
F1661-08	RI-TMW-04-AT-95
F1661-09	RI-TMW-04-AT-85
F1661-10	RI-TMW-04-AT-75
F1661-11	RI-TMW-04-AT-65
F1661-12	RI-TMW-04-AT-55
F1661-13	DUPLICATE
F1661-14	TRIPBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____



Mildred V. Reyes, QA/QC Supervisor
2014.03.28 13:53:48 -05'00'