

**Honeywell**

Honeywell  
101 Columbia Rd  
Morristown, NJ 07962

**RECEIVED**

December 22, 2008

DEC 23 2008

NYSDEC REG 9  
FOIL  
 REL  UNREL

Martin Doster  
New York State Department of Environmental Conservation, Region 9  
270 Michigan Avenue  
Buffalo, New York 14203-2915

Subject: **Buffalo Outer Harbor Site-Radio Tower Area  
Letter of Transmittal  
Work Plan for Inspection and Monitoring  
MACTEC Project 3410080629**

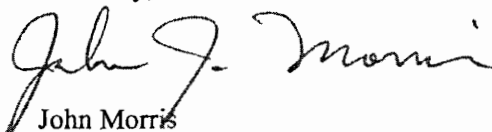
Dear Mr. Doster:

On behalf of Honeywell International Inc., MACTEC Engineering & Consulting, Inc. (MACTEC) has enclosed two copies of the above referenced Work Plan. This Work Plan is based on comments provided in your letter dated June 17, 2008, which specified that a sampling plan be submitted to the New York Department of Environmental Conservation.

The inspection and monitoring approach outlined in the Work Plan focuses on the use of groundwater monitoring to continue to verify that human health and the environment are protected and confirm the long-term viability of the remedy. In the event that future groundwater monitoring results identify nitrobenzene above the Class GA standard, additional action will be triggered as described in the Work Plan. We believe that this approach will meet the objectives required by NYSDEC and limit intrusive activities that may affect cap integrity.

If you have any questions or comments regarding the Work Plan for Inspection and Monitoring at the Buffalo Outer Harbor Site-Radio Tower Area, please do not hesitate to contact the undersigned at 973-455-4003.

Sincerely,



John Morris

cc: M. Desmond, Esq. (NYSDEC)  
D. Flynn, Esq. (Phillips Lytle)  
C. O'Connor (NYSDOH)  
R. Keating, Esq. (NFTA)  
C. Burns (CHA)  
J. Scrabis (MACTEC)

Enclosures

**Work Plan for Inspection and Monitoring**

**Buffalo Outer Harbor Site - Radio Tower Area**

**NYSDEC Site No. 915026**

**Erie County – Buffalo, NY**

**Prepared for:**

**HONEYWELL**

**Morristown, New Jersey**

**December 19, 2008**



**MACTEC Engineering and Consulting**  
**800 North Bell Avenue, Suite 200**  
**Carnegie, PA 15106**  
**412.279.6661**

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## 1.0 INTRODUCTION

On behalf of Honeywell International Inc. (“Honeywell”), MACTEC Engineering and Consulting, Inc. (“MACTEC”) has prepared this Work Plan to address long-term inspection and monitoring requirements for the Buffalo Outer Harbor Site – Radio Tower Area (“Site”) located in Buffalo, New York. This Work Plan is based on comments provided in your letter dated June 17, 2008, which specified that a sampling plan be submitted to the New York Department of Environmental Conservation (“NYSDEC”).

## 2.0 BACKGROUND

The Outer Harbor Site is a 110-acre Site located approximately one mile south of downtown Buffalo, New York. The Radio Tower Area (“RTA”) is a very small portion of the Outer Harbor Site where land disposal and fill placement formerly occurred. A Record of Decision (“ROD”) was issued by the New York State Department of Environmental Conservation (“NYSDEC”) for the RTA in March 1999, which was modified by an Explanation of Significant Difference in 2003.

Remedial action at the RTA, a 0.9-acre area located within the Outer Harbor Site, consisted of in-situ Chemical oxidation and stabilization, and in-place capping of certain of the waste/fill material. The cap is a soil cover system that is 24 inches thick and consists of a bottom geotextile liner overlain by 20 inches of clean fill and 4 inches of topsoil. Vegetation was established over the capped area via seeding with local grasses.

The Site remediation activities were documented in a Remedial Action Completion Report (August 17, 2005), which was approved by NYSDEC in a letter dated November 22, 2005. Institutional controls consisting of land use restrictions were also implemented, including the requirement for inspection and annual mowing of the capped area, as specified in Section 6.0 of the NYSDEC-approved Site Management Plan prepared for Honeywell by Remedial Engineering, P.C. (August 17, 2005). Six groundwater monitoring wells (GW-18R, GW-19, GW-20, GW-21, GW-22, and GW-23) are located adjacent to the capped area. A Site Plan is

attached which shows the property boundaries, monitoring well locations, and other Site details.

In its November 22, 2005 letter approving the Remedial Action Completion Report, NYSDEC specified that groundwater samples were to be collected and analyzed from the RTA monitoring wells on a quarterly basis for one year and on a semi-annual basis for the following year. MACTEC completed the quarterly groundwater monitoring events in 2005 and 2006 and documented the results in a letter report to NYSDEC dated October 4, 2006. The semi-annual groundwater monitoring was completed by MACTEC during 2006 and 2007 and documented in a letter report to NYSDEC dated March 26, 2008.

As described in the referenced MACTEC letter reports that documented the quarterly and semi-annual groundwater monitoring events, nitrobenzene (the organic constituent of concern {COC}) was not detected in any groundwater samples collected from the Site monitoring wells. The reported concentrations for various metals in the groundwater samples exceeded the NY Class GA groundwater standards. The metals results were consistent with previous Outer Harbor data presented in the ROD, which concluded that the metals concentrations in groundwater may be attributable to “general groundwater quality in the vicinity of the Site”.

### **3.0 SCOPE OF WORK**

NYSDEC’s letter dated June 17, 2008 specified that the following long-term activities must be completed for the RTA:

- Collection and laboratory testing of groundwater samples from Site wells once every three years;
- Collection and laboratory testing of representative samples of the stabilized waste material once every six years; and
- Annual inspection and maintenance of the covered area (including submittal of an annual report).

The following describes the scope of work in detail, including sampling and testing methods, quality control procedures, and the proposed schedule.

### **3.1 Groundwater Sampling and Testing Methods**

Groundwater sampling will be completed once every 3 years from the date of this letter (i.e., the fourth quarters of 2011 and 2014). During each groundwater sampling event, Honeywell will collect groundwater samples from the five monitoring wells located closest to the capped area: GW-18R, GW-19, GW-21, GW-22 and GW-23. The attached Site Plan identifies the monitoring well locations.

Honeywell will use dedicated disposable bailers to purge three well volumes of groundwater (or until the well is dry if this occurred prior to removal of three well volumes) from each well before sampling. Prior to purging each monitoring well, Honeywell will record the water level relative to the top of the well riser (or other reference point, if appropriate) with an electronic water level meter. Groundwater parameters such as pH, conductivity, temperature, and turbidity will be measured periodically during the groundwater purging process to verify that the parameters are stable prior to sample collection. Once purging is complete, the wells will be allowed to recharge before groundwater sample collection.

Each groundwater sample will be submitted to a New York-certified laboratory selected by Honeywell for analysis of nitrobenzene via United States Environmental Protection Agency (“USEPA”) Method 8270 and Target Analyte List (“TAL”) metals by USEPA Method 6000-7000 series. The disposable bailers will be used to collect the sample aliquots from the upper portion of the groundwater within the well to avoid disturbance of bottom sediments and minimize turbidity. The samples will not be filtered prior to metals analyses by the laboratory unless turbidity in the purged groundwater cannot be reduced below 50 nephelometric turbidity units (NTUs).

The groundwater samples will be labeled, logged on a chain-of-custody form, and placed in an ice-chilled cooler for shipment to the analytical laboratory. Purge water will be discharged

to the ground surface at each well location. The water will be discharged in a controlled fashion to promote infiltration and prevent surface runoff.

The results of the groundwater monitoring will be documented in the Annual Report prepared for the Site.

### **3.2 Inspection of Cap**

As required in Section 6.0 of the Site Management Plan (Remedial Engineering, 2005), which was incorporated as part of the Remedial Action Completion Report, the capped area of the RTA will be inspected by Honeywell on an annual basis. Inspections will be done during late summer or early fall (after annual mowing of the cap) to facilitate repair of the cover, if necessary. During inspections, Honeywell will look for the presence of uneven settling or other conditions that could compromise the integrity of the cover system. Appropriate repairs to the cap will be made as necessary based on conditions noted during the annual inspections. Details of the cap inspection will be included in the Annual Report.

### **3.3 Supplemental Actions**

NYSDEC has requested the collection and laboratory testing of representative samples of the stabilized waste material once every six years for TCLP testing for nitrobenzene. This sampling would require the need to drill or cut through and subsequently repair the surface soil cover and liner system during each sampling event. Honeywell proposes to review the results of the groundwater monitoring events completed during years 3 and 6 from the date of this letter. Supplemental actions (which may include stabilized material testing if appropriate) will be proposed if detected or estimated (i.e., “J” value) concentrations of nitrobenzene are identified in any of the groundwater samples in excess of the NY Class GA Standard of 0.4 ug/l. At that time, a supplemental work plan will be prepared and submitted within 60 days of receipt of the analytical results for NYSDEC review and approval that sets forth appropriate supplemental actions. If the groundwater analytical results continue to show no detectable concentrations of nitrobenzene, no waste samples will be collected.

### **3.4 Quality Control**

Quality control (“QC”) procedures will be utilized throughout the project. Use of disposable sampling equipment and decontamination of non-disposable equipment will be completed to minimize the potential for cross-contamination.

During the groundwater sampling events, QC samples consisting of duplicates, matrix spikes, matrix spike duplicates and trip blanks will be collected, as specified in the OM&M plan. The QC samples will be analyzed for the same constituents by the same test methods as the groundwater samples. Data validation will be completed for the groundwater sample analytical results in accordance with Honeywell requirements.

### **4.0 SCHEDULE**

NYSDEC will be contacted at least five days in advance of dates selected for the Annual Inspections and Groundwater Monitoring events. Annual Reports will be submitted by January 31<sup>st</sup> of each following year. Submitted reports will be certified by a licensed professional engineer that the soil cover has been maintained, institutional controls are still in place, unaltered and still effective, and that the remedy remains protective of public health and the environment.



**ATTACHMENT A**

**FIGURE**

MON WELL  
GW-20  
GROUND=588.07  
TOP OF CAP=588.27

LANDS N/F  
NIAGARA FRONTIER TRANSPORTATION AUTHORITY  
TMP# 122.17-1-1  
L.6434 P.43

**REFERENCES:**

- DEED DESCRIBING THE LANDS N/F OF "NIAGARA FRONTIER PORT AUTHORITY", FILED IN THE ERIE COUNTY CLERK'S OFFICE (E.C.C.O.) IN LIBER 6434 OF DEEDS, PAGE 43.
- DEED DESCRIBING THE LANDS N/F OF "FREEZER QUEEN FOODS, INC.", FILED IN ERIE COUNTY CLERK'S OFFICE (E.C.C.O.) IN LIBER 9547 OF DEEDS, PAGE 579.
- NCS MONUMENT INFORMATION.

MON WELL  
GW-21  
GROUND=584.73  
TOP OF CAP=586.14

N 1041144.28  
E 1070954.37

N63°56'28"W  
34.66'

N79°26'09"W  
106.97'

AREA:  
39,016 SQ.FT.  
0.896± ACRES

MON WELL  
GW-22  
GROUND=583.33  
TOP OF CAP=586.24  
SEAM OF CAP=585.89

6" CHAIN LINK FENCE

CC-2  
PK NAIL  
N: 1041161.17  
E: 1071297.92  
ELEV.=585.64'

CC-2  
PK NAIL  
N: 1041098.60  
E: 1071109.17  
ELEV.=585.70'

CHA #1  
PK NAIL  
N 1040999.22  
E 1071060.99  
ELEV.=585.52'

**LEGEND**

- MON WELL MONITORING WELL
- CAPPED REBAR PROPERTY MONUMENTATION (CAPPED REBAR)
- LIGHT LIGHT POLE
- HIGHWAY BOUNDARY LINE HIGHWAY BOUNDARY LINE
- PARCEL BOUNDARY LINE PARCEL BOUNDARY LINE
- CHAIN LINK FENCE CHAIN LINK FENCE
- EDGE OF PAVEMENT EDGE OF PAVEMENT

POINT OF BEGINNING

**NOTES:**

- PLANTIMENTS SHOWN HEREON ARE PREPARED BY CLOUGH, HARBOUR & ASSOCIATES, L.L.P. FROM AN APRIL 2005 FIELD SURVEY. REF: "ROCH" FB.75, P.67
- ELEVATIONS ARE BASED ON N.A.V.D. 1988 DATUM REFERENCING NATIONAL GEODETIC SURVEY MONUMENT MONUMENT O 388, ELEV. = 581.66', USING DIFFERENTIAL LEVELING TECHNIQUES.
- NORTH ORIENTATION AND COORDINATES SHOWN HEREON BASED ON N.Y.S. PLANE WEST ZONE, NAD 83, REFERENCING MONUMENTS:  
BUFFALO, R IMPROVEMENT CORP TX LEHR  
N: 1040703.604 N: 1030094.885  
E: 1076485.685 E: 1076447.880
- NO BOUNDARY DETERMINATION PERFORMED IN THE PREPARATION OF THIS PLAN.
- OWNER'S INFORMATION BASED ON TAX INFORMATION.
- ADDITIONAL FIELDWORK PERFORMED ON JULY 19, 2005. REF: "ROCH" FB.95, P.1

MON WELL  
GW-19  
GROUND=584.95  
TOP OF CAP=587.33

N43°36'11"E  
41.53'

N38°46'30"E  
45.15'

N49°20'15"E  
82.58'

N 1040832.61  
E 1070935.97

S20°15'55"E  
1.65'

S69°12'31"W  
100.31'

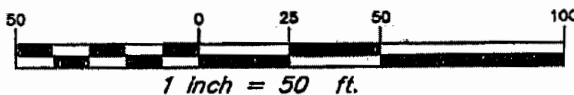
POINT OF COMMENCEMENT

LANDS N/F  
FREEZER QUEEN FOOS, INC.  
TMP# 132.06-1-1.1  
L.9547 P.579

CAPPED REBAR  
FND.  
N 1040172.57  
E 1072347.92

HIGHWAY BOUNDARY LINE  
**FUHRMANN  
BOULEVARD**

**GRAPHIC SCALE**



I HEREBY CERTIFY THAT THIS PLAN WAS COMPLETED ON JUNE 21 2005 USING LISTED REFERENCES AND FIELD NOTES FROM AN ACTUAL FIELD SURVEY COMPLETED ON JULY 19, 2005.

*David L. Standinger* 7/22/05  
DAVID L. STANDINGER NYSPLS. #050107 DATE

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Revisions	Drawn By	App'd. By	Date
	DJH	DLS	XX/XX/XX

Plan showing  
**INSTITUTIONAL CONTROL AREA**  
being a portion of property N/F  
**NIAGARA FRONTIER TRANSPORTATION AUTHORITY**  
City of Buffalo County of Erie State of New York

Scale: 1"=50'

Date: JULY, 2005

Sheet 1 OF 1

I:\13258\survey\acad\BASE-132582000.dwg; 7/22/2005 4:00:59 PM, 1403

Dwg: I:\13258\survey\acad\BASE-132582000.dwg

Xref: NONE

Dview: NONE

CHA Project Number: 13258