April 13, 2015

To: Holly Sammon, Onondaga County Public Library (1 bound)
    Samuel Sage, Atlantic States Legal Foundation (1 bound)
    Joseph J. Heath, Esq., Onondaga Nation (cover letter only)
    Diane Carlton, NYSDEC Region 7 (1 pdf)

Re: Letter of Transmittal – Semet Residue Ponds Repository Addition

The below document has been approved by the New York State Department of Environmental Conservation (NYSDEC) and is enclosed for your document holdings:


Sincerely,

John P. McAuliffe, P.E.
Program Director, Syracuse

Enc.

cc: Tracy A. Smith – NYSDEC
    Chris Fitch – Brown & Sanford
March 24, 2015

Mr. John P. McAuliffe, P.E.
Honeywell International, Inc.
301 Plainfield Road
Suite 330
Syracuse, NY 13212

Re: Semet Residue Ponds 2015 Demonstration Program Work Plan Addendum

Dear Mr. McAuliffe:

The New York State Department of Environmental Conservation (NYSDEC) has completed its review of the “Semet Residue Ponds 2015 Demonstration Program Work Plan Addendum” (work plan) submitted in your letter dated March 23, 2015. Based on our review, the work plan addendum is approved. If you have any questions, please contact me at 518-420-9796.

Sincerely,

Tracy A. Smith
Project Manager

cc: J. Gregg, NYSDEC
    M. Sergott, NYSDO
    J. Heath, Esq.
    H. Warner, NYSDE
    C. Calkins, OBG
    R. Nunes, USEPA
    D. Hesler, NYSDEC
    T. Joyal, Esq.
    C. Waterman
    J. Kyles, OBG
    T. Mongelli, USEPA
    J. Shenandoah
    A. Lowry
    P. Schultz, OBG
    S. Miller, Honeywell
Mr. Tracy Smith
Division of Environmental Remediation
Remedial Bureau D
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7013

Re: Semet Residue Ponds Site
Order on Consent: Index #D7-0005-01-09
Semet Residue 2015 Demonstration Program

Dear Mr. Smith:

This letter serves as the 2015 Demonstration Program Work Plan Addendum associated with the Semet Residue of the Semet Residue Ponds Site (Site) located in the Town of Geddes, Onondaga County, New York. This Demonstration Program is being conducted to support remedy selection for the Focused Feasibility Study (FFS) required under Administrative Consent Order (ACO) D7-0005-01-09 entered into by Honeywell International, Inc. (Honeywell), and the New York State Department of Environmental Conservation (NYSDEC) dated January 22, 2004.

The 2015 Demonstration Program Work Plan (WP) Addendum is intended to be an addendum to the Demonstration Program (2014) Work Plan Addendum that was submitted to NYSDEC in June 2014 and approved by NYSDEC on June 18, 2014. This WP incorporates comments received from the NYSDEC dated March 17, 2015 following the initial submittal on February 27, 2015. The Demonstration Program is anticipated to provide critical remedy refinements needed to advance remedy development and will further evaluate removal, dewatering of Semet Residue, shipment, and off-site thermal treatment options.

During the 2014 Demonstration Program, Semet Residue from Ponds 2 and 5 was successfully excavated and direct loaded into dump trailers. Direct loading operations were performed from August 1, 2014 to December 5, 2014. Downtime attributed to weather conditions was limited by a flexible work week (four 10-hour days). Observations, conclusions and recommendations following the 2014 Demonstration Program have been documented in the 2014 Demonstration Program Summary Report submitted to the NYSDEC on February 25, 2015.

A new dewatering system was purchased and intended to be utilized for dewatering trials as discussed in the Dewatering Trials Work Plan Addendum Letter submitted to the NYSDEC on October 23, 2014 and approved by NYSDEC on October 31, 2014. Although progress was made with the dewatering trial, there is additional work to be performed in 2015.

2015 Demonstration Program Objectives
As recommended in the 2014 Demonstration Program Summary Report, the objectives of the 2015 Demonstration Program are as follows:

- Refine the removal and direct loading processes at Ponds 1, 2, and 5 and identify and address constraints to dump trailer and equipment access.
- Evaluate scale-up of dewatering system in order to meet weekly production targets.
Refine scheduling and staging of dump trailers to meet increased weekly production targets.

- Evaluate potential downtime as a result of wind direction and weather conditions over a longer duration of time (36-week period).
- Evaluate trailer lining alternatives, methods and sizing to improve onsite and offsite loading efficiency.
- Continue to evaluate odor/emission management using spray covers over a longer duration.
- Evaluate alternative air monitoring locations along the southwest berm.
- Evaluate impacts to off-site thermal treatment options and potential for limitations on throughput due to material characteristics such as sulfur content, moisture content, calorific value, or others, as determined by the treatment facility.

**Demonstration Program Implementation**

Field work is anticipated to be similar to the field work performed as part of the approved 2014 Demonstration Program; the actual work performed will be weather and disposal vendor dependent. Removal of Semet Residue from the Ponds is expected to be done with a tracked, long reach excavator. Semet Residue from Ponds 1, 2, and 5 will be direct loaded to dump trailers. Semet Residue from Ponds 3 and 4 are intended to be dewatered by a dewatering screw conveyor and transferred to lined dump trailers using a belt conveyor. Aqueous sumps will be placed underneath the dewatering screw conveyor and piping will be utilized to direct aqueous phase to the sumps. The sumps will be drained back to the pond of origin during the trials. Dump trailers will be double-lined with plastic. If an alternate approach for lining the trailers is identified, approval from the NYSDEC will be obtained prior to implementation. Each dump trailer will contain approximately 23 tons of Semet Residue. Once the dump trailer is considered full based on estimated weights using portable axle scales, the Semet Residue surface in the dump trailer will be sprayed with a cover material (e.g., cement-based or fiber-based cover) and the plastic liners will be folded onto the surface completely encasing the Semet Residue. The dump trailer weather cover will then be secured. Decontamination of truck tires, as necessary, will be performed prior to off-site transport. Semet Residue will be shipped and managed off-site in accordance with applicable state and federal regulations. Excavation and loading operations are expected to be from March 30, 2015 (weather dependent) to November 25, 2015, with an approximate two and half-week shutdown for the New York State Fair (August 27 to September 7, 2015). A site plan indicating the expected excavation/loading areas and expected site traffic pattern is presented as Figure 1.

It is estimated that 10,000 tons of Semet Residue will be transported by truck to the selected off-site T&D facility for use as fuel at their cement kiln plant. This rate of production may vary depending upon weather constraints and the maintenance schedule of the cement kiln.

Equipment and materials purchased and rented for implementation of the 2015 Demonstration Program are intended to be similar to those utilized during the previous 2014 Demonstration Program.

**Health and Safety**

Health and safety procedures will be in accordance with the Honeywell Syracuse Portfolio Health and Safety Program (HSP2). Additionally, elements of the Harbor Brook/Wastebed B RI/FS Health and Safety Plan will be used during execution of this Work Plan Addendum along with specific Job Safety Analysis (JSA) requirements. The JSA to be implemented for the Demonstration Program is similar to the JSA implemented for the Expanded Remedy Selection Treatability Study (ERSTS) included as Appendix B of the ERSTS Work Plan Addendum.
Community Air Monitoring
The Community Air Monitoring Plan (CAMP) used for the 2014 Demonstration Program and Dewatering Trials will be implemented for the 2015 Demonstration Program. The TVOC action levels and perimeter limits for work are listed in the table below. Limits are based on 1-hour averages above the upwind (background) level as discussed in the 2014 Demonstration Program CAMP.

<table>
<thead>
<tr>
<th>TVOC Monitoring Action Levels and Perimeter Limits</th>
<th>Intrusive Work at Ponds 3 &amp; 4</th>
<th>Intrusive Work at Ponds 1, 2 &amp; 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigation Level</td>
<td>0.5 ppm</td>
<td>0.5 ppm</td>
</tr>
<tr>
<td>Control Level</td>
<td>0.7 ppm</td>
<td>0.9 ppm</td>
</tr>
<tr>
<td>Work Perimeter Limit</td>
<td>0.9 ppm</td>
<td>1.2 ppm</td>
</tr>
</tbody>
</table>

Decontamination
Daily decontamination of the workers may be required for which a decontamination trailer with showers is included.

Prior to demobilization from the site, construction, sampling, and processing equipment will be decontaminated using high pressure hot water at the decontamination pad constructed onsite adjacent to Pond 4.

Please contact Paul Schultz of O'Brien & Gere or me if you have any questions regarding this matter.

Sincerely,

John P. McAuliffe, P.E.
Program Director

ATTACHMENTS
Figure 1 - 2015 Demonstration Program Site Plan

Electronic only
cc: Robert Nunes, USEPA
    Tom Mongelli, USEPA
    Harry Warner, NYSDEC Region 7
    Mark Sergott, NYSDOH
    Margaret. A. Sheen, Esq., NYSDEC, Region 7
    Argie Cirillo, Esq., USEPA
    Brian D. Israel, Esq., Arnold & Porter
    Joseph Heath, Esq., (ec only)
    Thane Joyal, Esq., (ec only)
    Jeanne Shenandoah, Onondaga Nation
    Curtis Waterman, HETF
    Alma Lowry, (ec only)
    William Hague, Honeywell
    Steve Miller, Honeywell
    Christopher Calkins, O'Brien & Gere
    Paul Schultz, O'Brien & Gere
    Jim Kyles, O'Brien & Gere
STAGING FOR TRAILER STORAGE

DUMP TRAILERS EXPECTED TO BACK DOWN TO EXCAVATION / LOADING LOCATION

STAGING FOR LINER INSTALL

TURN AROUND

DEWATERING PROCESS AND SAMPLING AREA

STAGING FOR TRAILER STORAGE

GATE-TRUCK ENTRANCE

SCALE

DECON AREA

DECON AREA

EXPECTED SITE TRAFFIC PLAN

EXPECTED EXCAVATION AREA

PERIMETER AIR MONITORING BOUNDARY

APPROXIMATE POND AREAS CONTAINING SEMET RESIDUE

HONEYWELL SEMET RESIDUE PONDS SITE
GEDDES, NEW YORK

2015 DEMONSTRATION PROGRAM SITE PLAN

LEGEND

POND #1
POND #2
POND #3
POND #4
POND #5