Long-Term Stewardship Checklist
Former Honeywell International, Inc., 1100 Virginia Dr, Fort Washington PA 19034
EPA web fact sheet: http://www.epa.gov/reg3wcmd/ca/pa/webpages/pad002386761.html

A. Pre-Inspection Checklist

1. Review decision documents (Statement of Basis and Final Decision)

The Statement of Basis of August 24, 1994 proposed the construction and implementation of a groundwater recovery pump and treatment system to address groundwater contaminated with benzene, 1,1-dichloroethene (DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC). The Final Decision of December 16, 1994 outlines the final remedy of groundwater treatment and monitoring with institutional controls in more detail:

a. *Install two new recovery wells.*
b. *Conduct a pilot study to determine the most effective treatment method – UV/oxidation or air stripping.*
c. *Treat contaminated groundwater with air stripping or UV/oxidation.*
d. *Continue operation of the Interim Measures pump and treat system until the new groundwater pump and treat system is installed and operational.*
e. *Treat off-gases and treated groundwater from air stripping with granular activated carbon (GAC), or treat treated groundwater from UV/oxidation with GAC.*
f. *Determine if the in-place Interim Measures recovery wells should be used with the new pump and treat system or eliminated.*
g. *Develop and implement institutional controls providing for periodic monitoring and reporting of groundwater data to track compliance with established media cleanup standards.*
h. *Discharge treated groundwater to Pine Creek in accordance with the Clean Water Act NPDES regulations or to the sanitary sewer in accordance with limits required by the Delaware Valley Industrial Sewage Authority.*

2. Review Order

The Administrative Order on Consent of August 18, 1995 required the development of a Corrective Measures Implementation Work Plan and the construction of the remedy in accordance with this work plan and as described in the Final Decision. The Order also requires submittal of a Corrective Measure Assessment Report every five years to evaluate the past and projected future effectiveness of the Corrective Measure in attaining media cleanup objectives. Procedures for the selection of alternative or supplemental corrective measures and partial shutdowns or discontinuing all corrective measures are also described.

3. Review MNA assessment, Temporary System Shutdown Scope of Work, and Static Conditions Study Report

The MNA Assessment of July 17, 2012 provided evidence that natural attenuation processes were occurring in groundwater beneath the facility. The Temporary System Shutdown Scope of Work of October 5, 2012 outlined procedures for conducting a temporary shutdown of the groundwater pump-and-treat system. The Static Conditions Study Report of December 23, 2013 summarized sampling results collected during the shutdown period from October 2012 to October 2013 and proposes a further 2-year MNA study to increase confidence in trends established during the static conditions study that natural attenuation processes are occurring and MNA appears to be a viable remedial option for groundwater beneath the facility moving forward.

4. Review most recent annual CMI Report

2012 CME:

   a. *GW sampling event unremarkable. After treatment of over 60 million gallons of groundwater since 1997, shutdown of groundwater pump and treat system began in October 2012 to determine if MNA is a feasible remedial option moving forward since TCE concentrations in main source area are not projected to drop below Corrective Measures Objectives in the foreseeable future.*

5. Confirm status of financial assurance (EPA holds/maintains letter of credit).
   5/17/07 letter of credit of $2,492,442 is adequate and up-to-date.

6. Review EPA factsheet and update, as appropriate, including pertinent and working document and mapping links.

7. Arrange a site visit with the Facility, discussing the purpose of the visit and any files that should be made available for EPA review.

B. Site visit – *March 11, 2014*

1. Attendees

Name	**Affiliation**	**Phone**
Griff Miller	EPA	215-814-3407
John Heller	AMEC	609-631-2908

2. Introduction and purpose of visit

3. File review

Does the facility have a copy of:

   a. 8/24/94 SB? Y _x_ N ___ comments:
   b. 12/16/94 FDRTC? Y _x_ N ___ comments:
   c. 8/18/95 CMI Order? Y _x_ N ___ comments:
   d. 3/6/06 CA permit mod? Y _x_ N ___ comments:
   e. Current NPDES permit? Y ___ N _x_ comments: *facility has discharged directly to local sewer authority since mid-2000s*

4. Site walk
   a. Assess locations (IAW geospatial .pdf) and conditions of groundwater pump and treat system components:
      1. UV/oxidation lamps, GAC tanks, and other treatment components: *UV/oxidation in poor to fair condition but hasn't been used since 2009 EPA approval to bypass; GAC tanks and piping in good condition but has been shut down since October 2012 for MNA feasibility study; treatment building in good condition*
      2. Well network

Well	**Location**	**Condition**
MW1D	*Accurate*	*Good*
MW1R	*Accurate*	*Good*
MW2D	*Accurate*	*Good*

RW3 (pumping? y/n)	*Accurate*	*Good; not pumping*
RW4 (pumping? y/n)	*Accurate*	*Good; not pumping*
MW4D (pumping? y/n)	*Accurate*	*Good; not pumping*
MW5	*Accurate*	*Good*
MW6A	*Accurate*	*Good*
MW7	*Accurate*	*Good*
MW7D	*Did not visit*	*Did not visit*
MW8A	*Accurate*	*Good*
MW8D	*Did not visit*	*Did not visit*
MW9D	*Accurate*	*Good*
MW10	*Did not visit*	*Did not visit*
MW15	*Accurate*	*Good*
MW16	*Did not visit*	*Did not visit*
MW17	*Did not visit*	*Did not visit*
MW19	*Did not visit*	*Did not visit*
MW20	*Did not visit*	*Did not visit*
MW23	*Did not visit*	*Did not visit*
MW25	*Did not visit*	*Did not visit*
MW26	*Accurate*	*Good*
MW28	*Accurate*	*Good*

5. Questions, discussion, and wrap-up
   a. In light of potential feasibility of MNA as the future remedy for this facility, may the components of the groundwater pump and treat system be decommissioned? *Since the UV/oxidation system became an inefficient means of removing the smaller mass of contamination remaining in groundwater and has been idle since 2009, EPA agrees that the UV/oxidation system and its appurtenances may be decommissioned and removed from the facility; however, EPA requires that the GAC treatment system and well pumps remain in place in the event that potential future changes in site conditions warrant a re-start of the pump and treat system.*
   b. In light of potential feasibility of MNA as a future remedy, might the financial assurance required for this facility be reduced? *Yes, and as a result of Honeywell's March 10, 2014 letter to EPA requesting that financial assurance be reduced to $300,000 – an amount projected to conservatively cover 5 years of semi-annual monitoring under MNA – EPA approved reduction of financial assurance for this facility in a letter dated April 3, 2014.*