

101 Columbia Road Morristown, NJ 07962-1139 Tel: 973-455-4131 Fax: 973-455-3082

January 22, 2015

Mr. Edward Hammerberg
Technical Specialist/RCE Supervisor
Waste Division and Utilization Program
Maryland Department of the Environment
1800 Washington Boulevard, Suite 645
Baltimore, MD 21230

Subject: Transmittal of Quarterly Site Progress Report, Fourth Quarter 2014

2000 Race Street Site, Baltimore, Maryland

Dear Mr. Hammerberg:

Please find attached the Fourth Quarter 2014 Site Progress Report for the 2000 Race Street Site, Baltimore, Maryland. This document is provided on behalf of Honeywell and the Mayor and City Council of Baltimore pursuant to the requirements of Section III.A of the 2000 Race Street Site Consent Order (effective date of May 23, 2007).

If you have any questions or require additional information, please do not hesitate to contact me at 973-455-4131.

Very truly yours,

HONEYWELL INTERNATIONAL INC.

Christopher M. French, R.G., C.E.G.

Manager, Remediation & Evaluation Services

Attachment

cc: Mr. Ed Dexter (MDE)

Mr. Michael Daneker (Arnold & Porter) Ms. Dawn Lettman (City of Baltimore)

Mr. Art Shapiro (City of Baltimore)

Mr. Gary Walters (ERM)

# Fourth Quarter 2014 Race Street Quarterly Site Progress Report, 2000 Race Street, Baltimore, Maryland

Prepared for

Honeywell International Inc. The Mayor and City Council of Baltimore, Maryland

January 2015



15010 Conference Center Drive Suite 200 Chantilly, VA 20151

### **Contents**

| Sectio | on  | Page |
|--------|---|------|
| 1.     | Introduction  | 1    |
| 2.     | Quarter in Review   | 1    |
| 3.     | Upcoming Work and Submittals during the First Quarter of 2015 | 2    |
| 4.     | Schedule  | 2    |
| Apper  | ndixes  |      |
| Α      | Site Inspection Reports                                       |      |

EN0115151050WDC

# Fourth Quarter 2014 Race Street Quarterly Site Progress Report, 2000 Race Street, Baltimore, Maryland

#### 1. Introduction

Honeywell International Inc. (Honeywell) and the Mayor and City Council of Baltimore (City) are submitting this Quarterly Site Progress Report for the 2000 Race Street Site (Site) pursuant to the May 23, 2007, Administrative Consent Order (Consent Order) between the Maryland Department of the Environment (MDE), Honeywell, and the City. Quarterly Site Progress Reports will be submitted to MDE for the duration of the Consent Order. As specified within Section III.F of the Consent Order, the reports will identify the following information:

- Work completed and documents submitted to MDE in the preceding quarter;
- A schedule and submittals for the upcoming quarter; and
- Any delays, modifications, or changes anticipated in the upcoming quarter.

This report covers Site-related activities conducted under the Consent Order during the fourth quarter of 2014, from October 1 through December 31, 2014.

The Site is located at 2000 Race Street, in Baltimore, Maryland (ZIP Code 21230). It occupies approximately 10.3 acres and is bounded on the north by the Baltimore Gas and Electric (BGE) Spring Gardens facility, on the south by Swann Park, on the east by Race Street, and on the west by the Middle Branch of the Patapsco River. In addition, two elevated spans of Interstate 95 (I-95) oriented from east to west overlie the Site on the northern half of the property. A chain-link security fence is present at the perimeter of the Site. The Site has no onsite building structures and is currently vacant.

Controlled hazardous substances (CHS) are contained on the Site and covered with an engineered cap consisting of the following materials from top to bottom: asphalt, gravel base, and compacted clay. Cap maintenance is ongoing. Additional information regarding the Site is provided in several documents, including the May 23, 2007, Consent Order; the "Site Characterization Work Plan," dated September 2007; the "Site Characterization Report," dated September 2009; the "Near Shore Investigation Report," dated December 2009; and the "Interim Remedial Measures Assessment Investigation and Pilot Test Report," dated July 2012.

#### Quarter in Review

Site-related activities performed during the fourth quarter of 2014 include the following:

- October 2: City's contractor completed fence repairs and vegetation removal;
- October 11: Inclinometer readings obtained;
- October 15: First half 2014 bridge monitoring report submitted to MDE;
- October 23: Monthly Site status inspection (Appendix A);
- October 28: Monthly Site status call with MDE;
- October 30: Third quarter 2014 site progress report submitted;
- November 10: City's contractor completed crack sealing and fence repairs;
- November 20: Monthly Site status inspection (Appendix A);

EN0115151050WDC

- December 2: Monthly Site status call with MDE;
- December 18: Monthly Site status inspection (Appendix A); and
- December 29: Completed surface cover and erosion repairs along the BGE Spring Gardens fence line.

Interim remedial measure treatability evaluations progressed during the quarter with a focus on geochemical modeling and treatability testing.

## Upcoming Work and Submittals during the First Quarter of 2015

The following activities and submittals are anticipated to occur in the upcoming quarter:

- January, February, March: Conduct monthly Site status inspections and participate in monthly Site status calls with MDE;
- Perform cap maintenance consisting of milling and paving of the settlement area on west side of site;
- Perform quarterly inclinometer readings;
- Submit second half 2014 bridge monitoring report to MDE; and
- Submit the fourth quarter 2014 site status report to MDE.

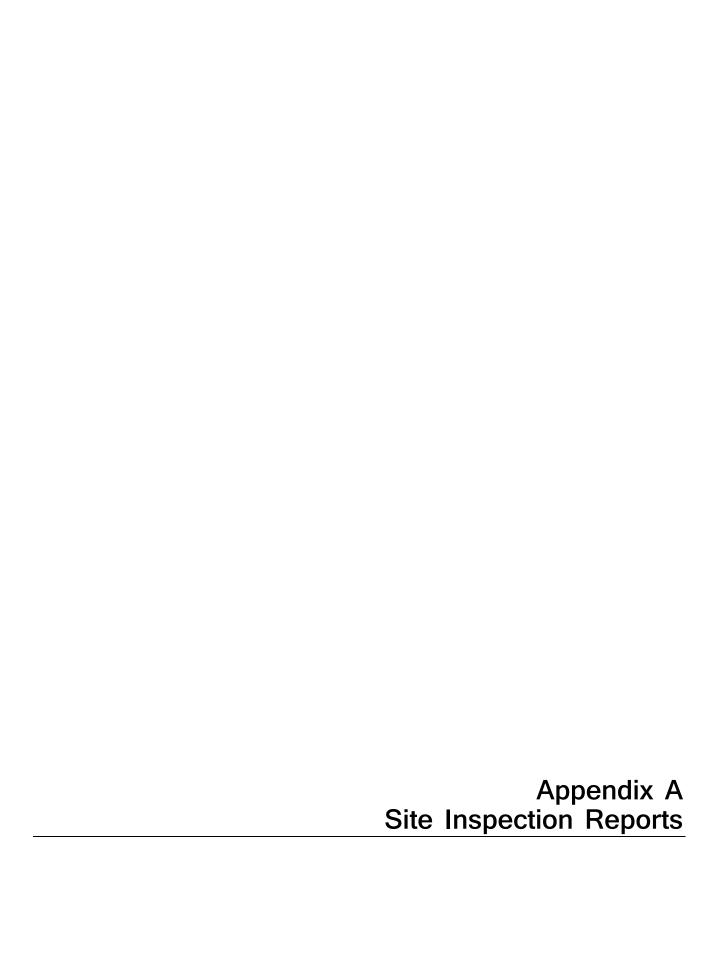
Continue IRM treatability evaluations with a focus on permeability testing and hydrodynamic modeling calculations.

#### 4. Schedule

A schedule of Consent Order activities anticipated during the first quarter of 2015 is provided below.

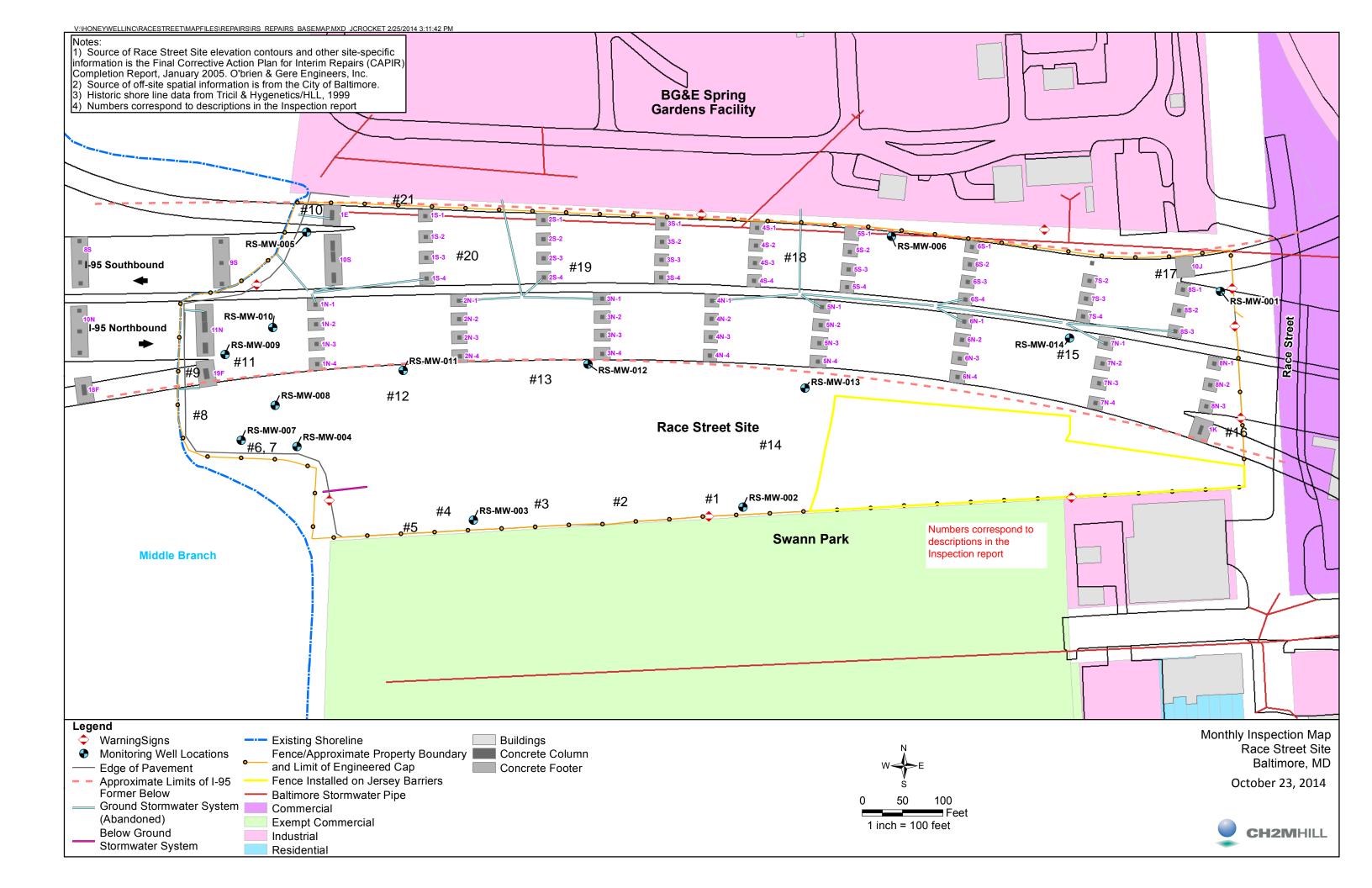
| Milestone  | Anticipated Date |
|--|------------------|
| January 2015   |                  |
| Perform monthly Site status inspection                               | 1-22-15          |
| Submit fourth quarter 2014 Site Status Report                        | 1-30-15          |
| February 2015  |                  |
| Perform monthly Site status inspection                               | TBD              |
| Perform surface cover repair of settlement area                      | TBD              |
| Submit Bridge Monitoring Report (2nd half of 2014 monitoring period) | TBD              |
| March 2015   |                  |
| Perform monthly Site inspection                                      | TBD              |
| Perform quarterly inclinometer readings                              | TBD              |
|  |                  |

EN0115151050WDC



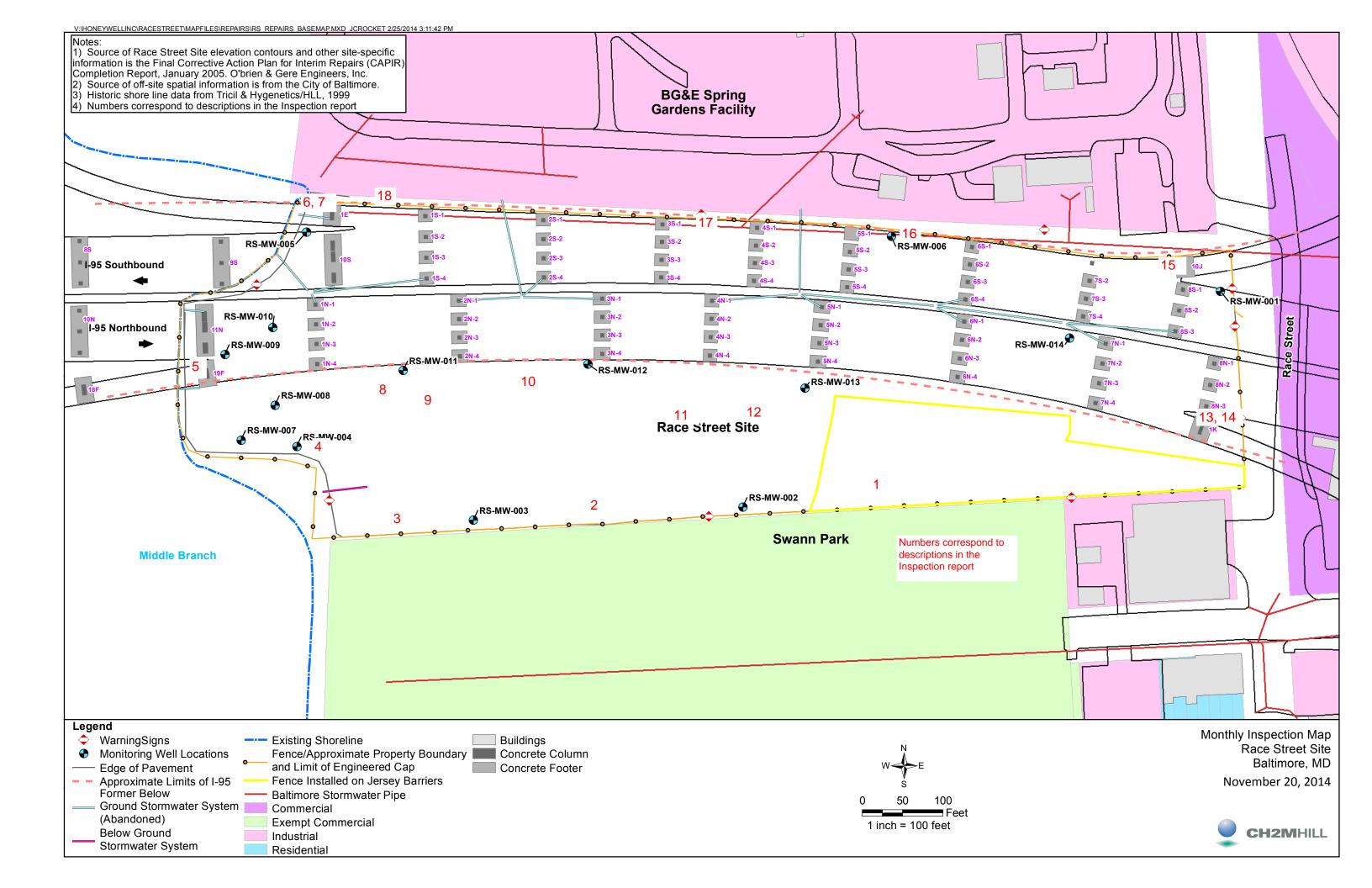
| Inspector:   | Bill Morris   | Date of Inspection:                    | 23-Oct-14                          |   |
|--|---|--|------------------------------------|---|
| Title:   | Environmental Engineer  | Date of Last Inspection:               | 24-Sep-14                          |   |
| Organization:  | CH2M HILL   | Weather:                               |                                    | Cool, Cloudy  |
| Site Inspection  | Results   |  |                                    |   |
| Task   | Observations  | Actions Taken                          | Date Completed                     | Comments/Additional Observations  |
| 1. General   |   |  |                                    |   |
| Inspect site for presence of surface debris. Identify type, approximate volume of debris, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist).        | None  | None                                   | NA                                 | NA  |
| Inspect site for presence of vegetation. Identify estimated amount and location of vegetation via description or on Site Plan (attach to Monthly Site Inspection Checklist)                  | None  | None                                   | NA                                 | NA  |
| 2. Interstate 95 Footings and Joints   | l.  | I                                      | 1                                  | lara  |
| Inspect around pier footings for settlement. Identify settlement off-set from grade and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)               | None  | None                                   | NA                                 | NA  |
| Inspect around pier footings for joint failure. Identify location via description or on Site Plan (attach to Monthly Site Inspection Checklist)  | None  | None                                   | NA                                 | NA  |
| 3. Engineered Cap  | 14 40 40 44 411 4 11 11   | IA : 1 ce 16 :                         | 1                                  |   |
| Inspect cap for alligator cracking. Identify estimated area of cracking and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)                           | 1, 12, 13, 14: Alligator cracking in the asphalt surface.   | Areas identified for site maintenance. |                                    | Surface cover maintenance to be performed during Q4 2014.   |
| Inspect cap for holes. Identify number of holes, width and depth, and location via description of on   | 6, 8, 11: Small hole in the asphalt surface; no vegetation present. 21. Hole at the top of the slope facing the BGE facility on the outside of the fence. | Areas identified for site maintenance. |                                    | Surface cover maintenance to be performed during Q4 2014. Item 21 to be addressed as part of surface cover maintenance.                                     |
| Inspect cap for cracks less than 0.5 inches wide.<br>Note number of cracks. Identify location of cracks<br>via description or on Site Plan (attach to Monthly<br>Site Inspection Checklist). | 2, 3: Surface cracks in the asphalt; no vegetation present.   | Areas identified for site maintenance. | First two weeks of October 2014    | Surface cover maintenance to be performed during Q4 2014. Vegetation has been removed from all crack features on the site in preparation for crack sealing. |
| Inspect cap for cracks greater than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).       | Surface cracks near asphalt slope facing<br>Swann Park. Vegetation that was growing<br>in the cracks has been removed.                                    | Areas identified for site maintenance. | First two weeks<br>of October 2014 | Surface cover maintenance to be performed during Q4 2014. Vegetation has been removed from all crack features on the site in preparation for crack sealing. |
| Inspect cap for any signs of ponding of water  | 18, 19, 20: Water ponding on the asphalt surface.   | Areas identified for site maintenance. |                                    | Items to be addressed as part of the surface cover maintenance activities.  |
| Inspect shorefront embankment for evidence of erosion or releases  | <ul><li>10: Localized erosion near the storm drain outfall.</li><li>16: Localized erosion along of the asphalt slope.</li></ul>                           | Areas identified for site maintenance. |                                    | Items to be addressed as part of the surface cover maintenance activities.  |
| Identify any other observations related to the condition of the cap and potential for cap damage   | 5: Minor stress crack at the top of the slope.  | Areas identified for site maintenance. |                                    | Items to be addressed as part of the surface cover maintenance activities.  |
| 4. Fence   | <u> </u>  | l                                      | l .                                |   |
|  |   |  |                                    |   |

| Site Inspection   | Results   |                                      |                |   |
|---|---|--------------------------------------|----------------|---|
| Task  | Observations  | Actions Taken                        | Date Completed | Comments/Additional Observations                      |
| Inspect fence for holes. Note number of holes. Identify location of holes via description or on Site Plan (attach to Monthly Site Inspection Checklist).  | None  | None                                 | NA             | NA  |
| Inspect fence to determine if there is any erosion compromising the integrity of the fence  | None  | None                                 | NA             | NA  |
| Inspect fence to determine if barbed wire is in good condition  | None  | None                                 | NA             | NA  |
| Inspect gates, chains, and locks for damage   | None  | None                                 | NA             | NA  |
| Inspect fence to determine if any vegetation is damaging or otherwise compromising fence  | None  | None                                 | NA             | NA  |
| Inspect fence to determine if there is any burrowing beneath fence  | None  | None                                 | NA             | NA  |
| Identify any other observations related to the condition of the fence and potential for fence damage (e.g., points of weakness, corrosion)  | None  | None                                 | NA             | NA  |
| 5. Aboveground Storm water Conveyance Syste   |   |                                      | <b>1</b>       |   |
| Inspect aboveground storm water conveyance system including piping, downspouts, and drain in southwest corner of site for proper operation  6. Vandalism  | 9, 17: Missing or disconnected storm water downspouts.  | MDTA maintenance activities resumed. | 9/11/2014      | MDTA is performing bridge maintenance during Q4 2014. |
| Inspect site for any vandalism including any dumped material on-site and damage to monitoring wells   | None  | None                                 | NA             | NA  |
| Identify any other observations related to vandalism on the site  | None  | None                                 | NA             | NA  |
| 7. Signage  |   | 1                                    | _l             | <u> </u>  |
| Inspect warning signs on exterior perimeter of fence to determine condition and readability. Identify number of signs removed/damaged/unreadable and locations via description or Site Plan (attach to Monthly Site Inspection Checklist) | None  | None                                 | NA             | NA  |
| 8. Miscellaneous Items  |   |                                      |                |   |
| Any interaction with people on or adjacent to the site? If yes, identify who, title, organization, contact information, and content of interaction  | Personnel onsite during the visit included Jackie Balducci of ERM, Jim Leizear of MDE, and Bill Hobson of MRCE. |                                      |                |   |
| Other Comments/Observations?  | 7,15: Bent bollards.  |                                      |                |   |



| Inspector:   | Bill Morris   | Date of Inspection:                    | 20-Nov-14      |   |
|--|---|--|----------------|---|
| Title:   | Environmental Engineer  | Date of Last Inspection:               | 23-Oct-14      |   |
| Organization:  | CH2M HILL   | Weather:                               | Cold, overcast |   |
| Site Inspection  | Results   |  |                |   |
| Task   | Observations  | Actions Taken                          | Date Completed | Comments/Additional Observations  |
| 1. General   | Observations  | Actions raken                          | Date Completed | Comments/Additional Observations  |
| Inspect site for presence of surface debris. Identify type, approximate volume of debris, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist).        | None  | None                                   | NA             | NA  |
| Inspect site for presence of vegetation. Identify estimated amount and location of vegetation via description or on Site Plan (attach to Monthly Site Inspection Checklist)                  | None  | None                                   | NA             | NA  |
| 2. Interstate 95 Footings and Joints   | I   | Te -                                   |                |   |
| Inspect around pier footings for settlement. Identify settlement off-set from grade and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)               | None  | None                                   | NA             | NA  |
| Inspect around pier footings for joint failure. Identify location via description or on Site Plan (attach to Monthly Site Inspection Checklist)  | None  | None                                   | NA             | NA  |
| 3. Engineered Cap  |   |  |                |   |
| Inspect cap for alligator cracking. Identify estimated area of cracking and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)                           | 8-12: Alligator cracking in the asphalt surface.  | Areas identified for site maintenance. |                | Surface cover maintenance to be performed during Q4 2014.   |
| Inspect cap for holes. Identify number of holes, width and depth, and location via description of on Site Plan (attach to Monthly Site Inspection Checklist)                                 | 4: Small hole in the asphalt surface; no vegetation present.  17, 18: Small hole along side slope facing the BG&E facility.   | Areas identified for site maintenance. |                | Surface cover maintenance to be performed during Q4 2014.Vegetation control measures performed during October 2014. |
| Inspect cap for cracks less than 0.5 inches wide.<br>Note number of cracks. Identify location of cracks<br>via description or on Site Plan (attach to Monthly<br>Site Inspection Checklist). | None  | None                                   | NA             | NA  |
| Inspect cap for cracks greater than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).       | 16: Crack in the asphalt surface  | Area identified for site maintenance   |                | Surface cover maintenance to be performed during Q4 2014.   |
| Inspect cap for any signs of ponding of water  | None  | None                                   | NA             | NA  |
| Inspect shorefront embankment for evidence of erosion or releases  | None  | None                                   | NA             | NA  |
| Identify any other observations related to the condition of the cap and potential for cap damage   | 3: localized hole along cap side slope.<br>6, 7: Vegetation growth and evidence of<br>erosion on the slope in the northwestern<br>corner of the site beyond the fence line. | Areas identified for site maintenance  |                | 3, 6 and 7: Items will be addressed as part of surface cover maintenance to be performed during Q4 2014.            |
| 4. Fence   | <del>,</del>  | <del>_</del>                           |                |   |
| Inspect fence for holes. Note number of holes. Identify location of holes via description or on Site Plan (attach to Monthly Site Inspection Checklist).                                     | None  | None                                   | NA             | NA  |

| Site Inspection   | Results  |   |                |   |
|---|--|---|----------------|---|
| Task  | Observations   | Actions Taken   | Date Completed | Comments/Additional Observations  |
| Inspect fence to determine if there is any erosion compromising the integrity of the fence  | 13, 14: Localized erosion from the western slope of cap.   | Area identified for site maintenance.                             |                | Item has been added to the list of repairs to be conducted during Q4 2014.                      |
| Inspect fence to determine if barbed wire is in good condition  | None   | None  | NA             | NA  |
| Inspect gates, chains, and locks for damage   | None   | None  | NA             | l<br>NA   |
| Inspect fence to determine if any vegetation is damaging or otherwise compromising fence  | Vegetation growth along the fence starting<br>at the jersey barrier partition and extending<br>to the east in the Swann Park parking area.<br>Vegetation was not removed during<br>maintenance activities in Q3 2014 | Area identified for site maintenance                              |                | Surface cover maintenance to be performed during Q4 2014.                                       |
| Inspect fence to determine if there is any burrowing beneath fence  | None   | None  | NA             | NA  |
| Identify any other observations related to the condition of the fence and potential for fence damage (e.g., points of weakness, corrosion)  | None   | None  | NA             | NA  |
| 5. Aboveground Stormwater Conveyance System   | 1  |   |                |   |
|   | Localized damaged asphalt curb.     15, 19: Missing or disconnected storm water downspout  | 5, 15, 19: Notify MdTA of the disconnected stormwater downspouts. | 25-Nov-14      | Area identified for site maintenance. Surface cover maintenance to be performed during Q4 2014. |
| 6. Vandalism  |  |   |                |   |
| Inspect site for any vandalism including any dumped material on-site and damage to monitoring wells   | None   | None  | NA             | NA  |
| Identify any other observations related to vandalism on the site  | None   | None  | NA             | NA  |
| 7. Signage  |  |   | •              |   |
| Inspect warning signs on exterior perimeter of fence to determine condition and readability. Identify number of signs removed/damaged/unreadable and locations via description or Site Plan (attach to Monthly Site Inspection Checklist) |  | None  | NA             | NA  |
| 8. Miscellaneous Items  |  |   | <u> </u>       |   |
| Any interaction with people on or adjacent to the site? If yes, identify who, title, organization, contact information, and content of interaction  | Josh Floyd of ERM and Jim Leizear of MDE v   | were on site for the monthly visit.                               |                |   |
| Other Comments/Observations?  |  |   |                |   |
|   |  |   |                |   |



Date of Inspection:

18-Dec-14

Bill Morris

Inspector:

| 1  |  | '                             |                                |  |
|--|--|-------------------------------|--------------------------------|--|
| Title:   | Environmental Engineer   | Date of Last Inspection:      | 20-Nov-14                      |  |
| Organization:  | CH2M HILL  | Weather:                      | Sunny, clear, cold, light wind |  |
| Site Inspection  | Populto  |                               |                                |  |
| Task   | Observations   | Actions Taken                 | Date Completed                 | Comments/Additional Observations   |
| 1. General   | Observations   | Actions Taken                 | Date Completed                 | Comments/Additional Observations   |
| Inspect site for presence of surface debris. Identify type, approximate volume of debris, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist).  | None   | None                          | NA                             | NA   |
| Inspect site for presence of vegetation. Identify estimated amount and location of vegetation via description or on Site Plan (attach to Monthly Site Inspection Checklist)            | None   | None                          | NA                             | NA   |
| 2. Interstate 95 Footings and Joints   |  |                               |                                |  |
| Inspect around pier footings for settlement. Identify settlement off-set from grade and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)         | None   | None                          | NA                             | NA   |
| Inspect around pier footings for joint failure. Identify location via description or on Site Plan (attach to Monthly Site Inspection Checklist)  | None   | None                          | NA                             | NA   |
| 3. Engineered Cap  |  |                               |                                |  |
| Inspect cap for alligator cracking. Identify estimated area of cracking and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)                     | 12: Localized alligator cracking in the asphalt south of RS-MW-012.  | None                          | NA                             | Area will be evaluated as part of 2015 surface cover maintenance.  |
| Inspect cap for holes. Identify number of holes, width and depth, and location via description of on Site Plan (attach to Monthly Site Inspection Checklist)                           | 3: Small hole in cap side slope. 10,11: localized alligator cracking; asphalt sealant has been applied to cracks 4: Small hole near monitoring well RS-MW-007. | 11,12: Area milled and paved. | 12/19/2014                     | 3, 4, and 12: Areas will be repaired during the Q1 2015 surface cover maintenance.   |
| Inspect cap for cracks less than 0.5 inches wide.  Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).   | None   | None                          | NA                             | NA   |
| Inspect cap for cracks greater than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist). | Localized crack on the side slope.     Localized gap near pile cap.  | None                          | NA                             | crack was sealed during Q4 2014 surface cover<br>maintenance. Crack and gap will be evaluated for<br>2015 surface cover maintenance. |
| Inspect cap for any signs of ponding of water  | 6, 7, 9: Localized settlement in the asphalt surface and limited ponding following precipitation events.   | None                          | NA                             | These areas will be repaired during the Q1 2015 surface cover maintenance.   |
| Inspect shorefront embankment for evidence of erosion or releases  | None   | None                          | NA                             | NA   |
| Identify any other observations related to the condition of the cap and potential for cap damage   | None   | None                          | NA                             | NA   |

| Site Inspection   | Results                                     |                                    |                |   |
|---|---|------------------------------------|----------------|---|
| Task  | Observations                                | Actions Taken                      | Date Completed | Comments/Additional Observations                                      |
| 4. Fence  | Obcorvations                                | 7 totione Takon                    | Date Completed | Commenter (datable Coorvations  |
| Inspect fence for holes. Note number of holes. Identify location of holes via description or on Site Plan (attach to Monthly Site Inspection Checklist).  | None  | None                               | NA             | NA  |
| Inspect fence to determine if there is any erosion compromising the integrity of the fence  |   |                                    |                |   |
| Inspect fence to determine if barbed wire is in good condition  | None  | None                               | NA             | NA  |
| Inspect gates, chains, and locks for damage   |   |                                    |                |   |
| Inspect fence to determine if any vegetation is damaging or otherwise compromising fence  | None  | None                               | NA             | NA  |
| Inspect fence to determine if there is any burrowing beneath fence  | None  | None                               | NA             | NA  |
| Identify any other observations related to the condition of the fence and potential for fence damage (e.g., points of weakness, corrosion)  | 8: Localize erosion                         | None                               | NA             | 8: repair will be performed during Q1 2015 surface cover maintenance. |
| 5. Aboveground Stormwater Conveyance System   | 1   |                                    | l .            |   |
| Inspect aboveground stormwater conveyance system including piping, downspouts, and drain in southwest corner of site for proper operation   | 1: Localized damaged asphalt curb.          | None                               | NA             | Area will be repaired as part of Q1 2015 surface cover maintenance.   |
| 6. Vandalism  |   |                                    |                |   |
| Inspect site for any vandalism including any dumped material on-site and damage to monitoring wells   | None  | None                               | NA             | NA  |
| Identify any other observations related to vandalism on the site  | None  | None                               | NA             | NA  |
| 7. Signage  |   |                                    |                |   |
| Inspect warning signs on exterior perimeter of fence to determine condition and readability. Identify number of signs removed/damaged/unreadable and locations via description or Site Plan (attach to Monthly Site Inspection Checklist) | None  | None                               | NA             | NA  |
| 8. Miscellaneous Items  | 1   | 1                                  | I              | 1   |
| Any interaction with people on or adjacent to the site? If yes, identify who, title, organization, contact information, and content of interaction  | Jackie Balducci of ERM and Jim Leizear of M | MDE were on site for the monthly s | site visit.    |   |
| Other Comments/Observations?  |   |                                    |                |   |

