MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE MANAGEMENT AND RADIOLOGICAL PROTECTION DIVISION
ANNUAL HYDROGEOLOGICAL CHECKLIST
CIF5-FY18

FACILITY: Arbor Hills Landfill

STAFF: Brett W. Coulter

DATE: 12/20/2018

Part A: Sampling

1. *How many monitoring wells are included in the approved hydrogeological monitoring plan?* **25**
   a) How many wells are detection monitoring wells? **25**
   b) How many wells are assessment monitoring wells? **0**
   c) How many wells are corrective action/compliance monitoring wells? **0**
   d) What other wells are included in the plan? **12 piezometers**

2. *How many wells on site are not currently monitored and should be abandoned?* **12 Monitor wells should be reviewed for abandonment since they are duplicative (they were part of Republic/Arbor Hills East monitoring)**

3. *Provide the total number of wells that had a violation noted, in the following table:*

Visible	*Labeled*	*Locked*	*Capped*	*Vented*
*1***	*2**	*0*	*1**	*0*

** MPB-264RR didn't have a manhole cover and needs labelling.*
*** MPB-399 was buried due to the raising of the nearby access road connected to recent construction activities.*

4. *Has a sampling event conducted by the facility been observed in the last year?*
   ☐ *Yes* ☒ *No* *Date:*

   If yes, attach completed CIF13-FY18 Sampling Compliance Checklist.

5. *What was the date of the last split-sampling event at this facility?* **N/A**

6. *Were significant differences observed between the facility's data and the WMRPD's data?*
   N/A ☐ *Yes* ☐ *No*

   If yes, please comment on the parameters and the magnitude of these differences and on what lab the facility uses.

Part B: Monitoring Results

1. *Has the facility submitted timely and complete monitoring reports during the past year?*
   ☒ *Yes* ☐ *No* *Comments:*

2. *Summarize exceedances and issues noted on attached "Summary of Statistical Exceedances" form:* ***There is a new HMP in place due to the AD purchase of AHE last year. This resulted in a revision of the statistical plan to address detections (9/18), therefore, additional data is necessary to better evaluate SSIs. However, prior to the approval of the revised HMP, SSIs were noted along the North-Northwest portion of the landfill. ASD due to construction activities was accepted.***

3. *What actions have been taken or will be taken to address the above exceedances for which there has not been adequate demonstration provided?* **None at this time. Adequate demonstration was provided, and concentrations do not exceed MDEQ Part 201 Criteria (with the exception of TDS at one location). Future data for SSIs in the NNE area will evaluated closely as construction is completed in this area.**

4. *What sources other than landfill units have caused apparent statistical increases at the facility, per approved alternate source demonstrations (e.g., well materials, natural variations in water quality, grout contamination, off-site sources, run-off, etc.)?* **Analytical anomalies, construction activities, natural variations in water quality**

Part C: Hydrogeologic Monitoring Plan

1. *What is the title and date of the currently approved hydrogeologic monitoring plan?* **Hydrogeologic Monitoring Plan (September 2018)**

2. *Does the facility consist of:*
   ☐ *Monitorable Units*
   ☐ *Unmonitorable Units*
   ☒ *Both*

3.. *Do any statistical limits exceed Part 201 criteria?*
   ☒ *Yes* ☐ *No* **Total dissolved solids exceeded Part 201 criteria due to construction activities.**

4. *If answer is yes to Item 3, is (are) exceedances of Part 201 justified by local conditions?*
   ☒ *Yes* ☐ *No* *Comments:* **Construction activities likely have created the elevated TDS locally.**

6. *Have any statistical limits changed since last year that might indicate rolling background? (This question does not apply to control charts.)*
   ☐ *Yes* ☒ *No* *Comments:* **Statistical limits have been updated with additional data as permitted by Part 115 on request.**

Part D: Remedial Action

1. *Does the facility have groundwater contamination above background?*
   ☒ *Yes* ☐ *No* *Which parameters? TDS*

2. *Does the facility have groundwater contamination above Part 201 criteria?*
   ☒ *Yes* ☐ *No* *Which parameters? TDS*

3. *Does the facility have an approved Remedial Action Plan (RAP)?* ☒ *Yes* ☐ *No*
   What is the date this document was approved? **6/90**

4. *If yes to number 3, then you should fill out CIF12-FY18 Corrective Action Monitoring and Maintenance Checklist.*

Revised 4/2018