

PUNCH LIST FOR ATTACHMENT 24
Environmental Monitoring Program Sampling and Analysis Plan (SAP)

The Dow Chemical Company, Michigan Operations – Midland Plant
Draft Amendment 14 Major Operating License Modification

February 25, 2013

These are changes that the Department of Environmental Quality, Office of Waste Management and Radiological Protection is planning to require Dow to make to the draft SAP before it is finalized. Some of the changes identified below are still under evaluation.

- 1) Page 2.3. Typo in first paragraph. Final text should read "...documented in the field data sheet."
- 2) Page 2.4. Typo in Paragraph 2.3.2. Delete "or" in step 3.
- 3) Page 2.6., Paragraph 2. Description of or reference to the use of "low flow" sampling for metals (in addition to 0.45 um filtration) should be included in this section.
- 4) Page 3.1., Section 3.1. This section needs to be clarified to indicate that all wells (including those inside the plant site) will be locked and that collision protection will be provided for wells as appropriate.
- 5) Page 3.1., Section 3.1.1. This section needs to be clarified to indicate that pressure readings will be measured and recorded to 0.01 foot (consistent with the License language).
- 6) Page 3.2., Section 3.1.2. Recommend adding text to this section that indicates that water level meters that have been used in highly contaminated wells will not be used on wells that monitor uncontaminated groundwater.
- 7) Page 3.3., Section 3.3.1. This section should be expanded/clarified to address monitoring wells other than 2" diameter for fixed volume purging.
- 8) Page 3.4., Section 3.3.1.2. The last sentence in this section appears to be out of place.
- 9) Page 4.1., Section 4.1., Paragraph 2. This paragraph should be expanded to include procedures for lift stations that are plumbed for sampling.
- 10) GTRA. Figure 1 – Wells 8264 and 8265 need to be added to this figure.
- 11) GTRA. New Figure 1A is needed that shows all the hydraulic monitoring wells.
- 12) East Side RGIS. Table 2-B.
 - Deep purge well needs to be added to the chemical characterization program.
 - Verify Cluster AW is upstream of the Dow dam.
 - Two day evaluation text needs to be changed to reflect evaluation of instantaneous readings vs. the Pro-Active Response level.
 - Deep piezometers above the Dow dam and at LS-5 need to be added to Table 2-B.
 - Include evaluation language in Table 2-B.
 - Show locations of deep piezometers and purge well on Figure 5.
 - East Side RGIS Figure 13 needs to be updated to be consistent with the License language.
 - Add pathway for "instantaneous reading" evaluation.
 - Change "within 5 days" evaluation of data to "within 2 working days."
 - Table 5.
 - Retain all piezometers (primary/inboard/outboard) in the RGIS Piezometer Specification Table.
 - Add deep piezometers for sand units above Dow dam and at LS-5.

- 13) West-Side RGIS Chemical Monitoring.
Consider adding LS-14 to the chemical characterization monitoring program. Dow will be submitting initial chemical characterization data for review.
- 14) 6Pond Tile System. Table 2-D.
 - The proposed reduction to the chemical monitoring list is under review.
- 15) 7th Street Purge Well Area Corrective Action Monitoring Program. Table 2-F.
 - Target list evaluation text needs to specify when the evaluation will begin (or began – e.g., starting in 2010).
 - Response criteria need to be added to address the identification of a problem via alarm or inspection.
 - Verification of whether the purge wells are included in the inspection schedule is needed (may not be identified consistently in Table 2-F and Table 6)
- 16) Ash Pond Area Groundwater Detection Monitoring. Table 2-G.
 - The arsenic performance criteria need to be checked in Appendix J. It is higher than the generic GSI value – varies from <2ug/l to 230 ug/l.
- 17) Northeast Perimeter Groundwater Corrective Action Monitoring – Table 2-I.
 - The proposed reduction to the chemical monitoring list is under review. Also may need to add Freon compounds.
- 18) Sludge Dewatering Facility (SDF) Groundwater Detection Monitoring. Table 2-M.
 - The proposed reduction to the chemical monitoring list is under review.
- 19) Table 4. Specifications for the seventh 7th Street purge well are not provided.
- 20) Table 6. Inspection Schedule for Environmental Monitoring Programs.
 - Need to add the deep purge well adjacent to LS-5.
 - Add/identify the 7th Street Purge Wells.
 - Need to add inspection of the River Corrective Action Program (Sand Bar).
 - The “automated piezometer data” validation/calibration needs to be changed from bimonthly to quarterly.
 - Add inspection of additional (new) hydraulic monitoring programs (i.e., LELs, 1925 Landfill).
- 21) Appendix B. Chemical Constituent, Analytical Method, and Reporting Limit List.
 - The proposed changes to the reporting limits are being evaluated on a chemical-by-chemical basis. It is likely that the DEQ will not accept a number of the proposed changes for detection monitoring programs.
- 22) Appendix E. Survey Schedule.
 - The text of this table needs to be revised to indicate that surveying will also occur if damage to as well or piezometer is identified during routine inspection or otherwise noted.
 - Add other monitoring wells (e.g., Ash Pond, Northeast Perimeter) or clarify that they are covered as part of the Facility Shallow Groundwater Monitoring Piezometers.
- 23) Appendix K. Well Abandonment and Replacement Specification.
 - The plan needs to be revised to specify the placement of surface casing and/or other protective procedures for deeper wells in plant interior. Identify rules/procedures for well placement in areas of known contaminated shallow groundwater/non-aqueous phase liquids.
 - Section 3.2.2. Add detail on acceptable well screen length.