May 19, 2020

ELECTRONIC SUBMITTAL VIA EMAIL

Jack Schinderle
Materials Management Division (MMD), Hazardous Waste Section
Michigan Department of Environment, Great Lakes & Energy (EGLE)
525 W. Allegan Street, Floor 4
Lansing, MI 48933-1502
SchinderleJ@michigan.gov

cc: Dan Dailey, EGLE-MMD, 525 W. Allegan St., Lansing, MI 48933;
DAILEYD@michigan.gov
Trisha Confer, EGLE- MMD, Saginaw Bay District Office, 401 Ketchum St., Suite B, Bay City, MI 48708; ConferT@michigan.gov
Joe Rogers, EGLE-MMD, 525 W. Allegan St., Lansing, MI 48933;
ROGERSJ5@michigan.gov
Art Ostaszewski, EGLE-MMD, 525 W. Allegan St., Lansing, MI 48933;
OSTASZEWSKIA@michigan.gov

SALZBURG LANDFILL - MID 980 617 435 WORKPLAN TO ABANDON AND REINSTALL MONITORING WELL 4666

In accordance with R 299.9519(5) of the administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of NREPA, 1994 PA 451, as amended, The Dow Chemical Company (Dow) is requesting approval of the following workplan to replace an existing monitoring well with a new monitoring well due to poor performance of the existing monitoring well.

Existing monitoring well 4666 is included in the Salzburg Landfill groundwater monitoring program outlined in License Condition IX.L.1. The existing monitoring well has not been fully recharging after being purged dry and was unable to be sampled within 24 hours of purging during the 2019 sampling events, as outlined in Section 3.4 of the Sampling and Analysis Plan

(SAP), Attachment 20 of the Operating License. Therefore, the existing monitoring well needs to be abandoned and replaced.

The replacement well will be installed immediately adjacent to the existing well, and the planned well design details are summarized below. The location and depth of the replacement well will be unchanged from the existing well and the planned replacement well is consistent with the specification in Section 3.7 of the SAP, Attachment 20 of the Operating License. The existing well 4666 will be abandoned in place per ASTM D5299 and abandonment details are summarized below.

Existing Design Details

Monitoring Well 4666

- Salzburg Landfill Groundwater Monitoring Program Well
- Shown in Figure 1 from SAP
- Depth = 72’0”
- Screen Interval = 60’0” – 70’0”
- Screen Material = 4” diameter stainless steel No. 10 slot screen
- Riser Material = 4” diameter stainless steel

Existing Well Abandonment Details

Monitoring Well 4666

- Abandon per ASTM D5299
- Remove all downhole pumps and equipment from well
- Abandon well with portland cement slurry grout via tremie pipe method
- Remove monitoring well surface completion
- Cutoff well casing to 2.0’ below grade
- Install a HDPE cap on the well casing
- Restore ground surface conditions

Proposed Replacement Design

Monitoring Well 4666 Replacement

- Install via roto-sonic drilling method
- Depth = 70’0”
- Planned Screen Interval = 60’0” – 70’0”
- Screen Material = 4” diameter stainless steel No. 10 slot screen
- Sand pack from bottom to 2’ above screen
- Riser Material = 4” diameter stainless steel

We are requesting approval from the Materials Management Division for this work and would

like to replace the well during second quarter 2020. If you have any questions regarding this workplan, please contact Brad Kischnick at (989) 638-9602.

I agree to the use of electronic signatures with EGLE.

Karen Mann*
EH&S Responsible Care Leader
Environment, Health and Safety
1790 Building, Washington Street
Midland, MI 48674

*Electronic Review as completed in place of hard-copy signature due to ongoing work from home pandemic response event.

Enclosures:
Salzburg Figure 1
Existing 4666 Well Construction Log