



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

Sylwia Scott
Environmental Compliance Manager
US Ecology
49350 North I-94 Service Drive
Belleville, Michigan 48111-1854

Re: Major Modification of the Federal TSCA PCB Chemical Waste Landfill Approval,
Wayne Disposal, Inc.; MID 048 090 633

Dear Ms. Scott:

On January 21, 2021, the U.S. Environmental Protection Agency received a request for a major modification (modification request) to the February 14, 2019, federal Toxic Substances Control Act (TSCA) polychlorinated biphenyl (PCB) chemical waste landfill approval (Approval) for Wayne Disposal, Inc (WDI) located at 49350 North I-94 Service Drive, Belleville, Michigan, which is owned by US Ecology. The modification request was for an engineered design change to the previously approved liner design for Master Cell (MC) VI Subcell F1 through F4 (MC VI-F) and MC VI Subcell G4 through G7 (MC VI-G) to incorporate Geosynthetic Clay Liner (GCL) into the baseliner system (see Figure in Attachment). The 370-page modification request includes an introductory narrative; a technical equivalency demonstration; design calculations; engineering drawings; and Geosynthetic Clay Liner (GCL) manufacturer specifications, construction quality assurance manual, and installation guidelines.

On July 16, 2021, EPA received a liner grade revision for MC VI-F based on information that WDI obtained during construction of MC VI Subcell G3 in 2021. This 30-page revision includes cross sections detailing the proposed grade change and modified major modification drawings that show the new proposed grade for MC VI-F. These liner grade revisions supersede the liner grades presented in the modification request.

To respond to this request for a major modification, EPA reviewed the January 21, 2021, major modification package and the July 16, 2021 liner grade revision package. Based upon review of the relevant documents, EPA finds that the requested modification to the engineering design does not affect overall performance or environmental impact. EPA finds that the liner design revision incorporating GCL is technically equivalent to the previously approved liner design for MC VI-F and MC VI-G. In accordance with the Definitions and Modifications sections of the Approval, EPA finds that the requested design changes constitute a major modification.

This letter serves as an approval of a major modification to the TSCA PCB Chemical Waste Landfill February 14, 2019 Approval. Based on this approval, the engineering design


description, drawings, and technical specifications for MC VI-G and MC VI-F in the January 21, 2021 major modification request and the July 16, 2021 liner grade revisions shall replace those in the March 29, 2018, Renewal Application for the WDI TSCA PCB chemical waste landfill that are referenced in the existing 2019 Approval.

Modification of the February 14, 2019 Approval does not relieve WDI of the responsibility to comply with Toxic Substances Control Act (TSCA) and any and all applicable federal, state, and local laws, regulations or requirements. Furthermore, any violation of the terms and conditions of the Approval may be subject to enforcement action under Section 15 of TSCA.

If you have questions, please contact Lisa Graczyk, of my staff, at (312) 353-3219.

Sincerely,

**EDWARD
NAM**

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EDWARD NAM
Date: 2022.04.19
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Edward Nam
Director
Land, Chemicals and Redevelopment Division

cc: Robert L. Thompson, EPA ORC
Lisa Graczyk, EPA LCRD
Susan Mooney, EPA LCRD
Christine Matlock, MI EGLE

Attachment: Excerpt from Major Modification Request, Figure 1, Proposed Master Cells VI-F and VI-G Layout

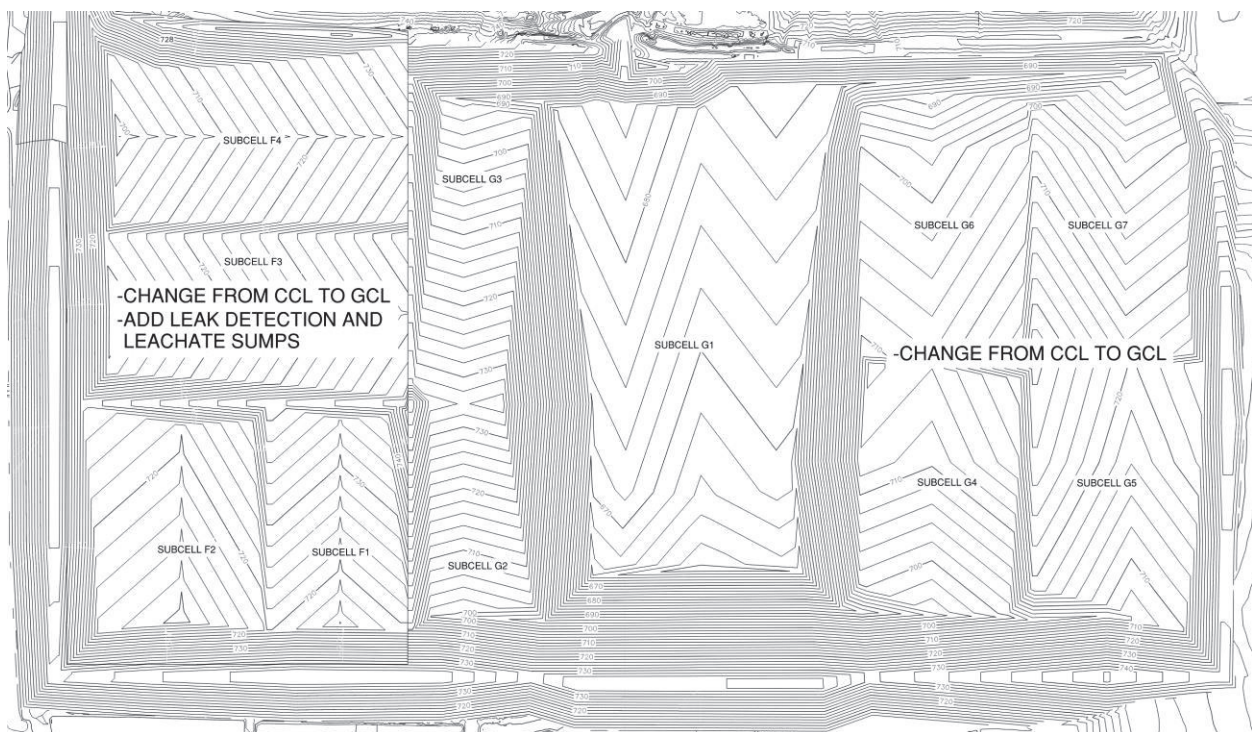
ATTACHMENT

Excerpt from Major Modification Request, Figure 1, Proposed Master Cells VI-F and VI-G Layout

- GCL has superior resistance to freeze-thaw damage and is preferred considering Michigan's climate
- GCL has superior resistance to settlement-induced tensioning
- GCL reduces the need for compaction and is more consistent in achieving the approved grades
- GCL has substantially lower hydraulic conductivity

Figure 1 outlines the proposed area of the base liner system upgrade from CCL to GCL in MC VI-F and MC VI-G, as well as associated changes to the baseliner grades and layout of MC VI-F.

Figure 1. Proposed Master Cells VI-F and VI-G Layout



In accordance with Rule 299.9620 (4) of the Michigan Part 111 Administrative Rules, an alternate design may be approved if the owner or operator can demonstrate the design will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the design requirements specified in the subrule. The following sections discuss how the proposed design satisfies this requirement.

Proposed Liner System Configuration

This modification proposes the incorporation of GCL, in lieu of the currently approved design of CCL only, as part of the soil component of the base liner system for the future construction of MC VI-F and MC VI-G. In May of 2018, this same upgrade was submitted by CTI and approved by your offices for Master Cells