

April 1, 2026

Michael W. Smith, P.E.
Environmental Engineer Senior
IDNR – Land Quality Bureau
6200 Park Avenue Suite 200
Des Moines, Iowa 50321



**RE: CONSTRUCTION CERTIFICATION - FML REPAIR
LEACHATE STORAGE LAGOON
MARSHALL COUNTY SLF – IDNR PERMIT NO. 64-SDP-02-75P
HLW PN 6003-23A.200**

Dear Mr. Smith:

This letter shall serve as notice to IDNR that repairs to the flexible membrane liner (FML) in one of the leachate storage lagoons at the Marshall County Sanitary Landfill (SLF) in Marshall County, Iowa, has been completed. The Marshall County SLF has two leachate storage lagoons on site, one constructed in 1991, the other constructed in 2010. Both were constructed with a Subtitle D composite liner system. Repairs were only needed in the lagoon constructed in 1991.

1991 lagoon. HLW has record drawings (dated February 16, 1993 by CGA) in our files; however, no record drawing documentation on this lagoon could be located in the IDNR Document DNA database.

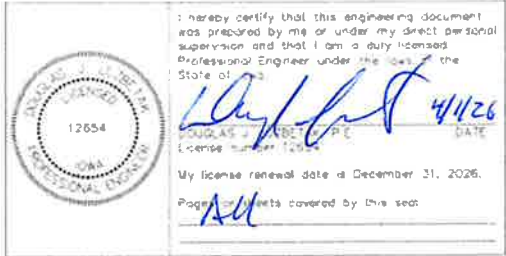
During routine staff inspections of the 1991 lagoon in March, 2026, a tear in the FML was noted. The tear was approximately 14 feet in length and split into two tears at the base and top. All noted damage was above the leachate level of the lagoon. Staff immediately directed leachate inflow to the other leachate storage lagoon and placed heavy bags adjacent to the tear to limit additional damage. The leachate level in the lagoon has been kept below the level of the damage since it was discovered.

Clean Air and Water Systems, LLC (CAAW), Dousman, WI, was retained to repair the damage. As much leachate was removed from the 1991 lagoon as practical prior to CAAW arriving at the site to maximize the portion of the FML exposed for review. HLW personnel performed a visual inspection of the exposed portion of the 60 mil HDPE FML liner in each leachate storage lagoon to determine if there were additional areas needing repair besides the tear noted in March, 2026 and no other areas needing repairs were noted.

A figure showing the approximate location of the damage is included in Attachment A. Photos documenting the damage to the FML and the repairs are included in Attachment B. The damaged area was first cleaned to facilitate the repairs. A test weld was done with the extrusion welder prior to welding starting. The extrusion welds were completed in accordance with industry standards and the integrity of the extrusion welds was confirmed using a vacuum box upon

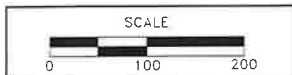
completion. 60 mil HDPE geomembrane was used to fabricate the patches. The repairs of the FML were observed by HLW personnel.

Please contact me if you have any questions.



cc: Don Ballalatak, Manager, Marshall Co SLF (electronic copy)

ATTACHMENT A



AERIAL DATED AUGUST 8, 2025

AERIAL PROVIDED BY THE IOWA STATE UNIVERSITY GEOGRAPHIC INFORMATION SYSTEMS SUPPORT AND RESEARCH FACILITY IN COOPERATION WITH THE IOWA DEPARTMENT OF NATURAL RESOURCES, THE USDA NATURAL RESOURCES CONSERVATION SERVICES, AND THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

Legend	
	Existing 2' Contours
	Existing 10' Contours
	Design 10' Contours
	Design 2' Contours
	Waste Boundary (Existing)
	Waste Boundary (Proposed)
	Existing Groundwater Diversion Pipe
	Existing Leachate Pipe
	Design Leachate Piping
	Property Line
	Storm Water Pipe
	Fence
	Leachate Manhole (Existing)
	Gravel Surface

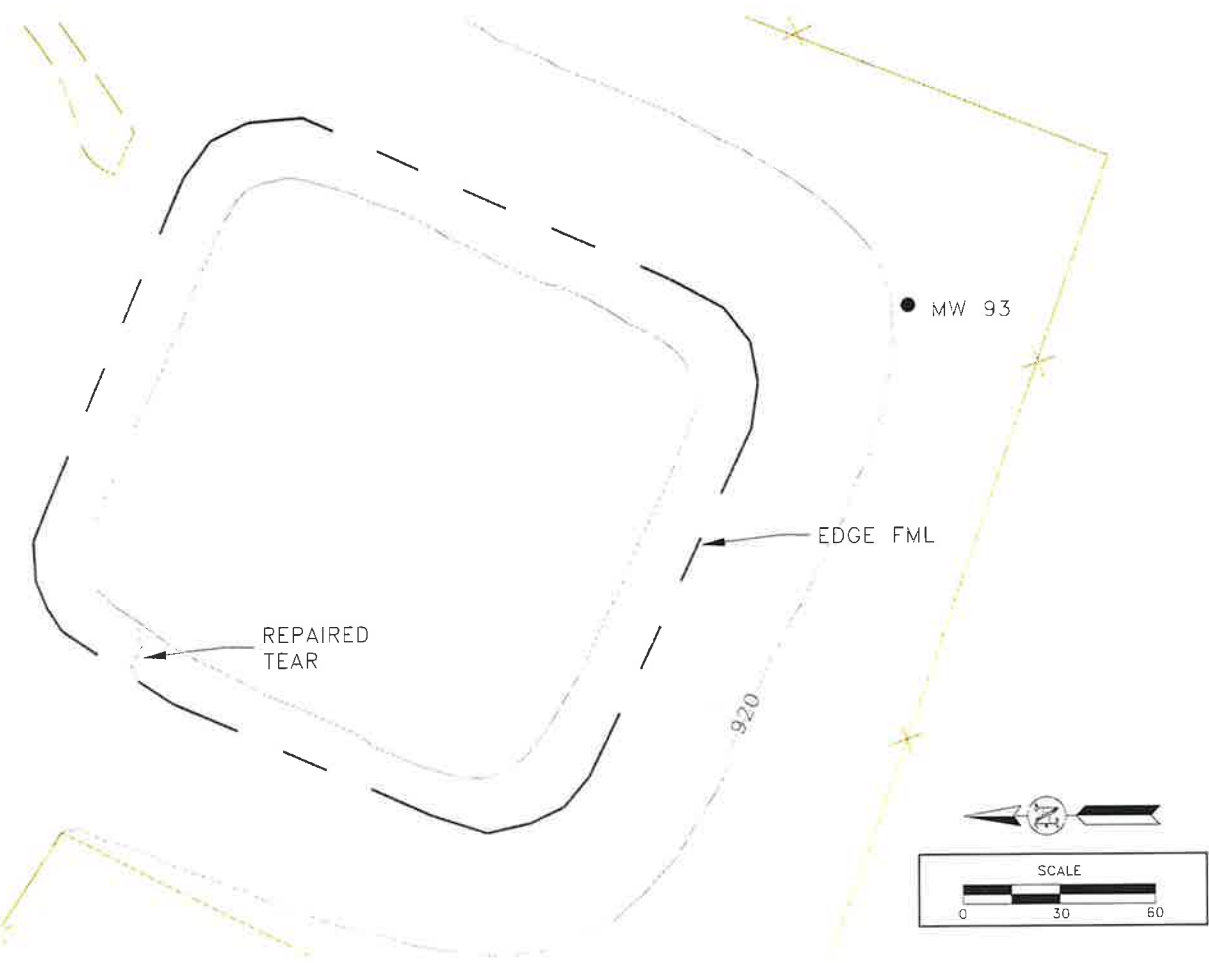


FIGURE: 1

LAGOON REPAIR

HLW Engineering Group
 204 West Broad Street, P.O. Box 314
 Story City, Iowa 50248
 Phone: (515) 733-4144
 FAX: (515) 733-4146



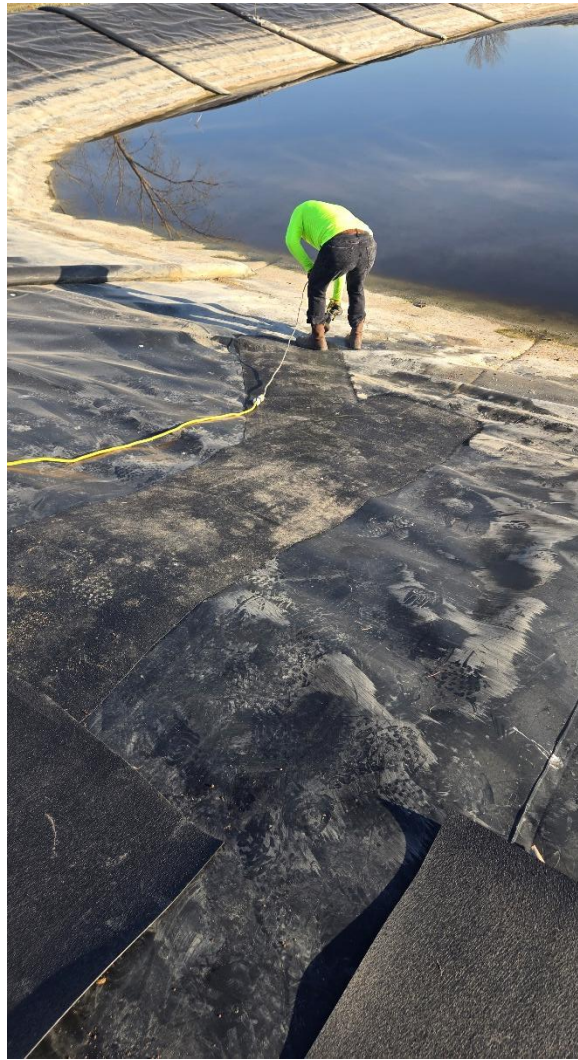
REVISION	NO.	DATE
DRAWN	JGH	3/30/26
PROJECT NO.	6003-21A	DATE

MARSHALL COUNTY SANITARY LANDFILL
 MARSHALL COUNTY, IOWA

ATTACHMENT B



Photo 1: Damage in 1991 lagoon, looking north, 03-09-26.



**Photo 2: Grinding patch in 1991 lagoon,
looking north, 03-30-26.**



Photo 3: Grinding and extrusion welding patch in 1991 lagoon, looking north, 03-30-26.



Photo 4: Completed patch in 1991 lagoon, looking north, 03-30-26.