

SALE
POB

BARKER LEMAR
ENGINEERING CONSULTANTS

Con 12-1-1
Doc # 81300

September 26, 2014

Mr. Mick Leat
Iowa Department of Natural Resources
Land Quality Bureau
Wallace State Office Building
502 East 9th Street
Des Moines, Iowa 50319-0034

**Re: Fall 2014 Semi-Annual Inspection Report
Clinton County Sanitary Landfill (West Site)
Permit No. 23-SDP-02-74C
Project No. CCASW 15001**

Dear Mick:

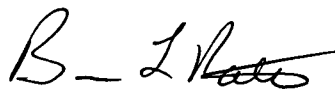
This brief report documents the semi-annual inspection required by the facility's Iowa Department of Natural Resources Sanitary Disposal Project Permit and the Iowa Administrative Code. The semi-annual inspection was made to evaluate the site's general conformance with the permit and the approved plans and specifications.

If you have any questions regarding this report, please contact us at (515) 256-8814.

Sincerely,
BARKER LEMAR ENGINEERING CONSULTANTS



C.J. Lage
Project Manager



Brian L. Rath, P.E.
Project Manager

Copies: Addressee
Brad Seward, CCASWA
Brock Swan, Progress Contracts
File
Electronic File

M:\CCASW15001\Documents\Task 20 - Semi-annual Landfill Engineering Inspection - West Site\Documents\CCASW W 2014
Fall Inspect CL.doc

**Site Inspection Report
Fall 2014**

**Clinton County Sanitary Landfill (West Site)
Welton, Iowa
Permit No. 23-SDP-02-74C
Project No. CCASW 15001**


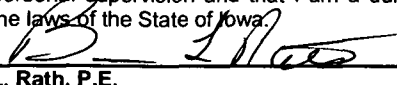
Prepared For:

Clinton County Area Solid Waste Agency

Prepared By:

BARKER LEMAR ENGINEERING CONSULTANTS

**1801 Industrial Circle
West Des Moines, Iowa 50265
Phone: (515) 256-8814
Fax : (515) 256-0152**

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.
	<div><div></div><div>Date: <u>9-26-14</u></div></div> <div><div>Brian L. Rath, P.E.</div><div>License No. 14659</div><div>My license renewal date is December 31, 2014</div></div> <div><div>Pages or sheets covered by this seal:</div><div>Entire document.</div></div>

1.0 Introduction

The facility was inspected on September 11, 2014. This landfill has been closed since September 24, 1992. The facility appeared to be in general conformance with the items listed in the General Provisions and Special Provisions sections of the Closure Permit. Figure 1 (attached) is a sitemap of the facility. Photos taken during the inspection are attached (see Figures 2a and 2b). A copy of the observation checklist used during the inspection is included in Attachment A. Items relating to observed conditions and non-compliance items are discussed below.

Brad Seward, Director of Operations and Education, was present during the inspection.

2.0 Observed Conditions

The following summarizes the maintenance activities or observations made during the site visit:

- The gate was locked and chained and a sign was posted noting the facility and contact information.
- The vegetation was noted to be well established.
- Stormwater ponding was not observed during the inspection.
- The site was recently mowed (see Figures 2a and 2b). To maintain vegetation integrity on the landfill cap it is recommended that the Agency continue to perform periodic mowing to better observe potential erosion and leachate seeps as well to reduce growth of saplings and noxious weeds.

3.0 Non-Conformance with Permit Conditions

A small non-flowing leachate seep was observed during the inspection at the location shown on the attached Figure 1. This was likely the same seep as noted in the Spring 2014 Inspection Report as that seep had not yet been repaired. This was discussed with the Director who indicated it would be repaired this fall.

No other items of non-conformance with the permit conditions were noted.

4.0 General Comments

The observations presented in this report were based upon data obtained from the field observations made at the site, interviews with the site operator, and from information sources discussed in this report. This report provides a snap-shot in time of the conditions present at the time of the inspection and does not reflect variations in operating conditions that may occur throughout the year.

BARKER LEMAR has prepared this report for the exclusive use of our client. This report is meant for the specific application discussed and has been prepared in accordance with generally accepted engineering practices. No warranties, either express or implied, are intended or made.

Filepath: M:\CCASW\15001\CAD\Fall Inspections\2014 FALL INSPECT - WEST - CSM 011614.dwg - Last Edited: Sep 18, 2014 13:45 - By: Imiller


SCALE

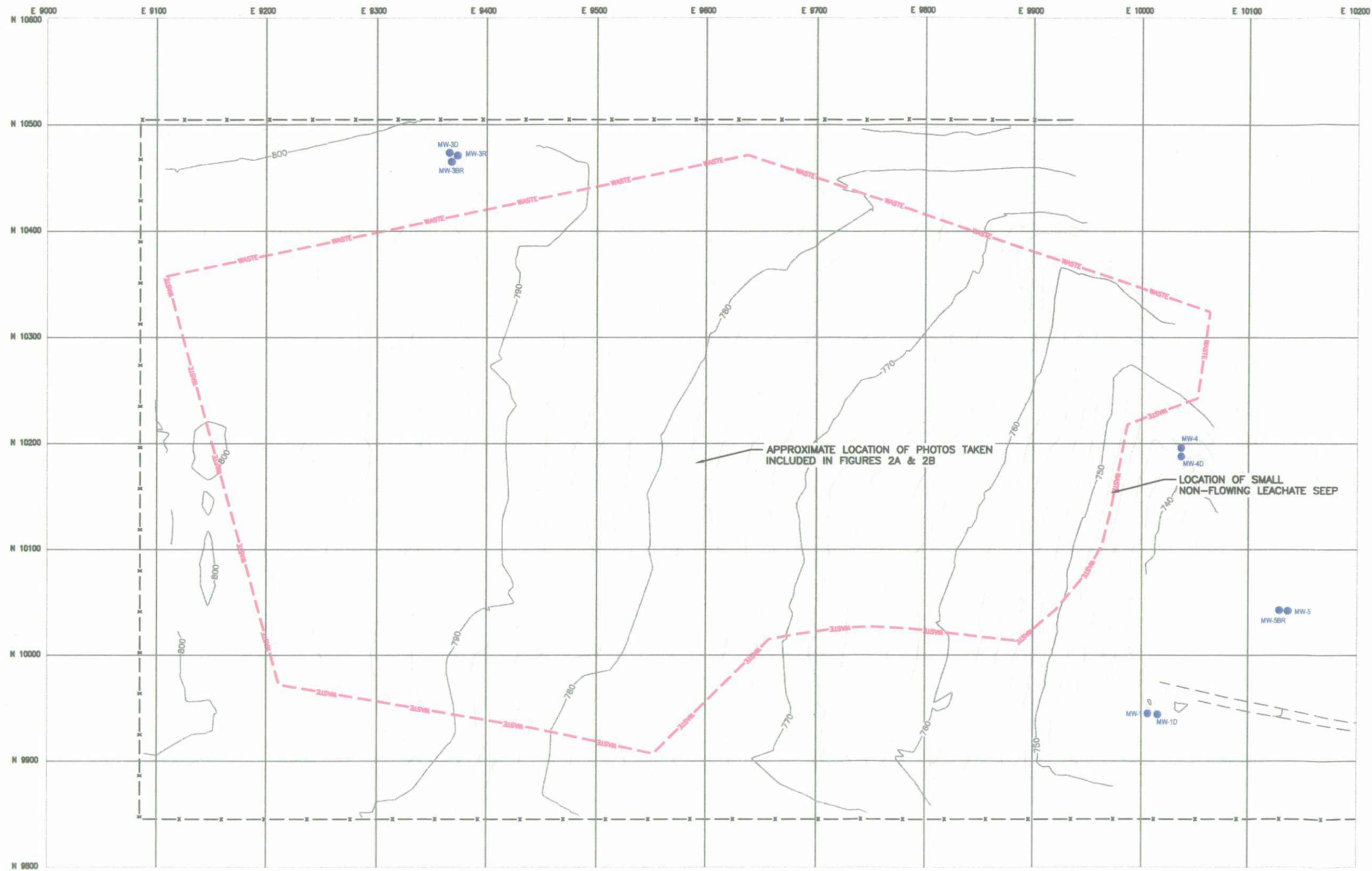
0

50

100

Copyright © 2014 Barker Lemar Engineering Consultants





- LEGEND
- EXISTING GROUND SURFACE
(2 FT. CONTOUR INTERVAL)
- WASTE

ESTIMATED WASTE BOUNDARY
- x —

FENCE
- UNPAVED ROAD
- MW-1

MONITORING WELL

NOTE:
LOCATION OF MW-5 AND MW-5BR ARE
ESTIMATED, NOT SURVEYED.

BARKER LEMAR

ENGINEERING CONSULTANTS

1801 Industrial Circle - West Des Moines, Iowa - 50265

Phone: 515.256.8814 - Fax: 515.256.0152 - www.barkerleamar.com

REVISION:	DATE:	DESCRIPTION:
1		
2		
3		
4		

CLINTON COUNTY SANITARY LANDFILL (WEST)
WELTON, IOWA
PROJECT NO. CCASW 15001
DRAWING DATE: SEPTEMBER 2014

INSPECTION MAP
SEPTEMBER 11, 2014

FIGURE
1



PHOTO DOCUMENTATION
CLINTON COUNTY SANITARY LANDFILL (WEST SITE)
CLINTON, IOWA
PROJECT NO. CCASW 15001

BARKER LEMAR
ENGINEERING CONSULTANTS

FIGURE
2a



PHOTO DOCUMENTATION
CLINTON COUNTY SANITARY LANDFILL (WEST SITE)
CLINTON, IOWA
PROJECT NO. CCASW 15001

BARKER LEMAR
ENGINEERING CONSULTANTS

FIGURE
2b

ATTACHMENT A
OBSERVATION CHECKLIST

SOLID WASTE LANDFILLS OBSERVATION CHECKLIST

FACILITY INFORMATION

Facility: Clinton County Landfill (West) – Closed

Location: Welton, Iowa

Type: Sanitary Disposal Project

Permit No.: 23-SDP-02-74C

Permit Issued: September 24, 1992

Permit Expires: September 24, 2022

INSPECTION INFORMATION

Operator: NA

Other Personnel: Brad Seward, Director of Operations; Brock Swan, Contract Operator

Date: September 11, 2014

Inspector: C.J. Lage

Engineer: Brian L. Rath, P.E.

WEATHER CONDITIONS

Wind: north @ 8 mph

Other: cloudy

Temperature: 52 degrees F.

A. PLAN REQUIREMENTS AND OPERATING PROCEDURES

- 1) Is the landfill identification, phone number, hours and days open, and categories of waste accepted indicated on a sign at the landfill entrance?
- 2) Is lockable entrance gate and all perimeter fences in good repair?
- 3) Is the landfill office being maintained?
- 4) Are daily records being kept?
- 5) Is a copy of the operating permit on file at the landfill office?
- 6) Is there a copy of the landfill plans and specifications on file at the landfill office?
- 7) Is the entrance road into landfill in good condition?
- 8) Is an all weather area available for adverse conditions?
- 9) Is solid waste being unloaded in the proper locations in accordance with the plans?
- 10) Is solid waste being spread and compacted properly?
- 11) Is daily cover being provided as required?
- 12) Is intermediate and final cover being provided as required?
- 13) Are fill elevations being maintained according to plans?
- 14) Are excavation elevations being maintained prior to accepting solid waste as per the plans?
- 15) Have any sand pockets or major sand seams been encountered during excavation?
- 16) Have current work areas been properly staked according to plans?
- 17) Is all required equipment available at the landfill site?
- 18) Is operational equipment in good repair and operating in good repair?
- 19) Is back-up equipment available?
- 20) Is litter being controlled properly?
- 21) Are litter fences in place and being used?
- 22) Has topsoil been placed on completed portions of the landfill?
- 23) Have completed areas been properly graded and seeded according to the specifications?
- 24) Are completed areas of the landfill showing adequate growth of grass?
- 25) Is drainage and erosion control being maintained on completed areas of the landfill?
- 26) Is there evidence of leachate on the surface in completed areas of the landfill?
- 27) Is there any leachate flows leaving the landfill site?
- 28) Is there evidence of landfill gas problems?
- 29) Is there evidence of open burning?
- 30) Is there evidence of rodents or insects as a result of improper landfilling operations?
- 31) Does the landfill accept demolition and construction wastes in a separate location?
- 32) Are demolition and construction wastes being properly disposed of?
- 33) Are sanitary facilities available at the landfill site?
- 34) Is a telephone available at the landfill?
- 35) Is fire control available at the landfill site?

Yes	No	Comments
		NA
X		
		NA
		NA
		NA
		NA
		NA
		NA
		NA
		NA
X		
		NA
		NA
		NA
		NA
		NA
		NA
		NA
X		
X		
X		
X		
X		See Section 3.0
	X	
	X	
	X	
	X	
		NA
		NA
		NA
		NA
		NA

SOLID WASTE LANDFILLS OBSERVATION CHECKLIST

B. HYDROGEOLOGICAL MONITORING SYSTEM PLAN

- 1) Has a hydrogeologic study been completed for the landfill?
- 2) Has a monitoring system plan been completed?
- 3) Are monitoring wells in good condition?
- 4) Are monitoring wells marked and identified?
- 5) Have monitoring wells/surface points been sampled according to the permit schedule?
- 6) Have the water sample test results been submitted to IDNR?

Yes	No	Comments
X		
X		
X		
X		
X		
X		

C. LEACHATE CONTROL

- 1) Has the landfill submitted plans/specifications for a leachate collection/treatment system?
- 2) Has the approved leachate collection and treatment system been constructed?
- 3) Does the landfill have permit from the local POTW to discharge leachate?

Yes	No	Comments
		NA
		NA
		NA

D. MISCELLANEOUS REQUIREMENTS

- 1) Is a certified landfill operator on site?
- 2) Has a Closure/Post Closure Plan been submitted to IDNR?
- 3) Are the SWA reports completed/submitted to IDNR quarterly?
- 4) Has the landfill received petroleum contaminated soil recently?
- 5) Has a quarterly soil sample been collected/analyzed of the aerated petroleum impacted soil?
- 6) Does the landfill have a permit amendment for recycling?

Yes	No	Comments
		NA
X		
		NA
		NA
		NA
		NA

NA - Not applicable for a closed landfill.