



Post-Closure Care Plan

Coal Combustion Residue Landfill Lansing Generating Station Lansing, Iowa

Prepared for:

Interstate Power and Light Company

Lansing Generating Station
2320 Power Plant Drive
Lansing, Iowa 52151-7539

Prepared by:

SCS ENGINEERS
2830 Dairy Drive
Madison, Wisconsin 53718-6751
(608) 224-2830

September 2016
File No. 25216109.00

Offices Nationwide
www.scsengineers.com

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PE CERTIFICATION

	<p>I, Eric J. Nelson, hereby certify that this Post-Closure Care Plan meets the requirements of 40 CFR 257.104(d), was prepared by me or under my direct supervision, and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.</p>
	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  (signature) </div> <div style="text-align: center;"> <p>9/21/2016</p> (date) </div> </div>
	<p style="text-align: center;">ERIC J. NELSON</p> (printed or typed name)
	<p>License number <u>23136</u></p>
	<p>My license renewal date is December 31, <u>2016</u>.</p>
<p>Pages or sheets covered by this seal:</p>	
<p style="text-align: center;">SEPTEMBER 2016 POST-CLOSURE CARE PLAN</p>	
<p style="text-align: center;">IPL LANSING GENERATING STATION</p>	

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1.0 INTRODUCTION AND PROJECT SUMMARY

On behalf of Interstate Power and Light Company (IPL), SCS Engineers (SCS) has prepared this Post-Closure Care Plan for the Lansing Generating Station (LAN) Coal Combustion Residue (CCR) Landfill in accordance with 40 CFR 257.104(d) as follows.

40 CFR 257.104(d). *“Written post-closure plan – (1) Content of the plan. The owner or operator of a CCR unit must prepare a written post-closure plan that includes, as a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of this section.”*

The LAN CCR Landfill includes an active CCR landfill, which currently consists of a single CCR unit. The CCR unit has received CCR both before and after the effective date of the CCR Rule. The site location is shown on **Figure 1**. **Figure 2** shows proposed final cover grades and monitoring locations.

The CCR unit has been partially closed by leaving the CCR in place and capping it. Phase 1 was capped in 2014 and Phase 2 was capped in 2015, with final cover system meeting 40 CFR 257.102(d)(3). The remaining open areas of the CCR unit will receive the same final cover when final waste grades are achieved.

2.0 MONITORING AND MAINTENANCE ACTIVITIES

40 CFR 257.104(d)(1)(i). *“A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed.”*

Monitoring and Maintenance Activities	Frequency
Mowing	Semi-Annually
Inspections by Owner/Operator	Monthly
Repair to final cover for erosion concerns	As needed, determined by inspection
CCR settling pond maintenance	As needed, determined by inspection
Environmental Monitoring (groundwater)	Semi-Annually

The owner/operator will perform monthly inspections of the landfill surface and groundwater monitoring system. If issues are noticed during the inspection, action will be taken to remedy the situation. Eroded areas on the final cover will be repaired and reseeded. Repairs or replacement will be performed on the groundwater monitoring system components as needed.

The Lansing CCR Landfill does not have a leachate collection system. The CCR Landfill is an existing CCR unit under the Federal CCR Rule (40 CFR 257, Subpart D) and is not subject to the design criteria for new CCR landfills in 257.70; therefore, leachate collection is not required.

2.1 FINAL COVER MAINTENANCE

Mowing will be performed semi-annually during the growing season unless additional mowing is required in response to the vegetation growth rate. If eroded areas are noted during monthly inspections, IPL will repair and reseed the area.

2.2 GROUNDWATER MONITORING AND SYSTEM MAINTENANCE

Groundwater monitoring wells MW6, MW301, MW302, and MW303 will be maintained and sampled semi-annually for the parameters listed in Appendix III to Part 257 and in accordance with 40 CFR 257.90-98.

3.0 POST CLOSURE PERIOD CONTACTS

40 CFR 257.104(d)(1)(ii). *“The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure period.”*

The contact information for the CCR Landfill during the post-closure period is as follows:

Lansing Generating Station
Attn: Plant Manager
2320 Power Plant Drive
Lansing, IA 52151-7539
(563) 538-3100
CCRProgram@allientenergy.com

4.0 POST-CLOSURE PERIOD SITE USE

40 CFR 257.104(d)(1)(iii). *“A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements of this subpart.”*

The final use of the CCR Landfill will be privately-owned green space. With this use, there will be no disturbance of the final cover or any other landfill-related components.

5.0 CERTIFICATIONS

40 CFR 257.104(d)(4). *“The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this section.”*

Eric Nelson, PE, a licensed professional engineer in the State of Iowa, has overseen the preparation of this Post-Closure Care Plan. A certification statement is provided on **page iii** of this plan.

6.0 RECORDKEEPING AND REPORTING

40 CFR 257.104(d)(2)(iii). *“The owner or operator has completed the written post-closure plan when the plan, including the certification required by paragraph (d)(4) of this section, has been placed in the facility’s operating record as required by Section 257.105(i)(4).”*

The Post-Closure Care Plan will be placed in the facility’s operating record and on Alliant Energy’s CCR Rule Compliance Data and Information website, as will all amendments, if any.

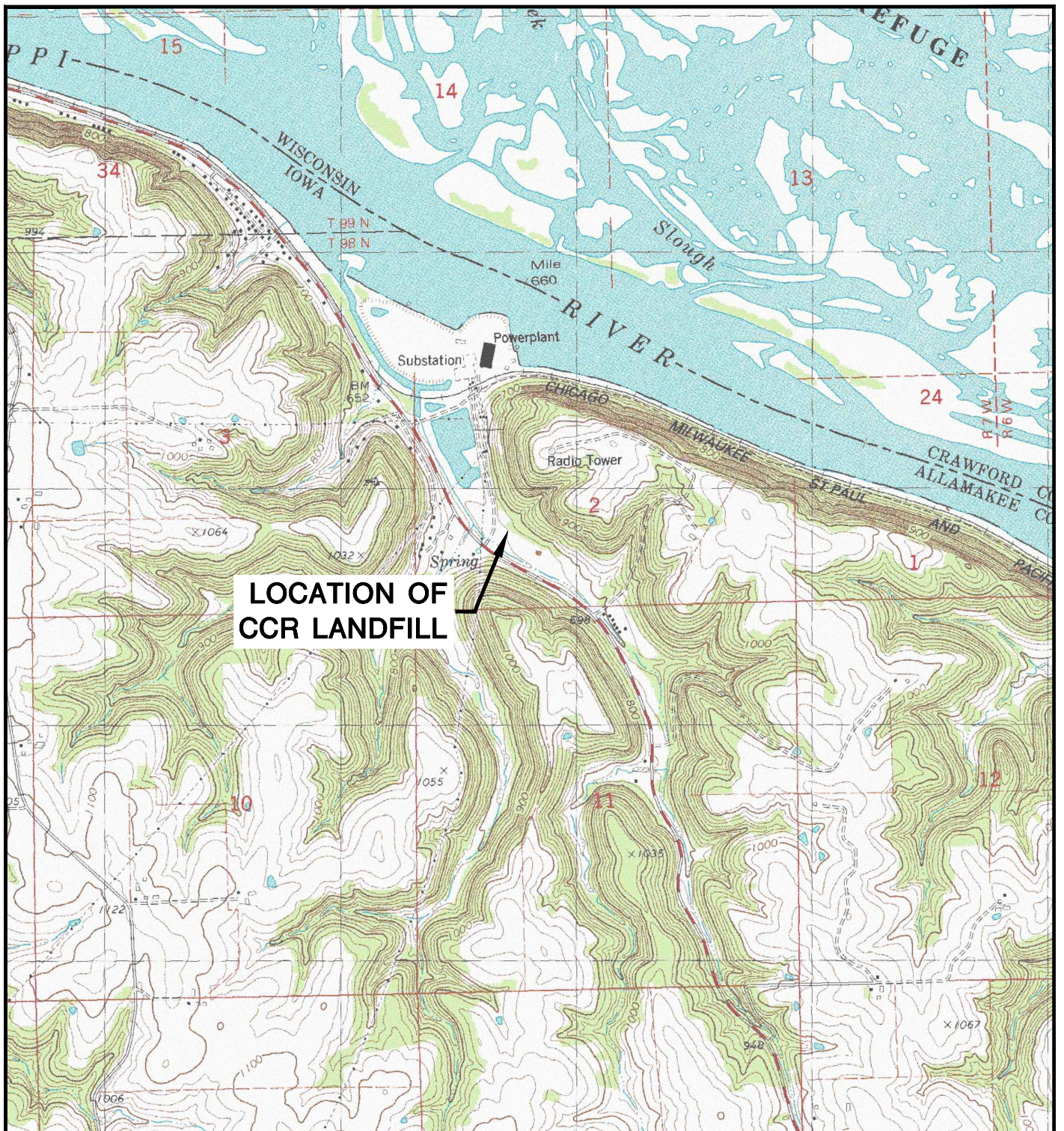
IPL will amend the Post-Closure Care Plan if there is a change in operation of the CCR unit that affects the written Post-Closure Care Plan or, if after post-closure activities have started, unexpected events cause a revision of the plan.

IPL will provide notification of completion of the post-closure care no later than 60 days following the completion of the post-closure care period. The notification will include certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the plan. The notification will be placed in the facility’s operating record and on the website.

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FIGURES

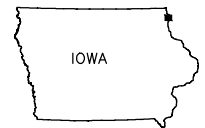
- 1 Site Location Map
- 2 Post-Closure Care Plan



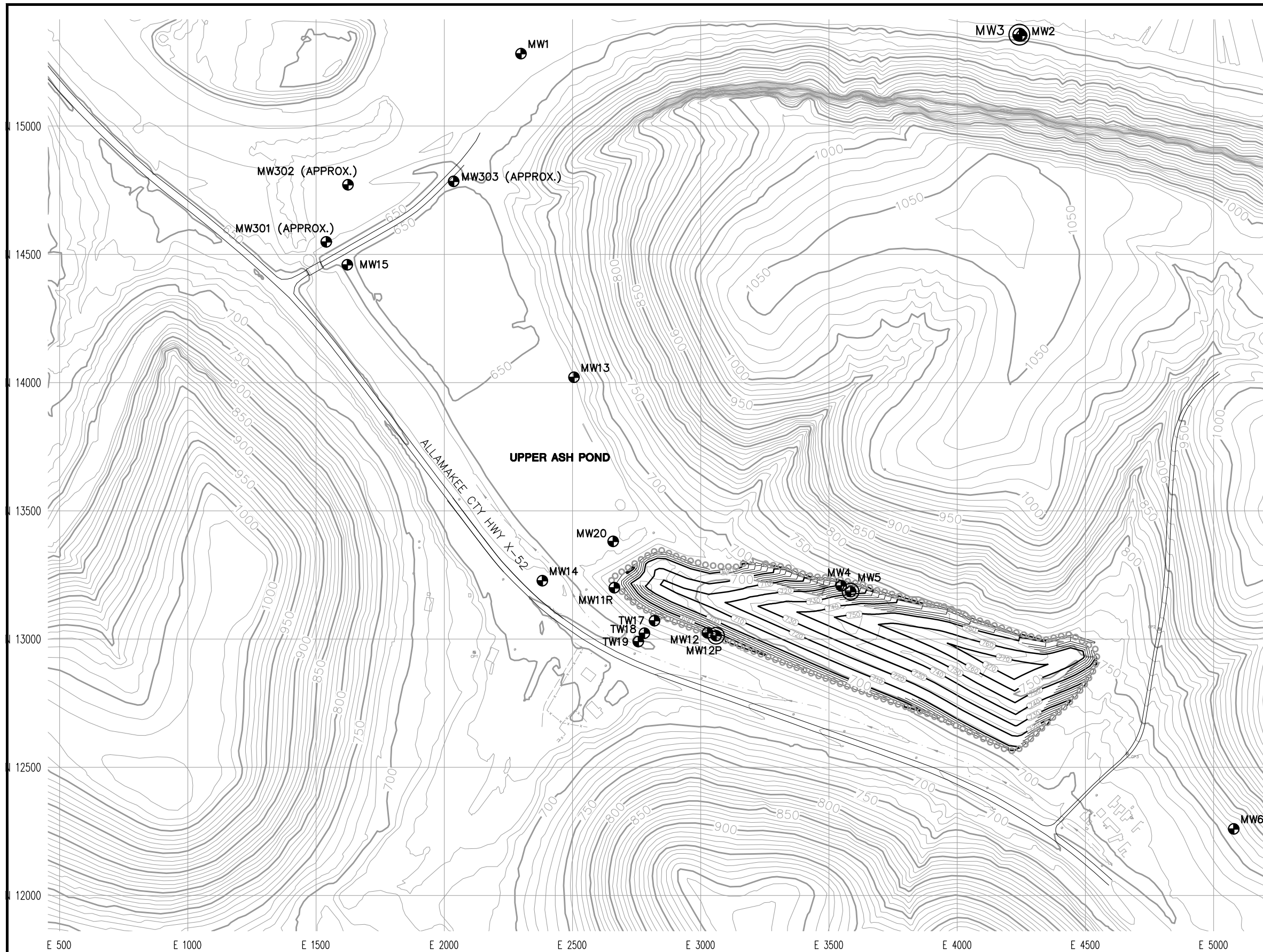
**LOCATION OF
CCR LANDFILL**



LANSING QUADRANGLE
 IOWA-ALLAMAKEE CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 SW/4 FERRYVILLE 15' QUADRANGLE
 1983
 SCALE: 1" = 2,000'

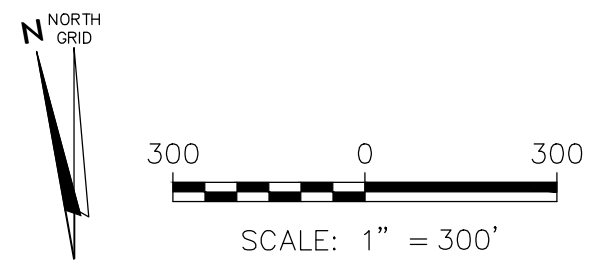


CLIENT	INTERSTATE POWER AND LIGHT CO. 2320 POWER PLANT DRIVE LANSING, IA 52151-9733		SITE	POST-CLOSURE CARE PLAN COAL COMBUSTION RESIDUE LANDFILL LANSING, IOWA		ENGINEER	SITE LOCATION MAP	
	PROJECT NO.	25216109.00		DRAWN BY:	AHB		SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830	FIGURE
DRAWN:	05/01/13	CHECKED BY:	LB	APPROVED BY:	EN 09/21/16			
REVISED:	09/08/16							



LEGEND	
	EXISTING CONTOUR (10' INTERVAL)
	EXISTING CONTOUR (50' INTERVAL)
	EXISTING LIMITS OF WASTE
	PROPOSED FINAL GRADE (10' CONTOUR)
	PROPOSED FINAL GRADE (2' CONTOUR)
	EXISTING MONITORING WELL
	EXISTING PIEZOMETER

- NOTES:
- EXISTING TOPOGRAPHIC SURFACE OUTSIDE EXISTING LIMITS OF WASTE BASED ON 2008 LYDAR CONTOURS PROVIDED BY IOWA DEPARTMENT OF NATURAL RESOURCES.
 - EXISTING TOPOGRAPHIC SURFACE INSIDE LIMITS OF WASTE BASED ON TOPOGRAPHIC SURVEY BY SCS ENGINEERS COMPLETED ON APRIL 25, 2013.



PROJECT NO. 25216109.00	DRAWN BY: AHB	ENGINEER	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830	CLIENT	INTERSTATE POWER AND LIGHT 2320 POWER PLANT DRIVE LANSING, IA 52151-9733	SITE	POST-CLOSURE CARE PLAN COAL COMBUSTION RESIDUE LANDFILL LANSING, IOWA	POST-CLOSURE CARE PLAN	FIGURE
DRAWN: 04/07/14	CHECKED BY: TK								2
REVISED: 09/08/16	APPROVED BY: EN 09/21/16								