

Mathews, Barbara

From: Drew Landoll <DLandoll@aquaterra-env.com>
Sent: Tuesday, August 16, 2011 9:37 AM
To: Matoska, Maria
Cc: Jason Kincade (j.kincade@naborssanitation.com); Mark Russell; Floyd Cotter; Mathews, Barbara
Subject: NABORS Class 4 AEIR
Attachments: 4622.10 - AEIR 2010 CLASS 4 rev1 Stamped (small).pdf

Ms. Matoska,

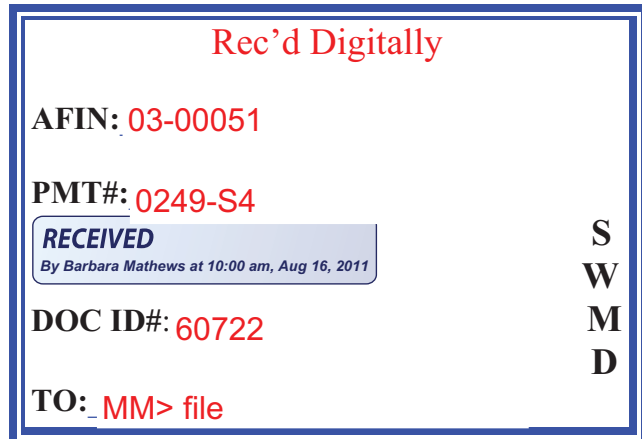
Please find the attached Class 4 AEIR NOD Response. The hard copies were mailed yesterday, and should arrive today. Consider this email the electronic file submission. If you have any more questions, please don't hesitate to contact us.

Thank You,

Drew Landoll, E.I.T.
Project Engineer

AQUATERRA

Environmental Solutions, Inc.
2101 W.Chesterfield Blvd., Suite A201
Springfield, MO 65807
Phone: (417) 890-9967
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dlandoll@aquaterra-env.com



Aquaterra is a 2010 Award Winner on the Zweig White Hot Firm List four years running;
We are one of 200 fastest-growing A/E/P and Environmental Consulting Firms!

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August 11, 2011

Ms. Maria Matoska, Permit Engineer
Solid Waste Management Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

**Re: Notice of Deficiency for the 2010 Annual Engineering Inspection Report
NABORS Class 4 Landfill**

Permit Number: 0249-S4

AFIN: 03-00051

Document Number: 60427

Cross Reference Number: 59614

Dear Ms. Matoska:

On behalf of NABORS Sanitation (NABORS), Aquaterra Environmental Solutions, Inc. (Aquaterra) submits this response to the Notice of Deficiency Letter (NOD), ADEQ document #60427, dated July 14, 2011. The NOD letter was issued by Arkansas Department of Environmental Quality-Solid Waste Management Division (ADEQ) in response to the 2011 Annual Engineering Inspection Report (AEIR), ADEQ document #59614, submitted March 30, 2011 by Aquaterra.

The following response to comments includes the ADEQ comment in italicized bold face type followed by our response.

Comment 1: Drawing 3 - Current Site Conditions does not contain the grid coordinates.

Revised drawings including the grid coordinates are included in this response.

Comment 2: Review of ADEQ files show that NABORS has posted a letter of credit in the amount of \$156,000.00 for financial assurance for closure and post-closure care. Please attach a copy of the required financial assurance documentation with future AEIR submittals in order to satisfy the requirement of Regulation 22.619(b)(10).

The letter of credit for financial assurance for closure and post-closure care is included in this response.

Maria Matoska, ADEQ
2010 Class 4 AEIR NOD
August 11, 2011
Page 2 of 2

Comment 3: The information provided on the AEIR form stated that the facility performs groundwater detection monitoring every six months. Please explain.

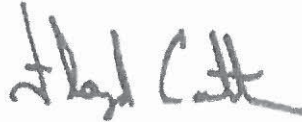
NABORS does not perform groundwater detection monitoring every six months on the Class 4 landfill. The statement made was incorrect, and is not included in the revised documents.

A revised Class 4 AEIR form has been provided to include the above updates. Aquaterra believes that the attached drawing and written explanations have adequately addressed ADEQ's concerns. If you have any questions or need more clarification, please feel free to contact us at (417)890-9967.

Sincerely,
Aquaterra Environmental Solutions, Inc.



Drew Landoll, E.I.T.
Project Engineer



Floyd Cotter, P.E.
Principal

C: Jason Kincade, NABORS Sanitation

Attachments:

Revised NABORS Class 4 AEIR Form
Revised Drawing 3 – Current Conditions
Letter of Credit

ANNUAL ENGINEERING INSPECTION REPORT (AEIR) FORM

Note: Check applicable landfill class. Class 1 (Reg 22.423(b)) _____, Class 3 (22.522(a)) _____, Class 4 (22.619(b)) _____

Reporting Year: _____

Facility Name: _____ NABORS Sanitation Class 4 Landfill AFIN: 03-00051 Permit #: 0249-S4 Landfill Class: 4

Report Submittal Date: 3/30/11 (rev. 8/11/11) Date of Landfill Site Inspection by Certifying Engineer: 3/17/2011

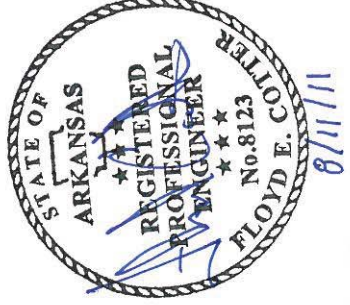
***Complete the form as indicated
 Instructions are bolded and italicized.***

Item	Regulation Reference	Item Description	Report Information/Comments/Remarks	Attachment Reference
<i>COLUMN TO BE COMPLETED BY REPORTER</i>				
1	22.423(b)(1)	Remaining volume in current cell.	a) 70,831 cubic yards	
	22.522(a)(1) 22.619(b)(1)	Projected date of opening new cell.	b) Date: N/A	
2	22.423(b)(2)	Remaining volume of all permitted units.	a) 70,831 cubic yards	
	22.522(a)(2) 22.619(b)(2)	Total air space used during the reporting period.	b) 28,515 cubic yards	
3	22.423(b)(3)	Estimated remaining site life (years) based on utilization rate during the reporting period. <i>Note: Itemize current permitted unit/cell information - use attachment if necessary.</i>	c) Landfill Unit/Cell remaining life: Landfill unit/cell Cells 1 through 6, 2.5 years. Landfill unit/cell _____, _____ years. Landfill unit/cell _____, _____ years.	
	22.522(a)(3) 22.619(b)(3)	Documentation of fill progression in compliance with permit plans, specs and operating plan and narrative. <i>Note: Provide narrative regarding fill progression during the reporting period. Be specific about landfill unit/cell designations (example: Cell 1, Phase A completely filled; Cell 2, Phase A, 50% full, being filled south to north as of December 31). Specifically note any overfill conditions.</i>	d) Entire permitted landfill: 2.5 years remaining life. a) Progression narrative: NABORS is actively filling Cells 4, 5, and 6 concurrently. Cells 1 through 3 are currently inactive pending ADEQ's review and approval of the submitted Overfill Management Plan (Document #58364).	

4	22.423(b)(4) 22.522(a)(4) 22.619(b)(4)	Documentation of compliance with regulatory operating requirements, permit conditions, approved operating plan, and other applicable regulations. <i>Note: Review current operating plans, and permit conditions. Include photographs of engineer's inspection as Attachment A. Check for weekly/monthly operational logs, waste volume records in and out of landfill, unauthorized waste form sheets, waste cover maintenance, stormwater reports to ADEQ, and wet weather repair information.</i>	<p>a) Weekly/monthly operational logs exist (Y/N)? <u>Y</u></p> <p>b) Photos of AEIR inspection attached (Y/N)? <u>Y</u></p> <p>c) Waste volume in and out records exist (Y/N)? <u>Y</u></p> <p>d) Hazardous Waste and Unauthorized Waste Exclusion (HWUWE) Plan located onsite? (Y/N)? <u>Y</u></p> <p>Operations in compliance with HWUWE Plan (Y/N)? <u>Y</u></p> <p>e) Daily/weekly cover adequate at time of inspection (Y/N)? <u>Y</u></p> <p>f) Alternative Daily Cover (ADC) Plan, if applicable, located onsite (Y/N)? <u>N/A</u></p> <p>Operations in compliance with ADC Plan (Y/N)? <u>N/A</u></p> <p>g) Liquid Waste Management (LWM) Plan, if applicable, located onsite (Y/N)? <u>Y</u></p> <p>Operations in compliance with LWM Plan (Y/N)? <u>Y</u></p> <p>h) Waste cover of inactive areas maintained adequately (Y/N)? <u>Y</u></p> <p>i) Net amount of waste disposed in landfill during reporting period: 28,515 cubic yards 5,703 tons</p> <p>j) Leachate head level less than 1' on liner at time of inspection (Y/N)? <u>Y</u></p>	A
5	22.423(b)(5) 22.522(a)(5) 22.619(b)(5)	Updated contour map that depicts: <i>Note: Provide updated drawing(s) and final cover permit drawing as Attachment B – discuss any discrepancies. Max. contour interval = 2 feet</i>	<p>a) Updated contour drawing attached (Y/N)? <u>Y</u></p> <p>b) Final cover permit drawing attached (Y/N)? <u>Y</u></p> <p>c) List all discrepancies here: _____ _____ _____</p> <p>Overfill condition in Cells 1, 2, and 3.</p> <p>d) Is there an overfill condition (Y/N)? <u>Y</u></p>	B
		(i) horizontal and vertical extent of active and inactive fill areas;		
		(ii) status of all permitted units/cells; <i>(Note: Label all active (working face, bulking area, stockpiles), inactive, closed and interim cover areas).</i>		
		(iii) survey grid (required by 22.426); <i>Note: Include benchmarks and horizontal controls</i>		
		(iv) location of other visible surface features or improvements (e.g., roads, buildings, gas control systems, etc.); <i>Note: Include leachate risers, manholes, monitoring wells, gas wells, etc.</i>		

		<p>(v) the person responsible for gathering the survey data and the date survey data was taken to prepare the map. <i>Reminder: Reporting period is calendar year. Survey data should be collected to reflect the AEIR reporting period.</i></p>	<p>a) Name: Tom Alexander (NTB Associates, Inc.) b) Name of person using the data to produce contour map: Drew Landoll (Aquaterra) c) Date survey data was collected: 3/15/2011</p>	
6	<p>22.423(b)(6) 22.522(a)(6) 22.619(b)(6)</p>	<p>Quantity, location, and characteristics of leachate collected, recirculated, and disposed. Note: Provide analytical report as Attachment C. Provide brief narrative on this form in space provided about leachate sources, how leachate is collected, measured and disposed. Also explained how the leachate head on the landfill liner is monitored and measured.</p>	<p>a) Leachate Collected: 976,000 gallons b) Leachate Disposed: 976,000 gallons c) Leachate Recirculated: 0 gallons d) Leachate Recirculation Plan exists (Y/N)? N/A ADEC approval Doc # N/A e) Leachate operating records exist (Y/N)? Y f) Leachate analytical report attached (Y/N)? Y g) Leachate narrative (collection, measurements and disposal): Leachate from the Class 4 landfill is collected in a sump. The leachate is pumped from the sump into a 10,000 gallon holding tank. The leachate is pumped from the holding tank into a tank truck and disposed of at a POTW. h) Leachate narrative (verifying <1' head on liner system): The leachate management system is designed to maintain less than 1 foot of head on the liner system. During storm events, head on the liner may transiently exceed 1 foot for a short period (<1 week) while leachate is being pumped and hauled for treatment.</p>	C
7	<p>22.423(b)(7) 22.522(a)(7) 22.619(b)(7)</p>	<p>Maintenance of stormwater controls and best management practices for erosion control. Note: List any upset conditions during the reporting period (i.e., washouts, etc...). Also, include narrative about vegetation maintenance and repair.</p>	<p>a) Briefly list maintenance activities and upset conditions here: Ditch and berm grading is part of normal routine operation. Approximately 3 acres to the east of the Class 4 landfill has been seeded and vegetative growth has been established.</p>	
8	<p>22.423(b)(8) 22.619(b)(8)</p>	<p>Status of capping and closure of completed areas. Note: List areas with acreage that have received interim or final cover. Include total landfilled area acreage not yet under final certified closed cover. Note: "Certified closed" means the facility has received an approval letter from ADEC accepting the engineer's closure certification report.</p>	<p>a) Lndfl unit/cell _____, _____ acres. Intrm or Final Cover (I/F): _____ b) Lndfl unit/cell _____, _____ acres. Intrm or Final Cover (I/F): _____ c) Lndfl unit/cell _____, _____ acres. Intrm or Final Cover (I/F): _____ d) Lndfl unit/cell _____, _____ acres. Intrm or Final Cover (I/F): _____ e) Total permitted disposal acres that contain waste but do not have intermediate or final certified cover: 5.75 acres</p>	
9	<p>22.423(b)(9) 22.522(a)(8) 22.619(b)(9)</p>	<p>Status of remedial or corrective action activities. Note: List corrective action events during reporting period (e.g., seeps and erosion correction, leachate spills, unauthorized waste handling and removal, etc...), and indicate whether action was taken in</p>	<p>a) Briefly list corrective actions events here: An Overfill Management Plan for the Class 4 landfill has been submitted to ADEC. Document #58364. b) Were any of the corrective actions taken in response to an ADEC</p>	

		<p><i>response to an ADEQ inspection.</i></p> <p><i>Note: If trust fund financial assurance mechanism is utilized, the trust fund must fully fund all acres permitted.</i></p>	<p>inspection (Y/N)? <u> N </u></p> <p>c) Current status of corrective actions: <u> NABORS Sanitation is awaiting ADEQ approval of the overfill management plan. </u></p> <p>d) Did corrective actions permanently solve the conditions (Y/N)? <u> N </u> Explain briefly: <u> Corrective actions to address the overfill conditions in the Class 4 landfill have not yet been implemented. Upon approval from ADEQ the overfill management plan will be executed which will permanently solve the conditions. </u></p>	
10	<p>22.423(b)(10) 22.522(a)(9) 22.619(b)(10)</p>	<p>Updated Financial Assurance documentation as required by Chapter 14. Note: Include copy of most recent financial assurance documentation as Attachment D. Also, included updated closure and post closure cost estimated as an attachment. Show detailed calculations of cost items in tabular format with specific item breakdowns. Also, show source of unit cost information and/or inflationary factor adjustments – use ADEQ factors where applicable. If updated unit cost information is used instead of inflationary factors, show the source of unit cost information. Confirm estimates are based on largest area ever requiring final cover.</p>	<p>a) Size of facility property under current permit? <u> 200 </u> acres b) Size of actual permitted disposal area? <u> 5.75 </u> acres c) What is the current total permitted disposal area not certified closed? <u> 5.7 5 </u> acres d) Updated closure cost estimate amount: \$ <u> 144,990.00 </u> e) Is the closure cost estimate based on the largest area ever requiring closure (Y/N)? <u> Y </u> f) Is the existing closure financial assurance adequate for acreage not yet certified closed (Y/N)? <u> N </u> g) Updated post closure care cost estimate amount: \$ <u> 10,240.00 </u> h) Is the existing post closure care financial assurance adequate for all permitted areas (Y/N)? <u> Y </u> i) Is the financial assurance mechanism a trust fund (Y/N)? <u> Y </u> j) Are the sources of information for updated unit cost line items shown on the cost estimate calculations (Y/N)? <u> N </u></p>	D
11	<p>22.423(b)(11) 22.522(a)(10) 22.619(b)(11)</p>	<p>Revised or updated facility Closure Plan in accordance with Chapter 13. Note: Provide updated Closure Plan as Attachment E if facility obtained a permit modification during the reporting period that affects the closure and/or post closure care.</p>	<p>a) List date and document id # for currently approved closure/ post closure plan. Date: <u> 9/12/1997 </u> Doc#: <u> 40047 </u> b) Does the currently approved closure plan detail phasing the closure activities (Y/N)? <u> N </u> c) What is the largest area requiring closure in the currently approved closure plan? <u> 5.75 </u> acres. d) Was an updated Closure Plan required during this reporting period (Y/N)? <u> N </u> e) Is an updated Closure Plan attached herein (Y/N)? <u> N </u> a) Are there current ADEQ enforcement actions (Y/N)? <u> N </u> b) Summary of enforcement actions:</p>	E
12	<p>22.423(b)(12) 22.522(a)(11) 22.619(b)(12)</p>	<p>Other items that affect compliance. Note: Include an ADEQ enforcement activity summary (solid waste, water, air, hazardous waste related) and , status of operating and permit fees. Also, include brief narrative concerning groundwater</p>		

	<p><i>monitoring reports, landfill gas, leachate recirculation, alternate daily cover, etc...</i></p>	
<p>c) Are operating and permit fees payments up-to-date (Y/N) ? <u>Y</u> If not explain: _____ _____ _____</p> <p>Additional Information: d) Does the facility monitor groundwater (Y/N): <u>N</u> If so, is it detection monitoring or assessment monitoring?: _____</p> <p>e) What is the groundwater analytical sampling frequency? _____ months f) Does the facility collect landfill gas (Y/N)? <u>N</u> g) Does the facility have a Gas Monitoring Plan (Y/N)? <u>N</u> h) Does the facility have permanent gas monitoring probes (Y/N)? <u>N</u> i) Does the facility use an alternate daily cover (ADC)(Y/N)? <u>N</u> If so, what type of ADC is used: _____ If so, list document id# approving ADC: _____ j) Does the facility have a Liquid Waste Management (LWM) Plan (Y/N)? <u>N</u> If so, list document id# approving the LWM Plan: _____ k) Are weigh scales utilized at the landfill (Y/N)? <u>Y</u> l) Does the final cap include a synthetic liner (Y/N)? <u>N</u> m) Does the final cap include clay liner (Y/N)? <u>Y</u> n) Total current permitted landfill volume: <u>222,100</u> cubic yards</p>	<p>a) Arkansas Licensed Engineer: Sign: _____ Date: _____ b) License Number: _____ c) Attach seal here:</p>	
<p>13</p>	<p>22.423(b) 22.522(a) 22.619(b)</p> <p>Certification of AEIR Report: "I have inspected the landfill site and have prepared this report to reflect operational compliance with permit conditions, permit plans, specifications, narrative, and all applicable regulations"</p>	

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ISSUING BANK:

ARVEST BANK
INTERNATIONAL DEPARTMENT
ARVEST BANK
502 S. MAIN
TULSA, OKLAHOMA 74103

LETTER OF CREDIT NO.: SDP11000244

DATE AND PLACE OF ISSUE:

APRIL 14, 2011, TULSA, OKLAHOMA

DATE AND PLACE OF EXPIRY:

APRIL 14, 2012 TULSA, OKLAHOMA

AMOUNT:

156,000.00USD (ONE HUNDRED FIFTY SIX THOUSAND
00/100EXACTLY)

APPLICANT:

NORTHWEST ARKANSAS REGIONAL SOLID WASTE MGT DIST
1305 ROSSI ROAD
MOUNTAIN HOME, AR 72653-5755

BENEFICIARY:

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
5301 NORTHSHORE DRIVE
NORTH LITTLE ROCK, AR 72118-5317

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. SDP11000244 IN YOUR FAVOR, AT THE REQUEST AND FOR THE ACCOUNT OF THE NORTHWEST ARKANSAS REGIONAL SOLID WASTE MGT DIST, 1305 ROSSI ROAD, MOUNTAIN HOME, AR 72653-5755, UP TO THE AGGREGATE AMOUNT OF \$156,000.00 (ONE HUNDRED FIFTY SIX THOUSAND U.S. DOLLARS AND NO/100) AVAILABLE UPON PRESENTATION OF:

- (1) YOUR SIGHT DRAFT, BEARING REFERENCE TO THIS LETTER OF CREDIT NO. SDP11000244, AND
- (2) YOUR SIGNED STATEMENT READING AS FOLLOWS: "I CERTIFY THAT THE AMOUNT OF THE DRAFT IS PAYABLE PURSUANT TO REGULATIONS ISSUED UNDER AUTHORITY OF THE ARKANSAS SOLID WASTE MANAGEMENT ACT (ACT 237 OF 1971 AS AMENDED)."

THIS LETTER OF CREDIT IS EFFECTIVE AS OF APRIL 14, 2011 AND SHALL EXPIRE ON APRIL 14, 2012, BUT SUCH EXPIRATION DATE SHALL BE AUTOMATICALLY EXTENDED FOR A PERIOD OF ONE YEAR ON THE STATED EXPIRATION DATE AND ON EACH SUCCESSIVE EXPIRATION DATE, UNLESS AT LEAST 30 DAYS BEFORE THE CURRENT EXPIRATION DATE, WE NOTIFY BOTH YOU AND NORTHWEST ARKANSAS REGIONAL SOLID WASTE MGT DIST BY CERTIFIED MAIL THAT WE DECIDED NOT TO EXTEND THIS LETTER OF CREDIT BEYOND THE CURRENT EXPIRATION DATE. IN THE EVENT YOU ARE SO NOTIFIED, ANY UNUSED PORTION OF THE CREDIT SHALL BE AVAILABLE UPON PRESENTATION OF YOUR SIGHT DRAFT FOR 30 DAYS AFTER THE DATE OF RECEIPT BY BOTH YOU AND NORTHWEST ARKANSAS REGIONAL SOLID WASTE MGT DIST SPRINGS, AS SHOWN ON THE SIGNED RETURN RECEIPTS.

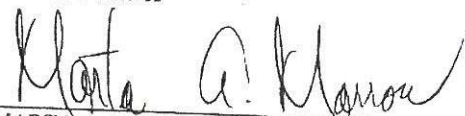
WHENEVER THIS LETTER OF CREDIT IS DRAWN ON UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS CREDIT, WE SHALL DULY HONOR SUCH DRAFT UPON PRESENTATION TO US, AND WE SHALL FORFEIT THE AMOUNT OF THE DRAFT TO THE ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY IN ACCORDANCE WITH YOUR INSTRUCTIONS.

WE CERTIFY THAT THE WORDING OF THIS LETTER OF CREDIT IS IDENTICAL TO THE WORDING SPECIFIED IN SECTION 12 OF THE ARKANSAS SOLID WASTE DISPOSAL CODE AS SUCH REGULATIONS WERE CONSTITUTED ON THE DATE SHOWN IMMEDIATELY BELOW.

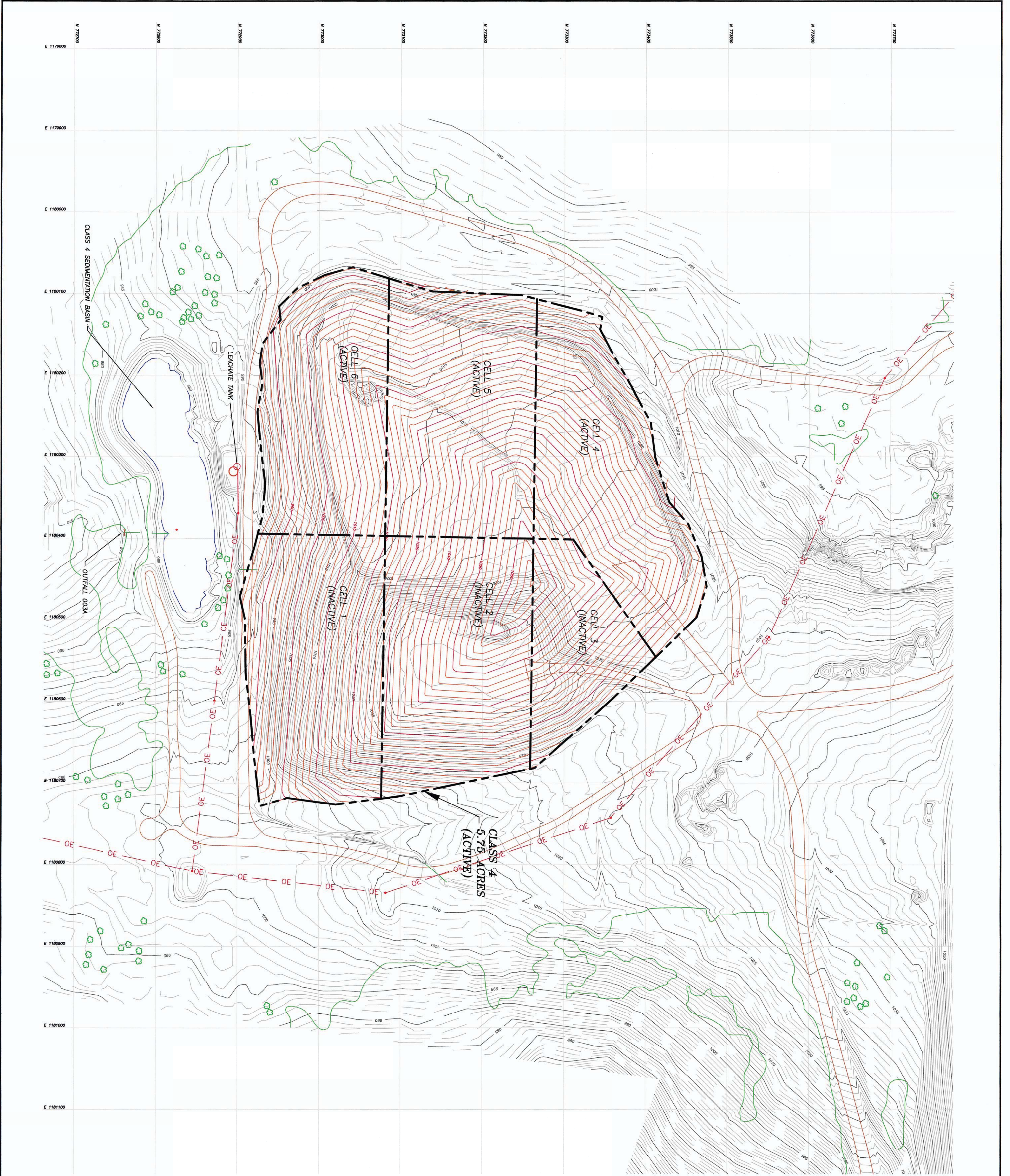
THIS IRREVOCABLE STANDBY LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS PRACTICE
FOR DOCUMENTARY CREDITS (2007 REVISION), INTERNATIONAL CHAMBER OF COMMERCE
PUBLICATION NO. 600.

FOR QUESTIONS REGARDING THIS LETTER OF CREDIT, PLEASE CONTACT THE INTERNATIONAL
DEPARTMENT AT (918) 631-1097 OR VIA EMAIL AT: ARVESTINTERNATIONAL@ARVEST.COM.

ARVEST BANK



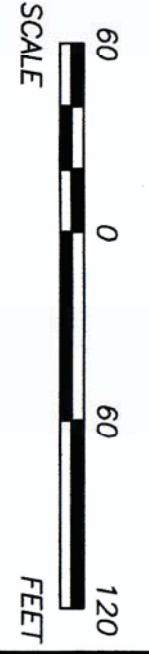
MARTA A. MORROW - SVP
INTL. DEPARTMENT MANAGER



- NOTES:**
1. EXISTING CONTOURS FROM AERIAL SURVEY FLOWN AUGUST 17, 2010 BY M.J. HARBEN ASSOCIATES, INC.
 2. SURVEY CONTROL PROVIDED BY NTB ASSOCIATES, INC'S TOM ALEXANDER, P.S.
 3. ALL DATA REFERS TO ARKANSAS STATE PLANE COORDINATE SYSTEM NORTH.

LEGEND:

1000	EXISTING 5' CONTOUR (8/17/10)
1000	EXISTING 1' CONTOUR (8/17/10)
1000	FINAL COVER 10' CONTOUR (DOC. 58185)
1000	FINAL COVER 2' CONTOUR (DOC. 58185)
---	PERMITTED BOUNDARY
---	TREE LINE
---	ROAD
---	OVERHEAD ELECTRIC
---	BUILDING
---	CONTAINMENT STRUCTURE



ANNUAL ENGINEERING INSPECTION REPORT
CLASS 4 LANDFILL
CURRENT CONDITIONS

REV: 1 DRAWING NUMBER: 3 PROJECT NUMBER: 4622.10 SHT. 3 OF 3

CLIENT: NABORS SANITATION
 NABORS LANDFILL
 THREE BROTHERS, AR

DRAWN BY: DWL DESIGNED BY: DWL PROJECT MGR: MSR
 ELECTRONIC FILE NAME: 4622.10 - CLASS 4 CURRENT CONDITIONS-REV 1.DWG DATE: 3/30/11

AQUATERRA
 ENVIRONMENTAL SOLUTIONS, INC.
 2101 W. Chesterfield, Ste. A201
 Springfield, Missouri 65807

R6	---	6BY	---
R5	---	5BY	---
R4	---	4BY	---
R3	---	3BY	---
R2	---	2BY	---
R1	05/24/11	DWL	ADDED COORDINATES
REV.	DATE	BY	DESCRIPTION