Haley Griffith (adpce.ad)

Subject: RE: 2024 AEIR - Elemental Environmental Solutions Class 3N LF, Gum Springs Plant - Permit No. 0262-S, AFIN 10-00004

From: Carpenter, Owen <Owen.Carpenter@terracon.com>
Sent: Friday, June 27, 2025 4:59 PM
To: Richard Bennett (adpce.ad) <richard.bennett@arkansas.gov>; richard.bennett@adeq.state.ar.us
Cc: Banic, Greg <greg.banic@adeq.state.ar.us>; Clark, Cole <cole.clark@veolia.com>; John Boothe <john.boothe@veolia.com>
Subject: 2024 AEIR - Elemental Environmental Solutions Class 3N LF, Gum Springs Plant - Permit No. 0262-S, AFIN 10-00004

Good afternoon Richard!

Please see the attached Calendar Year 2024 Annual Engineering Inspection Report for the Elemental Environmental Sol. Class 3N Landfill in Gum Springs, Arkansas. Please let us know if you have any questions or comments or if you need any additional information.

Thanks!
Owen

F. Owen Carpenter, P.E., P.G.
Senior Engineer I Solid Waste Services

25809 I-30 South I Bryant, Arkansas 72022
P (501) 847-9292 I F (501) 847-9210
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owen.carpenter@terracon.com I Terracon.com

2024 Annual Engineering Inspection Report

Elemental Environmental Solutions LLC Class 3N Landfill
Permit No. 0262-S, AFIN: 10-00004

June 27, 2025
Terracon Project No. 35257041

Prepared for:

VEOLIA

Elemental Environmental Solutions LLC
500 East Reynolds Road
Arkadelphia, Arkansas 71923
(870) 245-2771

Terracon

Nationwide
Terracon.com

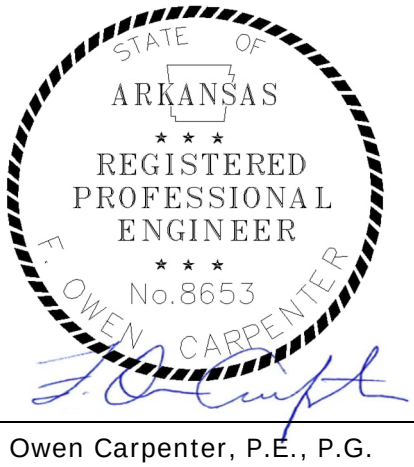
- Environmental
- Facilities
- Geotechnical
- Materials

Table of Contents

List of Attachments

PROFESSIONAL ENGINEER'S CERTIFICATION

As required by *Arkansas Rule 22* (*Reg.22.522*), representatives from Terracon Consultants, Inc. inspected the Elemental Environmental Solutions Class 3N Landfill (Facility) on June 2, 2025. During this inspection, general Facility operating practices and procedures in relation to *Arkansas Rule 22* and the Facility's permit were reviewed. Based on the site visit, review of the facility operating records, and discussions with the landfill owner/operator, it is my professional opinion that the Facility is being operated and maintained in compliance with *Arkansas Regulation 22* and the Facility's solid waste permit. This opinion is contingent on the fact that all information supplied to the signatory authority as of the date of this certification is unquestionably accurate and provided in good faith.



F. Owen Carpenter, P.E., P.G.
Arkansas Professional Engineer No. 8653

June 27, 2025
Date

ANNUAL ENGINEERING INSPECTION REPORT (AEIR) FORM Reporting Year: 2024

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

Facility Name: Elemental Environmental Solutions LLC Class 3N Landfill AFIN: 10-00004
Permit #: 0262-S Landfill Class: 3N

Report Submittal Date: June 27, 2025 Date of Landfill Site Inspection by Certifying Engineer: June 2, 2025

Complete the form as indicated
Instructions are bolded and italicized.

COLUMN TO BE COMPLETED BY REPORTER

Item	Regulation Reference	Item Description	Report Information/Comments/Remarks	Attachment Reference
1	22.423(b)(1) 22.522(a)(1) 22.619(b)(1)	Remaining volume in current cell.	a) 0 cubic yards	
		Projected date of opening new cell.	b) Date: Landfill is closed	
2	22.423(b)(2) 22.522(a)(2) 22.619(b)(2)	Remaining volume of all permitted units.	a) 0 cubic yards	
		Total air space used during the reporting period.	b) 0 cubic yards	
		Estimated remaining site life (years) based on utilization rate during the reporting period. ***Note: Itemize current permitted unit/cell information - use attachment if necessary.***	c) Landfill Unit/Cell remaining life: Landfill unit/cell N/A , ____ years. Landfill unit/cell ____ , ____ years. Landfill unit/cell ____ , ____ years. d) Entire permitted landfill: ____ years remaining life.	
3	22.423(b)(3) 22.522(a)(3) 22.619(b)(3)	Documentation of fill progression in compliance with permit plans, specs and operating plan and narrative. ***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.***	a) Progression narrative: The past fill progression at the Elemental Environmental Solutions (EES) Landfill followed the approved Permit plans and specifications. Division 1 is filled with waste, has reached its final permit contours and has undergone certified final closure.	

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. ***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.***	a) Weekly/monthly operational logs exist (Y/N)? Y b) Photos of AEIR inspection attached (Y/N)? Y c) Waste volume in and out records exist (Y/N)? Y d) Unauthorized waste forms exist (Y/N)? N e) Daily/weekly cover adequate at time of inspection (Y/N)? N/A f) Alternative Daily Cover (ADC) Plan located onsite (Y/N)? N/A Operations in compliance with ADC Plan (Y/N)? N/A g) Liquid Waste Management (LWM) Plan located onsite (Y/N)? N/A Operations in compliance with LWM Plan (Y/N)? N/A h) Liquids received to be bulked during reporting period: 0 gallons 0 tons i) Waste cover of inactive areas maintained adequately (Y/N)? Y j) Net amount of waste disposed in landfill during reporting period: 0 cubic yards 0 tons k) Leachate head level less than 1' on liner at time of inspection (Y/N)? Y	**A**
5	22.423(b)(5) 22.522(a)(5) 22.619(b)(5)	Updated contour map that depicts: ***Note: Provide updated drawing(s) and final cover permit drawing as Attachment B – discuss any discrepancies. Max. contour interval = 2 feet)***	a) Updated contour drawing attached (Y/N)? Y b) Final cover permit drawing attached (Y/N)? N/A c) ***List all discrepancies here:*** N/A d) Is there an overfill condition (Y/N)? N/A	**B**
		(i) horizontal and vertical extent of active and inactive fill areas;		
		(ii) status of all permitted units/cells; ***(Note: Label all active (working face, bulking area, stockpiles), inactive, closed and interim cover areas)***.	a) Currently, does the facility have sufficient on-site quantities and types of soils for liner and cover construction of permitted units/cells (Y/N)? N/A b) If not, where will deficiency shortfalls be obtained (be specific)? c) Is the current Design Narrative earthwork balance accurate (Y/N)? N/A	
		(iii) survey grid (required by 22.426); ***Note: Include benchmarks and horizontal controls***		
		(iv) location of other visible surface features or improvements (e.g., roads, buildings, gas control systems, etc.); ***Note: Include leachate risers, manholes, monitoring wells, gas wells, etc.***		
		(v) the person responsible for gathering the survey data and the date survey data was taken to prepare the map. *Reminder: Reporting period is calendar year. Survey data should be collected to reflect the AEIR reporting period.*	a) Name: N/A b) Name of person using the data to produce contour map: N/A c) Date survey data was collected: N/A	

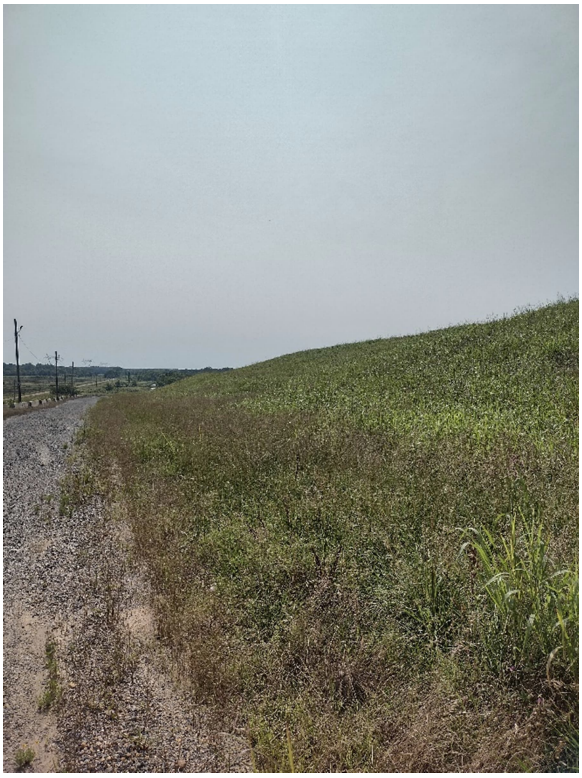
6	22.423(b)(6) 22.522(a)(6) 22.619(b)(6)	Quantity, location, and characteristics of leachate collected, recirculated, and disposed. ***Note: Provide analytical report as Attachment C. Provide brief narrative on this form in space provided about leachate sources, how leachate is collected, measured and disposed. Also, explain how the leachate head on the landfill liner is monitored and measured. (note that henceforth, can cite doc IDs for leachate results already submitted in database rather than including actual leachate analytical results)***	a) Leachate Collected: 59,055 gallons b) Leachate Disposed: 59,055 gallons c) Leachate Recirculated: 0 gallons d) Leachate Recirculation Plan exists (Y/N)? N ADEQ 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): EES properly manages the leachate generated in Division 1 of the Landfill with a leachate collection system, The major components of the leachate management system include a collection layer across the entire waste area, perforated and dual contained leachate collection pipes, leachate collection sump, and leachate collection pump that discharges the leachate into a leachate storage tank. Leachate is then transported to the on-site kiln for incineration. EES inspects the leachate collection system operation on a daily basis. EES checks the flow of the leachate from Division 1 on a weekly basis. h) Leachate narrative (verifying <1' head on liner system): Leachate continuously drains into the leachate collection sump which has auto level controls that transfer the leachate to a storage tank preventing leachate from collecting in the cell.	**C**
7	22.423(b)(7) 22.522(a)(7) 22.619(b)(7)	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.***	a) ***Briefly list maintenance activities and upset conditions here:*** Division 1 has been designed to adequately manage stormwater run-on and run-off and prevent erosion of the final cover system. The intent of the run-on control system is to limit the generation of leachate in Division 1. The stormwater run-on system consists of diversion berms, ditches, and culverts that collect, direct and convey stormwater at the Landfill into an NPDES permitted stormwater basin. EES performs routine maintenance on Division 1 of the Landfill, as required. Maintenance generally includes mowing and erosion control.	
8	22.423(b)(8) 22.619(b)(8)	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 ADEQ accepting the engineer's closure certification report.***	a) Lndfl unit/cell Division 1 , 6.5 acres. Intrm or Final Cover (I/F): 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) Acres of disposed waste not under final certified cover: 0 acres f) Acres of disposed waste area that have interim cover: 0 acres	

9	22.423(b)(9) 22.522(a)(8) 22.619(b)(9)	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 response to an ADEQ inspection.***	a) ***Briefly list corrective actions events here:*** N/A b) Were any of the corrective actions taken in response to an ADEQ inspection (Y/N)? N/A c) Current status of corrective actions: N/A d) Did corrective actions permanently solve the conditions (Y/N)? N/A ***Explain briefly:***	
10	22.423(b)(10) 22.522(a)(9) 22.619(b)(10)	Updated Financial Assurance documentation as required by Chapter 14. ***Note: Include copy of most recent financial assurance documentation as Attachment D. Also, include updated closure and post closure cost estimated as an attachment– recommend to use the Closure Costs and Post-closure Care Costs Worksheet located at ADEQ - Solid Waste - Technical Branch Home Page Specific links to the worksheets:*** http://www.adeq.state.ar.us/solwaste/branch_technical/pdfs/closure_costs_worksheet.xlsx ***and*** http://www.adeq.state.ar.us/solwaste/branch_technical/pdfs/post_closure_care_costs_worksheet.xlsx***. . 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.***	a) Size of the facility property under current permit? ±1380 acres b) Size of actual permitted disposal area? 6.5 acres c) What is the current total permitted disposal area that contains disposed waste but is not certified closed? 0 acres d) Updated closure cost estimate amount: $ N/A e) Is the closure cost estimate based on the largest area ever requiring closure (Y/N)? 0 f) Is the existing closure financial assurance adequate for acreage not yet certified closed (Y/N)?: N/A g) Updated post closure care cost estimate amount: $ 166,605 h) Is the existing post closure care financial assurance adequate for all permitted areas (Y/N)?: Y i) Is the financial assurance mechanism a trust fund (Y/N)? N j) Are the sources of information for updated unit cost line items shown on the cost estimate calculations (Y/N?): Y k) Do the unit cost items for soil cover material include actual third party cost of materials and labor (Y/N)? Y	**D**
11	22.423(b)(11) 22.522(a)(10) 22.619(b)(11)	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.***	a) Was an updated Closure Plan required during this reporting period (Y/N)?: N b) Is an updated Closure Plan attached herein (Y/N)? N	
12	22.423(b)(12) 22.522(a)(11) 22.619(b)(12)	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 monitoring reports, landfill gas, leachate recirculation, alternate daily cover, etc…***	a) Are there current ADEQ enforcement actions (Y/N)? N b) Summary of enforcement actions: c) Are operating and permit fees payments up-to-date (Y/N)? Y If not explain:	

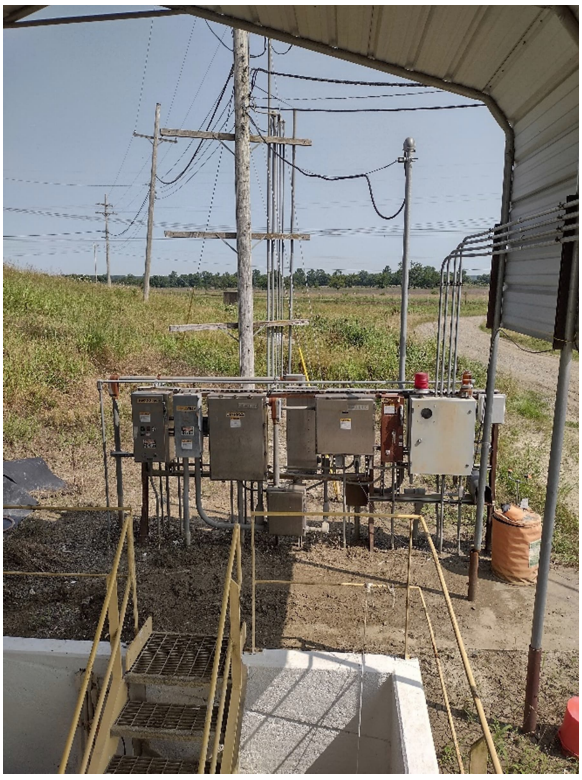
			Additional Information: d) Does the facility monitor groundwater (Y/N)?: Y If so, is it detection monitoring or assessment monitoring?: Detection e) What is the groundwater analytical sampling frequency? 6 months f) Does the facility collect landfill gas (Y/N)?: N g) Does the facility have a Gas Monitoring Plan (Y/N)? N h) Does the facility have gas monitoring probes (Y/N)? N i) Does the facility use an alternate daily cover (ADC) (Y/N)? N If so, what type of ADC is used: N/A If so, list document id# approving ADC: N/A j) Does the facility have a Liquid Waste Management (LWM) Plan (Y/N)? N/A If so, list document id# approving the LWM Plan: _____ k) Date and document id # of currently approved Operating Plan and Narrative: Date: _____ Doc#: N/A l) Date and document id # for currently approved Closure/ Post Closure Plan: Date: 6/28/2004 Doc#: 23540 m) Date and document id # of currently approved Permit Drawings: Date: _____ Doc#: N/A n) Date and document id # of currently approved Design Narrative: Date: _____ Doc#: N/A o) Are weigh scales utilized at the landfill (Y/N)? N p) Does the final cap include a synthetic liner (Y/N)? Y q) Does the final cap include clay liner (Y/N)? Y r) Total current permitted landfill volume: 307,000 cubic yards	
13	22.423(b) 22.522(a) 22.619(b)	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"	a) Arkansas Licensed Engineer: Sign: See Engineering Certification Page ii Date: June 27, 2025 b) License Number: 8653 c) ***Attach seal here:***	

Attachment A

Photographic Log



Looking east - north side of closed Landfill



Verifying leachate levels at pump station control panel

Looking west along south side of landfill

Looking east along south side of landfill

Attachment B
Updated Drawings

DIVISION 1 - CLASS 3N LANDFILL
(POST-CLOSURE STATUS)
SOLID WASTE PERMIT 0262-S

STORMWATER POND

RUN-OFF POND

DIVISION 2
(CLOSED)

DIVISION 3
(CLOSED)

DIVISION 4
(ACTIVE)

DIVISION 5
(ACTIVE)

DIVISION 6
(ACTIVE)

DIVISION 7
(ACTIVE)

DIVISION 8
(ACTIVE)

DIVISION 9
(ACTIVE)

DIVISION 10
(ACTIVE)

ENTRANCE GATE

E 1,674,500
N 510,500

E 1,675,000
N 511,000

E 1,675,500
N 510,500

BENCHMARKS

NO.:	DESCRIPTION	NORTHING	EASTING	ELEVATION
1008	Franklin Monument	511,636.38	1,674,556.90	267.34
1036	Top of Borrow Area	510,703.58	1,674,647.04	247.22
1037	SE Corner of Cell 6-8	510,544.70	1,675,823.90	206.90
1050	Top of Cell 1 (east end)	511,968.99	1,675,432.37	258.72

LEGEND

APPROXIMATE LIMITS OF SOLID WASTE LANDFILL PERMIT 262-S

APPROXIMATE LIMITS OF HAZARDOUS WASTE LANDFILL PERMIT 30-H

NOTE:
SURVEY INFORMATION PROVIDED BY AERIAL MAPS OF ARKANSAS DATED: MARCH 2014.

N

200 0 100 200
SCALE IN FEET

C:\0-Terracon\PROJECTS\Veolia - Elemental Environmental Solutions LLC-Gum Springs\052-002-CAD Dir\35257041\001 - LANDFILL LAYOUT.dwg

FIGURE 1

DESIGNED BY:	FOC
DRAWN BY:	FOC
APPVD. BY:	
SCALE:	1" = 200'
DATE:	06/18/2025
JOB NO.	052-002-35257041
ACAD NO.	001
SHEET NO.:	1 OF 1

LANDFILL LAYOUT

2024 ANNUAL ENGINEERING INSPECTION REPORT
ELEMENTAL ENV. SOLUTIONS
GUM SPRINGS PLANT
ARKANSAS

GUM SPRINGS

Terracon
Consulting Engineers and Scientists
25809 I-30 SOUTH
PH. (501) 847-9232
BRYANT, AR 72022
FAX. (501) 847-9210

REV.	DATE	BY	DESCRIPTION

Attachment C
Leachate Analytical Reports

10 April 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX
Project Number: March 2024
Date Received: 13-Mar-24 08:15

ANALYTICAL RESULTS

Lab Number: 2403320-03
Sample Name: Leachate 1
Date/Time Collected: 3/12/24 11:27
Sample Matrix: Water

Semivolatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
1,2,4,5-Tetrachlorobenzene	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
1,2,4-Trichlorobenzene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
1,4-Naphthoquinone	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
1-Naphthylamine	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
2,3,4,6-Tetrachlorophenol	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,4,5-Trichlorophenol	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,4,6-Trichlorophenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,4-Dichlorophenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,4-Dimethylphenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,4-Dinitrophenol	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,4-Dinitrotoluene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2-Chloronaphthalene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,6-Dichlorophenol	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
2-Chlorophenol	ug/L	< 50.0	E5	3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2,6-Dinitrotoluene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2-Acetylaminofluorene	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
2-Methylnaphthalene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2-Methylphenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2-Naphthylamine	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
2-Nitrophenol	ug/L	< 50.0	E5	3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2-Picoline	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
3 & 4-Methylphenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
3,3'-Dimethylbenzidine	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
3,3-Dichlorobenzidine	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
3-Methylcholanthrene	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
4,6-Dinitro-o-cresol	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
4-Aminobiphenyl	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
4-Bromophenyl-phenylether	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
4-Chloro-3-methylphenol	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
4-Chlorophenyl-phenylether	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
4-Chloroaniline	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
4-Nitroquinoline 1-oxide	ug/L	< 100	E21	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
5-Nitro-o-toluidine	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
4-Nitroaniline	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
7,12-Dimethylbenz(a)anthracene	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
4-Nitrophenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Acenaphthene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Acenaphthylene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Acetophenone	ug/L	< 100	E-01	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Alpha, Alpha-Dimethylphenethylamine	ug/L	< 500	E21	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018

10 April 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX
Project Number: March 2024
Date Received: 13-Mar-24 08:15

ANALYTICAL RESULTS

Lab Number: 2403320-03
Sample Name: Leachate 1
Date/Time Collected: 3/12/24 11:27
Sample Matrix: Water

Semivolatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Aniline	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Anthracene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Aramite	ug/L	< 600		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Benzo (a) anthracene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Benzo[a]pyrene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Benzo[b]fluoranthene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Benzo[g,h,i]perylene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Benzo[k]fluoranthene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Benzyl alcohol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Bis(2-chloro-1-methylethyl) ether	ug/L	< 50.0	E5	3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Bis(2-chloroethoxy)methane	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Bis(2-chloroethyl)ether	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Bis(2-ethylhexyl)phthalate	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Butylbenzylphthalate	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Chlorobenzilate	ug/L	< 100	E-01	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Chrysene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Diallate	ug/L	< 100	E-01	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Dibenz[a,h]anthracene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Dibenzofuran	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Diethylphthalate	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Dimethoate	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Dimethylphthalate	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Di-n-butylphthalate	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Di-n-octylphthalate	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Diphenylamine	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Disulfoton	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Ethyl Methanesulfonate	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Famphur	ug/L	< 200		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Fluoranthene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Fluorene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Hexachlorobenzene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Hexachlorobutadiene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Hexachlorocyclopentadiene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Hexachloroethane	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Hexachlorophene	ug/L	< 500	E21, E2-F	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Hexachloropropene	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Indeno[1,2,3-cd]pyrene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Isodrin	ug/L	< 100	E-01, E5	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Isophorone	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Isosafrole	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Kepone	ug/L	< 100	E2-F	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
m-Dinitrobenzene	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018

10 April 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX
Project Number: March 2024
Date Received: 13-Mar-24 08:15

ANALYTICAL RESULTS

Lab Number: 2403320-03
Sample Name: Leachate 1
Date/Time Collected: 3/12/24 11:27
Sample Matrix: Water

Semivolatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Methapyrilene	ug/L	< 200	E2-F	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Methyl parathion	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Methyl Methanesulfonate	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
m-Nitroaniline	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Nitrobenzene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
N-Nitrosodiethylamine	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
N-Nitrosodimethylamine	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
N-Nitrosodi-n-butylamine	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
n-Nitrosodiphenylamine	ug/L	< 200		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
N-Nitroso-di-n-propylamine	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
N-Nitrosomethylethylamine	ug/L	< 100	E-01	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
N-Nitrosomorpholine	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
N-Nitrosopiperidine	ug/L	< 100	E-01	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
N-Nitrosopyrrolidine	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
O,O,O-Triethyl phosphorothioate	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
o,o-Diethyl o-2-pyrazinyl	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
o-Nitroaniline	ug/L	< 100		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
o-Toluidine	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
p-Dimethylaminoazobenzene	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Parathion	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Pentachlorobenzene	ug/L	< 50.0		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Pentachloroethane	ug/L	< 500		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Pentachloronitrobenzene	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Pentachlorophenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Phenacetin	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Phenanthrene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Phenol	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Phorate	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
p-Phenylenediamine	ug/L	< 69000		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Pronamide	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Pyrene	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Pyridine	ug/L	< 50.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Safrole	ug/L	< 100	E-01	3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
Sulfotep	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
sym-Trinitrobenzene	ug/L	< 100		3/20/24 17:54	B403311	SW 8270E, Rev. 6, 2018
2,4,6-Tribromophenol [surr]	%	69.9		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2-Fluorobiphenyl [surr]	%	68.1		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
2-Fluorophenol [surr]	%	50.1		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Nitrobenzene-d5 [surr]	%	70.3		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Phenol-d5 [surr]	%	36.8		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018
Terphenyl-d14 [surr]	%	95.0		3/18/24 14:50	B403311	SW 8270E, Rev. 6, 2018

Total Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method

10 April 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX
Project Number: March 2024
Date Received: 13-Mar-24 08:15

ANALYTICAL RESULTS

Lab Number:	**2403320-03**
Sample Name:	**Leachate 1**
Date/Time Collected:	**3/12/24 11:27**
Sample Matrix:	**Water**

Total Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Antimony	ug/L	< 52.0		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Arsenic	ug/L	**4880**		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Barium	ug/L	**329**		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Beryllium	ug/L	< 6.50		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Cadmium	ug/L	**1.61**	J	3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Chromium	ug/L	**45.0**		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Cobalt	ug/L	**20.8**		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Copper	ug/L	**5.06**	J	3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Lead	ug/L	**10.5**		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Mercury	ug/L	< 2.00		3/14/24 16:41	B403325	SW7470A/EPA245.1,3.0- 1994
Nickel	ug/L	**14.6**	J	3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Selenium	ug/L	**203**		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Silver	ug/L	< 7.80		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Thallium	ug/L	< 6.50		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Tin	ug/L	< 520		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Vanadium	ug/L	**4270**		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014
Zinc	ug/L	< 520		3/20/24 17:25	B403403	SW 6020B, Rev 2-2014

Volatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
1,1,1,2-Tetrachloroethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,1,1-Trichloroethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,1,2,2-Tetrachloroethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,1,2-Trichloroethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,1-Dichloroethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,1-Dichloroethene	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,2,3-Trichloropropane	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,2-Dibromo-3-chloropropane	ug/L	< 300		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,2-Dibromoethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,2-Dichloroethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,2-Dichloropropane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,3-Dichlorobenzene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,2-Dichlorobenzene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
2-Hexanone	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
4-Methyl-2-pentanone	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Acetone	ug/L	< 500		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Acetonitrile	ug/L	< 5000		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Acrolein	ug/L	< 400		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Acrylonitrile	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Allyl chloride	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,4-Dichlorobenzene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Benzene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Bromodichloromethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006

10 April 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX
Project Number: March 2024
Date Received: 13-Mar-24 08:15

ANALYTICAL RESULTS

Lab Number: 2403320-03
Sample Name: Leachate 1
Date/Time Collected: 3/12/24 11:27
Sample Matrix: Water

Volatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Bromoform	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Bromomethane	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Carbon disulfide	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
2-Butanone	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Carbon Tetrachloride	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Chlorobenzene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Chloroethane	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Chloroform	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Chloromethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Chloroprene	ug/L	< 500		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
cis-1,3-Dichloropropene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Dibromochloromethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Dibromomethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Dichlorodifluoromethane	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Ethyl Methacrylate	ug/L	< 300		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Ethylbenzene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Iodomethane	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Isobutyl alcohol	ug/L	< 1000		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Methacrylonitrile	ug/L	< 5000		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Methylene Chloride	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Methyl Methacrylate	ug/L	< 500		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
m,p-Xylene	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Naphthalene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
o-Xylene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Propionitrile	ug/L	< 1000		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Styrene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Tetrachloroethene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Toluene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
trans-1,2-Dichloroethene	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
trans-1,3-Dichloropropene	ug/L	< 100		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
trans-1,4-Dichloro-2-butene	ug/L	< 500		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Trichloroethene	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Trichlorofluoromethane	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Vinyl acetate	ug/L	< 400		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Vinyl chloride	ug/L	< 200		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
4-Bromofluorobenzene [surr]	%	101		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
1,2-Dichloroethane-d4 [surr]	%	110		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006
Toluene-d8 [surr]	%	98.5		3/23/24 2:43	B403380	SW 8260C, Rev 3, 2006

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Cyanide (total)	mg/L	**4.00**		3/15/24 8:21	B403344	SM 4500-CN B,C,E 2016
pH	S.U.	**12.0**	E2	3/13/24 9:19	B403289	SM 4500-H+ B-2011
Sulfide	mg/L	< 2.50		3/14/24 9:50	B403297	SM 4500-S2 D-2011

10 April 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX

Project Number: March 2024
Date Received: 13-Mar-24 08:15

ANALYTICAL RESULTS

Lab Number:	**2403320-03**
Sample Name:	**Leachate 1**
Date/Time Collected:	**3/12/24 11:27**
Sample Matrix:	**Water**

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Temp of pH	°C	**25.4**		3/13/24 9:19	B403289	SM 2550 B-2010

09 September 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX

Project Number: August 2024
Date Received: 26-Aug-24 14:31

ANALYTICAL RESULTS

Lab Number: 2408580-03
Sample Name: Leachate 1
Date/Time Collected: 8/26/24 12:30
Sample Matrix: Liquid

Semivolatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Aniline	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Anthracene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Aramite	ug/L	< 600		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Benzo (a) anthracene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Benzo[a]pyrene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Benzo[b]fluoranthene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Benzo[g,h,i]perylene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Benzo[k]fluoranthene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Benzyl alcohol	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Bis(2-chloro-1-methylethyl) ether	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Bis(2-chloroethoxy)methane	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Bis(2-chloroethyl)ether	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Bis(2-ethylhexyl)phthalate	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Butylbenzylphthalate	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Chlorobenzilate	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Chrysene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Diallate	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Dibenz[a,h]anthracene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Dibenzofuran	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Diethylphthalate	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Dimethoate	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Dimethylphthalate	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Di-n-butylphthalate	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Di-n-octylphthalate	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Diphenylamine	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Disulfoton	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Ethyl Methanesulfonate	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Famphur	ug/L	< 200		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Fluoranthene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Fluorene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Hexachlorobenzene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Hexachlorobutadiene	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Hexachlorocyclopentadiene	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Hexachloroethane	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Hexachlorophene	ug/L	< 500	E21, E2-A	8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Hexachloropropene	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Indeno[1,2,3-cd]pyrene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Isodrin	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Isophorone	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Isosafrole	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Kepone	ug/L	< 100	E2-F, E5	8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
m-Dinitrobenzene	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018

09 September 2024

Cole Clark
Veolia Gum Springs Facility
500 East Reynolds Rd.
Arkadelphia, AR 71923
Project: Groundwater Samples - Appendix IX
Project Number: August 2024
Date Received: 26-Aug-24 14:31

ANALYTICAL RESULTS

Lab Number: 2408580-03
Sample Name: Leachate 1
Date/Time Collected: 8/26/24 12:30
Sample Matrix: Liquid

Semivolatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Methapyrilene	ug/L	< 200	E-01, E2-F	8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Methyl parathion	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Methyl Methanesulfonate	ug/L	< 100	E2-F	8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
m-Nitroaniline	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Nitrobenzene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitrosodiethylamine	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitrosodimethylamine	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitrosodi-n-butylamine	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
n-Nitrosodiphenylamine	ug/L	< 200		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitroso-di-n-propylamine	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitrosomethylethylamine	ug/L	< 100	E-01	8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitrosomorpholine	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitrosopiperidine	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
N-Nitrosopyrrolidine	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
O,O,O-Triethyl phosphorothioate	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
o,o-Diethyl o-2-pyrazinyl	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
o-Nitroaniline	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
o-Toluidine	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
p-Dimethylaminoazobenzene	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Parathion	ug/L	< 100	E-01	8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Pentachlorobenzene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Pentachloroethane	ug/L	< 500		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Pentachloronitrobenzene	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Pentachlorophenol	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Phenacetin	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Phenanthrene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Phenol	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Phorate	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
p-Phenylenediamine	ug/L	< 69000	E5	8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Pronamide	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Pyrene	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Pyridine	ug/L	< 50.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Safrole	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Sulfotep	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
sym-Trinitrobenzene	ug/L	< 100		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
2,4,6-Tribromophenol [surr]	%	92.2		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
2-Fluorobiphenyl [surr]	%	81.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
2-Fluorophenol [surr]	%	57.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Nitrobenzene-d5 [surr]	%	69.0		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Phenol-d5 [surr]	%	38.2		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018
Terphenyl-d14 [surr]	%	105		8/30/24 13:14	B408578	SW 8270E, Rev. 6, 2018

Total Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method

09 September 2024

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Project: Groundwater Samples - Appendix IX

Project Number: August 2024
Date Received: 26-Aug-24 14:31

ANALYTICAL RESULTS

Lab Number: **2408580-03**
Sample Name: **Leachate 1**
Date/Time Collected: **8/26/24 12:30**
Sample Matrix: **Liquid**

Total Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Antimony	ug/L	< 52.0		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Arsenic	ug/L	**5200**		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Barium	ug/L	**426**		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Beryllium	ug/L	< 6.50		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Cadmium	ug/L	**1.82**	J	9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Chromium	ug/L	**34.7**		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Cobalt	ug/L	**24.9**		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Copper	ug/L	**11.4**	J	9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Lead	ug/L	**16.7**		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Mercury	ug/L	**0.0675**	J	8/28/24 13:18	B408561	SW7470A/EPA245.1,3.0- 1994
Nickel	ug/L	< 39.0		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Selenium	ug/L	**350**		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Silver	ug/L	**3.10**	J	9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Thallium	ug/L	< 6.50		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Tin	ug/L	< 520		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Vanadium	ug/L	**4380**		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014
Zinc	ug/L	< 520		9/4/24 14:09	B409035	SW 6020B, Rev 2-2014

Volatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
1,1,1,2-Tetrachloroethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,1,1-Trichloroethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,1,2,2-Tetrachloroethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,1,2-Trichloroethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,1-Dichloroethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,1-Dichloroethene	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,2,3-Trichloropropane	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,2-Dibromo-3-chloropropane	ug/L	< 150		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,2-Dibromoethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,2-Dichloroethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,2-Dichloropropane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,3-Dichlorobenzene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,2-Dichlorobenzene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
2-Hexanone	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
4-Methyl-2-pentanone	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Acetone	ug/L	< 250		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Acetonitrile	ug/L	< 2500		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Acrolein	ug/L	< 200	E21	8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Acrylonitrile	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Allyl chloride	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,4-Dichlorobenzene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Benzene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Bromodichloromethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006

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Project: Groundwater Samples - Appendix IX

Project Number: August 2024
Date Received: 26-Aug-24 14:31

ANALYTICAL RESULTS

Lab Number: **2408580-03**
Sample Name: **Leachate 1**
Date/Time Collected: **8/26/24 12:30**
Sample Matrix: **Liquid**

Volatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Bromoform	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Bromomethane	ug/L	< 100	E-01	8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Carbon disulfide	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
2-Butanone	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Carbon Tetrachloride	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Chlorobenzene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Chloroethane	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Chloroform	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Chloromethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Chloroprene	ug/L	< 250		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
cis-1,3-Dichloropropene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Dibromochloromethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Dibromomethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Dichlorodifluoromethane	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Ethyl Methacrylate	ug/L	< 150		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Ethylbenzene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Iodomethane	ug/L	< 100	E-01	8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Isobutyl alcohol	ug/L	< 500		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Methacrylonitrile	ug/L	< 2500		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Methylene Chloride	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Methyl Methacrylate	ug/L	< 250		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
m,p-Xylene	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Naphthalene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
o-Xylene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Propionitrile	ug/L	< 500		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Styrene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Tetrachloroethene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Toluene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
trans-1,2-Dichloroethene	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
trans-1,3-Dichloropropene	ug/L	< 50.0		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
trans-1,4-Dichloro-2-butene	ug/L	< 250		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Trichloroethene	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Trichlorofluoromethane	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Vinyl acetate	ug/L	< 200	E21	8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Vinyl chloride	ug/L	< 100		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
4-Bromofluorobenzene [surr]	%	102		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
1,2-Dichloroethane-d4 [surr]	%	115		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006
Toluene-d8 [surr]	%	101		8/29/24 16:42	B408584	SW 8260C, Rev 3, 2006

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Cyanide (total)	mg/L	**15.6**		9/3/24 14:49	B409001	SM 4500-CN B,C,E 2016
pH	S.U.	**12.0**	E2	8/27/24 14:10	B408535	SM 4500-H+ B-2011
Sulfide	mg/L	< 7.50		8/28/24 8:14	B408540	SM 4500-S2 D-2011

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Project: Groundwater Samples - Appendix IX

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Date Received: 26-Aug-24 14:31

ANALYTICAL RESULTS

Lab Number:	**2408580-03**
Sample Name:	**Leachate 1**
Date/Time Collected:	**8/26/24 12:30**
Sample Matrix:	**Liquid**

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Temp of pH	°C	**24.9**		8/27/24 14:10	B408535	SM 2550 B-2010

Attachment D
Updated Financial Assurance

LANDFILL POST-CLOSURE CARE - ANNUAL COST ESTIMATE WORKSHEET

OWNER: Elemental Environmental Solutions LLC		PERMIT NO.	0262-S	AFIN No.: 10-00004	
OPERATOR: Elemental Environmental Solutions		ESTIMATOR: F. Owen Carpenter	(Ark. Licensed P.E. #: 8653)		DATE: August 28, 2020
TOTAL PERMITTED WASTE DISPOSAL ACRES: 6.5					
TOTAL PERMITTED ACRES CERTIFIED CLOSED: 6.5					

LANDFILL POST CLOSURE CARE - ANNUAL COST ESTIMATE WORKSHEET Permit: 0302-S3N AFIN:: 41-00230

ITEM No.	ITEM	QUANTITY	UNITS	UNIT COST	COST	SUBTOTALS	SOURCE OF UNIT COST INFO
1.0.0	PROFESSIONAL SERVICES						
1.1.0	Engineering (Annual inspection and reporting, corrective action design and bid, contract management)	1	Lump Sum	$ 2,500.00	$ 2,500.00		Terracon estimate
1.2.0	Topographic and Boundary Survey (annual, final, and corrective action, if required)		Lump Sum		$		N/A
1.3.0	Corrective Action Engineering Services (Construction Oversight, Testing, Reporting, Certification)		Lump Sum				N/A
	Professional Services Annual Subtotal					$ 2,500.00	
2.0.0	FINAL COVER ROUTINE MAINTENANCE						
2.1.0	Inspect soil cover, vents, flares, drainage letdowns and outfalls, etc...	2	Event	$500.00	$ 1,000.00		Terracon estimate
2.2.0	Mowing/Trimming (6.5 acres twice per year)	13	ACRE	$85.00	$ 1,105.00		Mid-Ark Environmental Services estimate
2.3.0	Clean Drain/Vent Openings	2	Event	$215.00	$ 430.00		Mid-Ark Environmental Services estimate
	Final Cover Routine Maintenance Annual Subtotal					$ 2,535.00	
3.0.0	FINAL COVER REPAIRS						
3.1.0	Remove/incorporate unacceptable materials (e.g., dead vegetation, solid waste)		ACRE		$ -		N/A
3.2.0	Scarify and prepare surface		ACRE		$ -		N/A
3.3.0	Soil, On-Site (excavate, transport, place, compact)		CU. YD.		$ -		N/A
3.4.0	Soil, Off-site (excavate, transport, place, compact)		CU. YD.		$ -		N/A
3.5.0	Seeding and mulching (5% of total acreage annually)		ACRE		$ -		N/A
3.6.0	Fertilizer	6.5	ACRE	$150.00	$ 975.00		Based on Model Fill 38-acre closure
	Final Cover Repairs Annual Subtotal					$ 975.00	
4.0.0	ACCESS ROADS REPAIRS						
4.1.0	Reshape/regrade subgrade		SQ. YD.		$		N/A
4.2.0	Gravel (transport, place, compact)		TON		$		N/A
4.3.0	Drainage Structures (e.g., culverts,		Lin. FT.		$		N/A
4.4.0	Riprap ditching/channels		Lin. FT.		$		N/A
	Access Roads Repair Annual Subtotal					$ -	
5.0.0	SURFACE WATER MANAGEMENT OPERATION AND MAINTENANCE (O&M)						
5.1.0	Collection system operation and maintenance (ditches, piping conveyances, outfalls, sampling points repair/replace)	1	Lump Sum	$ 1,500.00	$ 1,500.00		Mid-Ark Environmental Services estimate
5.2.0	Stormwater storage (sediment pond) operation/repairs		Lump Sum				N/A
5.3.0	Sample collection (1 events per year)	1	Event	$ 1,000.00	$ 1,000.00		Mid-Ark Environmental Services estimate
5.4.0	Sample analysis and reporting (1 events per year)	1	Event	$ 1,000.00	$ 1,000.00		Mid-Ark Environmental Services estimate
	Surface Water Management O&M Annual Subtotal					$ 3,500.00	
6.0.0	LEACHATE COLLECTION SYSTEM O&M						
	Generation Rate = 86,870 gal./ac./yr.						
6.1.0	Collection operation/maintenance (pump, piping, storage...operation/repair/replace)	12	Months	$ 1,000.00	$ 12,000.00		Terracon estimate
6.2.0	Leachate loading, off-loading and transportation	10	Event	$ 1,175.00	$ 11,750.00		Mid-Ark Environmental Services estimate
6.3.0	Leachate Treatment/Disposal	86,870	Gal.	$ 0.75	$ 65,152.50		Site specific cost
6.4.0	Additional/upgrades for piping, pumps and storage		Lump Sum		$		N/A
6.5.0	Leachate sample collection		EACH		$		N/A - included with groundwater sampling
6.6.0	Leachate sample analysis and reporting		EACH		$		N/A - included with groundwater sampling
	Leachate Collection System O&M Annual Subtotal					$ 88,902.50	
7.0.0	GROUNDWATER MONITORING SYSTEM O&M						
	Number of Wells in Approved System = 11						
7.1.0	Well maintenance (e.g., protective casing (lock & hinges) repair/replacement, well pad repair/replace, etc...)	4	EACH	$ 25.00	$ 100.00		Terracon estimate
7.2.0	Upgrade/redevelop existing wells		EACH		$		N/A

LANDFILL POST CLOSURE CARE - ANNUAL COST ESTIMATE WORKSHEET					Permit: 0302-S3N	AFIN:: 41-00230	
ITEM No.	ITEM	QUANTITY	UNITS	UNIT COST	COST	SUBTOTALS	SOURCE OF UNIT COST INFO
7.3.0	Well Replacement (assume one well)	50	Lin. FT.	$ 50.00	$ 2,500.00		Terracon estimate
7.4.0	Sample collection (4 events per year)	4	Event	$ 3,600.00	$ 14,400.00		Terracon estimate
7.5.0	Sample analysis and reporting (4 events per year)	4	Event	$ 3,200.00	$ 12,800.00		Terracon estimate
	Groundwater Monitoring System O&M Annual Subtotal					$ 29,800.00	
8.0.0	GAS MONITORING SYSTEM O&M						
8.1.0	Number of Gas Monitoring Probes/Wells = _____						
8.2.0	Methane monitoring of probes/wells (4 per year)	4	Event		$		N/A
8.3.0	Methane monitoring at site boundary and structures (4 per year)	4	Event		$		N/A
8.4.0	Sample analysis and reporting	4	Event		$		N/A
	Gas Monitoring System O&M Annual Subtotal					$ -	
9.0.0	GAS EXTRACTION SYSTEM O&M						
	Gas vents, _____# of vents, _____ average depth						
9.1.0	Passive System						
9.1.1	Passive well head flare maintenance		EACH		$		N/A
9.2.0	Active System						
9.2.1	Flare, ___ BTU/hour		EACH		$		N/A
9.2.2	Additional Well Installation/Upgrades		EACH		$		N/A
9.2.3	Ancillary gas equipment repair/replacement (piping, blowers, condensate collection)		Lump Sum		$		N/A
	Gas Extraction System O&M Annual Subtotal					$ -	
10.0.0	CORRECTIVE ACTION EVALUATION AND IMPLEMENTATION						
10.1.0	Resurvey monitoring well reference points and site benchmarks (prorate for annual expenses)		EACH		$		N/A
10.2.0	Remove sediments from stormwater basin(s) (prorate for annual expenses)		EACH		$		N/A
10.3.0	Groundwater exceedances statistical evaluation (		EACH		$		N/A
10.4.0	Groundwater alternate source determination) (prorate for annual expenses)		EACH		$		N/A
10.5.0	Groundwater compliance monitoring (prorate for annual expense)		EACH		$		N/A
10.6.0	Other: _____ _____		EACH		$		N/A
	Corrective Action Evaluation and Implementation Annual Subtotal					$ -	
	Total Post Closure Care Annual Cost Subtotal					$ 128,212.50	
11.0.0	MISCELLANEOUS						
11.1.0	10% Administration and Contingency (Total Closure Cost Subtotal x 10%)				$ 12,821.25		
					$		
					$		
	Misc. Subtotal					$ 12,821.25	
	TOTAL ESTIMATED ANNUAL POST CLOSURE CARE COST					$ 141,033.75	

POST-CLOSURE COST INFLATION ADJUSTMENT

Year	2020	2021	2022	2023	2024
Inplicit Price Deflator	1	1.017	1.062	1.065	1.027
Adjusted Post-Closure Cost Estimate	$141,033.75	$143,431.32	$152,324.07	$162,225.13	$166,605.21

Inflation Factor Notes:

*1. All inflation multipliers in the table above are expressed as multipliers and are used to increase yearly costs by applying the Inflation Factor (IF) as a multiplier, where Current Year Cost = Prior Year Cost * IF*

2. Implicit Price Deflator numbers provided by DEQ at: https://www.adeq.state.ar.us/sw/permits/financial.aspx#collapseAeir