

Illinois Environmental Protection Agency Bureau of Land 1021 North Grand Avenue East Box 19276 Springfield, IL 62794-9276

RCRA FACILITY GROUNDWATER, LEACHATE AND GAS REPORTING FORM

This form must be used as a cover sheet for the notices and reports, identified below as required by: (1) a facility's RCRA interim status closure plan; (2) the RCRA interim status regulations; or (3) a facility's RCRA permit. All reports must be submitted to the Illinois EPA's Bureau of Land Permit Section. This form is for use by Hazardous Waste facilities only. Reporting for Solid Waste facilities should be submitted on a separate form. All reports submitted to the Illinois EPA's Bureau of Land Permit Section must contain an original, plus a minimum of two copies.

Note: This form is not to be used with permit or closure plan modification requests. The facility's approved permit or closure plan will state whether the document you are submitting is required as a report or a modification request.

Facility Name: <u>WRB Refining LLC - Wood River Refinery</u> Facility Address: <u>900 S. Central Ave; Roxana, IL 62048</u>

Site ID #: <u>1191150002</u> Fed ID #: ILD 080 012 305

Check the appropriate heading. Only one heading may be checked for each corresponding submittal. Check the appropriate sub-heading, where applicable. Attach the original and all copies behind this form.

- ____ LPC-160 Forms
 - <u>Groundwater</u>
 - Quarterly Indicate one: 1 2 3 4
 - Semi-Annual
 - Annual
 - Biennial

Leachate Quarterly – Indicate one: 1 2 3 4 Semi-Annual Annual Biennial

- Groundwater Data (without LPC-160 Forms) Quarterly – Indicate one: 1 2 3 4
 - _____ Annual _____ Semi-Annual _____ Biennial
- X Well Construction Information
 - X Well Construction Forms, Boring Logs and/or Abandonment Forms
 - X Well Survey Data (e.g., Stick-up Elevation Data)
- ____ Notice of Statistically Significant Evidence of Groundwater Contamination (35 III. Adm. Code 724.198)
- ____ Notice of Exceedence of Groundwater Concentration Limit (35 III. Adm. Code 724.199(h))
- ____ Notice of Alternate Source or Error in Sampling Analysis or Evaluation of Groundwater (35 III. Adm. Code 724.199(i))
- ____ Gas Monitoring Reports
- ____ Other (identify) _____



Monitoring Well Installation Details Flush Mount Monitoring Well Construction Diagram

Destate	Mast Fanalina Davita 444/David A				N/N/ 40
Project:	West Fenceline - Route 111/Rand A		40/4/2040	Well ID:	MW-13
Project Location:	Roxana, Illinois	Date Started:	12/1/2010		
Well Location:	WRR West Property	Date Completed:	12/3/2010	Boring ID:	MW-13
Drilling Contractor:			1420	Northing:	791574.95
Driller:	B. Schilling	Type of Rig:	CME 55	Easting:	2321696.95
Consulting Firm:	URS Corporation	Drilling Method: HSA (4.25" ID)		Elevation Datum:	430.79
Geologist:	E. Fritsch	Completion Zone:			
				Depths (ft bgs)	Elevations (ft)
			Ground Elevation:		430.7
		I	Depth of Riser Below Ground:	0.52	
		I	Elevation of Top of Riser Pipe:	0.52	430.2
			ID/Type of Surface Casing:	12" Flush Mount	
			Type of Surface Seal:		
		1	Bottom of Surface Seal:	2.00	428.7
Boring Dia	imeter		Solitin of Sunace Seal.	2.00	420.1
9	in 🔽		Groundwater (after completion):	24.32	406.4
			Type of Riser Pipe:	Schedule 40 PVC	
			Riser Diameter:	2.00 in	
			Type of Backfill:	Cement/Bentonite Gr	rout
			Top of Seal:	19.80	
				10.00	410.9
			Type of Seal:	Bentonite Chips	410.9
			Type of Seal: Top of Filter Pack		
				Bentonite Chips	407.7
			Top of Filter Pack Top of Screen Type of Filter Pack:	Bentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa	407.7
			Top of Filter Pack Top of Screen Type of Filter Pack:	Bentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa Schedule 40 PVC	407.7
			Top of Filter Pack Top of Screen Type of Filter Pack: Type of Screen: Screen Diameter	Bentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa Schedule 40 PVC 2.00 in	407.7
			Top of Filter Pack Top of Screen Type of Filter Pack: Type of Screen:	Bentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa Schedule 40 PVC 2.00 in	407.7
			Top of Filter Pack Top of Screen Type of Filter Pack: Type of Screen: Screen Diameter	Bentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa Schedule 40 PVC 2.00 in	407.7
			Top of Filter Pack Top of Screen Type of Filter Pack: Type of Screen: Screen Diameter Screen Slot Size:	Bentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa Schedule 40 PVC 2.00 in 0.010 in	407.7 405.2 and 395.2
		· · · · · · · · · · · · · · · · · · ·	Top of Filter Pack Top of Screen Type of Filter Pack: Type of Screen: Screen Diameter Screen Slot Size: Bottom of Screen: Bottom of Blank Casing: Backfill/Seal Below Well:	Bentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa Schedule 40 PVC 2.00 in 0.010 in 35.57 35.82 Native soil (cave	407.1 405.2 and 395.2 394.5 394.5 a in) and placed
		· · · · · · · · · · · · · · · · · · ·	Top of Filter Pack Top of Screen Type of Filter Pack: Type of Screen: Screen Diameter Screen Slot Size: Bottom of Screen: Bottom of Blank Casing:	Elentonite Chips 23.00 25.57 ANSI/NSF Quartz Sa Schedule 40 PVC 2.00 in 0.010 in 35.57 35.82 Native soil (cave	407.1 405.2 and 395.2 394.5 394.5 a in) and placed

DIAGRAM IS NOT TO SCALE

									Page 1 Of 2		
				LOG OF BORING							
								MW-13			
at								Starting Qua Date: 12/1/10	adrangle Sec:34.00		
ı fe		ed		Ê	.			Date: 12/1/10 Completion	Sec:34.00 T:T5N R:R9W		
Depth In feet	SS	Inches Recovered	, ts	PID (ppm)	Sampler Graphic	<u></u>	S	Date: 12/3/10	R:R9W M (or State Plane) Coord		
eptl	Inches Driven	sco	Blow Counts		amg	Symbol	nscs	Cashig Elevation. 450.27	N: (X):791574.95		
ă	20	ڇڇ	шŌ	đ	un n	ŝ) ĭ	Ground Elevation: 430.79	E: (Y):2321696.95		
							FILL	DESCRIPTION White crushed limestone gravel	NOTES Borehole advanced to depth of 10' via		
						\boxtimes		Soft, moist, dark gray, medium plastic, Silty CLAY	air knife to clear utilities.		
\vdash	1					\bigotimes	1	(CL), with gravel	Soil cuttings from air knife were used to		
						\bigotimes			log the upper portion of the borehole.		
\vdash	1					\bigotimes	;				
						\boxtimes					
	1					\bigotimes	1	With cinders, bricks, rocks			
						\boxtimes)				
						\boxtimes	FILL				
5						\otimes					
Ŭ						\bigotimes					
	-					\boxtimes	1				
						\bigotimes					
\vdash	-					\bigotimes					
						\bigotimes	,				
	-					()		Soft, moist, dark gray, Silty CLAY (CL),	-		
						\/////		our, moist, unix gray, only CLATT (CL),			
\vdash	1					\/////					
40						\/////					
10						\/////					
	24	15	$\begin{array}{c} 0\\ 1\end{array}$	11.9		\/////					
	24	15		11.7		\/////					
			3			<i>\//////</i>	CL				
			1			\/////		Becomes medium stiff, with olive gray mottling			
	24	15	$ \begin{array}{c} 1 \\ 3 \\ 4 \end{array} $	20.6		\/////					
			4	-		\/////					
\vdash			- T		┝╌┣┛─	¥//////					
			2			\/////		Increasing silt			
15	24	24	$2 \\ 2 \\ 3$	2.7		\/////					
			5			\/////					
F					╞╴ ║ ╴			Medium dense, moist, dark gray, Clayey SAND	-		
	24	10	3 5	0.7		XXX	SC/SM	(SC), to Silty SAND (SM)			
	24	10	7	0.7		XX	30/3/1				
L			9			[XXX			_		
			4					Loose to medium dense, moist, dark gray, poorly graded SAND (SP)			
	24	15	4	2.5			SP	graded SAND (SP)			
			6 8								
20			0					Modium dance moist brownish II City CAND	Petroleum-like odor		
			5					Medium dense, moist, brownish yellow, Silty SAND (SM)	reuoieum-like odor		
\vdash	24	12	6 8	258			SM				
			7								
\vdash			_		╞╴ <mark>╸</mark> ┛╴			Very soft, moist, dark gray, Clayey SILT (ML)	-		
	1	20	$\begin{array}{c} 0\\ 0 \end{array}$	C 1			<u> </u>	, , ,			
	24	20	1	5.1			ML				
			4						$\overline{\mathbf{v}}$		
			3				SP	Medium dense, wet, dark gray, poorly graded,			
			5					medium grained SAND (SP)			
	letion				0 Ft bgs	<u> </u>		Water Depth: <u>2</u>	4 ft., After <u>ATD</u> hrs. ft., After <u>hrs.</u>		
roject	t No.: t Nam		Route	21562 111/R	291 and Ave	enue Vi	cinity	Water Depth:	ft., After hrs.		
roject)rillin	g Con	tracto	r.	Robert	ts Envir	onment	tal Drilling,	\Box Water level at time of			
			n		Brian	Schillin	ıg	vater level aπer drilli			
Drillin	g Met	hod:			HSA	4.25"		ATD - At time of drill	ling I Air Rotary		
Drill R	kig Ty	pe: _		_	CME Fritsch	55		NE - None Encounter	ed 3" Clear Acetate Liner		
oggeo	d by:			<u> </u>	Fritsch			NA - Not Applicable	Splitspoon Sampler		
Jounty	y:			ſ	Madisor 11911	u 50002		TIDC	Hollow Stem Auger- Soil samples not collected		
me ID Federa	א תו ה א תו ה	Jo ·)800123	305	URS USC based on field visu	Soil samples not collected		
								USC based on held visu	ai ousei valions		

LOG OF BORING MW-13	
Starting Quadrangle	
D 10/1/10 S-24.00	
$\begin{array}{c c} \hline c \\ c \\$	na) Carand
tag Date: 12/1/10 Sec:34.00 u tag Date: 12/1/10 Sec:34.00 u tag Date: 12/1/10 Sec:34.00 u tag Date: 12/1/10 Completion u tag Sec:34.00 T.T5N u tag Sec:34.00 T.T5N u tag Sec:34.00 T.T5N u tag Date: 12/3/10 u tag <td>, · · · · · · · · · · · · · · · · · · ·</td>	, · · · · · · · · · · · · · · · · · · ·
DESCRIPTION	NOTES
24 16 6 8 6.9 Same: Medium dense, wet, dark gray, poorly graded, medium grained SAND (SP)	
-24 18 $\frac{8}{10}$ 2.6	
-24 18 $\begin{vmatrix} 1\\5\\15\end{vmatrix}$ 10.1	
30	
-24 16 $\begin{vmatrix} 3\\6\\7 \end{vmatrix}$ 10.8 SP	
-24 12 11 2.7	
$\begin{bmatrix} 24 & 12 & 15 \\ 30 & 30 \end{bmatrix}$ Trace fine gravel	
35 $-$ 12 12 $\begin{bmatrix} 20\\50\\0.1 \end{bmatrix}$ Becomes dense to very dense, gravel grades out	
$\begin{vmatrix} 12 \\ 50 \end{vmatrix}$	
Bottom of boring at 36' bgs Monitoring	g well installed.
Screened in	nterval based on the ground
surface at t 25' to 35' b	the time of installation was
	a of the existing ground
u u u u u u u u u u u u u u u u u u u	ows the screen interval from
40	5.5 / bgs
45	
Completion Depth: 36.00 Ft bgs Water Depth: 24 & A &	
Project No.: 1562291 Water Depth: A.	
Project Name: Route 111/Rand Avenue Vicinity	Geoprobe Macro Sampler
Driller Name: Brian Schilling Water level after drilling	Air Knife/Hand Auger Sampler
Drilling Method: HSA 4.25" ID ATD - At time of drilling	Air Rotary
Drill Rig Type: CME 55 Net - None Encountered Logged by: E. Fritsch NA - Not Applicable	3" Clear Acetate Liner
County: Madison	Splitspoon Sampler Hollow Stem Auger-
Site ID No.: 1191150002 Federal ID No.: ILD080012305 URS	Hollow Stem Auger- Soil samples not collected

GROUNDWATER DEVELOPMENT/SAMPLING DATA SHEET

	West Fenceline - I	Route 111/Rand A	venue Vicinity		PROJEC	NUMBER: 215622	91.00007			
ATE: <u>12/7/10</u> /EATHER:		2001	Sunnul						· · · · · · · · · · · ·	
ELD PERSONNE	L:_N. Satam, M. N									
IONITORING WEI	.L ID: <u>MW-13</u>									
ITIAL DATA										
Vell Diameter: 2	in.		Gallon	s/Lin.Ft1:0.163	0.100		Water Added	during Drilling: 10		allons
otal Depth of Well: epth to Water:	<u>35 (installed)</u> 	ft bgs ft btoc		Water Column:	4-180	galions (5 volur		Removed: 50	gallons (5x a ଏ - ପ	_ppm
leight of Water Colu	mn: 1) · 0.5 2 inch well, 0.653 gallo	ft	Depth	to Top of Screen: 25		_ft bgs	Wellbore PID	/FID Reading:		_ppm
PURGE DATA	. Incit west, 0.000 gailo						• • • •			
Purge Method:	Monsoon Submers	ibie Pump								
Purge Volume (gals)	Time	Depth to Water (ft)	Color	Odor	Hq	Temp	29 (umhos/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
125	11100	23.80	Cloudy	More	6.75	65.20	6.21	17.3	1.95	- 0-11
126	1223				6.76	65.34	1126	70	2.27	-0.11
123	1224	<u> </u>	Cleaning		6.75	66.58	1125	36	3.62	-0.10
129	1226	23.80			6.77	66.05	(140	29	2.40	011
		<u> </u>	- <u> </u>				· ·		<u> </u>	
		L							L	
	007	P	urge Stop Time:	1226	Elapsed	lime: 139 m	in	Total Volume		
Average Purge Rate	(gallons/min):	<u>, </u>	lell Volumes Purged:	65	Water Qu	ality Meter ID: Troll 9	500	Calibrated on	: 12/7/10	
SAMPLING DAT Sampling Method:	A				Net La Par		4. j			
				e Time: <u>N/A</u>	Analysis: N/A					
COMMENTS:	ft btoc prior to	dovelonment								
DTB = 26.	ft bloc prior to	evelopment								