

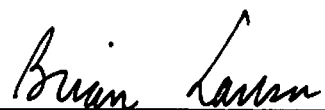
BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PROPOSED AMENDMENTS TO CLEAN) R 2012-009B
CONSTRUCTION OR DEMOLITION) (Rulemaking – Land)
DEBRIS (CCDD) FILL OPERATIONS:)
PROPOSED AMENDMENTS TO 35 Ill.)
Adm. Code 1100)

NOTICE OF FILING

To: SEE ATTACHED SERVICE LIST

Please take notice that on the 13th day of May 2013, you were served with copies of the Response to Board Questions on Behalf of LRRA.

By: 
Brian Lansu
Land Reclamation & Recycling Association
2250 Southwind Blvd.
Bartlett, IL 60103

Date: May 13, 2013

PROOF OF SERVICE

I do hereby certify that a copy of the Response to Board Questions on Behalf of LRRRA were tendered via email on May 13, 2013, to the following:

John Therriault, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500 Chicago, IL 60601

and by first class mail, postage prepaid, on May 13, 2013, to the following:

Marie Tipsord, Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Environmental Enforcement
Office of the Attorney General
69 West Washington Street, Suite 1800
Chicago, IL 60602

Stephen Sylvester, Asst. Attorney General
Environmental Enforcement
Office of the Attorney General
69 West Washington Street, Suite 1800
Chicago, IL 60602

Claire A. Manning
Brown, Hay & Stephens LLP
700 First Mercantile Bank Building
205 South Fifth St, PO Box 2459
Springfield, IL 62794-9276

Kimberly A. Geving, Assistant Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
PO Box 19276
Springfield, IL 62794-9276

Mark Wright, Assistant Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
PO Box 19276
Springfield, IL 62794-9276

Stephanie Flowers, Assistant Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
PO Box 19276
Springfield, IL 62794-9276

Dennis Wilt
Waste Management
720 East Butterfield Road
Lombard, IL 60148

Michele Gale
Waste Management
720 East Butterfield Road
Lombard, IL 60148

Mitchell Cohen, General Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Steven Gobelman, Geologic/Waste
Assessment Specialist
Illinois Department of Transportation
2300 S Dirksen Parkway
Springfield, IL 62764
Matthew J. Dunn, Chief

Tiffany Chappell
City of Chicago, Mayor's Office of
Intergovernmental Affairs
121 N. LaSalle Street City Hall
Room 406 Chicago, IL 60602
James Huff – Vice President
Huff & Huff, Inc

Greg Wilcox – Executive Director
Land Reclamation & Recycling Association
2250 Southwind Blvd.
Bartlett, IL 60103

John Henriksen, Executive Director
Illinois Association of Aggregate Producers
1115 S. 2nd. Street
Springfield, IL 62704

A handwritten signature in cursive script, reading "Brian Lansu", is written over a solid black horizontal line.

Brian Lansu

Responses to Board Questions on Behalf of LRRRA

Response to Question 1 Attachment A:

Attached is a summary of all payments made for developing the ground water modeling for the Bluff Spring FEN on behalf of Bluff City Materials, Inc. and Vulcan Materials Corporation. The summary reflects the costs associated with the 8 permanent monitoring wells that were installed from 20 to 80 feet deep. The total cost for these wells, as evidenced by invoices 19064, 19581, 19813, 26796, and 7532, was \$106,985. The groundwater model was developed as part of a program to protect the Bluff City Spring and to ensure no degradation would occur from adjacent mining, industrial park development, and/or CCDD site filling. The model was developed to determine groundwater flow and the rate of flow into the Bluff Spring Fen from adjacent areas. The out of pocket cost associated with the development of the groundwater model was \$364,547 which does not include internal staff time contributed by Bluff City Materials.

Response to Question 8 Attachment A:

LRRRA hereby submits additional water quality data from the Reliable Lyons CCDD site. The Lyons site is one of the largest permitted CCDD facilities in Illinois. It accepts more than 700,000 cubic yards of fill each year from primarily urban and industrial construction projects. Since it began accepting fill in 2006, approximately 6,000,000 cubic yards of CCDD has been placed at the Reliable Lyons CCDD site.

Reliable Lyons continuously maintains a groundwater elevation of 372.0 USGS which is currently 150 to 250 feet below the CCDD fill in the quarry. In November 2012, Reliable Lyons installed a metering device to record the total flow that is pumped from the CCDD site. They also began monitoring the total precipitation that falls on site and seeps through the deposited fill to the groundwater pumping well.

According to the collected, Reliable Lyons has pumped a total of 74.9 million gallons in the past six months. Precipitation flowing through the CCDD soil on

made up 32.0 million gallons of this flow (Midway Airport reading) while the remaining 42.9 million gallons came from surrounding groundwater flowing into the site.

Based on this data, it is estimated that 43% of the water being pumped has been in direct contact with the CCDD material at the facility. Reliable Lyons has sampled the pumped water discharged from the dewatering well for SVOCs and RCRA metals and found only one detect (Barium at 0.052 mg/l per attached Lab report). Assuming a dilution ratio of 2.34 to 1 from the groundwater and that ground water contains no Barium, the water flowing thru the CCDD has a concentration of Barium roughly equal to 0.12 mg/l. The groundwater 1 standard for Barium is 2.0 mg/l. Accordingly, there is no evidence that the placement of CCDD at this site has had a negative impact on groundwater quality.

**Bluff City Industrial Park
FEN / Groundwater Model**

Invoice #	Date	Amount	
19064	August 6, 2002	\$2,145.00	Patrick Engineering
19581	September 4, 2002	\$4,294.92	Patrick Engineering
19813	September 25, 2002	\$2,459.66	Patrick Engineering
26796	September 1, 2003	\$14,477.71	Patrick Engineering
6896	November 25, 2003	\$5,523.84	Groundwater model
7178	December 31, 2003	\$4,365.75	Groundwater model
7332	January 30, 2004	\$15,709.52	Mackie / Natural Resource Technology
7532	March 3, 2004	\$69,130.63	Mackie / Natural Resource Technology
			HH Holmes - borings and monitoring wells
7814	May 5, 2004	\$16,577.70	Groundwater model - Bruce Hensel work
8051	May 28, 2004	\$22,023.77	Groundwater model - Bruce Hensel work
8366	July 22, 2004	\$1,028.00	Groundwater model - Bruce Hensel work
8579	August 31, 2004	\$16,011.63	Groundwater model - Bruce Hensel work
8875	October 22, 2004	\$15,453.80	
9302	December 27, 2004	\$17,097.00	Mackie / Natural Resource Technology
9589	January 27, 2005	\$4,169.88	
9813	March 11, 2005	\$2,368.43	Mackie / Natural Resource Technology
12044	April 21, 2006	\$4,158.05	Mackie / Natural Resource Technology
12444	June 4, 2006	\$1,093.88	Mackie / Natural Resource Technology
13068	August 24, 2006	\$19,115.91	Mackie / Natural Resource Technology
16059	July 9, 2007	\$360.00	Mackie Consultants
	Aerial	\$3,000.00	Mackie Consultants
15645	June 3, 2007	\$420.00	Mackie Consultants
15412	May 9, 2007	\$502.00	Mackie Consultants
15084	April 18, 2007	\$3,792.50	Mackie Consultants
14431	February 20, 2007	\$3,227.18	Mackie Consultants
19594	August 15, 2008	\$765.00	Mackie / Natural Resource Technology
20315	November 25, 2008	\$16,166.90	Mackie Consultants
20572	December 30, 2008	\$10,863.99	Mackie Consultants
20859	February 20, 2009	\$6,514.76	Mackie Consultants
21036	March 24, 2009	\$10,287.36	Mackie Consultants
21233	April 17, 2009	\$800.00	Mackie / Natural Resource Technology
21367	May 15, 2009	\$19,115.44	Mackie Consultants
21392	May 15, 2009	\$1,050.00	Mackie / Natural Resource Technology
21584	June 22, 2009	\$6,747.01	Mackie / Natural Resource Technology
21585	June 22, 2009	\$1,687.54	Mackie / Natural Resource Technology
21752	July 21, 2009	\$2,859.85	Mackie Consultants
21753	July 21, 2009	\$10,376.00	Mackie / Natural Resource Technology
21757	August 1, 2009	\$681.09	Mackie Consultants
21975	September 1, 2009	\$6,738.22	Mackie / Natural Resource Technology
22311	October 23, 2009	\$240.94	Mackie Consultants
22617	November 23, 2009	\$16,044.70	Mackie / Natural Resource Technology / CBBEL
22808	December 31, 2009	\$30,029.25	Mackie / Natural Resource Technology / CBBEL
22856	December 31, 2009	\$800.00	Mackie Consultants
23026	February 19, 2010	\$13,167.11	Mackie / Natural Resource Technology
23339	April 21, 2010	\$14,125.75	Mackie / Natural Resource Technology
22766	February 1, 2010	\$10,550.64	Mackie Consultants
23704	June 22, 2010	\$7,003.38	Mackie Consultants
23942	July 29, 2010	\$3,637.50	Mackie Consultants
24322	September 17, 2010	\$14,729.07	Mackie Consultants
24469	October 14, 2010	\$2,322.58	Mackie Consultants
24646	November 15, 2010	\$3,536.02	Mackie Consultants
24970	December 14, 2010	\$6,186.41	Mackie Consultants
25075	January 13, 2011	\$1,312.50	Mackie Consultants
25279	February 24, 2011	\$1,197.24	Mackie Consultants
25291-25267	February 21, 2011	\$1,920.00	Mackie Consultants
25575	April 13, 2011	\$1,570.00	Mackie Consultants
	TOTAL	\$471,533.01	

Prairie Analytical Systems, Inc.

Date: 3/20/2013

LABORATORY RESULTS

Client: Winston Engineering
 Project: Lyons Outfall 03-07-2013
 Client Sample ID: 030713-1QT-Metals
 Collection Date: 3/7/13 13:00

Lab Order: 13C0184
 Lab ID: 13C0184-01
 Matrix: Water

Analytes	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Arsenic	U	0.00500		mg/L	1	3/13/13 11:20	3/15/13 2:10	SW 6020A	JHN
*Barium	0.0520	0.00500		mg/L	1	3/13/13 11:20	3/15/13 2:10	SW 6020A	JHN
*Cadmium	U	0.00100		mg/L	1	3/13/13 11:20	3/15/13 2:10	SW 6020A	JHN
*Mercury	U	0.000200		mg/L	1	3/13/13 11:20	3/15/13 2:10	SW 6020A	JHN
*Selenium	U	0.00500		mg/L	1	3/13/13 11:20	3/15/13 2:10	SW 6020A	JHN
*Silver	U	0.00500		mg/L	1	3/13/13 11:20	3/15/13 2:10	SW 6020A	JHN
Metals by ICP									
*Chromium	U	0.00500		mg/L	1	3/13/13 11:20	3/14/13 14:39	SW 6010B	JHN
*Lead	U	0.00500		mg/L	1	3/13/13 11:20	3/14/13 14:39	SW 6010B	JHN

Analyst	Method	Date Analyzed	Date Prepared	DF	Units	Qual	Limit	Result
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Acenaphthene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Acenaphthylene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Anthracene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	Benzidine
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*Benzo(a)anthracene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*Benzo(b)fluoranthene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*Benzo(k)fluoranthene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Benzo(g,h,i)perylene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*Benzo(a)pyrene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Bis(2-chloroethoxy)methane
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Bis(2-chloroethyl)ether
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Bis(2-chloroisopropyl)ether
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00619	*Bis(2-ethylhexyl)phthalate
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Butyl benzyl phthalate
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Carbazole
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*4-Chloro-3-methylphenol
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0206	*4-Chloroaniline
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*2-Chloromorphthalene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*2-Chlorophenol
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*4-Chlorophenyl phenyl ether
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00139	*Chrysene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Di-n-butyl phthalate
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Di-n-octyl phthalate
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*Dibenz(a,h)anthracene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0144	*Dibenzofuran
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*1,2-Dichlorobenzene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*1,3-Dichlorobenzene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0206	*1,4-Dichlorobenzidine
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*2,4-Dichlorophenol
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Dimethyl phthalate
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Dimethyl phthalate
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*2,4-Dimethylphenol
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0144	*2,4-Dinitrophenol
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*2,4-Dinitrotoluene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*2,6-Dinitrotoluene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	1,2-Diphenylhydrazine
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Fluorene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*Hexachlorobenzene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Hexachlorobutadiene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Hexachlorocyclopentadiene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00722	*Hexachloroethane
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.00103	*Indeno(1,2,3-cd)pyrene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*Isophorone
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*2-Methylnaphthalene
JKA	SW 8270C	3/12/13 19:01	3/12/13 14:28	1	mg/L	U	0.0103	*2-Methylphenol

Semi-Volatile Organic Compounds by GC-MS

Client:	Winston Engineering
Project:	Lyons Outfall 03-07-2013
Client Sample ID:	030713-1QT-SVOCs
Collection Date:	3/7/13 13:00
Lab Order:	13C0184
Lab ID:	13C0184-02
Matrix:	Water

LABORATORY RESULTS

Analyte	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
3 & 4-Methylphenol	U	0.0206		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*Naphthalene	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*2-Nitroaniline	U	0.0515		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*3-Nitroaniline	U	0.0515		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*4-Nitroaniline	U	0.0206		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*Nitrobenzene	U	0.00361		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*2-Nitrophenol	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*4-Nitrophenol	U	0.0515		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*N-Nitroso-di-n-propylamine	U	0.00186		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
N-Nitrosodimethylamine	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*N-Nitrosodiphenylamine	U	0.00330		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*Phenachlorophenol	U	0.00103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*Phenanthrene	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*Phenol	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*Pyrene	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*1,2,4-Trichlorobenzene	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*2,4,5-Trichlorophenol	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA
*2,4,6-Trichlorophenol	U	0.0103		mg/L	1	3/12/13 14:28	3/12/13 19:01	SW 8270C	JKA

LABORATORY RESULTS

Client: Winston Engineering
 Project: Lyons Outfall 03-07-2013
 Client Sample ID: 030713-1QT-SVOCs
 Collection Date: 3/7/13 13:00
 Lab Order: 13C0184
 Lab ID: 13C0184-02
 Matrix: Water

Acampthene	U	0.0100	mg/L
Acampthylene	U	0.0100	mg/L
Anthracene	U	0.0100	mg/L
Benzidine	U	0.0100	mg/L
Benzof(a)anthracene	U	0.00100	mg/L
Benzof(b)fluoranthene	U	0.00100	mg/L
Benzof(k)fluoranthene	U	0.00100	mg/L
Benzof(g,h,i)perylene	U	0.0100	mg/L
Benzof(a)pyrene	U	0.00100	mg/L
Bis(2-chloroethoxy)methane	U	0.0100	mg/L
Bis(2-chloroethyl)ether	U	0.0100	mg/L
Bis(2-chloroisopropyl)ether	U	0.0100	mg/L
Bis(2-ethylhexyl)phthalate	U	0.00600	mg/L
4-Bromophenyl phenyl ether	U	0.0100	mg/L
Butyl benzyl phthalate	U	0.0100	mg/L
Carbazole	U	0.0100	mg/L
4-Chloro-3-methylphenol	U	0.0200	mg/L
4-Chloroaniline	U	0.0200	mg/L
2-Chlorophthalene	U	0.0100	mg/L
2-Chlorophenol	U	0.0100	mg/L
4-Chlorophenyl phenyl ether	U	0.0100	mg/L
Chrysene	U	0.00135	mg/L
Dib-n-butyl phthalate	U	0.0100	mg/L
Dib-n-octyl phthalate	U	0.0100	mg/L
Dibenz(a,b)anthracene	U	0.00100	mg/L
Dibenzofuran	U	0.0140	mg/L
1,2-Dichlorobenzene	U	0.0100	mg/L
1,3-Dichlorobenzene	U	0.0100	mg/L
1,4-Dichlorobenzene	U	0.0100	mg/L
3,3'-Dichlorobenzidine	U	0.0200	mg/L
2,4-Dichlorophenol	U	0.0100	mg/L
Dibutyl phthalate	U	0.0100	mg/L
Dimethyl phthalate	U	0.0100	mg/L
2,4-Dimethylphenol	U	0.0100	mg/L
4,6-Dimethyl-2-methylphenol	U	0.00100	mg/L
2,4-Dimethylphenol	U	0.0140	mg/L
2,4-Dinitrophenol	U	0.00100	mg/L
2,6-Dinitrophenol	U	0.00100	mg/L
1,2-Diphenyldiphenylamine	U	0.0100	mg/L
Fluorene	U	0.0100	mg/L
Fluoranthene	U	0.0100	mg/L
Hexachlorobenzene	U	0.00100	mg/L
Hexachlorobutadiene	U	0.0100	mg/L
Hexachlorocyclopentadiene	U	0.0100	mg/L

Prepared & Analyzed: 03/12/2013

Blank (W001228-BLK)

Batch W001228 - SW 3510C BNA

Analyte	Result	Reporting Limit	Units	Spike Level	Source	%RBC	RPD	RPD Limit	Notes
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Semi-Volatile Organic Compounds by GC-MS - Quality Control

Lab Order: 13C0184

Lyons Outfall 03-07-2013

Winston Engineering

Project:

LABORATORY RESULTS

Date: 3/20/2013

Fraltre Analytical Systems, Inc.

Prairie Analytical Systems, Inc.

Date: 3/20/2013

LABORATORY RESULTS

Client: Winston Engineering
 Project: Lyons Outfall 03-07-2013

Lab Order: 13C0184

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch W001228 - SW 3510C BNA										
Blank (W001228-BLK1)										
Prepared & Analyzed: 03/12/2013										
Hexachloroethane	U	0.00700	mg/L							
Indeno(1,2,3-cd)pyrene	U	0.00100	mg/L							
Isophorone	U	0.0100	mg/L							
2-Methylnaphthalene	U	0.0100	mg/L							
2-Methylphenol	U	0.0100	mg/L							
3 & 4-Methylphenol	U	0.0200	mg/L							
Naphthalene	U	0.0100	mg/L							
2-Nitroaniline	U	0.0500	mg/L							
3-Nitroaniline	U	0.0500	mg/L							
4-Nitroaniline	U	0.0200	mg/L							
Nitrobenzene	U	0.00350	mg/L							
2-Nitrophenol	U	0.0100	mg/L							
4-Nitrophenol	U	0.0500	mg/L							
N-Nitroso-di-n-propylamine	U	0.00180	mg/L							
N-Nitrosodimethylamine	U	0.0100	mg/L							
N-Nitrosodiphenylamine	U	0.00320	mg/L							
Pentachlorophenol	U	0.00100	mg/L							
Phenanthrene	U	0.0100	mg/L							
Phenol	U	0.0100	mg/L							
Pyrene	U	0.0100	mg/L							
1,2,4-Trichlorobenzene	U	0.0100	mg/L							
2,4,5-Trichlorophenol	U	0.0100	mg/L							
2,4,6-Trichlorophenol	U	0.0100	mg/L							
<i>Surrogate: 2-Fluorobiphenyl</i>		0.0174	mg/L	0.020000		87	40-150			
<i>Surrogate: 3-Fluorophenol</i>		0.00853	mg/L	0.030000		28	10-95			
<i>Surrogate: Nitrobenzene-d5</i>		0.0193	mg/L	0.020000		97	40-150			
<i>Surrogate: Phenol-d6</i>		0.00504	mg/L	0.030000		17	15-90			
<i>Surrogate: 4-Terphenyl-d14</i>		0.0197	mg/L	0.020000		98	40-140			
<i>Surrogate: 2,4,6-Tribromophenol</i>		0.0172	mg/L	0.030000		57	30-100			

Prairie Analytical Systems, Inc.

Date: 3/20/2013

LABORATORY RESULTS

Client: Winston Engineering
 Project: Lyons Outfall 03-07-2013

Lab Order: 13C0184

Semi-Volatile Organic Compounds by GC-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch W001228 - SW 3510C BNA

LCS (W001228-BS1)

Prepared & Analyzed: 03/12/2013

Aceaphthene	0.0167	0.0100	mg/L	0.020000		84	40-120			
4-Chloro-3-methylphenol	0.0373	0.0200	mg/L	0.040000		93	50-150			
2-Chlorophenol	0.0312	0.0100	mg/L	0.040000		78	50-150			
1,4-Dichlorobenzene	0.0158	0.0100	mg/L	0.020000		79	40-120			
2,4-Dinitrotoluene	0.0165	0.00100	mg/L	0.020000		82	50-120			
4-Nitrophenol	0.00578	0.0500	mg/L	0.040000		14	10-90			
N-Nitroso-di-n-propylamine	0.0219	0.00180	mg/L	0.020000		110	40-130			
Pentachlorophenol	0.0308	0.00100	mg/L	0.040000		77	40-140			
Phenol	0.00938	0.0100	mg/L	0.040000		23	20-50			
Pyrene	0.0191	0.0100	mg/L	0.020000		96	50-120			
1,2,4-Trichlorobenzene	0.0151	0.0100	mg/L	0.020000		76	40-120			
Surrogate: 2-Fluorobiphenyl	0.0185		mg/L	0.020000		93	40-150			
Surrogate: 2-Fluorophenol	0.00777		mg/L	0.030000		26	10-95			
Surrogate: Nitrobenzene-d5	0.0199		mg/L	0.020000		99	40-150			
Surrogate: Phenol-d6	0.00527		mg/L	0.030000		18	15-90			
Surrogate: 4-Terphenyl-d14	0.0206		mg/L	0.020000		103	40-140			
Surrogate: 2,4,6-Tribromophenol	0.0190		mg/L	0.030000		63	30-100			

Prairie Analytical Systems, Inc.

Date: 3/20/2013

LABORATORY RESULTS

Client: Winston Engineering
 Project: Lyons Outfall 03-07-2013

Lab Order: 13C0184

Metals by ICP-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch W001248 - SW 3005A Metals

Blank (W001248-BLK1)

Prepared: 03/13/2013 Analyzed: 03/15/2013

Arsenic	U	0.00500	mg/L							
Barium	U	0.00500	mg/L							
Cadmium	U	0.00100	mg/L							
Mercury	U	0.000200	mg/L							
Selenium	U	0.00500	mg/L							
Silver	U	0.00500	mg/L							

LCS (W001248-BS1)

Prepared: 03/13/2013 Analyzed: 03/15/2013

Arsenic	0.493	0.00500	mg/L	0.50000		99	80-120			
Barium	0.548	0.00500	mg/L	0.50000		110	80-120			
Cadmium	0.491	0.00100	mg/L	0.50000		98	80-120			
Mercury	0.0198	0.000200	mg/L	0.020000		99	80-120			
Selenium	0.499	0.00500	mg/L	0.50000		100	80-120			
Silver	0.0516	0.00500	mg/L	0.050000		103	80-120			

Prairie Analytical Systems, Inc.

Date: 3/20/2013

LABORATORY RESULTS

Client: Winston Engineering
Project: Lyons Outfall 03-07-2013

Lab Order: 13C0184

Notes and Definitions

- * NELAC certified compound.
- U Analyte not detected (i.e. less than RL or MDL).

Chain of Custody Record

Central IL- 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
 Chicago Office - 9114 Virginia Rd., Ste 112 -Lake in the Hills, IL 60156 - Phone (847) 651-2604 - Facsimile (847) 458-9680

www.prairieanalytical.com



Client	Winston Engineering				Analysis and/or method Requested						Reporting	
Address	2256 Southwind Blvd				Analysis and/or method Requested	RCRA Metals	SCOC's					TACO
City, State Zip Code	Bartlett, IL, 60103											Resid
Phone / Facsimile No.	630-503-5028 / andrewg@grp7.com											Ind/Comm
Client Project	Lyons Outfall-03-07-2013											CALM
Location	Lyons Outfall to River, Lyons IL											A B
Sampler(s) / Phone	Diego Nunez / 708-447-1100 ext 333											C
Turnaround Time	Standard [X] Rush [] Date Required:											RISC
P.O. # or Invoice To	Winston Engineering											Resid
Contact Person	Andrew Germanetti / 708-447-110 ext 234				Indust							
Sample Description	Sampling		Matrix Code ¹	Total # of Containers	Sample							Sampler Comments
	Date	Time			Comp	Grab						
030713-1QT-Metals	3/7/2013	1:00 PM	GW	1		X		X				River Outfall
030713-1QT-SVOCS	3/7/2013	1:00 PM	GW	1		X						River Outfall
¹ M = Matrix Code A - Aqueous DW - Drinking Water GW - Groundwater NA - Non-aqueous Liquid S - Solids O - Other (Specify)												
Relinquished By			Date	Time	Received By			Date	Time	Method of Shipment		
Diego Nunez					<i>[Signature]</i>			3/8/13	1341	UPS		
<i>[Signature]</i>			3/8/13	1730	<i>[Signature]</i>			3-8-13	9:30			
Special Instructions:						Q/C Level		On Wet Ice		Temperature (°C)		
						1_ 2_ <input checked="" type="checkbox"/> 3_ 4_		<input checked="" type="checkbox"/> / N		3.0		
						Proper Preservation		<input checked="" type="checkbox"/> / N				

Page 10 of 10



BLUFF CITY MATERIALS, INC.

Aggregates

May 13th, 2013

Mr. Gregory W. Wilcox, PE
President
Winston Engineering
2256 Southwind Blvd.
Bartlett, IL 60103

Dear Mr. Wilcox:

Attached are all payments associated with ground water modeling for the Bluff City FEN site. These costs do not include internal engineering fees.

Please contact me with any questions.

Sincerely,
Molly Francesconi



Wednesday, March 20, 2013

Andrew Germanetti
Winston Engineering
2250 Southwind Boulevard
Bartlett, IL 60103

TEL: (708) 447-1100

FAX: (630) 524-9020

RE: Lyons Outfall 03-07-2013

PAS WO: 13C0184

Prairie Analytical Systems, Inc. received 2 sample(s) on 3/8/2013 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to contact me at (217) 753-1148.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kristen Potter".

Kristen A. Potter
Project Manager

Certifications:

NELAP/NELAC - IL #100323

1210 Capital Airport Drive	*	Springfield, IL 62707	*	1.217.753.1148	*	1.217.753.1152 Fax
9114 Virginia Road Suite #112	*	Lake in the Hills, IL 60156	*	1.847.651.2604	*	1.847.458.0538 Fax