KPDES FORM 1

AI: 2761

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- ☐ Apply for a new permit.
- ☒ Apply for reissuance of expiring permit.
- ☐ Apply for a construction permit.
- ☐ Modify an existing permit.
  Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:
Form A, Form B, Form C, Form F, or Short Form C

For additional information contact:
KPDES Branch (502) 564-3410

I. FACILITY LOCATION AND CONTACT INFORMATION	AGENCY USE	0	0	7	2	6	3	0
A. Name of business, municipality, company, etc. requesting permit Logan Aluminum Inc								
B. Facility Name and Location	C. Facility Owner/Mailing Address							
Facility Location Name: Logan Aluminum Inc	Owner Name: Logan Aluminum Inc							
Facility Location Address (i.e. street, road, etc.): Hwy 431 North	Mailing Street: P O Box 3000							
Facility Location City, State, Zip Code: ssellville, KY 42276	Mailing City, State, Zip Code: Russellville, KY 42276							
	Telephone Number: 270-755-6000							

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: Casting and rolling of aluminum to produce aluminum body and end stock for can production

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code & Description:	3353 Aluminum Sheet Plate and Foil		
Other SIC Codes:			

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)

B. County where facility is located: Logan	City where facility is located (if applicable): N/A
C. Body of water receiving discharge: Austin Creek	
D. Facility Site Latitude (degrees, minutes, seconds): 36 degrees 36' 40"	Facility Site Longitude (degrees, minutes, seconds): 86 degrees 55' 55"
E. Method used to obtain latitude & longitude (see instructions):	Topo Map
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	13-040-0799

Revised June 1999

IV. OWNER/OPERATOR INFORMATION

A. Type of Ownership:
☐ Publicly Owned ☒ Privately Owned ☐ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator: Logan Aluminum Inc.	Telephone Number: 270-755-6000
Operator Mailing Address (Street): Hwy 431 North, P O Box 3000	
Operator Mailing Address (City, State, Zip Code): Russellville, KY 42276	
Is the operator also the owner? Yes ☒ No ☐	Is the operator certified? If yes, list certification class and number below. Yes ☒ No ☐
Certification Class: Class 2	Certification Number: Several certified operators on-site

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number: KY0072630	Issue Date of Current Permit: 03/01/01	Expiration Date of Current Permit: 09/30/04
Number of Times Permit Reissued: 5	Date of Original Permit Issuance: 08/30/84	Sludge Disposal Permit Number:
Kentucky DOW Operational Permit #: 071-2042 Drinking Water	Kentucky DSMRE Permit Number(s):	

C. Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source	V-97-034	NA
Solid or Special Waste	Landfill Permit 071-00007	NA
Hazardous Waste - Registration or Permit	KYD980600787	

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). The information in this section serves to specifically identify the department, office or individual you designate as responsible for submitting DMR forms to the Division of Water.

A. Name of department, office or official submitting DMRs:	Environmental Leader
B. Address where DMR forms are to be sent. (Complete only if address is different from mailing address in Section I.)	
DMR Mailing Name:	Same as operator
DMR Mailing Street:	
DMR Mailing City, State, Zip Code:	
DMR Official Telephone Number:	270-755-6000

VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

Facility Fee Category:	Filing Fee Enclosed:
Major Industry	Submitted

VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy Schumaker, Chief Management Officer	270-755-6000
SIGNATURE: Randy Schumaker	DATE: 10-11-07

KPDES FORM C

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Logan Aluminum Inc.	County: Logan							
I. OUTFALL LOCATION	AGENCY USE							

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
004	36	57	00	86	55	45	Austin Creek

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures. Attachment A

B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
004	See Attachment B			

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ Yes (Complete the following table.) ☒ No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ Yes (Complete Item III-B) List effluent guideline category: 467.14, 467.24, 465.33

☐ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☒ Yes (Complete Item III-C) ☐ No (Go to Section IV)

If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	
	See Attachment C		

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table) ☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

IV. B - Improvements

Planned water pollution control projects

004 Discharge

Since the construction of the wetlands, the flow of waste water has increased to an average of 0.893 MGD in 2006. This level of production has taxed the wetlands system, now operating at maximum capacity. Heavy rainfall in the wetlands basins can double or triple the daily volume flowing out the 004 outfall resulting in exceedances of the KPDES permit at median TSS and O&G concentrations.

Three capital projects are underway to improve the discharge conditions of 004.

1) Addition of a surge basin and weir level control will provide some buffer to reduce daily peak volumes. An additional basin next to the last basin of the wetlands is under survey. This basin will allow us regulate the discharge flow during high rain events.

2) Increased production demands in the rolling mills have resulted in increased oily wastewater loadings through the Industrial Waste System. The existing waste water treatment process is not capable of removing all O&G during periods of increased flows and concentrations. The higher loading produces elevated levels of O&G in the Tank Farm "Off Water" which discharges into the process pond increasing the O&G concentrations in the 004 Outfall. A membrane filtration unit will be installed at the bulk tank farm in 2009 to manage the removal of oils from our waste waters prior to the release to the wetlands overland spray fields. This filtration unit will remove 99.9% of O&G from the tank farm discharge.

3) The TSS issue at 004 is mainly due to plant life attrition and algae that produce very small organic fragments in the Wetlands basins which pass through the 004 outfall. A vibratory screen which removes approximately 45% of TSS will be added in 2008 to reduce TSS from the discharge. As an intermediate, Logan has installed a rental unit which removes solids before discharge.

These projects will be completed in a sequence which will provide the most effective results and will be re-evaluated in a phased approach.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
Phosphorous	Coating Line	Ammonia	Coating Line

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐ Yes (List all such pollutants below) ☒ No (Go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐ Yes (Complete Item VI-C) ☒ No (Go to Item VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☒ Yes (Identify the test(s) and describe their purposes below) ☐ No (Go to Section VIII)

Chronic Toxicity - 1/quarter per existing permit requirements

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below) ☐ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
SMR Laboratories, Inc.	319 West Broad Street P.O. Box 761 Central City, KY 42330	270-754-9928	per Table V
Environmental Science Corp.	12065 Lebanon Rd Mt. Juliet, TN 37122	615-758-5858	per Table V

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Sandy Schumaker, Chief Management Officer	270-755-6000
SIGNATURE Sandy Schumaker	DATE 10-11-07

'LEASE PR[illegible]T OR TYPE IN THE UNSHADED AREAS ONLY. You may report [illegible] or all of this information on separate sheets (use the same format) inst[illegible] completing ıese pages. (See instructions)

. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C) OUTFALL NO. 004

art A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. Maximum Daily Value (1) Concentration	2. EFFLUENT a. Maximum Daily Value (2) Mass	2. EFFLUENT b. Maximum 30-Day Value (if available) (1) Concentration	2. EFFLUENT b. Maximum 30-Day Value (if available) (2) Mass	2. EFFLUENT c. Long-Term Avg. Value (if available) (1) Concentration	2. EFFLUENT c. Long-Term Avg. Value (if available) (2) Mass	2. EFFLUENT d. No. of Analyses	3. UNITS (specify if blank) a. Concentration	3. UNITS (specify if blank) b. Mass	4. INTAKE (optional) a. Long-Term Avg. Value (1) Concentration	4. INTAKE (optional) a. Long-Term Avg. Value (2) Mass	4. INTAKE (optional) b. No of Analyses
Biochemical ›xygen Demand 3OD)	6						4	mg/L				
Chemical ›xygen Demand :OD)	36						4	mg/L				
Total Organic arbon (TOC)	25.1						1	mg/L				
Total uspended olids (TSS)		284.4	8	80.39	5.4	40.9	104	mg/L	lbs/day			
Ammonia ıs N)	5.4		3		1.9		104	mg/L				
Flow (in units f MGD)	VALUE		VALUE	1.133	VALUE	.893	104	MGD	MGD	VALUE		
Temperature (winter)	VALUE	2.2	VALUE		VALUE	8.3	88	C	°c	VALUE		
Temperature (summer)	VALUE	31.7	VALUE		VALUE	27.2	81	C	°c	VALUE		
pH	MINIMUM 6.84	MAXIMUM 8.44	MINIMUM	MAXIMUM			353	STANDARD UNITS	std			

art B - In the ARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and equirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X" a. Believed Present	2. MARK "X" b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	3. EFFLUENT a. Maximum Daily Value (2) Mass	3. EFFLUENT b. Maximum 30-Day Value (if available) (1) Concentration	3. EFFLUENT b. Maximum 30-Day Value (if available) (2) Mass	3. EFFLUENT c. Long-Term Avg. Value (if available) (1) Concentration	3. EFFLUENT c. Long-Term Avg. Value (if available) (2) Mass	3. EFFLUENT d. No. of Analyses	4. UNITS a. Concentration	4. UNITS b. Mass	6. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	6. INTAKE (optional) a. Long-Term Avg Value (2) Mass	6. INTAKE (optional) b. No. of Analyses
Bromide (24959-67-9)	x		<1						1	mg/L				
Bromine Total Residual										mg/L				
Chloride	x		34						1	mg/L				
Chlorine, Total Residual	x		.04						1	mg/L				
Color														
Fecal Coliform														
Fluoride (16984-48-8)	x		4.1						1	mg/L				
Hardness (as $CaCO_3$)	x		230				140		104	mg/L				
Nitrate – Nitrite (as N)	x		.2						1	mg/L				
Nitrogen, Total Organic (as N)	x		.25						1	mg/L				
Oil and Grease	x		5				3.75		104	mg/L				
Phosphorous (as P), Total 7723-14-0	x		.38				.11		104	mg/L				
adioactivity														
) Alpha, Total		x												
) Beta, Total		x												
) Radium Total		x												
) Radium, 226, Total		x												

rt B - Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	b. Maximum 30-Day Value (if available) (2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	c. Long-Term Avg. Value (if available) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value (1) Concentration	a. Long-Term Avg. Value (2) Mass	b. No. of Analyses
Sulfate (as SO_4) (14808-79-8)	x		112						4	mg/L				
Sulfide (as S)		x	<.1						1	mg/L				
Sulfite (as SO_4) (14286-46-3)		x	<.5						1	mg/L				
Surfactants		x	<.1						1	mg/L				
Aluminum, Total (7429-90)	x		.34	5.58			.18	1.3	104	mg/L	lbs/day			
Barium, Total 7440-39-3)	x		.027						1	mg/L				
Boron, Total (7440-42-8)	x		.081						1	mg/L				
Cobalt, Total (7440-48-4)		x	<.03						1	mg/L				
Iron, Total (7439-89-6)	x		.21						1	mg/L				
Magnesium Total (7439-96-4)	x		2.44						1	mg/L				
Molybdenum Total 7439-98-7)	x		.16						1	mg/L				
Manganese, Total (7439-96-6)	x		.56						1	mg/L				
Tin, Total (7440-31-5)		x	<.01						1	mg/L				
Titanium, Total (7440-32-6)		x	<.005						1	mg/L				

rt C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the **Testing Required** column · all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required /MS fractions), mark "X" in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark "X: in the **Believed Absent** column for each pollutant you believe to be absent. If you mark her the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete e table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	b. Maximum 30-Day Value (if available) (2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	c. Long-Term Avg. Value (if available) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value (1) Concentration	a. Long-Term Avg Value (2) Mass	b. No. of Analyses
ETALS, CYANIDE AND TOTAL PHENOLS															
1. Antimony Total (7440-36-0)	x			<.02						1	mg/L				
1. Arsenic, Total (7440-38-2)	x			<.02						1	mg/L				
1. Beryllium Total (7440-41-7)	x			<.001						4	mg/L				
1. Cadmium Total (7440-43-9)	x			~~<.002~~	~~<0.005~~	<0.50				4	~~mg/L~~ µg/L				
1. Chromium Total (7440-43-9)	x			<.005						4	mg/L				
1. Copper Total (7550-50-8)	x			<.005						4	mg/L				
1. Lead Total (7439-92-1)	x			<.006						4	mg/L				
1. Mercury Total (7439-97-6)	x			<.0002						4	mg/L				
1. Nickel, Total (7440-02-0)	x			<.005						4	mg/L				
M. Selenium, Total (7782-49-2)	x			<.01						4	mg/L				
M. Silver, Total (7440-28-0)	x			<.005						4	mg/L				

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
ETALS, CYANIDE AND TOTAL PHENOLS (Continued)															
M. Thallium, Total (7440-28-0)	x			<.002						1	mg/L				
M. Zinc, Total (7440-66-6)	x					0.06	0.18	0.02	0.12	104	mg/L	lbs/day			
M. Cyanide, Total (57-12-5)	x					<.005	0.07	<.005	0.04	104	mg/L	lbs/day			
M. Phenols, Total	x			<.040						1	mg/L				
OXIN															
,7,8 Tetra-lorodibenzo, Dioxin (1784-01-6)				DESCRIBE RESULTS:											
C/MS FRACTION – VOLATILE COMPOUNDS															
. Acrolein (107-02-8)	x			nd						1					
rylonitrile 07-13-1)	x			nd						1					
. Benzene 1-43-2)	x			nd						1					
. Bromoform 5-25-2)	x			nd						1					
. Carbon trachloride 5-23-5)	x			nd						1					
. Chloro-benzene 08-90-7)	x			nd						1					
lorodibro-omethane 24-48-1)	x			nd						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
loroethane 4-00-3)	x			nd						1					
V. 2-Chloro- ylvinyl Ether 10-75-8)	x			nd						1					
V. loroform 7-66-3)	x			nd						1					
V. Dichloro- omomethane 5-71-8)	x			nd						1					
V. 1,1- chloroethane 5-34-3)	x			nd						1					
V. 1,2- chloroethane 07-06-2)	x			nd						1					
V. 1,1- chlorethylene 5-35-4)	x			nd						1					
V. 1,2-Di- loropropane 8-87-5)	x			nd						1					
V. 1,3- chloropro- lene 52-75-6)	x			nd						1					
V. Ethyl- nzene 00-41-4)	x			nd						1					
V. Methyl omide 4-83-9)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
V. Methyl Chloride (74-87-3)	x			nd						1					
V. Methylene Chloride (75-00-2)	x			nd						1					
V. 1,1,2,2-Tetrachloro-ethane (79-34-5)	x			nd						1					
V. Tetrachloro-ethylene (127-18-4)	x			nd						1					
V. Toluene (108-88-3)	x			nd						1					
V. 1,2-Trans-Dichloro-ethylene (156-60-5)	x			nd						1					
V. 1,1,1-Tri-loroethane (71-55-6)	x			nd						1					
V. 1,1,2-Tri-loroethane (79-00-5)	x			nd						1					
V. Trichloro-ethylene (79-01-6)	x			nd						1					
V. Vinyl Chloride (75-01-4)	x			nd						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – ACID COMPOUNDS															
.. 2-Chloro-phenol (95-57-8)	x			nd						1					
.. 2,4-chlor-ophenol 20-83-2)	x			nd						1					
.. l-Dimeth-henol 05-67-9)	x			nd						1					
.. 4,6-Dinitro-o-cresol 34-52-1)	x			nd						1					
.. 2,4-Dinitro-phenol 1-28-5)	x			nd						1					
.. 2-Nitro-phenol 3-75-5)	x			nd						1					
.. 4-Nitro-phenol 00-02-7)	x			nd						1					
.. P-chloro-m-cresol 9-50-7)	x			nd						1					
.. ntachloro-enol 7-88-5)	x			nd						1					
A. Phenol 08-05-2)	x			nd						1					
A. 2,4,6-Tri-lorophenol 3-06-2)	x			nd						1					
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
. Acena-phthene (83-32-9)	x			nd						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
. Acena-phtylene (208-96-8)	x			nd						1					
. Anthra-cene (120-12-7)	x			nd						1					
3. nzidine 2-87-5)	x			nd						1					
. Benzo(a)-ithracene 5-55-3)	x			nd						1					
. Benzo(a)-rene)-32-8)	x			nd						1					
. 3,4-Benzo-oranthene)5-99-2)	x			nd						1					
. Benzo(ghl) rylene)1-24-2)	x			nd						1					
. Benzo(k)-oranthene)7-08-9)	x			nd						1					
B. Bis(2-lor-thoxy)-thane 1-91-1)	x			nd						1					
B. Bis -chlor-opropyl)-ner	x			nd						1					
B. Bis -ethyl-xyl)-thalate 7-81-7)	x			nd						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. 4-Bromo-enyl enyl ether)1-55-3)	x			nd						1					
B. Butyl-nzyl thalate 5-68-7)	x			nd						1					
B. 2-Chloro-phthalene)05-72-3)	x			nd						1					
B. 4-Chloro-enyl enyl ether)05-72-3)	x			nd						1					
B. Chrysene .8-01-9)	x			nd						1					
B. Dibenzo-h) thracene 5-70-3)	x			nd						1					
B. 1,2-chloro-nzene 5-50-1)	x			nd						1					
B. 1,3-chloro-nzene 41-73-1)	x			nd						1					
B. 1,4-chloro-nzene)6-46-7)	x			nd						1					
B. 3,3-chloro-nzidene .-94-1)	x			nd						1					
B. Diethyl thalate 1-66-2)	x			nd						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg. Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. Dimethyl Phthalate 31-11-3)	x			nd						1					
B. Di-N- tyl Phthalate 4-74-2)	x			nd						1					
B. 4-Dinitro- uene 21-14-2)	x			nd						1					
B. 5-Dinitro- uene 06-20-2)	x			nd						1					
B. Di-n-octyl thalate 17-84-0)	x			nd						1					
B. 1,2- henyl- drazine (as onbenzene) 22-66-7)	x			nd						1					
B. ioranthene 08-44-0)	x			nd						1					
B. Fluorene 5-73-7)	x			nd						1					
B. xachloro- nzene 18-71-1)	x			nd						1					
B. xachloro- tadiene 7-68-3)	x			nd						1					
B. xachloro- clopenta- ne 7-47-4)	x			nd						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. Hexachlo- roethane (67-72-1)	x			nd						1					
B. Indneo- 2,3-oc)- rene)3-39-5)	x			nd						1					
B. phorone 3-59-1)	x			nd						1					
B. pthalene 1-20-3)	x			nd						1					
B. tro- nzene 3-95-3)	x			nd						1					
B. N-Nitroso- nethyl- ine 2-75-9)	x			nd						1					
B. nitrosodi-n- opylamine 21-64-7)	x			nd						1					
B. N-nitro- diphenyl- ine 5-30-6)	x			nd						1					
B. Phenan- ene 5-01-8)	x			nd						1					
B. Pyrene 29-00-0)	x			nd						1					
B. 1,2,4 Tri- loro- nzene 20-82-1)	x			nd						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
C/MS FRACTION – PESTICIDES															
. Aldrin)9-00-2)															
. α-BHC 19-84-6)															
. β-BHC 3-89-9)															
. mma-BHC 3-89-9)															
. δ-BHC 19-86-8)															
. Chlordane 7-74-9)															
. 4,4'-DDT)-29-3)															
. 4,4'-DDE 2-55-9)															
. 4,4'-DDD 2-54-8)															
P. Dieldrin)-57-1)															
P. α- dosulfan 15-29-7)															
P. β- dosulfan 15-29-7)															
P. Endosulfan lfate)31-07-8)															
P. Endrin 2-20-8)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
C/MS FRACTION – PESTICIDES															
P. Endrin dehyde 421-93-4)															
P Heptachlor 5-44-8)															
P. Heptaclor oxide 024-57-3)															
P. PCB-1242 3469-21-9)															
P. PCB-1254 1097-69-1)															
P. PCB-1221 1104-28-2)															
P. PCB-1232 1141-16-5)															
P. PCB-1248 2672-29-6)															
P. PCB-1260 1096-82-5)															
P. PCB-1016 2674-11-2)															
P. Toxaphene 001-35-2)															

004-2006

Month	Flow (mgd)	Total Suspended Solids Avg Conc. (mg/l)	Mass (lbs/day)	Max (lbs/day)	No. of Exceed. Daily Max	Mthly. Avg.	Oil & Grease Conc. (mg/l)	Mass (lbs/day)	Max (lbs/day)	No. of Exceed.	Total Recoverable Aluminum Conc. (mg/l)	Mass (lbs/day)	Max (lbs/day)	No. of Exceed.	Total Recoverable Zinc Conc. (mg/l)	Mass (lbs/day)	Max. conc (mg/l)	Max Mass (lbs/day)	No. of Exceed.
January	0.776	6	40.44	85.28	0	0	3	16.72	33.11	0	0.24	1.63	4.09	0	0.06	0.18	0.14	1.08	0
February	0.751	5	28	51	0	0	2	15.2	25.7	0	0.21	1.31	2	0	0.01	0.06	0.01	0.09	0
March	0.771	7	43.37	67.19	0	0	3	19.29	27.21	0	0.24	1.52	2.12	0	0.01	0.07	0.01	0.09	0
April	0.903	7	53.79	86.52	0	0	3	23.41	30.04	0	0.14	0.96	1.43	0	0.01	0.08	0.01	0.1	0
May	1.124	5	41.55	52.7	0	0	5	43.57	107.15	1	0.19	1.81	5.58	0	0.01	0.1	0.014	0.13	0
June	1.133	5	43	66	0	0	3	31.3	43.3	0	0.1	0.95	1.3	0	0.02	0.14	0.04	0.45	0
July	0.986	5	45.93	104.28	1	0	5	43.81	91.24	2	0.13	1.12	2.61	0	0.01	0.12	0.04	0.46	0
August	1.027	6	52.91	91.13	0	0	3	27.36	39.05	0	0.1	0.89	1.3	0	0.01	0.09	0.01	0.13	0
September	1.102	8	80.39	284.4	1	1	5	43.9	78.7	2	0.2	2.05	6.9	0	0.01	0.09	0.01	0.19	0
October	0.572	4	18.24	38.61	0	0	5	23.69	87.87	1	0.12	0.52	1	0	0.02	0.1	0.06	0.32	0
November	0.759	4	22.57	47.47	0	0	4	26.5	77.34	1	0.34	2.28	12.6	0	0.03	0.22	0.184	1.28	0
December	0.814	3	20.7	39.84	0	0	4	26	58.42	0	0.14	0.94	39.45	0	0.03	0.21	0.149	1.06	0

July - Ongoing desludging of wetlands.
TSS - Abnormally high release due to rains (2.2 MGD)

May - No explanation provided in DMR.
July - High loading, low limits.
Sept. - High loading concerns; High flow 9/24
Oct. - High SMR lab result, ESC ok.
Nov. - High SMR lab result, ESC ok.

Avg	0.893167	5.416667	40.9075	84.535	0.166667	0.083333	3.75	28.39583	58.26083	0.583333	0.179167	1.331667	6.698333	0	0.019167	0.121667	0.056417	0.448333	0
Max	1.133	8	80.39	284.4	1	1	5	43.9	107.15	2	0.34	2.28	39.45	0	0.06	0.22	0.184	1.28	0

004 - 2006

Month	Flow (mgd)	Hardness Conc. (mg/l)	Hardness Max (mg/l)	Ammonia Conc. (mg/l)	Ammonia Max (mg/l)	Phosphorous Conc. (mg/l)	Phosphorous Max (mg/l)	Total Recoverable Chromium Conc. (mg/l)	Total Recoverable Chromium Mass (lbs/day)	Total Recoverable Chromium No. of Exceed.	Total Recoverable Cyanide Conc. (mg/l)	Total Recoverable Cyanide Mass (lbs/day)	Total Recoverable Cyanide No. of Exceed.	Tot. Metals Conc. (mg/l)	Chronic Toxicity Maximum TUc	Chronic Toxicity No. of Exceed.
January	0.776	116	230	2.7	3.9	0.1	0.1	0.005	0.02	0	0.005	0.02	0	0.005	n/a	
February	0.751	122	156	2.29	5.4	0.1	0.1	0.005	0.02	0	0.005	0.02	0	0.005	n/a	
March	0.771	106	124	3	5.4	0.1	0.1	0.005	0.02	0	0.005	0.02	0	0.005	<1.0	0
April	0.903	114	136	2.1	3.2	0.1	0.1	0.005	0.04	0	0.005	0.04	0	0.005	n/a	
May	1.124	136	220	2	2.6	0.12	0.24	0.005	0.04	0	0.005	0.04	0	0.005	n/a	
June	1.133	149	180	2.03	2.4	0.1	0.1	0.005	0.04	0	0.005	0.04	0	0.005	<1.0	0
July	0.986	160	180	1.4	2.4	0.1	0.1	0.005	0.07	0	0.005	0.07	0	0.005	n/a	
August	1.027	178	190	1.6	2.9	0.1	0.1	0.005	0.07	0	0.005	0.07	0	0.005	n/a	
September	1.102	155	178	1.11	1.7	0.13	0.37	0.005	0.07	0	0.005	0.07	0	0.005	<1.0	0
October	0.572	155	188	1.14	1.5	0.1	0.16	0.005	0.03	0	0.005	0.03	0	0.005	n/a	
November	0.759	172	210	1.96	2.3	0.12	0.25	0.005	0.03	0	0.005	0.03	0	<.005	n/a	
December	0.814	124	202	1.6	1.9	0.16	0.38	0.005	0.03	0	0.005	0.03	0	<.005	n/a	
Average	0.893	141	183	1.91	2.97	0.11	0.18	0.005	0.040	0.000	0.005	0.040	0.000	0.005		
Max	1.133	178	230	3	5.4	0.16	0.38	0.005	0.07	0	0.005	0.07	0	0.005		

004 - 2007

Month	Flow (mgd)	Total Suspended Solids Conc. (mg/l)	Mass (lbs/day)	Max (lbs/day)	No. of Exceed. Daily Max	Mthly. Avg.	Oil & Grease Conc. (mg/l)	Mass (lbs/day)	Max (lbs/day)	No. of Exceed.	Total Recoverable Aluminum Conc. (mg/l)	Mass (lbs/day)	Max (lbs/day)	No. of Exceed.	Total Recoverable Zinc Conc. (mg/l)	Mass (lbs/day)	Max. conc (mg/l)	Max Mass (lbs/day)	No. of Exceed.
January	0.851	3	18.51	29.12	0	0	3	25.96	33.05	0	0.18	1.34	2.05	0	0.01	0.07	0.01	0.09	0
February	0.768	2	16.46	30.76	0	0	3	20.67	28.12	0	0.16	1.02	1.9	0	0.012	0.08	0.021	0.18	0
March	0.691	5	31.14	51.54	0	0	3	18.14	22.59	0	0.3	1.76	4.46	0	0.012	0.07	0.022	0.12	0
April	0.699	5	34.09	64.26	0	0	3	23.59	38.55	0	0.18	1.26	2.2	0	0.01	0.07	0.01	0.12	0
May	0.699	7	43.22	118.22	1 *	0	3	19.28	27.48	0	0.16	0.98	2.6	0	0.01	0.06	0.012	0.09	0
June	0.831	16	105.8	166.85	1	5	4	33.49	97.61	0	0.24	1.72	4.17	0	0.01	0.07	0.01	0.13	0
July																			
August																			
September																			
October																			
November																			
December																			
Avg	0.7565	6.333333	41.53667	76.79167	0.2	0.833333	3.166667	23.52167	41.23333	0	0.203333	1.346667	2.896667	0	0.010667	0.07	0.014167	0.121667	0
Max	0.851	16	105.8	166.85	1	5	4	33.49	97.61	0	0.3	1.76	4.46	0	0.012	0.08	0.022	0.18	0

* Daily Max Exceedance - Due to algae bloom

004-2007

Month	Flow (mgd)	Hardness Conc. (mg/l)	Hardness Max (mg/l)	Ammonia Conc. (mg/l)	Ammonia Max (mg/l)	Phosphorous Conc. (mg/l)	Phosphorous Max (mg/l)	Total Recoverable Chromium Conc. (mg/l)	Total Recoverable Chromium Mass (lbs/day)	Total Recoverable Chromium No. of Exceed.	Total Recoverable Cyanide Conc. (mg/l)	Total Recoverable Cyanide Mass (lbs/day)	Total Recoverable Cyanide No. of Exceed.	Tot. Metals Conc. (mg/l)	Chronic Toxicity Maximum TUc	Chronic Toxicity No. of Exceed.
January	0.851	182	300	1.24	1.8	0.14	0.35	0	0	0	0	0	0	0	n/a	0
February	0.768	162	179	1.05	1.4	0.1	0.1	0	0	0	0	0	0	0	n/a	0
March	0.691	173	189	0.92	1.3	0.09	0.1	0.005	0.03	0	0.01	0.05	0	<.005	<1.00	0
April	0.857	165	186	1.5	2.19	0.1	0.1	0	0	0	0	0	0	0	n/a	0
May	0.699	161	171	2.43	3.3	0.11	0.17	0.005	0.03	0	0.01	0.05	0	0.005	n/a	0
June	0.831	153	169	0.61	1.38	0.09	0.16	0.005	0.03	0	0.01	0.05	0	<0.271	<1.00	0
July																
August																
September																
October																
November																
December																
Average	0.782833	166	199	1.291667	1.895	0.105	0.163333	0.0025	0.015	0	0.005	0.025	0	0.00125		
Max	0.857	182	300	2.43	3.3	0.14	0.35	0.005	0.03	0	0.01	0.05	0	0.005		

2007 Wetland Study

DATE	LOCATION	Parameter																
		Antimony	Sulfate	Thallium	COD	Chloride	pH	Aluminum	Arsenic	Beryllium	BOD	Cadmium	Chromium	Copper	Conductiv	Mercury	Ammonia Nitrogen	Nickel
6/22/2007	East Pond	0.01	133	0.02	172	105	7.798	1.84	0.01	0.001	49	0.002	0.005	0.005	909	0.0002	1.87	0.005
	A1 in	0.01	138	0.02	82	108	7.46	0.125	0.01	0.001	33	0.002	0.005	0.005	932	0.0002	3.82	0.005
	B1 in	0.01	134	0.02	55	109	7.3	0.118	0.01	0.001	13	0.002	0.005	0.005	916	0.0002	3.95	0.005
	A3 out	0.01	133	0.02	46	120	8.2	0.131	0.01	0.001	6	0.002	0.005	0.005	909	0.0002	1.11	0.005
	B3 out	0.01	142	0.02	42	114	7.8	0.1	0.01	0.001	6	0.002	0.005	0.005	961	0.0002	3.29	0.005
	A5 out	0.01	128	0.02	36	111	7.92	0.1	0.01	0.001	6	0.002	0.005	0.005	861	0.0002	0.703	0.005
6/27/2007	East Pond	0.01	160	0.02	153	85	7.7	2.41	0.01	0.001	66	0.002	0.005	0.005	879	0.0002	1.03	0.005
	A1 in	0.01	141	0.02	63	91.5	7.56	0.198	0.01	0.001	13	0.002	0.005	0.005	865	0.0002	2.62	0.005
	B1 in	0.01	134	0.02	45	90	7.42	0.308	0.01	0.001	11	0.002	0.005	0.005	856	0.0002	3.49	0.005
	A3 out	0.01	122	0.02	37	105	8.01	0.139	0.01	0.001	6	0.002	0.005	0.005	856	0.0002	1.69	0.005
	B3 out	0.01	123	0.02	36	96.5	7.63	0.1	0.01	0.001	6	0.002	0.005	0.005	858	0.0002	1.02	0.005
	A5 out	0.01	110	0.02	34	107	7.95	0.01	0.01	0.001	6	0.002	0.005	0.005	796	0.0002	0.611	0.005
6/29/2007	East Pond	0.01	146	0.02	135	95.5	7.69	1.32	0.01	0.001	38	0.002	0.005	0.005	817	0.0002	0.853	0.005
	A1 in	0.01	135	0.02	98	83	7.45	0.498	0.01	0.001	31	0.002	0.005	0.005	812	0.0002	1.49	0.005
	B1 in	0.01	127	0.02	51	82	7.39	0.239	0.01	0.001	7	0.002	0.005	0.005	799	0.0002	2.15	0.005
	A3 out	0.01	119	0.02	42	100	7.77	0.199	0.01	0.001	6	0.002	0.005	0.005	821	0.0002	2.09	0.005
	B3 out	0.01	118	0.02	36	86	7.72	0.1	0.01	0.001	6	0.002	0.005	0.005	766	0.0002	2.44	0.005
	A5 out	0.01	106	0.02	32	96.5	7.9	0.209	0.01	0.001	6	0.002	0.005	0.005	752	0.0002	0.651	0.005
7/3/2007	East Pond	0.01	138	0.02	119	102	8.23	4.89	0.01	0.001	33	0.002	0.005	0.005	926	0.0002	0.1	0.005
	A1 in	0.01	127	0.01	70	89	7.53	0.184	0.01	0.001	15	0.002	0.005	0.005	814	0.0002	4.46	0.005
	B1 in	0.01	124	0.02	46	92	7.42	0.262	0.01	0.001	6	0.002	0.005	0.005	758	0.0002	1.82	0.005
	A3 out	0.01	116	0.02	34	96	7.74	0.1	0.01	0.001	6	0.002	0.005	0.005	790	0.0002	1.65	0.005
	B3 out	0.01	114	0.02	44	95	7.63	0.1	0.01	0.001	8	0.002	0.005	0.005	770	0.0002	2.26	0.005
	A5 out	0.01	107	0.02	28	100	7.73	0.1	0.01	0.001	6	0.002	0.005	0.005	702	0.0002	0.277	0.005

O&G	Lead	Phosphoru	Selenium	Silver	TDS	TS	TSS	Zinc
1.8	0.006	0.204	0.01	0.005	537	640	23	0.01
1.6	0.006	0.395	0.01	0.005	546	601	23	0.01
1.6	0.006	0.085	0.01	0.005	537	570	4	0.01
1.6	0.006	0.096	0.01	0.005	546	561	13	0.01
1.6	0.006	0.103	0.01	0.005	570	587	9	0.01
1.6	0.006	0.05	0.01	0.005	524	545	9	0.01
1.5	0.006	0.188	0.01	0.005	534	568	30	0.01
1.5	0.006	0.188	0.01	0.005	507	537	10	0.01
1.5	0.006	0.069	0.01	0.005	499	528	11	0.01
1.5	0.006	0.05	0.01	0.005	495	513	6	0.01
1.5	0.006	0.05	0.01	0.005	490	514	2	0.01
1.6	0.006	0.05	0.01	0.005	452	487	9	0.01
1.6	0.006	0.122	0.01	0.005	505	577	26	0.01
1.6	0.006	0.543	0.01	0.005	477	526	27	0.01
1.6	0.006	0.05	0.01	0.005	474	502	8	0.01
1.6	0.006	0.051	0.01	0.005	475	517	10	0.01
1.5	0.006	0.05	0.01	0.005	447	481	5	0.01
3.8	0.006	0.05	0.01	0.005	438	467	8	0.01
1.6	0.006	0.412	0.01	0.005	569	631	38	0.01
1.6	0.006	0.227	0.01	0.005	477	526	7	0.01
1.6	0.006	0.094	0.01	0.005	481	488	6	0.01
1.6	0.006	0.05	0.01	0.005	455	489	6	0.01
1.6	0.006	0.099	0.01	0.005	458	484	6	0.01
1.6	0.006	0.05	0.01	0.005	420	436	7	0.01

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Est. 1970

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North

Russellville, KY 42276

Report Summary

Wednesday May 02, 2007

Report Number: L290627
Samples Received: 04/25/07
Client Project:

Description:

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Reviewed By: Rodney Shinbaum, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, WA - C1915

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REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-01

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 004 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 08:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cyanide	BDL	0.0050	mg/l	335.3	05/01/07	1
Total Phenol by 4AAP	BDL	0.040	mg/l	420.2	05/02/07	1
Thallium	BDL	0.0010	mg/l	200.8	04/29/07	1
Mercury	BDL	0.00020	mg/l	245.1	05/01/07	1
Antimony	BDL	0.020	mg/l	200.7	05/01/07	1
Arsenic	BDL	0.020	mg/l	200.7	05/01/07	1
Beryllium	BDL	0.0020	mg/l	200.7	05/01/07	1
Cadmium	BDL	0.0050	mg/l	200.7	05/01/07	1
Chromium	BDL	0.010	mg/l	200.7	05/01/07	1
Copper	BDL	0.020	mg/l	200.7	05/01/07	1
Lead	BDL	0.0050	mg/l	200.7	05/01/07	1
Nickel	BDL	0.020	mg/l	200.7	05/01/07	1
Selenium	BDL	0.020	mg/l	200.7	05/01/07	1
Silver	BDL	0.010	mg/l	200.7	05/01/07	1
Zinc	BDL	0.030	mg/l	200.7	05/01/07	1
PP Volatile Organics						
Benzene	BDL	0.0010	mg/l	624	04/27/07	1
Bromodichloromethane	BDL	0.0010	mg/l	624	04/27/07	1
Bromoform	BDL	0.0010	mg/l	624	04/27/07	1
Bromomethane	BDL	0.0050	mg/l	624	04/27/07	1
Carbon tetrachloride	BDL	0.0010	mg/l	624	04/27/07	1
Chlorobenzene	BDL	0.0010	mg/l	624	04/27/07	1
Chlorodibromomethane	BDL	0.0010	mg/l	624	04/27/07	1
Chloroethane	BDL	0.0010	mg/l	624	04/27/07	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	624	04/27/07	1
Chloroform	BDL	0.0050	mg/l	624	04/27/07	1
Chloromethane	BDL	0.0010	mg/l	624	04/27/07	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	624	04/27/07	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	624	04/27/07	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	624	04/27/07	1
1,1-Dichloroethane	BDL	0.0010	mg/l	624	04/27/07	1
1,2-Dichloroethane	BDL	0.0010	mg/l	624	04/27/07	1
1,1-Dichloroethene	BDL	0.0010	mg/l	624	04/27/07	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	624	04/27/07	1
1,2-Dichloropropane	BDL	0.0010	mg/l	624	04/27/07	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	624	04/27/07	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	624	04/27/07	1
Ethylbenzene	BDL	0.0010	mg/l	624	04/27/07	1
Methylene Chloride	BDL	0.0050	mg/l	624	04/27/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L290627-01 (PESTICIDES/PCBS) - Previous run also had low IS/SURR recovery. Matrix effect.

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REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-01

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 004 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 08:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	624	04/27/07	1
Tetrachloroethene	BDL	0.0010	mg/l	624	04/27/07	1
Toluene	BDL	0.0050	mg/l	624	04/27/07	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	624	04/27/07	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	624	04/27/07	1
Trichloroethene	BDL	0.0010	mg/l	624	04/27/07	1
Vinyl chloride	BDL	0.0010	mg/l	624	04/27/07	1
Surrogate Recovery						
Toluene-d8	106.		% Rec.	624	04/27/07	1
Dibromofluoromethane	113.		% Rec.	624	04/27/07	1
4-Bromofluorobenzene	112.		% Rec.	624	04/27/07	1
Pesticide/PCBs						
Aldrin	BDL	0.010	mg/l	608	05/01/07	20
Alpha BHC	BDL	0.010	mg/l	608	05/01/07	20
Beta BHC	BDL	0.010	mg/l	608	05/01/07	20
Delta BHC	BDL	0.010	mg/l	608	05/01/07	20
Gamma BHC	BDL	0.010	mg/l	608	05/01/07	20
Chlordane	BDL	0.10	mg/l	608	05/01/07	20
4,4-DDD	BDL	0.010	mg/l	608	05/01/07	20
4,4-DDE	BDL	0.010	mg/l	608	05/01/07	20
4,4-DDT	BDL	0.010	mg/l	608	05/01/07	20
Dieldrin	BDL	0.010	mg/l	608	05/01/07	20
Endosulfan I	BDL	0.010	mg/l	608	05/01/07	20
Endosulfan II	BDL	0.010	mg/l	608	05/01/07	20
Endosulfan sulfate	BDL	0.010	mg/l	608	05/01/07	20
Endrin	BDL	0.010	mg/l	608	05/01/07	20
Endrin aldehyde	BDL	0.010	mg/l	608	05/01/07	20
Endrin ketone	BDL	0.010	mg/l	608	05/01/07	20
Heptachlor	BDL	0.010	mg/l	608	05/01/07	20
Heptachlor epoxide	BDL	0.010	mg/l	608	05/01/07	20
Hexachlorobenzene	BDL	0.010	mg/l	608	05/01/07	20
Methoxychlor	BDL	0.010	mg/l	608	05/01/07	20
Toxaphene	BDL	0.20	mg/l	608	05/01/07	20
PCB 1016	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1221	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1232	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1242	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1248	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1254	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1260	BDL	0.0050	mg/l	608	05/01/07	10
Pest/PCBs Surrogates						
Decachlorobiphenyl	120.	0.000500	% Rec.	608	05/01/07	10
Tetrachloro-m-xylene	90.0	0.000500	% Rec.	608	05/01/07	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L290627-01 (PESTICIDES/PCBS) - Previous run also had low IS/SURR recovery. Matrix effect.

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REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-01

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 004 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 08:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
PP Base/Neutral Extractables						
Acenaphthene	BDL	0.010	mg/l	625	04/30/07	1
Acenaphthylene	BDL	0.010	mg/l	625	04/30/07	1
Anthracene	BDL	0.010	mg/l	625	04/30/07	1
Benzidine	BDL	0.050	mg/l	625	04/30/07	1
Benzo(a)anthracene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(b)fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(k)fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(g,h,i)perylene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(a)pyrene	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chlorethoxy)methane	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chloroethyl)ether	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chloroisopropyl)ether	BDL	0.010	mg/l	625	04/30/07	1
4-Bromophenyl-phenylether	BDL	0.010	mg/l	625	04/30/07	1
2-Chloronaphthalene	BDL	0.010	mg/l	625	04/30/07	1
4-Chlorophenyl-phenylether	BDL	0.010	mg/l	625	04/30/07	1
Chrysene	BDL	0.010	mg/l	625	04/30/07	1
Dibenz(a,h)anthracene	BDL	0.010	mg/l	625	04/30/07	1
3,3-Dichlorobenzidine	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dinitrotoluene	BDL	0.010	mg/l	625	04/30/07	1
2,6-Dinitrotoluene	BDL	0.010	mg/l	625	04/30/07	1
Fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Fluorene	BDL	0.010	mg/l	625	04/30/07	1
Hexachlorobenzene	BDL	0.010	mg/l	625	04/30/07	1
Hexachloro-1,3-butadiene	BDL	0.010	mg/l	625	04/30/07	1
Hexachlorocyclopentadiene	BDL	0.010	mg/l	625	04/30/07	1
Hexachloroethane	BDL	0.010	mg/l	625	04/30/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.010	mg/l	625	04/30/07	1
Isophorone	BDL	0.010	mg/l	625	04/30/07	1
Naphthalene	BDL	0.010	mg/l	625	04/30/07	1
Nitrobenzene	BDL	0.010	mg/l	625	04/30/07	1
n-Nitrosodimethylamine	BDL	0.050	mg/l	625	04/30/07	1
n-Nitrosodiphenylamine	BDL	0.010	mg/l	625	04/30/07	1
n-Nitrosodi-n-propylamine	BDL	0.010	mg/l	625	04/30/07	1
Phenanthrene	BDL	0.010	mg/l	625	04/30/07	1
Benzylbutyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-ethylhexyl)phthalate	BDL	0.010	mg/l	625	04/30/07	1
Di-n-butyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Diethyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Dimethyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Di-n-octyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Pyrene	BDL	0.010	mg/l	625	04/30/07	1
1,2,4-Trichlorobenzene	BDL	0.010	mg/l	625	04/30/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L290627-01 (PESTICIDES/PCBS) - Previous run also had low IS/SURR recovery. Matrix effect.

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REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-01

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 004 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 08:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
PP Acid Extractables						
4-Chloro-3-methylphenol	BDL	0.010	mg/l	625	04/30/07	1
2-Chlorophenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dichlorophenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dimethylphenol	BDL	0.010	mg/l	625	04/30/07	1
4,6-Dinitro-2-methylphenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dinitrophenol	BDL	0.010	mg/l	625	04/30/07	1
2-Nitrophenol	BDL	0.010	mg/l	625	04/30/07	1
4-Nitrophenol	BDL	0.010	mg/l	625	04/30/07	1
Pentachlorophenol	BDL	0.010	mg/l	625	04/30/07	1
Phenol	BDL	0.010	mg/l	625	04/30/07	1
2,4,6-Trichlorophenol	BDL	0.010	mg/l	625	04/30/07	1
Surrogate Recovery						
Nitrobenzene-d5	65.5		% Rec.	625	04/30/07	1
2-Fluorobiphenyl	69.3		% Rec.	625	04/30/07	1
p-Terphenyl-d14	105.		% Rec.	625	04/30/07	1
Phenol-d5	40.4		% Rec.	625	04/30/07	1
2-Fluorophenol	63.2		% Rec.	625	04/30/07	1
2,4,6-Tribromophenol	104.		% Rec.	625	04/30/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
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.
Reported: 05/02/07 17:01 Printed: 05/02/07 17:02
L290627-01 (PESTICIDES/PCBS) - Previous run also had low IS/SURR recovery. Matrix effect.

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J4	The associated batch QC was outside the established quality control range for accuracy.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

	Control Limits				(AQ)	(SS)
2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	68-128	64-125
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	76-115	69-118
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	79-127	61-134

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Logan Aluminum Inc.

U. S. Hwy 431 North
Russellville,KY 42276

Alternate billing information:

Chain of Custody
Page ___ of ___

Prepared by:
ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Mr. Steve Royer
Email: steve.royer@logan-aluminu

Project Description:
City/State Collected

Phone: (270) 755-6390
FAX:
Client Project #:
Lab Project #

Collected by (print): H. Wojnar
Site/Facility ID#:
P.O.#:

Collected by (signature):
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day.....100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed
Email? __No X Yes
FAX? __No __Yes

Acctnum: LOGALKY01 (lab use only)
Template/Prelogin: T42406/ P205277
Cooler #: 3WDS
Shipped Via: Courier

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	CN 250mlHDPEAmb-NaOH	Metals 500mlHDPE-HNO3	SV608 1L-Amb NoPres	SV625PP 1L-Amb-NoPres	Total Phenols (PHT) 250mlAmb-H2SO4	V624PP 40mlAmb-HCl			Remarks/Contaminant	Sample # (lab only)
004 Discharge	X	WW		4/24/07	8am	9	X	X	X	X	X	X				L2906270 1
005 Discharge	X	WW		4/24/07	9am	9	X	X	X	X	X	X				02

*Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____	Condition: (lab use only)
	4/24/07	9:30am			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 34° Bottles Received: 16+2B	OK
	4/25/07	1145	Wayne Shull		
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4.25.07 Time: 1445	pH Checked: 22,127 NCF:
Wayne Shull	4/25/07	1445			

SMR ENGINEERING & ENVIRONMENTAL SERVICES, INC.
319 West Broad Street; P. O. Box 761
Central City, Kentucky 42330

REPORT OF ANALYSES

LOGAN ALUMINUM
U.S. HIGHWAY 431
P O BOX 3000
RUSSELLVILLE, KY 42276-
Attn: PHILLIP PORTER

PROJECT NAME: KPDES RENEWAL
DATE: 01/15/2004

SAMPLE NUMBER- 149337 SAMPLE ID- SET #1/004 SAMPLE MATRIX- WA
DATE SAMPLED- 12/10/03 LOCATION- 004/RENEWAL TIME SAMPLED- 0800
DATE RECEIVED- 12/10/03 SAMPLER- PW RECEIVED BY- STM
TIME RECEIVED- 1025 DELIVERED BY- STM TYPE SAMPLE- Grab

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
BROMIDE		01/02/04	1700	WR	<1	mg/L
TOT.ORGANIC CARBON	9060/415.1	12/11/03	0900	MD	25.1	mg/L
CHLORIDE	EPA 325.3	12/12/03	1400	DP	34	mg/L
CYANIDE,TOTAL	9010/335.2	12/18/03	1200	MD	< 0.004	mg/L
BIOCHEM.OXY.DEMAND	5210.B	12/10/03	1215	DP	17	mg/L
CHEMICAL OXYGEN DEMAND	EPA 410.4	12/12/03	0915	DP	78	mg/L
FLUORIDE	EPA 340.2	12/22/03	0915	MRD	4.17	mg/L
HARDNESS AS CACO3	EPA 130.2	12/17/03	1450	DP	94	mg/L CaCO3
AMMONIA NITROGEN AS N	EPA 350.2	12/12/03	1130	MD	2.65	mg/L
TOTAL ORGANIC NITROGEN AS N	CALC.	12/30/03	0900	WR	0.25	mg/L
NITRATE AS N	9056/352.3	12/10/03	1515	DP	0.2	mg/L
OIL AND GREASE	5520B/1664	12/15/03	0800	RS	< 2	mg/L
CHLORINE(TOTAL)	EPA 330.5	12/10/03	1400	DP	0.04	mg/L
PH	9040/150.1	12/10/03	1100	STM	6.85	std units
TOTAL PHENOLS	EPA 420.1	12/18/03	1300	MD	< 0.1	mg/L
TOTAL PHOSPHOROUS AS P	EPA365.2	12/19/03		DLP	0.45	mg/L
TOTAL SUSP. SOLIDS	2540.D	12/18/03	1000	DP	3	mg/L
SULFATE	9038	12/15/03	1410	DP	140	mg/L
SURFACTANTS	5540/425.1	12/12/03	0905	JMY	< 0.10	mg/L
SULFITE	4500	01/02/04	1500	MD	< 0.50	mg/L
SULFIDE	4500/376.2	12/17/03		MD	< 0.10	mg/L

CONTINUATION OF DATA FOR SAMPLE NUMBER 149337

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
SEMI-VOLATILES	8270	12/16/03	0005	RP	ATTACHED	mg/L
VOLATILE SCAN	8260/624	12/17/03	0213	LAL	ATTACHED	
ALUMINUM,TOTAL	7020/202.2	12/15/03		AL	0.35	mg/L
ANTIMONY,TOTAL	7041/204.2	12/15/03		AL	< 0.004	mg/L
ARSENIC,TOTAL	7060/206.2	12/15/03		AL	< 0.003	mg/L
BARIUM,TOTAL	7081/208.2	12/15/03		AL	0.027	mg/L
BERYLLIUM,TOTAL	7090/210.2	12/15/03		AL	< 0.004	mg/L
BORON,TOTAL	200.7	12/15/03		AL	0.081	mg/L
CADMIUM,TOTAL	7131/213.2	12/15/03		AL	< 0.005	mg/L
CHROMIUM,TOTAL	7191/218.2	12/15/03		AL	< 0.003	mg/L
COBALT,TOTAL	7201/219.2	12/15/03		AL	< 0.03	mg/L
COPPER,TOTAL	7210/220.2	12/15/03		AL	0.004	mg/L
IRON,TOTAL	7380/236.1	12/15/03		AL	0.21	mg/L
LEAD,TOTAL	7421/239.2	12/15/03		AL	< 0.003	mg/L
MAGNESIUM,TOTAL	7450/242.1	12/15/03		AL	2.44	mg/L
MANGANESE,TOTAL	7460/239.1	12/15/03		AL	0.56	mg/L
MERCURY,TOTAL	1631E/7470	12/15/03		AL	< 0.0003	mg/L
MOLYBDENUM,TOTAL	7481/246.2	12/15/03		AL	0.169	mg/L
NICKEL,TOTAL	7520/249.1	12/15/03		AL	< 0.02	mg/L
SELENIUM,TOTAL	7740/270.2	12/15/03		AL	< 0.003	mg/L
SILVER,TOTAL	7761/272.1	12/15/03		AL	< 0.008	mg/L
THALLIUM,TOTAL	7841/279.2	12/15/03		AL	< 0.002	mg/L
TIN,TOTAL	7870/282.2	12/15/03		AL	< 0.01	mg/L
TITANIUM,TOTAL	283.2	12/15/03		AL	< 0.005	mg/L
ZINC,TOTAL	7950/289.1	12/15/03		AL	< 0.01	mg/L

SMR REPRESENTATIVE

SMR ENGINEERING & ENVIRONMENTAL SERVICES, INC.
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FINAL REPORT OF ANALYSES

LOGAN ALUMINUM
U.S. HIGHWAY 431
P.O. BOX 3000
RUSSELLVILLE, KY 42303-
ATTN: PHILLIP PORTER

PROJECT NAME:004 MONITORING
REPORT DATE: 01/15/2004

SAMPLE NUMBER: 149337 SAMPLE ID- SET #1/004 SAMPLE MATRIX- WA
DATE SAMPLED- 12/10/03 LOCATION- KPDES 004 RENEWAL TIME SAMPLED-0800
DATE RECEIVED- 12/10/03 SAMPLER- PW RECEIVED BY -STM
TIME RECEIVED- 1025 DELIVERED BY -STM TYPE SAMPLE-Grab
COMMENTS: METHODS 608, 624 & 625; ANALYST ESC
VOLATILE & BNA SEMIVOLATILES Analysis

Component Name	ANALYSIS Concentration ug/L	Component MDL ug/L
VOLATILES		
Acrolein	Not Det	50
Acrylonitrile	Not Det	50
Benzene	Not Det	1
Bis (chloromethyl) ether	Not Det	1
Bromodichloromethane	Not Det	1
Bromoform	Not Det	1
Carbon Tetrachloride	Not Det	1
Chlorobenzene	Not Det	2
Chloroethane	Not Det	1
2-Chloroethylvinyl Ether	Not Det	1
Chloroform	Not Det	1
Chloromethane (Methyl chloride)	Not Det	1
Dibromochloromethane	Not Det	1
Dibromomethane	Not Det	1
Dichlorofluoromethane	Not Det	1
1,1-Dichloroethane	Not Det	1
1,2-Dichloroethane	Not Det	1
1,1-Dichloroethylene	Not Det	1
t-1,2-Dichloroethylene	Not Det	1
c-1,2-Dichloroethylene	Not Det	1
1,2-Dichloropropane	Not Det	1
c-1,3-Dichloropropene	Not Det	1
t-1-3-Dichloropropene	Not Det	1
1,2-Dichlorobenzene	Not Det	1
1,4-Dichlorobenzene	Not Det	1
Ethylbenzene	Not Det	1
2-Butanone (MEK)	Not Det	20
Methylene Chloride (Dichloromethane)	Not Det	1
4-Methyl-2-Pentanone (MIBK)	Not Det	20
Styrene	Not Det	1

CONTINUATION OF DATA FOR SAMPLE NUMBER 149337

Component Name	ANALYSIS Concentration ug/L	Component MDL ug/L
1,1,2,2-Tetrachloroethane	Not Det	1
Tetrachloroethylene	Not Det	1
Toluene	Not Det	1
1,1,1-Trichloroethane	Not Det	1
1,1,2-Trichloroethane	Not Det	1
Trichloroethylene	Not Det	1
Trichlorofluoromethane	Not Det	1
2-Chlorotoluene	Not Det	1
4-Chlorotoluene	Not Det	1
Vinyl Chloride	Not Det	2
Xylene, Total	Not Det	1

BNA EXTRACTABLES

2-Chlorophenol	Not Det	10
2,4-Dichlorophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	10
2,4-Dinitrophenol	Not Det	10
2-Nitrophenol	Not Det	10
4-Nitrophenol	Not Det	10
4-Chloro-3-methylphenol	Not Det	10
Pentachlorophenol	Not Det	10
Phenol	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
Acenaphthene	Not Det	10
Acenaphthylene	Not Det	10
Anthracene	Not Det	10
Benzidene	Not Det	10
Benzo(a)anthracene	Not Det	10
Benzo(a)pyrene	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Bis(2-chloroethyl)ether	Not Det	10
Bis(2-chloroethoxy)methane	Not Det	10
Bis(2-chloroisopropyl)ether	Not Det	10
Bis(2-ethylhexyl)phthalate	Not Det	10
4-Bromophenyl phenyl ether	Not Det	10
Butyl benzyl phthalate	Not Det	10
2-Chloronaphthalene	Not Det	10
4-Chlorophenyl phenyl ether	Not Det	10
Chrysene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
1,3-Dichlorobenzene	Not Det	10

CONTINUATION OF DATA FOR SAMPLE NUMBER 149337

3,3-Dichlorobenzidine	Not Det	10
Diethyl phthalate	Not Det	10
Dimethyl phthalate	Not Det	10
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Di-n-butyl phthalate	Not Det	10
Di-n-octyl phthalate	Not Det	10
Dimethyl phthalate	Not Det	10
Diethyl phthalate	Not Det	10
1,2-Diphenylhydrazine	Not Det	10
Fluoranthene	Not Det	10
Fluorene	Not Det	10
Hexachlorobenzene	Not Det	10
Hexachlorobutadiene	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
Hexachloroethane	Not Det	10
Indeno(1,2,3-cd)pyrene	Not Det	10
Isophorone	Not Det	10
Naphthalene	26	10
Nitrobenzene	Not Det	10
N-Nitrosodimethylamine	Not Det	10
N-Nitrosodi-n-propylamine	Not Det	10
N-Nitrosodiphenylamine	Not Det	10
Phenanthrene	Not Det	10
Pyrene	Not Det	10
1,2,4-Trichlorobenzene	Not Det	10

LABORATORY DIRECTOR W.D. Ross

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Est. 1970

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North

Russellville, KY 42276

Report Summary

Wednesday May 02, 2007

Report Number: L290627
Samples Received: 04/25/07
Client Project:

Description:

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Reviewed By: Rodney Shinbaum, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, WA - C1915

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SMR ENGINEERING & ENVIRONMENTAL SERVICES, INC.
319 West Broad Street; P. O. Box 761
Central City, Kentucky 42330

REPORT OF ANALYSES

LOGAN ALUMINUM
U.S. HIGHWAY 431
P O BOX 3000
RUSSELLVILLE, KY 42276-
Attn: PHILLIP PORTER

PROJECT NAME: KPDES RENEWAL
DATE: 01/15/2004

SAMPLE NUMBER- 149338 SAMPLE ID- SET #2/005 SAMPLE MATRIX- WA
DATE SAMPLED- 12/10/03 LOCATION- 005/RENEWAL TIME SAMPLED- 0800
DATE RECEIVED- 12/10/03 SAMPLER- PW RECEIVED BY- STM
TIME RECEIVED- 1025 DELIVERED BY- STM TYPE SAMPLE- Grab

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
BROMIDE		01/02/04	1700	WR	<1	mg/L
TOT.ORGANIC CARBON	9060/415.1	12/11/03	0900	MD	2.9	mg/L
CHLORIDE	EPA 325.3	12/12/03	1400	DP	21	mg/L
CYANIDE,TOTAL	9010/335.2	12/18/03	1200	MD	< 0.004	mg/L
BIOCHEM.OXY.DEMAND	5210.B	12/10/03	1215	DP	4	mg/L
CHEMICAL OXYGEN DEMAND	EPA 410.4	12/12/03	0915	DP	21	mg/L
FLUORIDE	EPA 340.2	12/22/03	0915	MRD	0.70	mg/L
HARDNESS AS CACO3	EPA 130.2	12/17/03	1450	DP	176	mg/L CaCO3
AMMONIA NITROGEN AS N	EPA 350.2	12/12/03	1130	MD	1.46	mg/L
TOTAL ORGANIC NITROGEN AS N	CALC.	12/30/03	0900	WR	0.44	mg/L
NITRATE AS N	9056/352.3	12/10/03	1515	DP	0.3	mg/L
OIL AND GREASE	5520B/1664	12/15/03	0800	RS	< 2	mg/L
CHLORINE(TOTAL)	EPA 330.5	12/10/03	1400	DP	0.12	mg/L
PH	9040/150.1	12/10/03	1100	STM	7.07	std units
TOTAL PHENOLS	EPA 420.1	12/18/03	1300	MD	< 0.1	mg/L
TOTAL PHOSPHOROUS AS P	EPA365.2	12/19/03		DLP	0.07	mg/L
TOTAL SUSP. SOLIDS	2540.D	12/18/03	1000	DP	14	mg/L
SULFATE	9038	12/15/03	1410	DP	48	mg/L
SURFACTANTS	5540/425.1	12/12/03	0905	JMY	< 0.10	mg/L
SULFITE	4500	01/02/04	1500	MD	< 0.50	mg/L
SULFIDE	4500/376.2	12/17/03		MD	< 0.10	mg/L

CONTINUATION OF DATA FOR SAMPLE NUMBER 149338

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
SEMI-VOLATILES	8270	12/16/03	0005	RP	ATTACHED	mg/L
VOLATILE SCAN	8260/624	12/17/03	0213	LAL	ATTACHED	
ALUMINUM,TOTAL	7020/202.2	12/15/03		AL	0.37	mg/L
ANTIMONY,TOTAL	7041/204.2	12/15/03		AL	< 0.004	mg/L
ARSENIC,TOTAL	7060/206.2	12/15/03		AL	< 0.003	mg/L
BARIUM,TOTAL	7081/208.2	12/15/03		AL	0.069	mg/L
BERYLLIUM,TOTAL	7090/210.2	12/15/03		AL	< 0.004	mg/L
BORON,TOTAL	200.7	12/15/03		AL	0.139	mg/L
CADMIUM,TOTAL	7131/213.2	12/15/03		AL	< 0.005	mg/L
CHROMIUM,TOTAL	7191/218.2	12/15/03		AL	< 0.003	mg/L
COBALT,TOTAL	7201/219.2	12/15/03		AL	< 0.03	mg/L
COPPER,TOTAL	7210/220.2	12/15/03		AL	0.007	mg/L
IRON,TOTAL	7380/236.1	12/15/03		AL	0.22	mg/L
LEAD,TOTAL	7421/239.2	12/15/03		AL	< 0.003	mg/L
MAGNESIUM,TOTAL	7450/242.1	12/15/03		AL	8.45	mg/L
MANGANESE,TOTAL	7460/239.1	12/15/03		AL	0.33	mg/L
MERCURY,TOTAL	1631E/7470	12/15/03		AL	< 0.0003	mg/L
MOLYBDENUM,TOTAL	7481/246.2	12/15/03		AL	< 0.003	mg/L
NICKEL,TOTAL	7520/249.1	12/15/03		AL	< 0.02	mg/L
SELENIUM,TOTAL	7740/270.2	12/15/03		AL	< 0.003	mg/L
SILVER,TOTAL	7761/272.1	12/15/03		AL	< 0.008	mg/L
THALLIUM,TOTAL	7841/279.2	12/15/03		AL	< 0.002	mg/L
TIN,TOTAL	7870/282.2	12/15/03		AL	< 0.01	mg/L
TITANIUM,TOTAL	283.2	12/15/03		AL	< 0.005	mg/L
ZINC,TOTAL	7950/289.1	12/15/03		AL	< 0.01	mg/L

SMR REPRESENTATIVE

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FINAL REPORT OF ANALYSES

LOGAN ALUMINUM
U.S. HIGHWAY 431
P.O. BOX 3000
RUSSELLVILLE, KY 42303-
ATTN: PHILLIP PORTER

PROJECT NAME:005 MONITORING
REPORT DATE: 01/15/2004

SAMPLE NUMBER: 149338 SAMPLE ID- SET #2/005 SAMPLE MATRIX- WA
DATE SAMPLED- 12/10/03 LOCATION- KPDES 005 RENEWAL TIME SAMPLED-0800
DATE RECEIVED- 12/10/03 SAMPLER- PW RECEIVED BY -STM
TIME RECEIVED- 1025 DELIVERED BY -STM TYPE SAMPLE-Grab
COMMENTS: METHODS 608, 624 & 625; ANALYST ESC
VOLATILE & BNA SEMIVOLATILES Analysis

Component Name	ANALYSIS Concentration ug/L	Component MDL ug/L
VOLATILES		
Acrolein	Not Det	50
Acrylonitrile	Not Det	50
Benzene	Not Det	1
Bis (chloromethyl) ether	Not Det	1
Bromodichloromethane	Not Det	1
Bromoform	Not Det	1
Carbon Tetrachloride	Not Det	1
Chlorobenzene	Not Det	2
Chloroethane	Not Det	1
2-Chloroethylvinyl Ether	Not Det	1
Chloroform	Not Det	1
Chloromethane (Methyl chloride)	Not Det	1
Dibromochloromethane	Not Det	1
Dibromomethane	Not Det	1
Dichlorofluoromethane	Not Det	1
1,1-Dichloroethane	Not Det	1
1,2-Dichloroethane	Not Det	1
1,1-Dichloroethylene	Not Det	1
t-1,2-Dichloroethylene	Not Det	1
c-1,2-Dichloroethylene	Not Det	1
1,2-Dichloropropane	Not Det	1
c-1,3-Dichloropropene	Not Det	1
t-1-3-Dichloropropene	Not Det	1
1,2-Dichlorobenzene	Not Det	1
1,4-Dichlorobenzene	Not Det	1
Ethylbenzene	Not Det	1
2-Butanone (MEK)	Not Det	20
Methylene Chloride (Dichloromethane)	Not Det	1
4-Methyl-2-Pentanone (MIBK)	Not Det	20
Styrene	Not Det	1

CONTINUATION OF DATA FOR SAMPLE NUMBER 149338

Component Name	ANALYSIS Concentration ug/L	Component MDL ug/L
1,1,2,2-Tetrachloroethane	Not Det	1
Tetrachloroethylene	Not Det	1
Toluene	Not Det	1
1,1,1-Trichloroethane	Not Det	1
1,1,2-Trichloroethane	Not Det	1
Trichloroethylene	Not Det	1
Trichlorofluoromethane	Not Det	1
2-Chlorotoluene	Not Det	1
4-Chlorotoluene	Not Det	1
Vinyl Chloride	Not Det	2
Xylene, Total	Not Det	1

BNA EXTRACTABLES

2-Chlorophenol	Not Det	10
2,4-Dichlorophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	10
2,4-Dinitrophenol	Not Det	10
2-Nitrophenol	Not Det	10
4-Nitrophenol	Not Det	10
4-Chloro-3-methylphenol	Not Det	10
Pentachlorophenol	Not Det	10
Phenol	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
Acenaphthene	Not Det	10
Acenaphthylene	Not Det	10
Anthracene	Not Det	10
Benzidene	Not Det	10
Benzo(a)anthracene	Not Det	10
Benzo(a)pyrene	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Bis(2-chloroethyl)ether	Not Det	10
Bis(2-chloroethoxy)methane	Not Det	10
Bis(2-chloroisopropyl)ether	Not Det	10
Bis(2-ethylhexyl)phthalate	Not Det	10
4-Bromophenyl phenyl ether	Not Det	10
Butyl benzyl phthalate	Not Det	10
2-Chloronaphthalene	Not Det	10
4-Chlorophenyl phenyl ether	Not Det	10
Chrysene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
1,3-Dichlorobenzene	Not Det	10

CONTINUATION OF DATA FOR SAMPLE NUMBER 149338

3,3-Dichlorobenzidine	Not Det	10
Diethyl phthalate	Not Det	10
Dimethyl phthalate	Not Det	10
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Di-n-butyl phthalate	Not Det	10
Di-n-octyl phthalate	Not Det	10
Dimethyl phthalate	Not Det	10
Diethyl phthalate	Not Det	10
1,2-Diphenylhydrazine	Not Det	10
Fluoranthene	Not Det	10
Fluorene	Not Det	10
Hexachlorobenzene	Not Det	10
Hexachlorobutadiene	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
Hexachloroethane	Not Det	10
Indeno(1,2,3-cd)pyrene	Not Det	10
Isophorone	Not Det	10
Naphthalene	Not Det	10
Nitrobenzene	Not Det	10
N-Nitrosodimethylamine	Not Det	10
N-Nitrosodi-n-propylamine	Not Det	10
N-Nitrosodiphenylamine	Not Det	10
Phenanthrene	Not Det	10
Pyrene	Not Det	10
1,2,4-Trichlorobenzene	Not Det	10

LABORATORY DIRECTOR

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Est. 1970

REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cyanide	0.0058	0.0050	mg/l	335.3	05/01/07	1
Total Phenol by 4AAP	BDL	0.040	mg/l	420.2	05/02/07	1
Thallium	BDL	0.0010	mg/l	200.8	04/29/07	1
Mercury	BDL	0.00020	mg/l	245.1	05/01/07	1
Antimony	BDL	0.020	mg/l	200.7	05/01/07	1
Arsenic	BDL	0.020	mg/l	200.7	05/01/07	1
Beryllium	BDL	0.0020	mg/l	200.7	05/01/07	1
Cadmium	BDL	0.0050	mg/l	200.7	05/01/07	1
Chromium	BDL	0.010	mg/l	200.7	05/01/07	1
Copper	BDL	0.020	mg/l	200.7	05/01/07	1
Lead	BDL	0.0050	mg/l	200.7	05/01/07	1
Nickel	BDL	0.020	mg/l	200.7	05/01/07	1
Selenium	BDL	0.020	mg/l	200.7	05/01/07	1
Silver	BDL	0.010	mg/l	200.7	05/01/07	1
Zinc	BDL	0.030	mg/l	200.7	05/01/07	1
PP Volatile Organics						
Benzene	BDL	0.0010	mg/l	624	04/28/07	1
Bromodichloromethane	BDL	0.0010	mg/l	624	04/28/07	1
Bromoform	BDL	0.0010	mg/l	624	04/28/07	1
Bromomethane	BDL	0.0050	mg/l	624	04/28/07	1
Carbon tetrachloride	BDL	0.0010	mg/l	624	04/28/07	1
Chlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
Chlorodibromomethane	BDL	0.0010	mg/l	624	04/28/07	1
Chloroethane	BDL	0.0010	mg/l	624	04/28/07	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	624	04/28/07	1
Chloroform	BDL	0.0050	mg/l	624	04/28/07	1
Chloromethane	BDL	0.0010	mg/l	624	04/28/07	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
1,1-Dichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
1,2-Dichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
1,1-Dichloroethene	BDL	0.0010	mg/l	624	04/28/07	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	624	04/28/07	1
1,2-Dichloropropane	BDL	0.0010	mg/l	624	04/28/07	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	624	04/28/07	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	624	04/28/07	1
Ethylbenzene	BDL	0.0010	mg/l	624	04/28/07	1
Methylene Chloride	BDL	0.0050	mg/l	624	04/28/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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Est. 1970

REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	624	04/28/07	1
Tetrachloroethene	BDL	0.0010	mg/l	624	04/28/07	1
Toluene	BDL	0.0050	mg/l	624	04/28/07	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
Trichloroethene	BDL	0.0010	mg/l	624	04/28/07	1
Vinyl chloride	BDL	0.0010	mg/l	624	04/28/07	1
Surrogate Recovery						
Toluene-d8	103.		% Rec.	624	04/28/07	1
Dibromofluoromethane	112.		% Rec.	624	04/28/07	1
4-Bromofluorobenzene	117.		% Rec.	624	04/28/07	1
Pesticide/PCBs						
Aldrin	BDL	0.0050	mg/l	608	05/01/07	10
Alpha BHC	BDL	0.0050	mg/l	608	05/01/07	10
Beta BHC	BDL	0.0050	mg/l	608	05/01/07	10
Delta BHC	BDL	0.0050	mg/l	608	05/01/07	10
Gamma BHC	BDL	0.0050	mg/l	608	05/01/07	10
Chlordane	BDL	0.050	mg/l	608	05/01/07	10
4,4-DDD	BDL	0.0050	mg/l	608	05/01/07	10
4,4-DDE	BDL	0.0050	mg/l	608	05/01/07	10
4,4-DDT	BDL	0.0050	mg/l	608	05/01/07	10
Dieldrin	BDL	0.0050	mg/l	608	05/01/07	10
Endosulfan I	BDL	0.0050	mg/l	608	05/01/07	10
Endosulfan II	BDL	0.0050	mg/l	608	05/01/07	10
Endosulfan sulfate	BDL	0.0050	mg/l	608	05/01/07	10
Endrin	BDL	0.0050	mg/l	608	05/01/07	10
Endrin aldehyde	BDL	0.0050	mg/l	608	05/01/07	10
Endrin ketone	BDL	0.0050	mg/l	608	05/01/07	10
Heptachlor	BDL	0.0050	mg/l	608	05/01/07	10
Heptachlor epoxide	BDL	0.0050	mg/l	608	05/01/07	10
Hexachlorobenzene	BDL	0.0050	mg/l	608	05/01/07	10
Methoxychlor	BDL	0.0050	mg/l	608	05/01/07	10
Toxaphene	BDL	0.10	mg/l	608	05/01/07	10
PCB 1016	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1221	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1232	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1242	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1248	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1254	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1260	BDL	0.0050	mg/l	608	05/01/07	10
Pest/PCBs Surrogates						
Decachlorobiphenyl	140.	0.000500	% Rec.	608	05/01/07	10
Tetrachloro-m-xylene	100.	0.000500	% Rec.	608	05/01/07	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
PP Base/Neutral Extractables						
Acenaphthene	BDL	0.010	mg/l	625	04/30/07	1
Acenaphthylene	BDL	0.010	mg/l	625	04/30/07	1
Anthracene	BDL	0.010	mg/l	625	04/30/07	1
Benzidine	BDL	0.050	mg/l	625	04/30/07	1
Benzo(a)anthracene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(b)fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(k)fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(g,h,i)perylene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(a)pyrene	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chlorethoxy)methane	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chloroethyl)ether	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chloroisopropyl)ether	BDL	0.010	mg/l	625	04/30/07	1
4-Bromophenyl-phenylether	BDL	0.010	mg/l	625	04/30/07	1
2-Chloronaphthalene	BDL	0.010	mg/l	625	04/30/07	1
4-Chlorophenyl-phenylether	BDL	0.010	mg/l	625	04/30/07	1
Chrysene	BDL	0.010	mg/l	625	04/30/07	1
Dibenz(a,h)anthracene	BDL	0.010	mg/l	625	04/30/07	1
3,3-Dichlorobenzidine	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dinitrotoluene	BDL	0.010	mg/l	625	04/30/07	1
2,6-Dinitrotoluene	BDL	0.010	mg/l	625	04/30/07	1
Fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Fluorene	BDL	0.010	mg/l	625	04/30/07	1
Hexachlorobenzene	BDL	0.010	mg/l	625	04/30/07	1
Hexachloro-1,3-butadiene	BDL	0.010	mg/l	625	04/30/07	1
Hexachlorocyclopentadiene	BDL	0.010	mg/l	625	04/30/07	1
Hexachloroethane	BDL	0.010	mg/l	625	04/30/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.010	mg/l	625	04/30/07	1
Isophorone	BDL	0.010	mg/l	625	04/30/07	1
Naphthalene	BDL	0.010	mg/l	625	04/30/07	1
Nitrobenzene	BDL	0.010	mg/l	625	04/30/07	1
n-Nitrosodimethylamine	BDL	0.050	mg/l	625	04/30/07	1
n-Nitrosodiphenylamine	BDL	0.010	mg/l	625	04/30/07	1
n-Nitrosodi-n-propylamine	BDL	0.010	mg/l	625	04/30/07	1
Phenanthrene	BDL	0.010	mg/l	625	04/30/07	1
Benzylbutyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-ethylhexyl)phthalate	BDL	0.010	mg/l	625	04/30/07	1
Di-n-butyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Diethyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Dimethyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Di-n-octyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Pyrene	BDL	0.010	mg/l	625	04/30/07	1
1,2,4-Trichlorobenzene	BDL	0.010	mg/l	625	04/30/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
PP Acid Extractables						
4-Chloro-3-methylphenol	BDL	0.010	mg/l	625	04/30/07	1
2-Chlorophenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dichlorophenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dimethylphenol	BDL	0.010	mg/l	625	04/30/07	1
4,6-Dinitro-2-methylphenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dinitrophenol	BDL	0.010	mg/l	625	04/30/07	1
2-Nitrophenol	BDL	0.010	mg/l	625	04/30/07	1
4-Nitrophenol	BDL	0.010	mg/l	625	04/30/07	1
Pentachlorophenol	BDL	0.010	mg/l	625	04/30/07	1
Phenol	BDL	0.010	mg/l	625	04/30/07	1
2,4,6-Trichlorophenol	BDL	0.010	mg/l	625	04/30/07	1
Surrogate Recovery						
Nitrobenzene-d5	59.8		% Rec.	625	04/30/07	1
2-Fluorobiphenyl	66.2		% Rec.	625	04/30/07	1
p-Terphenyl-d14	96.8		% Rec.	625	04/30/07	1
Phenol-d5	41.1		% Rec.	625	04/30/07	1
2-Fluorophenol	59.6		% Rec.	625	04/30/07	1
2,4,6-Tribromophenol	78.6		% Rec.	625	04/30/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 05/02/07 17:01 Printed: 05/02/07 17:02

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L290627-01	Aldrin	O
	Alpha BHC	O
	Beta BHC	O
	Delta BHC	O
	Gamma BHC	O
	Chlordane	O
	4,4-DDD	O
	4,4-DDE	O
	4,4-DDT	O
	Dieldrin	O
	Endosulfan I	O
	Endosulfan II	O
	Endosulfan sulfate	O
	Endrin	O
	Endrin aldehyde	O
	Endrin ketone	O
	Heptachlor	O
	Heptachlor epoxide	O
	Hexachlorobenzene	O
	Methoxychlor	O
	Toxaphene	O
	PCB 1016	O
	PCB 1221	O
	PCB 1232	O
	PCB 1242	O
	PCB 1248	O
	PCB 1254	O
	PCB 1260	O
	2-Chloroethyl vinyl ether	J4
	1,1,1-Trichloroethane	J4
L290627-02	Aldrin	O
	Alpha BHC	O
	Beta BHC	O
	Delta BHC	O
	Gamma BHC	O
	Chlordane	O
	4,4-DDD	O
	4,4-DDE	O
	4,4-DDT	O
	Dieldrin	O
	Endosulfan I	O
	Endosulfan II	O
	Endosulfan sulfate	O
	Endrin	O
	Endrin aldehyde	O
	Endrin ketone	O
	Heptachlor	O
	Heptachlor epoxide	O
	Hexachlorobenzene	O
	Methoxychlor	O
	Toxaphene	O
	PCB 1016	O
	PCB 1221	O
	PCB 1232	O
	PCB 1242	O
	PCB 1248	O
	PCB 1254	O
	PCB 1260	O
	Decachlorobiphenyl	J1
	2-Chloroethyl vinyl ether	J4
	1,1,1-Trichloroethane	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J4	The associated batch QC was outside the established quality control range for accuracy.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

	Control Limits				(AQ)	(SS)
2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	68-128	64-125
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	76-115	69-118
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	79-127	61-134

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Logan Aluminum Inc.

U. S. Hwv 431 North
Russellville,KY 42276

Alternate billing information:

Chain of Custody
Page ___ of ___

Prepared by:
ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Mr. Steve Royer
Email: steve.royer@logan-aluminu

Project Description:
City/State Collected

Phone: (270) 755-6390
FAX:
Client Project #:
Lab Project #

Collected by (print): H. Wojnar
Site/Facility ID#:
P.O.#:

Collected by (signature):
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day.....100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed
Email? __No X Yes
FAX? __No __Yes

Acctnum: LOGALKY01 (lab use only)
Template/Prelogin: T42406/ P205277
Cooler #: 3245
Shipped Via: Courier

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	CN 250mlHDPEAmb-NaOH	Metals 500mlHDPE-HNO3	SV608 1L-Amb NoPres	SV625PP 1L-Amb-NoPres	Total Phenols (PHT) 250mlAmb-H2SO4	V624PP 40mlAmb-HCl			Remarks/Contaminant	Sample # (lab only)
004 Discharge	X	WW		4/24/07	8am	9	X	X	X	X	X	X				L2906270 1
005 Discharge	X	WW		4/24/07	9am	9	X	X	X	X	X	X				02

*Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Flow _____ Other _____

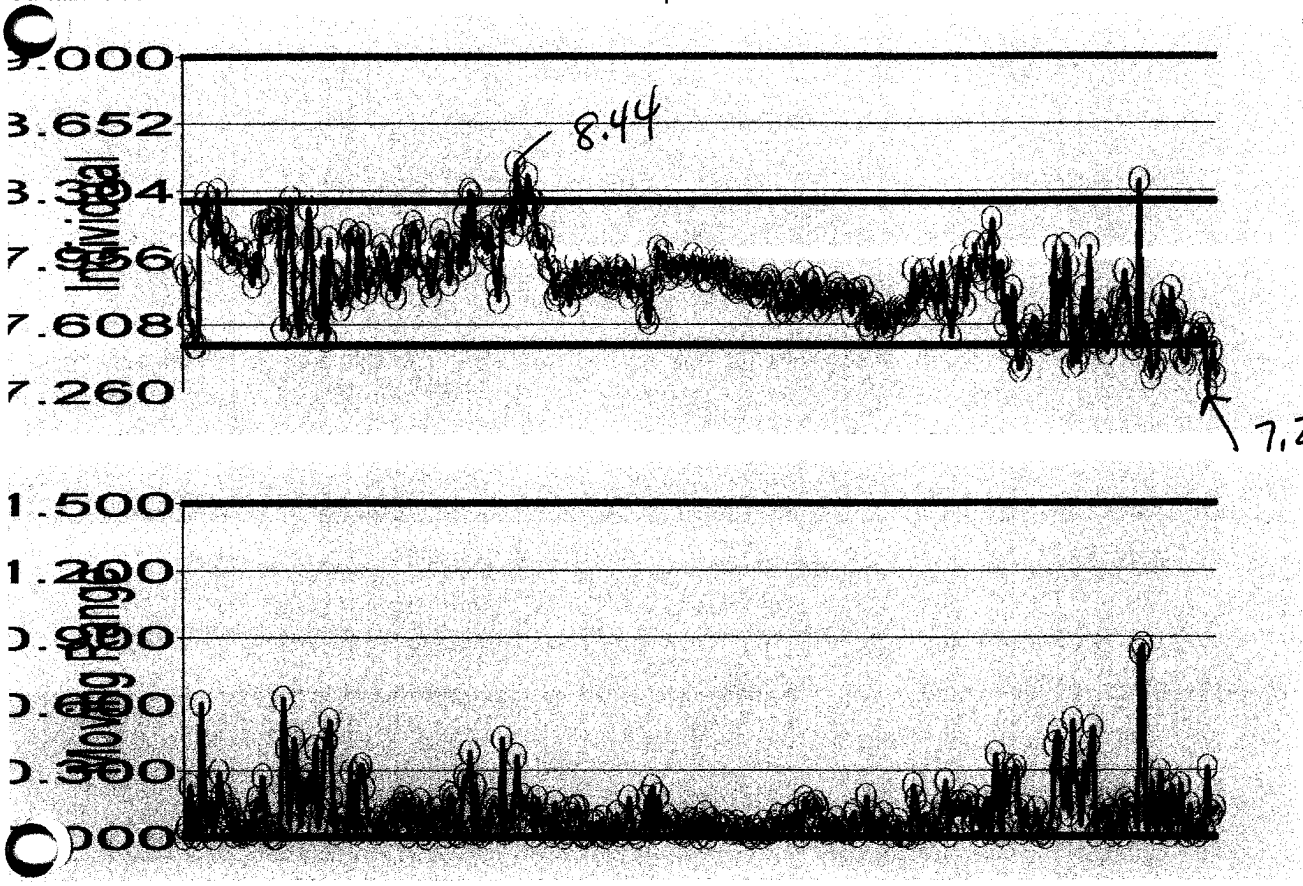
Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☒ Courier ☐	Condition: (lab use only)
	4/24/07	9:30am			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4°C Bottles Received: 16+2B	OK
	4/25/07	1145	Wayne Shull		
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4.25.07 Time: 1445	pH Checked: 22,127 NCF:
Wayne Shull	4/25/07	1445			

Individual and Moving Range (I & MR)

Variable: 004 Ph

Group: 004 Ph



Limits
UNPL: 9.000
CLI: 8.250
LNPL: 7.500

Limits
UMRL: 1.500
CLMR:
LMRL:

Start Time: 1/2/2006 2:41:28 PM

Points: 353

End Time: 12/30/2006 1:41:31 PM

Data Point

Item ID: 12/30/2006 1:41:31 PM

Value: 7.340

Date/Time: 12/30/2006 1:41:31 PM

Point Info

12/30/2006 1:41:31 PM	12/30/2006 1:41:31 PM	7.34		

Parameters

Group Information

Subgroup Size:

MSD Subgroup Size:

Target Value:

MSD Normalization:

Computed Average:

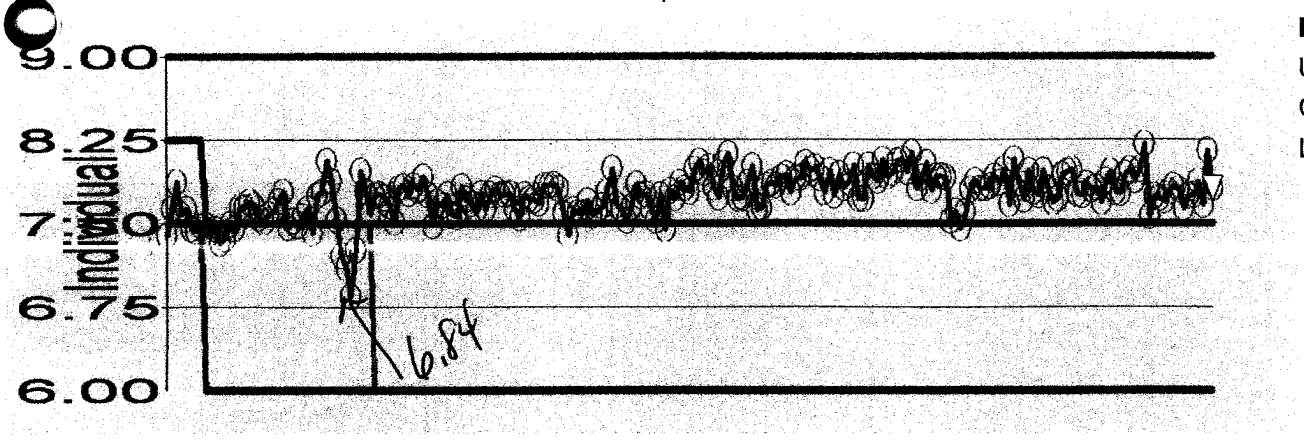
Non Standard Deviation:

Broken Rules

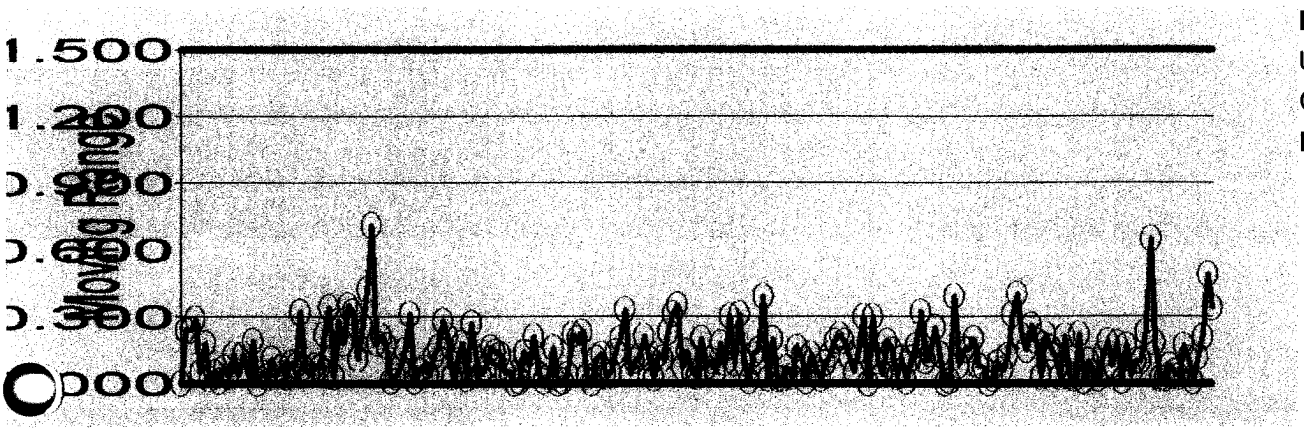
Individual and Moving Range (I & MR)

Variable: 004 Ph

Group: 004 Ph



Limits
UNPL: 9.000
CLI: 7.500
LNPL: 6.000



Limits
UMRL: 1.500
CLMR:
LMRL:

Start Time: 1/1/2007 1:44:04 PM

Points: 217

End Time: 8/6/2007 1:30:32 PM

Data Point

Item ID: 8/6/2007 1:30:32 PM

Value: 7.810

Date/Time: 8/6/2007 1:30:32 PM

Point Info

8/6/2007 1:30:32 PM	8/6/2007 1:30:32 PM	7.81		

Parameters

Group Information

Subgroup Size: 1

Target Value: 7.500

Computed Average: 7.750

MSD Subgroup Size: 4

MSD Normalization:

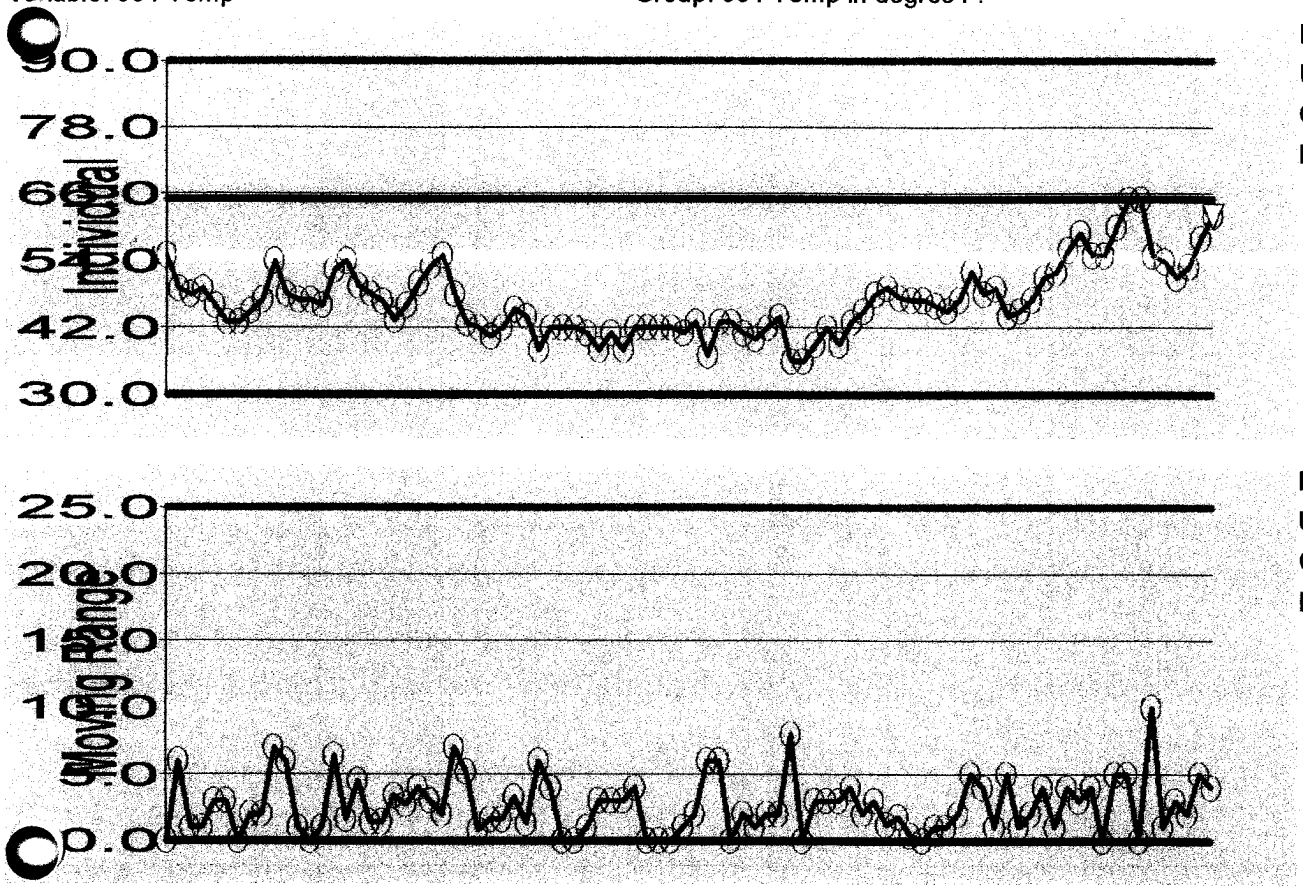
Non Standard Deviation:

Individual and Moving Range (I & MR)

Winter '06 - '07

Variable: 004 Temp

Group: 004 Temp in degres F.



Start Time: 12/22/2006 12:26:52 PM

Points: 88

End Time: 3/21/2007 1:23:03 PM

Data Point

Item ID: 3/21/2007 1:23:03 PM

Value: 62.000

Date/Time: 3/21/2007 1:23:03 PM

Point Info

3/21/2007 1:23:03 PM	3/21/2007 1:23:03 PM	62		

Parameters

Group Information

Subgroup Size: 1

Target Value: 60.000

Computed Average: 46.888

MSD Subgroup Size: 4

MSD Normalization:

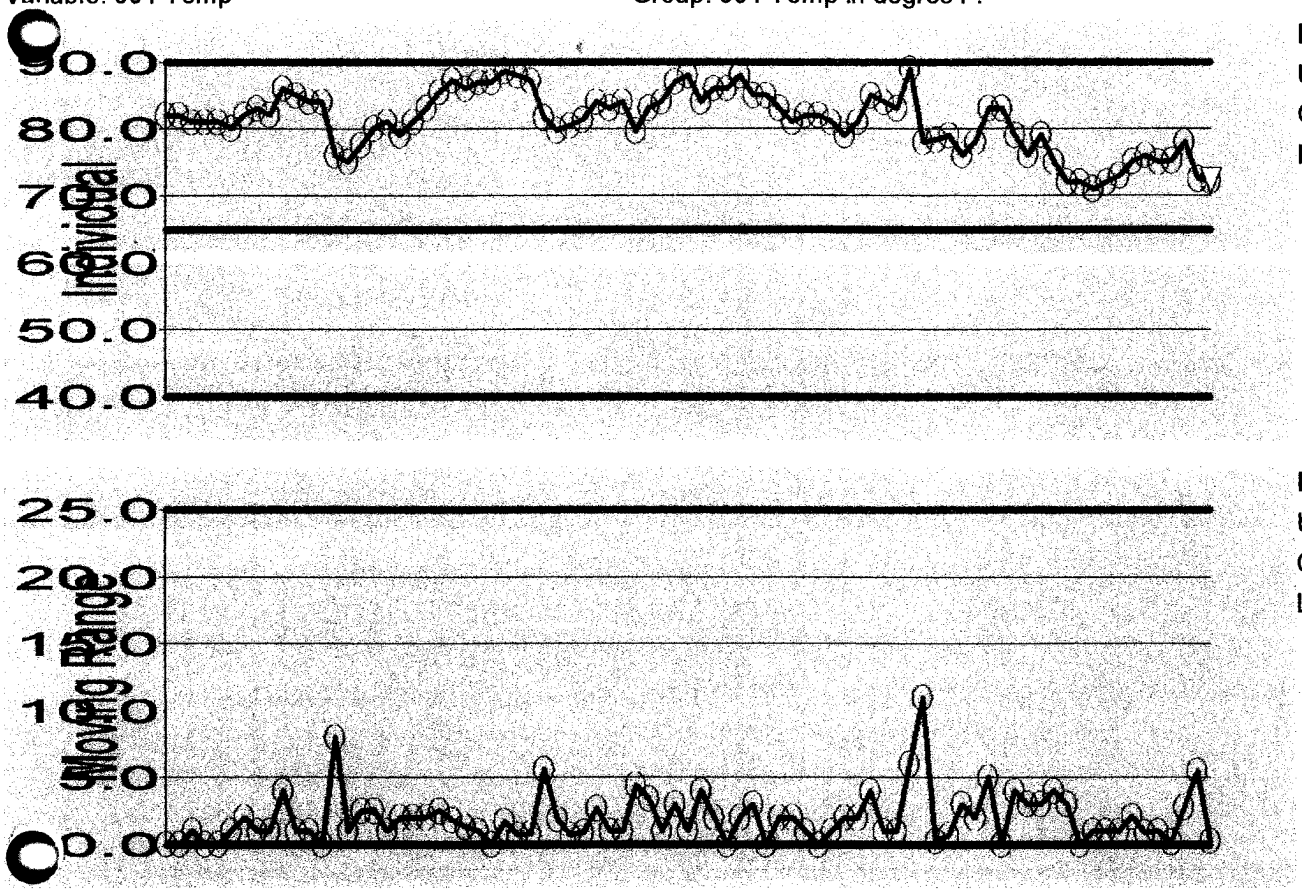
Non Standard Deviation:

Individual and Moving Range (I & MR)

Summer '06

Variable: 004 Temp

Group: 004 Temp in degres F.



Limits
UNPL: 90.000
CLI: 65.000
LNPL: 40.000

Limits
UMRL: 25.000
CLMR:
LMRL:

Start Time: 6/23/2006 3:01:31 PM

Points: 81

End Time: 9/14/2006 2:22:38 PM

Data Point

Item ID: 9/14/2006 2:22:38 PM

Value: 72.200

Date/Time: 9/14/2006 2:22:38 PM

Point Info

9/14/2006 2:22:38 PM	9/14/2006 2:22:38 PM	72.2		

Parameters

Group Information

Subgroup Size: 1

Target Value: 60.000

Computed Average: 81.112

MSD Subgroup Size: 4

MSD Normalization:

Non Standard Deviation:

Broken Rules

ATTACHMENT B: KPDES FORM C-11
FLOWS,SOURCES OF POLLUTION,& TREATMENT TECHNOLOGIES-SECTION B

Outfall No. (List)	Operation (List)	Average Flow	Description	List Codes from Table C-1	
004	Backwash from raw water filters	250,000gpd	None	X	X
	Backwash from Potable Coal Filters	5,000gpd	None	X	X
	Backwash from Activated Carbon Filter & De-mineralized water unit	25,800gpd	None	X	X
	Plant Cooling Water	100,000gpd	Induced Air Flotation	X	X
	Caster Cooling Water	300,000gpd	Drum skim plus Induced air Flotation	X	X
	Water from belt press	10,000gpd	None	X	X
	Return Water from Coating Lines	78,000gpd	Clarification & Neutralization	2 2 1	D K U
	Water from Industrial Waste System	120,000gpd	Oil Removal	X	X
	Misc Contributions	25,000gpd	None		
Estimated SW Contributions Surface areas Attached	Landfill Leachate Return	50gpd	Aeration	3	E
	Landfill Stormwater Runoff	19,000gpd	Sedimentation	1	U
	Sludge Drying Bed		Sludge De-watering	5	H
	Stormwater to Wetlands	300,000gpd	Sedimentation	1	U
	Total est.	1,209,050 gpd			

Stormwater Contributions

		Surface Area Acres	Run-off Coefficient	Affected Outfall
Landfill Runoff	Disturbed Area	9.6	0.80	004
	Gravel Area	0.9	0.80	
	Grassy Area	10	0.25	
	Basin	0.72	0.00	
Wetlands	Berms, Islands, Buffers	38.75	0.05	004
	Ponds	1	0.00	
	Process Ponds	1	0.00	

Attachment C - Form C III-B Maximum Production Values

Applicable Effluent Guideline	Production Data - Average Quantity/Day							Units of Measure	Affected Outfall
	2002	2003	2004	2005	2006	Avg '02-'06	2007		
Direct Chill Casting	3.338	3.493	3.55	3.53	3.574	**3.497**	3.5823	M lbs/day	004
Cold Rolling Process	11.43	12.026	12.632	12.741	13.388	**12.444**	13.541	M lbs/day	004
Hot Rolling Process	13.942	14.259	14.536	14.056	14.253	**14.209**	14.607	M lbs/day	004
Coating Process	5.6	6.177	6.36	6.711	8.072	**6.584**	8.0167	M ft2/day	004
								LCL will contribute 3.049 Mft2/day per year in the future =11.121 Mft2/day future production	

KPDES PERMIT **Calculation of O&G and TSS Limits**

Current Permit Limits

Process	Production Rate	Units	Oil & Grease		TSS	
			Daily Max	Monthly Avg	Daily Max	Monthly Avg
Coating Process	4.24	M ft2/day	4.1552	4.1552	6.1904	4.9608
Cold Rolling Process	12.97	M lbs/day	7.17241	7.17241	10.7651	8.61208
Hot Rolling Process	7.84	M lbs/day	10.192	10.192	15.288	12.2304
Direct Chill Casting	3.39	M lbs/day	45.0531	45.0531	67.5966	54.0705
			66.57	**66.57**	**99.84**	**79.87**

Proposed Permit Limits - 2002-2006 - 5 year avg

Process	Production Rate	Units	Oil & Grease		TSS	
			Daily Max	Monthly Avg	Daily Max	Monthly Avg
Coating Process *	6.58	M ft2/day	6.4484	6.4484	9.6068	7.6986
Cold Rolling Process	12.444	M lbs/day	6.881532	6.881532	10.32852	8.262816
Hot Rolling Process	14.209	M lbs/day	18.4717	18.4717	27.70755	22.16604
Direct Chill Casting	3.497	M lbs/day	46.47513	46.47513	69.73018	55.77715
			78.28	**78.28**	**117.37**	**93.90**

* This production rate increased significantly because original submittal did not include both sides of the substrate

Proposed Permit Limits - 2002-2006 - 5 year avg incl. forecast for addition of the level clean line/line speed-up

Process	Production Rate	Units	Oil & Grease		TSS	
			Daily Max	Monthly Avg	Daily Max	Monthly Avg
Coating Process *	11.23	M ft2/day	11.0054	11.0054	16.3958	13.1391
Cold Rolling Process	12.444	M lbs/day	6.881532	6.881532	10.32852	8.262816
Hot Rolling Process	14.209	M lbs/day	18.4717	18.4717	27.70755	22.16604
Direct Chill Casting	3.497	M lbs/day	46.47513	46.47513	69.73018	55.77715
			82.83	**82.83**	**124.16**	**99.35**

Proposed Permit Limits - using year (2002-2006) with highest daily average

Process	Production Rate	Units	Oil & Grease		TSS		
			Daily Max	Monthly Avg	Daily Max	Monthly Avg	
Coating Process	11.66	M ft2/day	11.4268	11.4268	17.0236	13.6422	incl. LCLine Forecast
Cold Rolling Process	13.387	M lbs/day	7.403011	7.403011	11.11121	8.888968	
Hot Rolling Process	14.535	M lbs/day	18.8955	18.8955	28.34325	22.6746	
Direct Chill Casting	3.574	M lbs/day	47.49846	47.49846	71.26556	57.0053	
			85.22	**85.22**	**127.74**	**102.21**	

Proposed Permit Limits - using month (2006) with highest daily average

Process	Production Rate	Units	Oil & Grease		TSS		
			Daily Max	Monthly Avg	Daily Max	Monthly Avg	
Coating Process	11.63	M ft2/day	11.3974	11.3974	16.9798	13.6071	incl. LCLine Forecast
Cold Rolling Process	13.039	M lbs/day	7.210567	7.210567	10.82237	8.657896	
Hot Rolling Process	13.768	M lbs/day	17.8984	17.8984	26.8476	21.47808	
Direct Chill Casting	3.72	M lbs/day	49.4388	49.4388	74.1768	59.334	
			85.95	**85.95**	**128.83**	**103.08**	

KPDES FORM C

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

DEC 7 2007

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Logan Aluminum Inc.	County: Logan							
I. OUTFALL LOCATION	AGENCY USE							

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
005	36	56	55	86	55	43	Austin Creek

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
005	Sediment Basin			
	Stormwater Runoff	19,000 gpd	Sedimentation	1-U

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ Yes (Complete the following table.) ☒ No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III.—MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (Complete Item III-B) List effluent guideline category:

☒ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐ Yes (Complete Item III-C) ☐ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table) ☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

IV. B. Improvements

Planned water pollution control projects

005 Discharge

The stormwater runoff from the landfill is collected in the sedimentation basin and was previously permitted for direct discharge to Austin Creek. This discharge has been designated as Outfall 005 ("005") with its own sampling and reporting requirements.

Logan has decided to discontinue this regular discharge from 005 and route this regulated stream to the inlet of the wetlands system. The collected leachate from the landfill has historically been collected and routed to the wetlands as well. A project has been implemented to pump the water from this basin back to the process ponds to the waste water treatment process. This project was completed in November 2007.

As a rule, discharge from 005 will not occur with this system in place but, Logan would like to retain the ability to discharge for emergencies, abnormally large rain events, maintenance or overflow purposes.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐ Yes (List all such pollutants below) ☒ No (Go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐ Yes (Complete Item VI-C) ☒ No (Go to Item VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below) ☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below) ☐ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
SMR Laboratories, Inc.	319 West Broad Street P.O. Box 761 Central City, KY 42330	270-754-9928	per Table V

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy Schumaker, Chief Management Officer	270-755-6000
SIGNATURE Randy Schumaker	DATE 12-5-07

'LEASE P.. ..T OR TYPE IN THE UNSHADED AREAS ONLY. You may report ..ne or all of this information on separate sheets (use the same format) inst... of completing ıese pages. (See instructions)

. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C) OUTFALL NO. 005

art A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	b. Maximum 30-Day Value (if available) (2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	c. Long-Term Avg. Value (if available) (2) Mass	d. No. of Analyses	3. UNITS (specify if blank) a. Concentration	3. UNITS b. Mass	4. INTAKE (optional) a. Long-Term Avg. Value (1) Concentration	4. INTAKE a. Long-Term Avg. Value (2) Mass	4. INTAKE b. No of Analyses
Biochemical 'xygen Demand 3OD)	4						1	mg/L				
Chemical 'xygen Demand :OD)	21						1	mg/L				
Total Organic arbon (TOC)	2.9						1	mg/L				
Total uspended olids (TSS)	48				20.35		20	mg/L				
Ammonia ıs N)	1.46						1	mg/L				
Flow (in units f MGD)	VALUE	0.36	VALUE		VALUE	0.22		MGD		VALUE		
Temperature (winter)	VALUE		VALUE		VALUE			°c		VALUE		
Temperature (summer)	VALUE		VALUE		VALUE			°c		VALUE		
pH	MINIMUM 7.66	MAXIMUM 8.83	MINIMUM	MAXIMUM			17	STANDARD UNITS standard				

art B - In the ı. ..RK "X" column, place an "X" in the Believed Present column for each pollutant you know ...ave reason to believe is present. Place an "X" in the Believed Absent column for each poı. ..ıt you believe ı be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and :quirements.

1. 'OLLUTANT ıND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		6. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
Bromide (24959-67-9)		x	<1						1	mg/L				
Bromine Total Residual		x												
Chloride	x		21						1	mg/L				
Chlorine, Total Residual	x		.12						1	mg/L				
Color														
Fecal Coliform														
Fluoride (16984-48-8)	x		.70						1	mg/L				
Hardness (as $CaCO_3$)	x		360				156		15	mg/L				
Nitrate – Nitrite (as N)	x		.3						1	mg/L				
Nitrogen, Total Organic (as N)	x		.44						1	mg/L				
Oil and Grease	x		10				7.5		20	mg/L				
Phosphorous (as P), Total 7723-14-0	x		.07						1	mg/L				
ı. adioactivity														
.) Alpha, Total		x												
?) Beta, Total		x												
ı) Radium Total		x												
ı) Radium, 226, Total		x												

rt B - Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
Sulfate (as SO_4) (14808-79-8)	X		48						1	mg/L				
Sulfide (as S)		X	<.10						1	mg/L				
Sulfite (as SO_4) (14286-46-3)		X	<.50						1	mg/L				
Surfactants		X	<.10						1	mg/L				
Aluminum, Total (7429-90)	X		.37						1	mg/L				
Barium, Total (7440-39-3)	X		.069						1	mg/L				
Boron, Total (7440-42-8)	X		.139						1	mg/L				
Cobalt, Total (7440-48-4)		X	<.03						1	mg/L				
Iron, Total (7439-89-6)	X		.22						1	mg/L				
Magnesium Total (7439-96-4)	X		8.45						1	mg/L				
Molybdenum Total (7439-98-7)		X	<.003						1	mg/L				
Manganese, Total (7439-96-6)	X		.33						1	mg/L				
Tin, Total (7440-31-5)		X	<.01						1	mg/L				
Titanium, Total (7440-32-6)		X	<.005						1	mg/L				

rt C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the **Testing Required** column all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required C/MS fractions), mark "X" in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark "X: in the **Believed Absent** column for each pollutant you believe to be absent. If you mark her the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete e table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
ETALS, CYANIDE AND TOTAL PHENOLS															
1. Antimony Total (7440-36-0)	X			<.020						1	mg/L				
1. Arsenic, Total (7440-38-2)	X			<.020						1	mg/L				
1. Beryllium Total (7440-41-7)	X			<.002						1	mg/L				
1. Cadmium Total (7440-43-9)	X			<.005						1	mg/L				
1. Chromium Total (7440-43-9)	X			<.010						1	mg/L				
1. Copper Total (7550-50-8)	X			<.020						1	mg/L				
1. Lead Total (7439-92-1)	X			<.005						1	mg/L				
1. Mercury Total (7439-97-6)	X			<.0003						1	mg/L				
1. Nickel, Total (7440-02-0)	X			<.02						1	mg/L				
M. Selenium, Total (7782-49-2)	X			<.02						1	mg/L				
M. Silver, Total (7440-28-0)	X			<.01						1	mg/L				

rt C – Contin...d

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
ETALS, CYANIDE AND TOTAL PHENOLS (Continued)															
M. Thallium, Total (7440-28-0)	X			<.002						1	mg/L				
M. Zinc, Total (7440-66-6)	X			<.030						1	mg/L				
M. Cyanide, Total (57-12-5)	X			<.004						1	mg/L				
M. Phenols, Total	X			<.040						1	mg/L				
OXIN															
,7,8 Tetra-lorodibenzo, Dioxin (1784-01-6)			x	DESCRIBE RESULTS:											
C/MS FRACTION – VOLATILE COMPOUNDS															
. Acrolein (107-02-8)	X		X	ND						1					
rylonitrile 07-13-1)	X		X	ND						1					
. Benzene 1-43-2)	X		X	ND						1					
. Bromoform 5-25-2)	X		X	ND						1					
. Carbon trachloride 5-23-5)	X		X	ND						1					
. Chloro-benzene 08-90-7)	X		X	ND						1					
lorodibro-omethane 24-48-1)	X		X	ND						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
loroethane 4-00-3)	X		X	ND						1					
V. 2-Chloro- ıylvinyl Ether 10-75-8)	X		X	ND						1					
V. loroform 7-66-3)	X		X	ND						1					
V. Dichloro- omomethane 5-71-8)	X		X	ND						1					
V. 1,1- chloroethane 5-34-3)	X		X	ND						1					
V. 1,2- chloroethane 07-06-2)	X		X	ND						1					
V. 1,1- chlorethylene 5-35-4)	X		X	ND						1					
V. 1,2-Di- loropropane 3-87-5)	X		X	ND						1					
V. 1,3- chloropro- lene 52-75-6)	X		X	ND						1					
V. Ethyl- ızene 00-41-4)	X		X	ND						1					
V. Methyl omide 4-83-9)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
V. Methyl Chloride (74-87-3)	X		X	ND						1					
V. Methylene Chloride (75-00-2)	X		X	ND						1					
V. 1,1,2,2-Tetrachloro-ethane (79-34-5)	X		X	ND						1					
V. Tetrachloro-ethylene (127-18-4)	X		X	ND						1					
V. Toluene (108-88-3)	X		X	ND						1					
V. 1,2-Trans-Dichloro-ethylene (156-60-5)	X		X	ND						1					
V. 1,1,1-Tri-loroethane (71-55-6)	X		X	ND						1					
V. 1,1,2-Tri-loroethane (79-00-5)	X		X	ND						1					
V. Trichloro-ethylene (79-01-6)	X		X	ND						1					
V. Vinyl Chloride (75-01-4)	X		X	ND						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – ACID COMPOUNDS															
. 2-Chloro-phenol (95-57-8)	X		X	ND						1					
. 2,4-chlor-ophenol 20-83-2)	X		X	ND						1					
-Dimeth-henol 05-67-9)	X		X	ND						1					
. 4,6-Dinitro-o-cresol 34-52-1)	X		X	ND						1					
. 2,4-Dinitro-phenol 1-28-5)	X		X	ND						1					
. 2-Nitro-phenol 3-75-5)	X		X	ND						1					
. 4-Nitro-phenol 00-02-7)	X		X	ND						1					
. P-chloro-m-cresol 9-50-7)	X		X	ND						1					
ntachloro-enol 7-88-5)	X		X	ND						1					
A. Phenol 08-05-2)	X		X	ND						1					
A. 2,4,6-Tri-lorophenol 3-06-2)	X		X	ND						1					
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
. Acena-phthene (83-32-9)	X		X	ND						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
. Acena-phtylene (208-96-8)	X		X	ND						1					
. Anthra-cene (120-12-7)	X		X	ND						1					
3. nzidine 2-87-5)	X		X	ND						1					
. Benzo(a)-thracene 5-55-3)	X		X	ND						1					
. Benzo(a)-rene)-32-8)	X		X	ND						1					
. 3,4-Benzo-oranthene)5-99-2)	X		X	ND						1					
. Benzo(ghl) ylene)1-24-2)	X		X	ND						1					
. Benzo(k)-oranthene)7-08-9)	X		X	ND						1					
B. Bis(2-lor-choxy)-ethane 11-91-1)	X		X	ND						1					
B. Bis chlor-opropyl)-ner	X		X	ND						1					
B. Bis ethyl-xyl)-thalate 17-81-7)	X		X	ND						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. 4-Bromo-enyl enyl ether)1-55-3)	X		X	ND						1					
B. Butyl-nzyl thalate 5-68-7)	X		X	ND						1					
B. 2-Chloro-phthalene)05-72-3)	X		X	ND						1					
B. 4-Chloro-enyl enyl ether)05-72-3)	X		X	ND						1					
B. Chrysene 18-01-9)	X		X	ND						1					
B. Dibenzo-h) thracene 3-70-3)	X		X	ND						1					
B. 1,2-chloro-nzene 5-50-1)	X		X	ND						1					
B. 1,3-chloro-nzene 41-73-1)	X		X	ND						1					
B. 1,4-chloro-nzene)6-46-7)	X		X	ND						1					
B. 3,3-chloro-nzidene 1-94-1)	X		X	ND						1					
B. Diethyl thalate 4-66-2)	X		X	ND						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg. Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. Dimethyl Phthalate 31-11-3)	X		X	ND						1					
B. Di-N-tyl Phthalate 4-74-2)	X		X	ND						1					
B. 4-Dinitro-uene 21-14-2)	X		X	ND						1					
B. 5-Dinitro-uene 06-20-2)	X		X	ND						1					
B. Di-n-octyl thalate 17-84-0)	X		X	ND						1					
B. 1,2-henyl-drazine (as onbenzene) 22-66-7)	X		X	ND						1					
B. oranthene 08-44-0)	X		X	ND						1					
B. Fluorene 5-73-7)	X		X	ND						1					
B. xachloro-nzene 18-71-1)	X		X	ND						1					
B. xachloro-tadiene 7-68-3)	X		X	ND						1					
B. xachloro-clopenta-ne 7-47-4)	X		X	ND						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. Hexachlo- roethane (67-72-1)	X		X	ND						1					
B. Indneo- 2,3-oc)- rene)3-39-5)	X		X	ND						1					
B. phorone 3-59-1)	X		X	ND						1					
B. pthalene 1-20-3)	X		X	ND						1					
B. tro- nzene 3-95-3)	X		X	ND						1					
B. N-Nitroso- nethyl- ine 2-75-9)	X		X	ND						1					
B. nitrosodi-n- opylamine 21-64-7)	X		X	ND						1					
B. N-nitro- liphenyl- ine 5-30-6)	X		X	ND						1					
B. Phenan- ene 5-01-8)	X		X	ND						1					
B. Pyrene 29-00-0)	X		X	ND						1					
B. 1,2,4 Tri- loro- nzene 20-82-1)	X		X	ND						1					

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	2. a. Believed Present	2. b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	3. a. Maximum Daily Value (2) Mass	3. b. Maximum 30-Day Value (if available) (1) Concentration	3. b. Maximum 30-Day Value (if available) (2) Mass	3. c. Long-Term Avg. Value (if available) (1) Concentration	3. c. Long-Term Avg. Value (if available) (2) Mass	3. d. No. of Analyses	4. UNITS a. Concentration	4. b. Mass	5. INTAKE (optional) a. Long-Term Avg. Value (1) Concentration	5. a. Long-Term Avg. Value (2) Mass	5. b. No. of Analyses
C/MS FRACTION – PESTICIDES															
. Aldrin)9-00-2)	—														
. α-BHC 19-84-6)	—														
. β-BHC 3-89-9)	—														
. nma-BHC 3-89-9)	—														
. δ-BHC 19-86-8)	—														
. Chlordane 7-74-9)	—														
. 4,4'-DDT)-29-3)	—														
. 4,4'-DDE 2-55-9)	—														
. 4,4'-DDD 2-54-8)	—														
P. Dieldrin)-57-1)	—														
P. α-dosulfan 15-29-7)	—														
P. β-dosulfan 15-29-7)	—														
P. Endosulfan lfate)31-07-8)	—														
P. Endrin 2-20-8)	—														

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
C/MS FRACTION – PESTICIDES															
P. Endrin dehyde 421-93-4)	—														
P Heptachlor 5-44-8)	—														
P. Heptaclor oxide 024-57-3)	—														
P. PCB-1242 3469-21-9)	—														
P. PCB-1254 1097-69-1)	—														
P. PCB-1221 1104-28-2)	—														
P. PCB-1232 1141-16-5)	—														
P. PCB-1248 2672-29-6)	—														
P. PCB-1260 1096-82-5)	—														
P. PCB-1016 2674-11-2)	—														
P. Toxaphene 001-35-2)	—														

005 - 2005
2006

Month	Flow (mgd)	Total Suspended Solids						Oil & Grease					
		Avg. Conc. (mg/l)	Monthly Limit (mg/l)	No. of Exceed. Mthly. Avg.	Daily Max. (mg/l)	Daily Limit (mg/L)	No. of Exceed. Daily Max	Avg. Conc. (mg/l)	Monthly Limit (mg/l)	No. of Exceed. Mthly. Avg.	Daily Max. (mg/l)	Daily Limit (mg/L)	No. of Exceed. Daily Max
January		48	30	1	48	50	0	<3.0	10	0	<3.0	15	0
February		*	30	N/A	*	50	N/A	*	10	N/A	*	15	N/A
March		10	30	0	10	50	0	<3.0	10	0	<3.0	15	0
April		38	30	1	38	50	0	<3.0	10	0	<3.0	15	0
May		11	30	0	12	50	0	3	10	0	7	15	0
June		7	30	0	12	50	0	7	10	0	7	15	0
July		10.5	30	0	14	50	0	8	10	0	10	15	0
August		*	30	N/A	*	50	N/A	*	10	N/A	*	15	N/A
September		26	30	0	26	50	0	<3.0	10	0	<3.0	15	0
October	0.36	10	30	0	10	50	0	<3.0	10	0	<3.0	15	0
November	0.225	20	30	0	20	50	0	<3.0	10	0	<3.0	15	0
December	0.114	23	30	0	26	50	0	6	10	0	6	15	0

* No Discharge from 005 in August 2006
* No Discharge from 005 in February 2006

Avg	20.35	30	0.2	21.6	50	0	6	10	0	7.5	15	0
Max	48	30	1	48	50	0	8	10	0	10	15	0

005-2007

Month	Flow (mgd)	Total Suspended Solids						Oil & Grease					
		Avg. Conc. (mg/l)	Monthly Limit (mg/l)	No. of Exceed. Mthly. Avg.	Daily Max. (mg/l)	Daily Limit (mg/L)	No. of Exceed. Daily Max	Avg. Conc. (mg/l)	Monthly Limit (mg/l)	No. of Exceed. Mthly. Avg.	Daily Max. (mg/l)	Daily Limit (mg/L)	No. of Exceed. Daily Max
January	0.261	29	30	0	29	50	0	<3	10	0	<3	15	0
February	0.293	20	30	0	20	50	0	<2.1	10	0	<3	15	0
March	0.244	29	30	0	32	50	0	<1.5	10	0	<1.5	15	0
April	0.198	5	30	0	8	50	0	<1.5	10	0	<1.5	15	0
May			30			50			10			15	
June	0.081	3	30	0	3	50	0	1.6	10	0	1.6	15	0
July	0.164	4.7	30	0	8	50	0	1.5	10	0	1.6	15	0
August			30			50			10			15	
September			30			50			10			15	
October			30			50			10			15	
November			30			50			10			15	
December			30			50			10			15	

* No discharge - drought conditions

Avg	0.206833	15.11667	30	16.66667	50	1.55	10	1.6	15
Max		29	30	32	50	1.6	10	1.6	15

Hardness - 2004 Outfall 005

120
153
123
125
141
360
260
159
156
160
115
120
116
120
119
156

005 pH Results 2007

8.13
7.88
7.83
7.66
8.83
8.51
7.73
8.02
8.06
8.08
8.30
8.14
8.73
8.58
8.13
7.88
7.83

8.14 Average of all readings
8.83 Max

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Est. 1970

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North

Russellville, KY 42276

Report Summary

Wednesday May 02, 2007

Report Number: L290627
Samples Received: 04/25/07
Client Project:

Description:

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Reviewed By: Rodney Shinbaum, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, WA - C1915

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SMR ENGINEERING & ENVIRONMENTAL SERVICES, INC.
319 West Broad Street; P. O. Box 761
Central City, Kentucky 42330

REPORT OF ANALYSES

LOGAN ALUMINUM
U.S. HIGHWAY 431
P O BOX 3000
RUSSELLVILLE, KY 42276-
Attn: PHILLIP PORTER

PROJECT NAME: KPDES RENEWAL
DATE: 01/15/2004

SAMPLE NUMBER- 149338 SAMPLE ID- SET #2/005 SAMPLE MATRIX- WA
DATE SAMPLED- 12/10/03 LOCATION- 005/RENEWAL TIME SAMPLED- 0800
DATE RECEIVED- 12/10/03 SAMPLER- PW RECEIVED BY- STM
TIME RECEIVED- 1025 DELIVERED BY- STM TYPE SAMPLE- Grab

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
BROMIDE		01/02/04	1700	WR	<1	mg/L
TOT.ORGANIC CARBON	9060/415.1	12/11/03	0900	MD	2.9	mg/L
CHLORIDE	EPA 325.3	12/12/03	1400	DP	21	mg/L
CYANIDE,TOTAL	9010/335.2	12/18/03	1200	MD	< 0.004	mg/L
BIOCHEM.OXY.DEMAND	5210.B	12/10/03	1215	DP	4	mg/L
CHEMICAL OXYGEN DEMAND	EPA 410.4	12/12/03	0915	DP	21	mg/L
FLUORIDE	EPA 340.2	12/22/03	0915	MRD	0.70	mg/L
HARDNESS AS CACO3	EPA 130.2	12/17/03	1450	DP	176	mg/L CaCO3
AMMONIA NITROGEN AS N	EPA 350.2	12/12/03	1130	MD	1.46	mg/L
TOTAL ORGANIC NITROGEN AS N	CALC.	12/30/03	0900	WR	0.44	mg/L
NITRATE AS N	9056/352.3	12/10/03	1515	DP	0.3	mg/L
OIL AND GREASE	5520B/1664	12/15/03	0800	RS	< 2	mg/L
CHLORINE(TOTAL)	EPA 330.5	12/10/03	1400	DP	0.12	mg/L
PH	9040/150.1	12/10/03	1100	STM	7.07	std units
TOTAL PHENOLS	EPA 420.1	12/18/03	1300	MD	< 0.1	mg/L
TOTAL PHOSPHOROUS AS P	EPA365.2	12/19/03		DLP	0.07	mg/L
TOTAL SUSP. SOLIDS	2540.D	12/18/03	1000	DP	14	mg/L
SULFATE	9038	12/15/03	1410	DP	48	mg/L
SURFACTANTS	5540/425.1	12/12/03	0905	JMY	< 0.10	mg/L
SULFITE	4500	01/02/04	1500	MD	< 0.50	mg/L
SULFIDE	4500/376.2	12/17/03		MD	< 0.10	mg/L

CONTINUATION OF DATA FOR SAMPLE NUMBER 149338

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
SEMI-VOLATILES	8270	12/16/03	0005	RP	ATTACHED	mg/L
VOLATILE SCAN	8260/624	12/17/03	0213	LAL	ATTACHED	
ALUMINUM,TOTAL	7020/202.2	12/15/03		AL	0.37	mg/L
ANTIMONY,TOTAL	7041/204.2	12/15/03		AL	< 0.004	mg/L
ARSENIC,TOTAL	7060/206.2	12/15/03		AL	< 0.003	mg/L
BARIUM,TOTAL	7081/208.2	12/15/03		AL	0.069	mg/L
BERYLLIUM,TOTAL	7090/210.2	12/15/03		AL	< 0.004	mg/L
BORON,TOTAL	200.7	12/15/03		AL	0.139	mg/L
CADMIUM,TOTAL	7131/213.2	12/15/03		AL	< 0.005	mg/L
CHROMIUM,TOTAL	7191/218.2	12/15/03		AL	< 0.003	mg/L
COBALT,TOTAL	7201/219.2	12/15/03		AL	< 0.03	mg/L
COPPER,TOTAL	7210/220.2	12/15/03		AL	0.007	mg/L
IRON,TOTAL	7380/236.1	12/15/03		AL	0.22	mg/L
LEAD,TOTAL	7421/239.2	12/15/03		AL	< 0.003	mg/L
MAGNESIUM,TOTAL	7450/242.1	12/15/03		AL	8.45	mg/L
MANGANESE,TOTAL	7460/239.1	12/15/03		AL	0.33	mg/L
MERCURY,TOTAL	1631E/7470	12/15/03		AL	< 0.0003	mg/L
MOLYBDENUM,TOTAL	7481/246.2	12/15/03		AL	< 0.003	mg/L
NICKEL,TOTAL	7520/249.1	12/15/03		AL	< 0.02	mg/L
SELENIUM,TOTAL	7740/270.2	12/15/03		AL	< 0.003	mg/L
SILVER,TOTAL	7761/272.1	12/15/03		AL	< 0.008	mg/L
THALLIUM,TOTAL	7841/279.2	12/15/03		AL	< 0.002	mg/L
TIN,TOTAL	7870/282.2	12/15/03		AL	< 0.01	mg/L
TITANIUM,TOTAL	283.2	12/15/03		AL	< 0.005	mg/L
ZINC,TOTAL	7950/289.1	12/15/03		AL	< 0.01	mg/L

SMR REPRESENTATIVE W.A. [illegible]

SMR ENGINEERING & ENVIRONMENTAL SERVICES, INC.
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CENTRAL CITY, KY 42330
(270)754-3737 FAX (270)754-9623

FINAL REPORT OF ANALYSES

LOGAN ALUMINUM
U.S. HIGHWAY 431
P.O. BOX 3000
RUSSELLVILLE, KY 42303-
ATTN: PHILLIP PORTER

PROJECT NAME:005 MONITORING
REPORT DATE: 01/15/2004

SAMPLE NUMBER: 149338 SAMPLE ID- SET #2/005 SAMPLE MATRIX- WA
DATE SAMPLED- 12/10/03 LOCATION- KPDES 005 RENEWAL TIME SAMPLED-0800
DATE RECEIVED- 12/10/03 SAMPLER- PW RECEIVED BY -STM
TIME RECEIVED- 1025 DELIVERED BY -STM TYPE SAMPLE-Grab
COMMENTS: METHODS 608, 624 & 625; ANALYST ESC
VOLATILE & BNA SEMIVOLATILES Analysis

Component Name	ANALYSIS Concentration ug/L	Component MDL ug/L
VOLATILES		
Acrolein	Not Det	50
Acrylonitrile	Not Det	50
Benzene	Not Det	1
Bis (chloromethyl) ether	Not Det	1
Bromodichloromethane	Not Det	1
Bromoform	Not Det	1
Carbon Tetrachloride	Not Det	1
Chlorobenzene	Not Det	2
Chloroethane	Not Det	1
2-Chloroethylvinyl Ether	Not Det	1
Chloroform	Not Det	1
Chloromethane (Methyl chloride)	Not Det	1
Dibromochloromethane	Not Det	1
Dibromomethane	Not Det	1
Dichlorofluoromethane	Not Det	1
1,1-Dichloroethane	Not Det	1
1,2-Dichloroethane	Not Det	1
1,1-Dichloroethylene	Not Det	1
t-1,2-Dichloroethylene	Not Det	1
c-1,2-Dichloroethylene	Not Det	1
1,2-Dichloropropane	Not Det	1
c-1,3-Dichloropropene	Not Det	1
t-1-3-Dichloropropene	Not Det	1
1,2-Dichlorobenzene	Not Det	1
1,4-Dichlorobenzene	Not Det	1
Ethylbenzene	Not Det	1
2-Butanone (MEK)	Not Det	20
Methylene Chloride (Dichloromethane)	Not Det	1
4-Methyl-2-Pentanone (MIBK)	Not Det	20
Styrene	Not Det	1

CONTINUATION OF DATA FOR SAMPLE NUMBER 149338

Component Name	ANALYSIS Concentration ug/L	Component MDL ug/L
1,1,2,2-Tetrachloroethane	Not Det	1
Tetrachloroethylene	Not Det	1
Toluene	Not Det	1
1,1,1-Trichloroethane	Not Det	1
1,1,2-Trichloroethane	Not Det	1
Trichloroethylene	Not Det	1
Trichlorofluoromethane	Not Det	1
2-Chlorotoluene	Not Det	1
4-Chlorotoluene	Not Det	1
Vinyl Chloride	Not Det	2
Xylene, Total	Not Det	1

BNA EXTRACTABLES

2-Chlorophenol	Not Det	10
2,4-Dichlorophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	10
2,4-Dinitrophenol	Not Det	10
2-Nitrophenol	Not Det	10
4-Nitrophenol	Not Det	10
4-Chloro-3-methylphenol	Not Det	10
Pentachlorophenol	Not Det	10
Phenol	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
Acenaphthene	Not Det	10
Acenaphthylene	Not Det	10
Anthracene	Not Det	10
Benzidene	Not Det	10
Benzo(a)anthracene	Not Det	10
Benzo(a)pyrene	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Bis(2-chloroethyl)ether	Not Det	10
Bis(2-chloroethoxy)methane	Not Det	10
Bis(2-chloroisopropyl)ether	Not Det	10
Bis(2-ethylhexyl)phthalate	Not Det	10
4-Bromophenyl phenyl ether	Not Det	10
Butyl benzyl phthalate	Not Det	10
2-Chloronaphthalene	Not Det	10
4-Chlorophenyl phenyl ether	Not Det	10
Chrysene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
1,3-Dichlorobenzene	Not Det	10

CONTINUATION OF DATA FOR SAMPLE NUMBER 149338

3,3-Dichlorobenzidine	Not Det	10
Diethyl phthalate	Not Det	10
Dimethyl phthalate	Not Det	10
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Di-n-butyl phthalate	Not Det	10
Di-n-octyl phthalate	Not Det	10
Dimethyl phthalate	Not Det	10
Diethyl phthalate	Not Det	10
1,2-Diphenylhydrazine	Not Det	10
Fluoranthene	Not Det	10
Fluorene	Not Det	10
Hexachlorobenzene	Not Det	10
Hexachlorobutadiene	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
Hexachloroethane	Not Det	10
Indeno(1,2,3-cd)pyrene	Not Det	10
Isophorone	Not Det	10
Naphthalene	Not Det	10
Nitrobenzene	Not Det	10
N-Nitrosodimethylamine	Not Det	10
N-Nitrosodi-n-propylamine	Not Det	10
N-Nitrosodiphenylamine	Not Det	10
Phenanthrene	Not Det	10
Pyrene	Not Det	10
1,2,4-Trichlorobenzene	Not Det	10

LABORATORY DIRECTOR

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cyanide	0.0058	0.0050	mg/l	335.3	05/01/07	1
Total Phenol by 4AAP	BDL	0.040	mg/l	420.2	05/02/07	1
Thallium	BDL	0.0010	mg/l	200.8	04/29/07	1
Mercury	BDL	0.00020	mg/l	245.1	05/01/07	1
Antimony	BDL	0.020	mg/l	200.7	05/01/07	1
Arsenic	BDL	0.020	mg/l	200.7	05/01/07	1
Beryllium	BDL	0.0020	mg/l	200.7	05/01/07	1
Cadmium	BDL	0.0050	mg/l	200.7	05/01/07	1
Chromium	BDL	0.010	mg/l	200.7	05/01/07	1
Copper	BDL	0.020	mg/l	200.7	05/01/07	1
Lead	BDL	0.0050	mg/l	200.7	05/01/07	1
Nickel	BDL	0.020	mg/l	200.7	05/01/07	1
Selenium	BDL	0.020	mg/l	200.7	05/01/07	1
Silver	BDL	0.010	mg/l	200.7	05/01/07	1
Zinc	BDL	0.030	mg/l	200.7	05/01/07	1
PP Volatile Organics						
Benzene	BDL	0.0010	mg/l	624	04/28/07	1
Bromodichloromethane	BDL	0.0010	mg/l	624	04/28/07	1
Bromoform	BDL	0.0010	mg/l	624	04/28/07	1
Bromomethane	BDL	0.0050	mg/l	624	04/28/07	1
Carbon tetrachloride	BDL	0.0010	mg/l	624	04/28/07	1
Chlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
Chlorodibromomethane	BDL	0.0010	mg/l	624	04/28/07	1
Chloroethane	BDL	0.0010	mg/l	624	04/28/07	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	624	04/28/07	1
Chloroform	BDL	0.0050	mg/l	624	04/28/07	1
Chloromethane	BDL	0.0010	mg/l	624	04/28/07	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	624	04/28/07	1
1,1-Dichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
1,2-Dichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
1,1-Dichloroethene	BDL	0.0010	mg/l	624	04/28/07	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	624	04/28/07	1
1,2-Dichloropropane	BDL	0.0010	mg/l	624	04/28/07	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	624	04/28/07	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	624	04/28/07	1
Ethylbenzene	BDL	0.0010	mg/l	624	04/28/07	1
Methylene Chloride	BDL	0.0050	mg/l	624	04/28/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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Est. 1970

REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	624	04/28/07	1
Tetrachloroethene	BDL	0.0010	mg/l	624	04/28/07	1
Toluene	BDL	0.0050	mg/l	624	04/28/07	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	624	04/28/07	1
Trichloroethene	BDL	0.0010	mg/l	624	04/28/07	1
Vinyl chloride	BDL	0.0010	mg/l	624	04/28/07	1
Surrogate Recovery						
Toluene-d8	103.		% Rec.	624	04/28/07	1
Dibromofluoromethane	112.		% Rec.	624	04/28/07	1
4-Bromofluorobenzene	117.		% Rec.	624	04/28/07	1
Pesticide/PCBs						
Aldrin	BDL	0.0050	mg/l	608	05/01/07	10
Alpha BHC	BDL	0.0050	mg/l	608	05/01/07	10
Beta BHC	BDL	0.0050	mg/l	608	05/01/07	10
Delta BHC	BDL	0.0050	mg/l	608	05/01/07	10
Gamma BHC	BDL	0.0050	mg/l	608	05/01/07	10
Chlordane	BDL	0.050	mg/l	608	05/01/07	10
4,4-DDD	BDL	0.0050	mg/l	608	05/01/07	10
4,4-DDE	BDL	0.0050	mg/l	608	05/01/07	10
4,4-DDT	BDL	0.0050	mg/l	608	05/01/07	10
Dieldrin	BDL	0.0050	mg/l	608	05/01/07	10
Endosulfan I	BDL	0.0050	mg/l	608	05/01/07	10
Endosulfan II	BDL	0.0050	mg/l	608	05/01/07	10
Endosulfan sulfate	BDL	0.0050	mg/l	608	05/01/07	10
Endrin	BDL	0.0050	mg/l	608	05/01/07	10
Endrin aldehyde	BDL	0.0050	mg/l	608	05/01/07	10
Endrin ketone	BDL	0.0050	mg/l	608	05/01/07	10
Heptachlor	BDL	0.0050	mg/l	608	05/01/07	10
Heptachlor epoxide	BDL	0.0050	mg/l	608	05/01/07	10
Hexachlorobenzene	BDL	0.0050	mg/l	608	05/01/07	10
Methoxychlor	BDL	0.0050	mg/l	608	05/01/07	10
Toxaphene	BDL	0.10	mg/l	608	05/01/07	10
PCB 1016	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1221	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1232	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1242	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1248	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1254	BDL	0.0050	mg/l	608	05/01/07	10
PCB 1260	BDL	0.0050	mg/l	608	05/01/07	10
Pest/PCBs Surrogates						
Decachlorobiphenyl	140.	0.000500	% Rec.	608	05/01/07	10
Tetrachloro-m-xylene	100.	0.000500	% Rec.	608	05/01/07	10

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
PP Base/Neutral Extractables						
Acenaphthene	BDL	0.010	mg/l	625	04/30/07	1
Acenaphthylene	BDL	0.010	mg/l	625	04/30/07	1
Anthracene	BDL	0.010	mg/l	625	04/30/07	1
Benzidine	BDL	0.050	mg/l	625	04/30/07	1
Benzo(a)anthracene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(b)fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(k)fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(g,h,i)perylene	BDL	0.010	mg/l	625	04/30/07	1
Benzo(a)pyrene	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chlorethoxy)methane	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chloroethyl)ether	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-chloroisopropyl)ether	BDL	0.010	mg/l	625	04/30/07	1
4-Bromophenyl-phenylether	BDL	0.010	mg/l	625	04/30/07	1
2-Chloronaphthalene	BDL	0.010	mg/l	625	04/30/07	1
4-Chlorophenyl-phenylether	BDL	0.010	mg/l	625	04/30/07	1
Chrysene	BDL	0.010	mg/l	625	04/30/07	1
Dibenz(a,h)anthracene	BDL	0.010	mg/l	625	04/30/07	1
3,3-Dichlorobenzidine	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dinitrotoluene	BDL	0.010	mg/l	625	04/30/07	1
2,6-Dinitrotoluene	BDL	0.010	mg/l	625	04/30/07	1
Fluoranthene	BDL	0.010	mg/l	625	04/30/07	1
Fluorene	BDL	0.010	mg/l	625	04/30/07	1
Hexachlorobenzene	BDL	0.010	mg/l	625	04/30/07	1
Hexachloro-1,3-butadiene	BDL	0.010	mg/l	625	04/30/07	1
Hexachlorocyclopentadiene	BDL	0.010	mg/l	625	04/30/07	1
Hexachloroethane	BDL	0.010	mg/l	625	04/30/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.010	mg/l	625	04/30/07	1
Isophorone	BDL	0.010	mg/l	625	04/30/07	1
Naphthalene	BDL	0.010	mg/l	625	04/30/07	1
Nitrobenzene	BDL	0.010	mg/l	625	04/30/07	1
n-Nitrosodimethylamine	BDL	0.050	mg/l	625	04/30/07	1
n-Nitrosodiphenylamine	BDL	0.010	mg/l	625	04/30/07	1
n-Nitrosodi-n-propylamine	BDL	0.010	mg/l	625	04/30/07	1
Phenanthrene	BDL	0.010	mg/l	625	04/30/07	1
Benzylbutyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Bis(2-ethylhexyl)phthalate	BDL	0.010	mg/l	625	04/30/07	1
Di-n-butyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Diethyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Dimethyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Di-n-octyl phthalate	BDL	0.010	mg/l	625	04/30/07	1
Pyrene	BDL	0.010	mg/l	625	04/30/07	1
1,2,4-Trichlorobenzene	BDL	0.010	mg/l	625	04/30/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

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Est. 1970

REPORT OF ANALYSIS

Mr. Steve Royer
Logan Aluminum Inc.
U. S. Hwy 431 North
Russellville, KY 42276

May 02, 2007

ESC Sample # : L290627-02

Date Received : April 25, 2007
Description :

Site ID :

Sample ID : 005 DISCHARGE

Project # :

Collected By : H. Wojnar
Collection Date : 04/24/07 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
PP Acid Extractables						
4-Chloro-3-methylphenol	BDL	0.010	mg/l	625	04/30/07	1
2-Chlorophenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dichlorophenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dimethylphenol	BDL	0.010	mg/l	625	04/30/07	1
4,6-Dinitro-2-methylphenol	BDL	0.010	mg/l	625	04/30/07	1
2,4-Dinitrophenol	BDL	0.010	mg/l	625	04/30/07	1
2-Nitrophenol	BDL	0.010	mg/l	625	04/30/07	1
4-Nitrophenol	BDL	0.010	mg/l	625	04/30/07	1
Pentachlorophenol	BDL	0.010	mg/l	625	04/30/07	1
Phenol	BDL	0.010	mg/l	625	04/30/07	1
2,4,6-Trichlorophenol	BDL	0.010	mg/l	625	04/30/07	1
Surrogate Recovery						
Nitrobenzene-d5	59.8		% Rec.	625	04/30/07	1
2-Fluorobiphenyl	66.2		% Rec.	625	04/30/07	1
p-Terphenyl-d14	96.8		% Rec.	625	04/30/07	1
Phenol-d5	41.1		% Rec.	625	04/30/07	1
2-Fluorophenol	59.6		% Rec.	625	04/30/07	1
2,4,6-Tribromophenol	78.6		% Rec.	625	04/30/07	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 05/02/07 17:01 Printed: 05/02/07 17:02

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L290627-01	Aldrin	O
	Alpha BHC	O
	Beta BHC	O
	Delta BHC	O
	Gamma BHC	O
	Chlordane	O
	4,4-DDD	O
	4,4-DDE	O
	4,4-DDT	O
	Dieldrin	O
	Endosulfan I	O
	Endosulfan II	O
	Endosulfan sulfate	O
	Endrin	O
	Endrin aldehyde	O
	Endrin ketone	O
	Heptachlor	O
	Heptachlor epoxide	O
	Hexachlorobenzene	O
	Methoxychlor	O
	Toxaphene	O
	PCB 1016	O
	PCB 1221	O
	PCB 1232	O
	PCB 1242	O
	PCB 1248	O
	PCB 1254	O
	PCB 1260	O
	2-Chloroethyl vinyl ether	J4
	1,1,1-Trichloroethane	J4
L290627-02	Aldrin	O
	Alpha BHC	O
	Beta BHC	O
	Delta BHC	O
	Gamma BHC	O
	Chlordane	O
	4,4-DDD	O
	4,4-DDE	O
	4,4-DDT	O
	Dieldrin	O
	Endosulfan I	O
	Endosulfan II	O
	Endosulfan sulfate	O
	Endrin	O
	Endrin aldehyde	O
	Endrin ketone	O
	Heptachlor	O
	Heptachlor epoxide	O
	Hexachlorobenzene	O
	Methoxychlor	O
	Toxaphene	O
	PCB 1016	O
	PCB 1221	O
	PCB 1232	O
	PCB 1242	O
	PCB 1248	O
	PCB 1254	O
	PCB 1260	O
	Decachlorobiphenyl	J1
	2-Chloroethyl vinyl ether	J4
	1,1,1-Trichloroethane	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J4	The associated batch QC was outside the established quality control range for accuracy.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

	Control Limits				(AQ)	(SS)
2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	68-128	64-125
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	76-115	69-118
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	79-127	61-134

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Logan Aluminum Inc.

U. S. Hwy 431 North
Russellville,KY 42276

Alternate billing information:

Chain of Custody
Page ___ of ___

Prepared by:
ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Mr. Steve Royer
Email: steve.royer@logan-aluminu

Project Description:
City/State Collected

Phone: (270) 755-6390
FAX:
Client Project #:
Lab Project #

Collected by (print): H. Wojnar
Site/Facility ID#:
P.O.#:

Collected by (signature):
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed
Email? ___No X Yes
FAX? ___No ___Yes

Acctnum: LOGALKY01 (lab use only)
Template/Prelogin T42406/ P205277
Cooler #: 3
Shipped Via: Courier

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	CN 250mlHDPEAmb-NaOH	Metals 500mlHDPE-HNO3	SV608 1L-Amb NoPres	SV625PP 1L-Amb-NoPres	Total Phenols (PHT) 250mlAmb-H2SO4	V624PP 40mlAmb-HCl			Remarks/Contaminant	Sample # (lab only)
004 Discharge	X	WW		4/24/07	8am	9	X	X	X	X	X	X				L2906270 1
005 Discharge	X	WW		4/24/07	9am	9	X	X	X	X	X	X				02

*Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐	Condition: (lab use only)
	4/24/07	9:30am			OK
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4 Bottles Received: 16+2B	
	4/25/07	1145	Wayne Shull		
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4.25.07 Time: 1445	pH Checked: 22,127 NCF:
Wayne Shull	4/25/07	1445			

KPDES FORM C

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Logan Aluminum Inc	County: Logan							
I. OUTFALL LOCATION	AGENCY USE							

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
006	Internal	Outfall					Logan Spray Fields

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
	Sanitary Package Plant	80,000 gpd	Sedimentation	1U
			Screening	1T
			Grinding	1L
			Aeration	No Code
			Chlorination	2F

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ Yes (Complete the following table.) ☒ No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ Yes (Complete Item III-B) List effluent guideline category:

☐ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☒ Yes (Complete Item III-C) ☐ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table) ☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐ Yes (List all such pollutants below) ☒ No (Go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐ Yes (Complete Item VI-C) ☒ No (Go to Item VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below) ☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below) ☐ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
SMR Laboratories, Inc.	319 West Broad Street P.O. Box 761 Central City, KY 42330	270-754-9928	per Table V
Environmental Science Corp.	12065 Lebanon Rd Mt. Juliet, TN 37122	615-758-5858	per Table V

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy Schumaker, Chief Management Officer	270-755-6000
SIGNATURE Randy Schumaker	DATE 10-11-07

'LEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing ıese pages. (See instructions)

. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C) | OUTFALL NO.

art A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. Maximum Daily Value (1) Concentration	2. EFFLUENT a. Maximum Daily Value (2) Mass	2. EFFLUENT b. Maximum 30-Day Value (if available) (1) Concentration	2. EFFLUENT b. Maximum 30-Day Value (if available) (2) Mass	2. EFFLUENT c. Long-Term Avg. Value (if available) (1) Concentration	2. EFFLUENT c. Long-Term Avg. Value (if available) (2) Mass	2. EFFLUENT d. No. of Analyses	3. UNITS (specify if blank) a. Concentration	3. UNITS (specify if blank) b. Mass	4. INTAKE (optional) a. Long-Term Avg. Value (1) Concentration	4. INTAKE (optional) a. Long-Term Avg. Value (2) Mass	4. INTAKE (optional) b. No of Analyses
Biochemical ›xygen Demand 3OD)	15		10				7	mg/L				
Chemical ›xygen Demand :OD)												
Total Organic arbon (TOC)												
Total uspended olids (TSS)	107		57				7	mg/L				
Ammonia ıs N)	2.7		1.4				7	mg/L				
Flow (in units f MGD)	VALUE		VALUE		VALUE				MGD MGD	VALUE		
Temperature (winter)	VALUE		VALUE		VALUE				°c	VALUE		
Temperature (summer)	VALUE		VALUE		VALUE				°c	VALUE		
pH	MINIMUM 7.3	MAXIMUM 9.6	MINIMUM	MAXIMUM			7	STANDARD UNITS standard units				

art B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and equirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		6. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
Bromide (24959-67-9)														
Bromine Total Residual														
Chloride														
Chlorine, Total Residual														
Color														
Fecal Coliform	X		1540		399				7	cfu/100 mL				
Fluoride (16984-48-8)														
Hardness (as $CaCO_3$)														
Nitrate – Nitrite (as N)														
Nitrogen, Total Organic (as N)														
Oil and Grease														
Phosphorous (as P), Total 7723-14-0														
adioactivity														
) Alpha, Total		x												
) Beta, Total		x												
) Radium Total		x												
) Radium, 226, Total		x												

rt B - Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
Sulfate (as SO_4) (14808-79-8)														
Sulfide (as S)														
Sulfite (as SO_4) (14286-46-3)														
Surfactants														
Aluminum, Total (7429-90)														
Barium, Total (7440-39-3)														
Boron, Total (7440-42-8)														
Cobalt, Total (7440-48-4)														
Iron, Total (7439-89-6)														
Magnesium Total (7439-96-4)														
Molybdenum Total (7439-98-7)														
Manganese, Total (7439-96-6)														
Tin, Total (7440-31-5)														
Titanium, Total (7440-32-6)														

rt B - Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
Sulfate (as SO_4) (14808-79-8)														
Sulfide (as S)														
Sulfite (as SO_4) (14286-46-3)														
Surfactants														
Aluminum, Total (7429-90)														
Barium, Total 7440-39-3)														
Boron, Total (7440-42-8)														
Cobalt, Total (7440-48-4)														
Iron, Total (7439-89-6)														
Magnesium Total (7439-96-4)														
Molybdenum Total 7439-98-7)														
Manganese, Total (7439-96-6)														
Tin, Total (7440-31-5)														
Titanium, Total (7440-32-6)														

rt C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the **Testing Required** column all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required /MS fractions), mark "X" in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark "X: in the **Believed Absent** column for each pollutant you believe to be absent. If you mark her the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete e table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. OLLUTANT nd CAS NO. f available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
ETALS, CYANIDE AND TOTAL PHENOLS															
1. Antimony Total (7440-36-0)															
1. Arsenic, Total (7440-38-2)															
1. Beryllium Total (7440-41-7)															
1. Cadmium Total (7440-43-9)															
1. Chromium Total (7440-43-9)															
1. Copper Total (7550-50-8)															
1. Lead Total (7439-92-1)															
1. Mercury Total (7439-97-6)															
1. Nickel, Total (7440-02-0)															
M. Selenium, Total (7782-49-2)															
M. Silver, Total (7440-28-0)															

rt C – Contin.

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
ETALS, CYANIDE AND TOTAL PHENOLS (Continued)															
M. Thallium, Total (7440-28-0)															
M. Zinc, Total (7440-66-6)															
M. Cyanide, Total (57-12-5)															
M. Phenols, Total															
OXIN															
,7,8 Tetra-lorodibenzo, Dioxin (1784-01-6)				DESCRIBE RESULTS:											
C/MS FRACTION – VOLATILE COMPOUNDS															
. Acrolein (107-02-8)															
rylonitrile 07-13-1)															
. Benzene 1-43-2)															
. Bromoform 5-25-2)															
. Carbon trachloride 5-23-5)															
. Chloro-benzene 08-90-7)															
lorodibro-omethane 24-48-1)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
loroethane 4-00-3)															
V. 2-Chloro- ylvinyl Ether 10-75-8)															
V. loroform 7-66-3)															
V. Dichloro- omomethane 5-71-8)															
V. 1,1- chloroethane 5-34-3)															
V. 1,2- chloroethane 07-06-2)															
V. 1,1- chlorethylene 5-35-4)															
V. 1,2-Di- loropropane 3-87-5)															
V. 1,3- chloropro- lene 52-75-6)															
V. Ethyl- nzene 00-41-4)															
V. Methyl omide 4-83-9)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
V. Methyl Chloride (74-87-3)															
V. Methylene Chloride (75-00-2)															
V. 1,1,2,2-Tetrachloro-ethane (79-34-5)															
V. Tetrachloro-ethylene (127-18-4)															
V. Toluene (108-88-3)															
V. 1,2-Trans-Dichloro-ethylene (156-60-5)															
V. 1,1,1-Tri-loroethane (71-55-6)															
V. 1,1,2-Tri-loroethane (79-00-5)															
V. Trichloro-ethylene (79-01-6)															
V. Vinyl Chloride (75-01-4)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
C/MS FRACTION – ACID COMPOUNDS															
. 2-Chloro-phenol (95-57-8)															
. 2,4-chlor-ophenol 20-83-2)															
l-Dimeth-henol 05-67-9)															
. 4,6-Dinitro-o-cresol 34-52-1)															
. 2,4-Dinitro-phenol 1-28-5)															
. 2-Nitro-phenol 3-75-5)															
. 4-Nitro-phenol 00-02-7)															
. P-chloro-m-cresol 9-50-7)															
ntachloro-enol 7-88-5)															
A. Phenol 08-05-2)															
A. 2,4,6-Tri-lorophenol 3-06-2)															
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
. Acena-phthene (83-32-9)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
. Acena-phtylene (208-96-8)															
. Anthra-cene (120-12-7)															
3. nzidine 2-87-5)															
. Benzo(a)-thracene 5-55-3)															
. Benzo(a)-rene)-32-8)															
. 3,4-Benzo-oranthene)5-99-2)															
. Benzo(ghl) ylene)1-24-2)															
. Benzo(k)-oranthene)7-08-9)															
B. Bis(2-lor-hoxy)-thane 11-91-1)															
B. Bis chlor-opropyl)-ner															
B. Bis ethyl-xyl)-thalate 17-81-7)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. 4-Bromo- enyl enyl ether)1-55-3)															
B. Butyl- nzyl thalate 5-68-7)															
B. 2-Chloro- phthalene)05-72-3)															
B. 4-Chloro- enyl enyl ether)05-72-3)															
B. Chrysene 18-01-9)															
B. Dibenzo- h) nthracene 3-70-3)															
B. 1,2- chloro- nzene 5-50-1)															
B. 1,3- chloro- nzene 41-73-1)															
B. 1,4- chloro- nzene)6-46-7)															
B. 3,3- chloro- nzidene 1-94-1)															
B. Diethyl thalate 4-66-2)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg. Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. Dimethyl Phthalate 31-11-3)															
B. Di-N- tyl Phthalate 4-74-2)															
B. 4-Dinitro- uene 21-14-2)															
B. 6-Dinitro- uene 06-20-2)															
B. Di-n-octyl thalate 17-84-0)															
B. 1,2- henyl- drazine (as nbenzene) 22-66-7)															
B. oranthene 08-44-0)															
B. Fluorene 5-73-7)															
B. xachloro- nzene 18-71-1)															
B. xachloro- tadiene 7-68-3)															
B. xachloro- clopenta- ne 7-47-4)															

rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X" a. Testing Required	a. Believed Present	b. Believed Absent	3. EFFLUENT a. Maximum Daily Value (1) Concentration	(2) Mass	b. Maximum 30-Day Value (if available) (1) Concentration	(2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration	(2) Mass	d. No. of Analyses	4. UNITS a. Concentration	b. Mass	5. INTAKE (optional) a. Long-Term Avg Value (1) Concentration	(2) Mass	b. No. of Analyses
C/MS FRACTION – BASE/NEUTRAL COMPOUNDS (Continued)															
B. Hexachlo- roethane (67-72-1)															
B. Indneo- 2,3-oc)- rene 93-39-5)															
B. phorone 3-59-1)															
B. pthalene 1-20-3)															
B. tro- nzene 3-95-3)															
B. N-Nitroso- nethyl- ine 2-75-9)															
B. nitrosodi-n- pylamine 21-64-7)															
B. N-nitro- liphenyl- ine 5-30-6)															
B. Phenan- ene 5-01-8)															
B. Pyrene 29-00-0)															
B. 1,2,4 Tri- loro- nzene 20-82-1)															

rt C – Continued

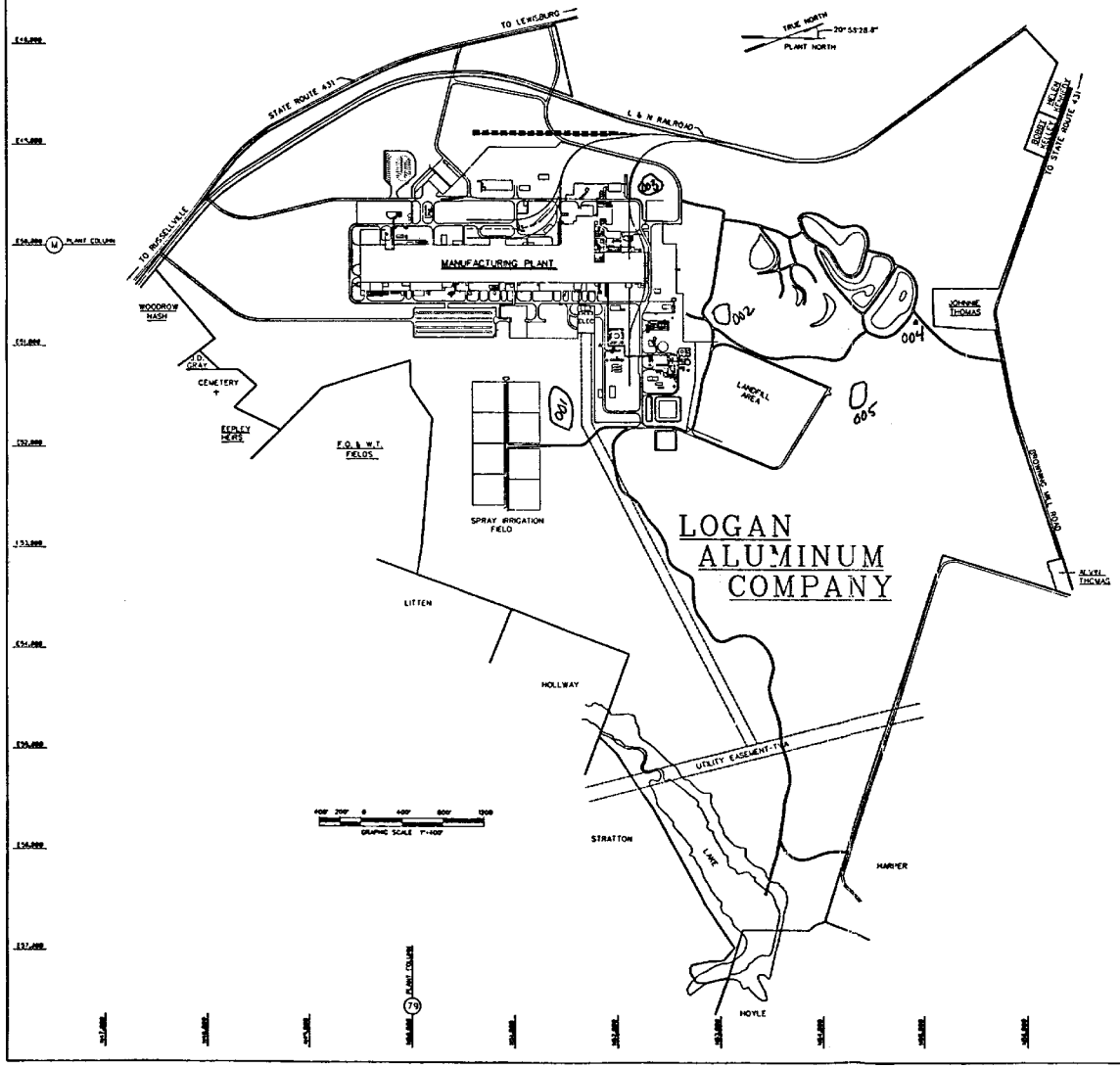
1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
C/MS FRACTION – PESTICIDES															
. Aldrin)9-00-2)															
. α-BHC 19-84-6)															
. β-BHC 3-89-9)															
. nma-BHC 3-89-9)															
. δ-BHC 19-86-8)															
. Chlordane 7-74-9)															
. 4,4'-DDT)-29-3)															
. 4,4'-DDE 2-55-9)															
. 4,4'-DDD 2-54-8)															
P. Dieldrin)-57-1)															
P. α-dosulfan 15-29-7)															
P. β-dosulfan 15-29-7)															
P. Endosulfan lfate)31-07-8)															
P. Endrin 2-20-8)															

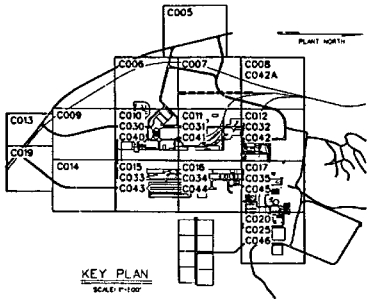
rt C – Continued

1. OLLUTANT nd CAS NO. if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
C/MS FRACTION – PESTICIDES															
P. Endrin dehyde 421-93-4)															
P Heptachlor 5-44-8)															
P. Heptaclor oxide 024-57-3)															
P. PCB-1242 3469-21-9)															
P. PCB-1254 1097-69-1)															
P. PCB-1221 1104-28-2)															
P. PCB-1232 1141-16-5)															
P. PCB-1248 2672-29-6)															
P. PCB-1260 1096-82-5)															
P. PCB-1016 2674-11-2)															
P. Toxaphene 001-35-2)															

Date	FC	pH	BOD	Ammonia I	Temp	TSS
7/18/2007	125	9.2	10	0.1499	31.3	107
5/2/2007	275	7.3	7	2.7	24	28
5/16/2007	1540	8.2	7	<1	23.8	30
6/13/2007	230	9.8	15	<.101	27.1	69
6/20/2007	45	8.9	13	<.101	27.3	49
6/27/2007	530	8.8	7	<.101	29.8	53
5/30/2007	45	9.6	8	<0.01	26.7	60
	398.57	8.83	9.57	1.42	27.14	56.57

1003-00-0000





CIVIL DRAWINGS

0000-00-C001	PLOT PLAN
0000-00-C002	GENERAL SITE ARRANGEMENT
0000-00-C003	MANHOLE LOCATION/REPAIR PLAN
0000-00-C004	SOIL BORING PLAN
0000-00-C005	SITE/GRADING PLAN
0000-00-C006	SITE/GRADING PLAN
0000-00-C007	SITE/GRADING PLAN
0000-00-C008	RAILROAD PLAN & PROFILE
0000-00-C009	SITE/GRADING PLAN
0000-00-C010	SITE PLAN
0000-00-C011	SITE PLAN
0000-00-C012	SITE PLAN
0000-00-C013	SITE/GRADING PLAN
0000-00-C014	SITE/GRADING PLAN
0000-00-C015	SITE PLAN
0000-00-C016	SITE PLAN
0000-00-C017	SITE PLAN
0000-00-C018	SITE/GRADING PLAN
0000-00-C020	GRADING PLAN
0000-00-C025	SITE PLAN
0000-00-C030	GRADING PLAN
0000-00-C031	GRADING PLAN
0000-00-C032	GRADING PLAN
0000-00-C033	GRADING PLAN
0000-00-C034	GRADING PLAN
0000-00-C035	GRADING PLAN
0000-00-C040	UTILITY PLAN
0000-00-C041	UTILITY PLAN
0000-00-C042	UTILITY PLAN
0000-00-C043	UTILITY PLAN
0000-00-C044	UTILITY PLAN
0000-00-C045	UTILITY PLAN
0000-00-C046	UTILITY PLAN
0000-00-C047	UTILITY PLAN/SECTIONS & DETAILS
0000-00-C048	UTILITY PLAN/SECTIONS & DETAILS
0000-00-C050	UTILITY PLAN/SECTIONS & DETAILS
0000-00-C051	CIVIL DETAILS
0000-00-C052	CIVIL DETAILS
0000-00-C053	CIVIL DETAILS
0000-00-C054	CIVIL DETAILS
0000-00-C055	CIVIL DETAILS
0000-00-C701	SECTIONS & DETAILS
0000-00-C702	SECTIONS & DETAILS

GENERAL NOTES:

1. ALL COORDINATES AND BEARINGS FOR THIS PROJECT ARE BASED ON PLANT NORTH COORDINATE SYSTEM, UNLESS NOTED OTHERWISE.
2. THE MANUFACTURING PLANT ASSUMES DATUM FOR FINISHED FLOOR ELEVATION=200.00 (THE PLANT DATUM OF 200.00=384.00 MSL).
3. HORIZONTAL CONTROL DATA SUBMITTED HEREIN WITH REFERENCE TO LEGAL BOUNDARY SURVEY BY BOWSER-MORNER TESTING LABORATORIES, DATED 1/19/81 TOPOGRAPHIC SURVEY PREPARED BY WOOLPERT CONSULTANTS AND BOWSER-MORNER TESTING LABORATORIES, 1981.
4. UPON COMPLETION OF EARTHWORK, ALL AREAS TO BE GRASSED SHALL BE PROPERLY COVERED WITH TOPSOIL, THEN FERTILIZED AND SEEDED FOR STABILIZATION.
5. THE MANUFACTURING PLANT SHALL HAVE A 6" THICK CRUSHED STONE BASE BENEATH THE FLOOR SLAB (SEE FLOOR PANEL SPECIFICATIONS NO. 5223.8). ALL OTHER BUILDINGS SHALL HAVE FLOOR SLABS CONSTRUCTED ON GRADE WITHOUT A CRUSHED STONE BASE.

NO.	DATE	REVISION	BY	DRD	APR	APR
7	10/13/06	REVISED DRAWING INDEX	PN	MJS	CWM	CWM
5	5/12/06	CONVERTED TO MICROSTATION	PN	MJS	CWM	CWM

LOGAN ALUMINUM INC

PLOT PLAN

TEW	7-17-81	1"=400'-0"	MICROSTATION
JPC			
TEW	0000-00-C001		7
RDH			

LOGAN ALUMINUM INC.
U.S. Highway 431 North
P.O. Box 3000
Russellville, Kentucky 42276
Telephone 502-755-6800

RECEIVED
OCT 16 2007
By

October 15, 2007

Via Fedex Overnight Delivery

Mr. Larry Sowder
Kentucky Department for Environmental Protection
Division for Water
KPDES Branch
14 Reilly Road
Frankfort, Kentucky 40601

RE: Logan Aluminum – Russellville, KY Facility
KPDES (Permit No. KY0072630)
Permit Renewal Application Package

Dear Mr. Sowder:

Please find enclosed the completely revised and updated KPDES Permit Renewal application package for the Logan Aluminum, Inc. ("Logan") secondary aluminum rolling facility located in Russellville, Kentucky (SIC Codes 3353, 3479). This submittal is intended to supercede and replace the original application package sent to the Division of Water ("Division") on March 24, 2004 to revise and update the KPDES Permit (KY0072630). We met with the Division at Logan in October 2006 to discuss the permit application timeline and again in Frankfort on August 21, 2007 to review this submittal package.

FACILITY AND REGULATORY BACKGROUND

Logan received its first KPDES industrial wastewater discharge permit in 1984. In 1991, Logan initiated a construction permit with the Division for a surface flow wetlands treatment system to process the wastewaters generated by the plant to be discharged through Outfall 004 ("004") into Austin Creek. The most recent KPDES permit was issued on March 1, 2001 and expired on September 30, 2004. Administratively, this permit has been extended.

Logan generates wastewater from multiple operations regulated by the Effluent Guidelines, New Source Performance Standards ("NSPS"), that enter the wetlands treatment system:

- Coil Coating Point Source for Aluminum (40 CFR 465.33, Subpart C),
- Aluminum Forming Point Source for Rolling With Neat Oils Subcategory (40 CFR 467.14, Subpart A), i.e., the Cold Mills,

- Aluminum Forming Point Source for Rolling with Emulsions (i.e., the Hot Mill) and for Direct Chill Casting Contact Cooling Water (i.e., the Remelt unit) Subcategory (40 CFR 467.24, Subpart B), and
- Landfill Point Sources (40 CFR 445).

The landfill stormwater collection pond was previously permitted for direct discharge to Austin Creek and designated as Outfall 005 ("005") with its own sampling and reporting requirements. Logan has decided to discontinue this regular discharge from 005 (while retaining the right to discharge for emergency, maintenance or overflow purposes) and route this regulated stream to the inlet of the wetlands system, with it ultimately discharging through 004. The collected leachate from the landfill has historically been collected and routed to the wetlands as well.

Additionally, Logan operates an extended aeration package treatment plant for sanitary wastewater treatment that is discharged through land application on-site, designated as an internal Outfall 006 ("006"). It is Logan's understanding that the Division now intends to apply specific sampling and monitoring limits at this outfall pursuant to Kentucky regulations (401 KAR 5:045). We have only limited or sparse data and have not been required to demonstrate compliance at this internal monitoring point in the last several years, and a compliance schedule may be warranted to allow time for data collection and make any refinements to the system, if needed.

Finally, Logan also has identified that the stormwater that comes into contact with its site is discharged through three discrete conveyances that have been labeled as Outfalls 001, 002 and 003. These discharges are controlled through implementation of Best Management Practices.

PERMIT APPLICATION PACKAGE

The permit application package has been assembled using the appropriate KPDES regulatory forms, including Form 1, Form C for each designated outfall other than the stormwater outfalls, and all associated attachments, drawings, analyses, etc. The information has been updated with the most current facility information, drawings and figures (where required), wastewater flow and quality data (including updated priority pollutant analyses for both 004 and 005) and the revised production data for most recent five years. This submittal is also being provided on CD per the Division's request.

MAJOR PROCESS AND EFFLUENT CHANGES

Logan has either made, or is in the process of completing and planning significant process modifications that affect the calculated mass permit daily and monthly limits for 004. The Logan processes regulated since 2001 by the effluent guidelines listed above have not been re-calculated. These process changes and the issues created by each are listed below:

- Installation of new Level Clean Line ("LCL") that started operations in September 2007 but likely will not reach full production capability until the end of 2007. Logan will increase the amount of coated aluminum production produced at the facility formerly done off-site by a supplier contributing to the coil coating source category;
- Rerouting of regulated wastewater from the Landfill (formerly Outfall 005) to the wetlands treatment system that will be completed later this month (October 2007);
- A new desludging bed to periodically dredge and remove solids from the basins is being constructed to improve wetlands management and operations;
- An evaluation of various treatment technologies to improve existing or be added to the current pre-treatment systems, potential modifications to the wetlands drainage

systems and capacity and/or other end-of-pipe controls for 004 is underway. A final decision on what combination of various technologies and upgrades, and the associated schedule, has not been reached yet. While Logan intends to comply with the limitations in its KPDES permit, we will notify the Division of the planned upgrades and schedules as they are implemented; and

- Since Logan's primary wastewater treatment is a surface flow wetlands system and the limits for 004 are established from production-based effluent guidelines in the regulated operating areas, stormwater is not currently accommodated. Additional data on the surface areas and proposed drainage coefficients for both areas around and including Outfalls 004 and 005 have been included with this package.

While other projects are underway, like the new Recycle Furnace and Scrap Processing System for melting of used beverage cans (UBC's) and other aluminum scrap which is currently under construction, but will not affect the use of direct contact cooling water in the cast bay, no other significant impacts on the nature and quantity of wastewaters to the wetlands system are contemplated at this time.

PROPOSED PERMIT MODIFICATION REQUESTS

Several potential permit modifications may be warranted from the process changes or regulatory issues outlined above. We have also fully reviewed all of the current issues and compliance strategy related to the existing permit, associated terms and conditions in the existing permit, and how the proposed new application of effluent guidelines may affect us.

As such, we are proposing several potential permit modifications for the Division to review and consider, that can be summarized as follows:

1. Increase the Outfall 004 limits based on higher production values provided in the application, including the anticipated production increases from LCL.
2. Review the provided surface areas and runoff coefficients for Outfalls 004 and 005, and associated drainage areas, to determine how the limits for 004 will be impacted.
3. Provide for a compliance schedule in the event that (1) any new parameters are added to current list of permitted parameters that have either mass or concentration limits for which we have very limited or sparse data for Outfall 004, and (2) for the sanitary package plant internal outfall 006.
4. Modify the 005 monitoring and testing conditions to reflect the fact that it will be re-routed to the inlet of the wetlands treatment system such that no testing or sampling would be required if there is no discharge. We would like to retain the ability to discharge from 005 if there is a major upset/process equipment malfunction, abnormally large rain event, or power failure that may result in a discharge to Austin Creek directly.
5. Clarify the test frequency for the toxicity testing.
6. Reduce the monitoring frequency for those parameters that have been sampled for many years and are <25% of the permitted limits per U. S. EPA's "Internal Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies", dated April 19, 1996. Specifically for 004, Zinc and Aluminum (currently 2/week to 1/month); Chromium, Cyanide and Total Recoverable Metals (currently 1/quarter to 1/6 months).
7. Clarify the intent for managing cooling water additives pursuant to Part I, Page I-3, Section C of the current permit.

We would be glad to review and discuss any of these issues with the Division upon request, and provide additional information, if necessary, before a draft permit is proposed.

We appreciate your timely response to our requests in developing this final application package and look forward to working with you and your staff in renewing the permit. If there are any questions regarding this submittal, please contact either me at (270-755-6390) or Ms. Laura Haury (270-755-6146).

Sincerely,

Steven L. Royer
Environmental Leader

Encl. (application package notebook, forms, CD)

Cc: Ms. Sara Beard (Division of Water, Frankfort)
Mr. Randy Schumaker
Ms. Laura Haury

LOGAN ALUMINUM INC.
U.S. Highway 431 North
P.O. Box 3000
Russellville, Kentucky 42276
Telephone 502-755-6000

DEC 7 2007

December 3, 2007

Ms. Sara Beard
Kentucky Department for Environmental Protection
Division of Water
14 Reilly Road
Frankfort, KY 40601

Re: KPDES Permit No. KY0072630

Dear Sara:

Per our e-mail correspondence please find enclosed the Form C for Outfall 005. Although we do not plan to discharge from this outfall routinely, the need may occur in emergency conditions.

I have also sent the form via e-mail so that you will have the electronic version of the file. We look forward to continuing to work with the Division of Water to obtain a new permit that accurately reflects the operations at Logan Aluminum, Inc.

If any questions arise regarding this information, please contact me at (270) 755-6146.

Sincerely,

Laura Haury

Laura Haury
Environmental Engineer

STEVEN L. BESHEAR
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

ROBERT D. VANCE
SECRETARY

December 27, 2007

Laura Haury
Logan Aluminum Inc.
P.O. Box 3000
Russellville, KY 42276

Re: KPDES Application Complete
KPDES No.: KY0072630
Logan Aluminum Inc.
AI ID: 2761
Activity ID: APE20040001
Logan County, Kentucky

Dear Ms. Haury,

Your revised Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on December 7, 2007. A completeness review of your permit application has been conducted. Please be aware that you may be asked to provide additional information to clarify, modify, or supplement your application material. In accordance with 401 KAR 5:075, Section 1(7) you are being provided written notification that your application has been deemed complete as of the date of this letter.

If you have any questions concerning this matter, please call me at (502) 564-8158, extension 590.

Sincerely,

Sara Beard

Sara Beard
Environmental Engineer Assistant III
KPDES Branch
Division of Water

SJB
Enclosures
c: Bowling Green Regional Office
Division of Water Files