



November 22, 2011

Arkansas Department of Environmental Quality  
Water Division  
5301 North Shore Dr.  
North Little Rock, AR 72218-5317

Attn: Mr. Allen Gilliam

Re: Semi Annual Reporting

Dear Mr. Gilliam

Attached you will find our report showing Defiance Metal Products (DMP) waste water effluent testing for the period represented from May 2011 through November 2011. Also attached you will find the laboratory report of analysis with the chain of custody. We are glad to report that all parameters are within specification.

Upon your review if you should find anything which requires our attention please do not hesitate to call. We'll continue to strive to improve our processes and comply with all federal, State and Local regulations.

Respectfully,

A handwritten signature in cursive script that reads "Carmela Simmons".

Carmela Simmons  
Safety Engineer  
Defiance Metal Products

944 Bypass Rd.  
Heber Springs AR 72543  
501-362-1919

# SEMI-ANNUAL REPORT FOR INDUSTRIAL USERS REGULATED BY 40CFR433

Use of this form is not an EPA/ADEQ requirement.

Attn: Water Div/NPDES Pretreatment

## (1) IDENTIFYING INFORMATION

### A. LEGAL NAME & MAILING ADDRESS

Defiance Metal Products  
944 Bypass Road  
Heber Springs, AR 72543

### B. FACILITY & LOCATION ADDRESS

Same as section A

C. FACILITY CONTACT: Carmela Simmons      TELEPHONE NUMBER: 501 887 4756      e-mail: csimmons@defiancemetals.com

## (2) REPORTING PERIOD--FISCAL YEAR From May 1 to Apr 30 (Both Semi-Annual Reports must cover Fiscal Year)

### A. MONTHS WHICH REPORTS ARE DUE

May & November

### B. PERIOD COVERED BY THIS REPORT

FROM: May 2011      TO: November 2011

## (3) DESCRIPTION OF OPERATION

### A. REGULATED PROCESSES

#### CORE PROCESS(ES)

CHECK EACH APPLICABLE BLOCK

- Electroplating
- Electroless Plating
- Anodizing
- Coating
- Chemical Etching and Milling
- Printed Circuit Board Manufacture

#### ANCILLARY PROCESS(ES)\*

LIST BELOW EACH PROCESS USED IN THE FACILITY

Cleaning  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**B. CHANGES:**      SUMMARIZE ANY CHANGES IN THE REGULATED PROCESSES SINCE THE LAST REPORT. ATTACH AN ADDITIONAL SHEET IF THE SPACE BELOW IS INADEQUATE. PROVIDE A NEW SCHEMATIC IF APPROPRIATE.

Stage one of the process was changed from a heated city water rinse to a 6 % magnuspray solution

\*SEE 40CFR433.10(a) FOR 40 DIFFERENT OPERATIONS

C. Number of Regular Employees at this Facility

274

D. [Reserved]

**(4) FLOW MEASUREMENT**

**INDIVIDUAL & TOTAL PROCESS FLOWS DISCHARGED TO POTW IN GALLONS PER DAY**

Process	Average	Maximum	Type of Discharge
Regulated (Core & Ancillary)	8000	12000	Batch
Regulated (Cyanide)			
' 403.6(e) Unregulated*			
' 403.6(e) Dilute			
Cooling Water			
Sanitary	3800	5000	
<b>Total Flow to POTW</b>	<b>11800</b>	<b>17000</b>	<b>*****</b>

\*"Unregulated" has a precise legal meaning; see 40CFR403.6(e).

**(5) MEASUREMENT OF POLLUTANTS**

**A. TYPE OF TREATMENT SYSTEM**

CHECK EACH APPLICABLE BLOCK

- Neutralization
- Chemical Precipitation and Sedimentation
- Chromium Reduction
- Cyanide Destruction
- Other \_\_\_\_\_
- None

**B. COMMENTS ON TREATMENT SYSTEM**

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS OF THE EFFLUENT FROM ALL REGULATED PROCESSES--CORE & ANCILLARY--(AFTER TREATMENT, IF APPLICABLE). ATTACH THE LAB ANALYSIS WHICH SHOWS A MAXIMUM; TABULATE ALL THE ANALYTICAL DATA COLLECTED DURING THE REPORT PERIOD IN THE SPACE PROVIDED BELOW. ZERO CONCENTRATIONS ARE NOT ACCEPTABLE; LIST THE DETECTION LIMIT IF CONCENTRATION WAS BELOW DETECTION LIMIT.

Pollutant(mg/l)	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CN	TTO*
Max for 1 day	0.11	2.77	3.38	0.69	3.98	0.43	2.61	1.20	2.13
Monthly Ave	0.07	1.71	2.07	0.43	2.38	0.24	1.48	0.65	--
Max Measured	<.004	<.007	.060	<.04	.35	<.007	.89	<.01	
Ave Measured									

Sample Location Clarifier Effluent

Sample Type (Grab or Composite) Grab

Number of Samples and Frequency Collected One for sample period

40CFR136 Preservation and Analytical Methods Use:  Yes  No

**(6) CERTIFICATION**

A. [Reserved]

[Reserved]

B. CHECK ONE:  '433.11(e) TOXIC ORGANIC ANALYSIS ATTACHED  '433.12(a) TTO CERTIFICATION

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to Arkansas Department of Environmental Quality.

(Typed Name)

Raymond Mc...  
(Corporate Officer or authorized representative)

Date of Signature 11/22/11

**CORPORATE ACKNOWLEDGEMENT (Optional)**

STATE OF ARKANSAS )  
COUNTY OF \_\_\_\_\_ )

Before me, the undersigned authority, on this day personally appeared

\_\_\_\_\_ of \_\_\_\_\_,  
a corporation, known to me to be the person whose name is subscribed to the foregoing instrument(s), and acknowledged to me that he executed the same for purposes and considerations therein expressed, in the capacity therein stated and as the act and deed of said corporation.

Given under my hand and seal of office on this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_.

\_\_\_\_\_  
Notary Public in and for \_\_\_\_\_  
County, Arkansas

My commission expires \_\_\_\_\_.

*\* 6602 [42 U.S.C. 13101] Findings and Policy para (b) Policy.--The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.*

The User may list any new or ongoing Pollution Prevention practices:

**(8) GENERAL COMMENTS**

**(9) SIGNATORY REQUIREMENTS [40CFR403.12(l)]**

I certify under penalty of law that I have personally examined and am familiar with the information in 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.

RAY MILLER  
NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

  
SIGNATURE

WASTEWATER TECHNICIAN  
OFFICIAL TITLE

11/22/11  
DATE SIGNED

# Arkansas Testing Laboratories

3301 Langley Drive · Searcy, AR 72143

(501) 268-6431 f(501) 268-9314

NPDES Wastewater Monitoring  
 Water and Wastewater Analysis  
 Concrete, Asphalt, and Aggregate Testing  
 Geotechnical Testing  
 Industrial and Construction Quality Control

## DEFIANCE METALS

Collection Date: October 17, 2011

Collection Time: 11:30 AM

Collected By: Carmella Simmons

## WATER ANALYSIS

Collection Place: EFFLUENT OUTFALL

KLB

Parameter	Analysis Begin Date / Time	Analysis End Date / Time	Results	Unit	Analyst	% Spike	Rel %	Sample Type	Method:
BOD	10/19 9:00 AM	10/24 9:00 AM	44	mg/l	KLB / KLB	94.9	1.38	GRAB	SM 5210 B
TSS	10/21 2:00 PM	NA	12	mg/l	MNE	NA	0.00	GRAB	SM 2540 B
pH	10/18 8:00 AM	NA	8.73	S.U.	KLB	NA	0.00	GRAB	SM 9222 D
TDS	10/21 4:10 PM	NA	1538	mg/l	KLB	NA	12.22	GRAB	SM 2540 D
OIL & GREASE	10/18 12:30 PM	NA	5	mg/l	MNE	94.9	7.51	GRAB	EPA 1664 A
COD	10/26 1:00 PM	NA	144	mg/l	KLB	106.1	0.00	GRAB	HACH 8000

### Additional Testing is attached. These results include Cyanide, Metals, Volatiles, Semi-Volatiles, Pesticides and Metals

AI CONTROL 152075

Quality Assurance: All Parameters include 10% duplication studies by random selection. The following equipment is checked and calibrated daily: pH meter, balance, incubators, water baths, drying oven and sterilizing apparatus. Ammonia Nitrogen and Oil & Grease Analysis include duplication and spike studies at a rate of at least 10%.

Notes: Samples iced at collection. Preserved with H<sub>2</sub>SO<sub>4</sub> to pH<sub>2</sub>; Oil & Grease, Ammonia, COD

  
 Neville Adams, Manager



Arkansas Testing Laboratories  
ATTN: Mr. Neville Adams  
3301 Langley Drive  
Searcy, AR 72143

This report contains the analytical results and supporting information for the sample submitted on October 21, 2011. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Laboratory Director or a qualified designee.

A handwritten signature in cursive script that reads 'Steve Bradford'.

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Steve Bradford  
Deputy Laboratory Director

This document has been distributed to the following:

PDF cc: Arkansas Testing Laboratories  
ATTN: Mr. Neville Adams  
arkatl@sbcglobal.net



Arkansas Testing Laboratories  
3301 Langley Drive  
Searcy, AR 72143

**SAMPLE INFORMATION**

**Project Description:**

One (1) water sample(s) received on October 21, 2011  
2103  
P.O. No. 2103

**Receipt Details:**

A Chain of Custody was provided. The samples were delivered in one (1) ice chest.  
Ice chest #1 was delivered with shipping documentation.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

**Sample Identification:**

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Sampled Date/Time</u>	<u>Notes</u>
152075-1	Sample #1 10-17-11 1130am	17-Oct-2011 1130	

**Qualifiers:**

- Q Analyte is not within quality control limits
- R n-Nitrosodiphenylamine cannot be separated from diphenylamine

**Case Narrative:**

Low surrogate recovery for 2,4,6-Tribromophenol is due to matrix interference.

**References:**

- "Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
- "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
- "Standard Methods for the Examination of Water and Wastewaters", 20th edition, 1998.
- "American Society for Testing and Materials" (ASTM).
- "Association of Analytical Chemists" (AOAC).



Arkansas Testing Laboratories  
3301 Langley Drive  
Searcy, AR 72143

**ANALYTICAL RESULTS**

AIC No. 152075-1

Sample Identification: Sample #1 10-17-11 1130am

Analyte	Result	RL	Units	Qualifier
<b>Total Cyanide</b> SM4500-CN C,E	<b>&lt; 0.01</b>	0.01	<b>mg/l</b>	
Prep: 24-Oct-2011 1003 by 302	Analyzed: 28-Oct-2011 1509 by 258		Batch: W37786	
<b>Cadmium</b> EPA 200.7	<b>&lt; 0.004</b>	0.004	<b>mg/l</b>	
Prep: 24-Oct-2011 1434 by 271	Analyzed: 25-Oct-2011 1610 by 297		Batch: S31109	
<b>Chromium</b> EPA 200.7	<b>&lt; 0.007</b>	0.007	<b>mg/l</b>	
Prep: 24-Oct-2011 1434 by 271	Analyzed: 25-Oct-2011 1610 by 297		Batch: S31109	
<b>Copper</b> EPA 200.7	<b>0.060</b>	0.006	<b>mg/l</b>	
Prep: 24-Oct-2011 1434 by 271	Analyzed: 25-Oct-2011 1610 by 297		Batch: S31109	
<b>Lead</b> EPA 200.7	<b>&lt; 0.04</b>	0.04	<b>mg/l</b>	
Prep: 24-Oct-2011 1434 by 271	Analyzed: 25-Oct-2011 1610 by 297		Batch: S31109	
<b>Nickel</b> EPA 200.7	<b>0.35</b>	0.01	<b>mg/l</b>	
Prep: 24-Oct-2011 1434 by 271	Analyzed: 25-Oct-2011 1610 by 297		Batch: S31109	
<b>Silver</b> EPA 200.7	<b>&lt; 0.007</b>	0.007	<b>mg/l</b>	
Prep: 24-Oct-2011 1434 by 271	Analyzed: 25-Oct-2011 1610 by 297		Batch: S31109	
<b>Zinc</b> EPA 200.7	<b>0.89</b>	0.002	<b>mg/l</b>	
Prep: 24-Oct-2011 1434 by 271	Analyzed: 25-Oct-2011 1610 by 297		Batch: S31109	
<b>Mercury</b> EPA 245.2	<b>&lt; 0.0002</b>	0.0002	<b>mg/l</b>	
Prep: 24-Oct-2011 0942 by 271	Analyzed: 25-Oct-2011 1602 by 270		Batch: S31102	
<b>Base/Neutral and Acid Compounds By EPA 625</b>				
<b>Acenaphthene</b> EPA 625	<b>&lt; 10</b>	10	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>Acenaphthylene</b> EPA 625	<b>&lt; 10</b>	10	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>Anthracene</b> EPA 625	<b>&lt; 10</b>	10	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>Benzidine</b> EPA 625	<b>&lt; 50</b>	50	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>Benzo(a)anthracene</b> EPA 625	<b>&lt; 5.0</b>	5.0	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>Benzo(a)pyrene</b> EPA 625	<b>&lt; 5.0</b>	5.0	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>Benzo(g,h,i)perylene</b> EPA 625	<b>&lt; 20</b>	20	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>Benzo(k)fluoranthene</b> EPA 625	<b>&lt; 5.0</b>	5.0	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>3,4-Benzofluoranthene</b> EPA 625	<b>&lt; 10</b>	10	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>bis(2-Chloroethoxy)methane</b> EPA 625	<b>&lt; 10</b>	10	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	
<b>bis(2-Chloroethyl)ether</b> EPA 625	<b>&lt; 10</b>	10	<b>ug/l</b>	
Prep: 24-Oct-2011 0911 by 100	Analyzed: 27-Oct-2011 2025 by 293		Batch: B7236	

152075

# Arkansas Testing Laboratories

3301 Langley Drive  
Searcy, AR 72143  
Off 501-268-8431  
Fax 501-268-9314

\*NPDES Wastewater Monitoring  
\*Water and Wastewater Analysis  
\*Concrete, Asphalt, and Aggregate Testing  
\*Geotechnical Testing  
\*Industrial and Construction Quality Control

## CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

CLIENT: ARKANSAS TESTING LAB				PO #		REF #		PARAMETERS				
SAMPLE ID EFF INF CLAR POND BACKWASH	SAMPLE MATRIX W=H2O S=SLUDG D=SOIL C=WELL	SAMPLED BY:		DATE	TIME	HNO3	NaOH	HCl	PRESERVATIVES		NP	
		C.S.	C.S.						Volatiles	Pesticides		
Sample #1	W			10-17-11	11:30am							

# = number of bottles Q, L, H = Quart, Liter, Half Gallon P, G = Plastic, Glass  
 Relinquished by: [Signature] Date/Time: 10-20-11 4:00 pm  
 Received by: [Signature] Date/Time: 10-21-11 10:30 am

UPDS # 1 Z 1287 R5 0395983261