

ADEQ

ARKANSAS
Department of Environmental Quality

December 19, 2011

Carmela Simmons
Safety/Project Engineer
Defiance Metal Products
944 By Pass Road
Heber Springs, AR 72543

Re: Defiance Metal Products (ARP001047) Compliance Assurance Visit; City of Heber Springs
(NPDES #AR0022381)

Dear Ms. Simmons,

Under 40 CFR 403.8(f)(2)(v), "[ADEQ will] Randomly sample and analyze the effluent from Industrial Users and conduct surveillance activities in order to identify, independent of information supplied by Industrial Users, occasional and continuing noncompliance with Pretreatment Standards..."

On 11/9/11, a compliance assurance visit (CAV) was conducted by ADEQ Pretreatment personnel at your facility. A grab sample was taken at your discharge point to the City. This grab sample was deemed representative of wastewater discharged to the City's sewage treatment system.

ADEQ's laboratory analysis indicated your facility is in compliance with the Metal Finishing Standards in 40 CFR 433.17 (see Attachment A-2).

The compliance assurance visit indicated Defiance Metal is in compliance with the Federal Pretreatment Regulations in 40 CFR 403 and the Metal Finishing (Pretreatment) Standards in 40 CFR 433.17.

Recommendations and Concerns

- 1) Defiance utilizes a standard chemical precipitation system to treat its regulated wastewater to comply with the Metal Finishing Standards in 40 CFR 433.17.

It is this office's understanding "chemical precipitation is a method of causing contaminants that are either dissolved or suspended in solution to settle out of solution as a solid precipitate, which can then be filtered, centrifuged, or otherwise separated from the liquid portion...insoluble metal sulfides can be formed with the addition of ferrous sulfate and lime. Once rendered insoluble, these compounds will tend to precipitate and settle." (excerpt from USEPA doc. #832-F-00-018 dated 9/02).

During the CAV it was observed a portion of the "floc" was not settling, but floating on top of the clarifier to the point of plugging/pushing through many of the port holes feeding the sample trough. Pictures of the clarifier (Attachment A-1) taken during the 11/09 CAV revealed clear supernatant above the clarifier plates.

Submit an explanation in writing within thirty (45) days from the date of this correspondence if Defiance Metal's chemical precipitation system is operating as designed or provide a reason why it is not. If it is not operating as designed please outline corrective actions.

You had mentioned there had been some process chemical changes since the last CAV. Could these changes cause the floc not to settle without the proper polymer mix?

- 2) Sample taking from the 3" hole in the trough above the clarifier (page 2 of Attachment A-1) is not an ideal sampling point. Holding a sample bottle using a finger inside the bottle itself (to keep it from falling into the discharge pipe) could lead to contamination/violations. Danger of dropped/lost sample bottles in this hole is also a concern.

It is advised to research the plumbing system downstream of this discharge pipe (somewhere near the flow meter?) to ascertain if there can be modifications made to accommodate a safer, contamination-free sampling point.

This office appreciates your open and cooperative attitude in sharing Defiance Metal's process and Pretreatment information during and after the compliance assurance visit.

Please keep this and all Pretreatment correspondence on file for future reference.

If there are further questions or comments, please feel free to contact this office at (501) 682-0625 or electronically at gilliam@adeq.state.ar.us.

Sincerely,



Allen Gilliam
ADEQ State Pretreatment Coordinator

Attachments: "Pretreatment Industrial Inspection" (CAV), picture of clarifier/sampling point and ADEQ's lab analysis for 40 CFR 433 metals

cc: Donald Knight - General Manager, Heber Springs Wastewater, 1108 West Front Street
Heber Springs, AR 72543

Pretreatment Industrial Inspection


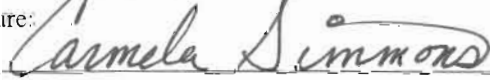
Facility Information

Facility Name: Defiance Metal Products	Site Address: 944 By Pass Road Heber Springs, AR 72543
Signatory Authority (Name & Title): Devin McSpadden / Plant Manager	
Phone: 501.362.1919	Mailing Address (if different):
Fax: 501.362.6160	
Address: same	Corporate Owner Name and address (if applicable): Defiance Metal Products
Contact Person (Name & Title): Carmela Simmons Safety Engineer / <i>Project Engineer</i>	Phone:
Phone: 501.887.4756	Fax:
Fax: 501.362.2214	Corporate CEO:
e-mail: csimmons@defiancemetals.com	e-mail:
Facility Tracking #ARP001047; AFIN #1200214	Last Inspection Date: 11/4/09
POTW (City) IU discharges to: Heber Springs (NPDES #AR0022381)	
Industrial Classification:	<input checked="" type="checkbox"/> Categorical <input type="checkbox"/> Significant
If Categorical, list which CFR #(s) the facility is subject to: 40 CFR 433.17 (Metal Finishing PSNS)	

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A. General Information	
B. Facility Permits	
C. Additional Comments	
III. Attachments "Yes" indicates item exists at the facility and attachments will be included "No" indicates item does not exist at the facility and attachments aren't necessary	
A. Industrial Processes	yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Page 5 of 10
B. Pollution Prevention Activities	yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Page 6 of 10
C. Pretreatment System	yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Page 7 of 10
D. Chemical Storage	yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Page 8 of 10
E. Spill/Slug Control Plan	yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Page 9 of 10
F. Self-Monitoring/TOMP	yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Page 10 of 10

Comments :

Inspector's Name (Print): Allen Gilliam	Signature: 
IU Rep's Name (Print): <i>CARMELA SIMMONS</i>	Signature: 
Date and Time Inspection Ended: 11/9/11 @ 3:00pm.	

I. Summary of Inspection

A. Inspection and Objective (Complete Before Inspection)

<input type="checkbox"/> Permit Renewal	<input checked="" type="checkbox"/> Bi-Annual	<input type="checkbox"/> Spill/Slug	<input type="checkbox"/> Unscheduled
<input type="checkbox"/> New Construction	<input type="checkbox"/> Noncompliance	<input type="checkbox"/> Follow-up	<input type="checkbox"/> Complaint

Inspection Objective(s): Compliance assurance visit (CAV) with sampling and process walk-through to verify facility file information.

Checklist of items to be reviewed and/or visually inspected:

<input checked="" type="checkbox"/> Pre-inspection Meeting	<input type="checkbox"/> Permit Conditions	<input checked="" type="checkbox"/> Safety Concerns
<input checked="" type="checkbox"/> Process Inspection	<input checked="" type="checkbox"/> Pretreatment Process	<input checked="" type="checkbox"/> TOMP
<input checked="" type="checkbox"/> Chemical Storage	<input checked="" type="checkbox"/> Discharge point(s)	<input checked="" type="checkbox"/> Spills/Slug Control Plan
<input checked="" type="checkbox"/> Records Review	<input type="checkbox"/> RCRA information	<input checked="" type="checkbox"/> Process/Flow/Pretreatment Schematics
<input checked="" type="checkbox"/> IU sampling procedures	<input type="checkbox"/> Flow/pH Meter(s)	<input type="checkbox"/> Calibration Records
<input checked="" type="checkbox"/> MSDS Inventory List	<input type="checkbox"/> New MSDS	<input type="checkbox"/>

Comments: Ray Miller ("E-Coat & Water Technician") accompanied Carmela and this inspector during the walk-through site visit. Ray was very conversant in both systems' operations and wastewater flows.

B. Inspection Analysis

Were there any deficiencies/violations identified and noted during the inspection? Yes No

Provide a brief narrative of deficiencies/violations or other concerns- any comments in the following areas:

Records Review: A narrative process and pretreatment description cannot be located in this inspector's file.

Process Area(s): Clean and orderly.

Pretreatment System: Not all of the floc was dropping to the bottom of the clarifier. Some of the floating floc had plugged numerous holes which allow treated water to enter the sampling trough. See Attachment A-1 for pictures of the clarifier in operation back in 11/09. No floating floc was seen during that year's CAV. This raises the question of whether the pretreatment system is currently being well maintained and operated. "Scooping" out floc was not mentioned during the 11/09 CAV.

Self-Monitoring/Reporting Procedures: See Attachment A-1. Sampling point is a downward vertical entrance to a 3" pipe in the middle of the trough in which supernatant from the clarifier is fed. Taking samples at this point is difficult as sample bottles cannot be easily inserted into the pipe to capture an uncontaminated sample without placing a finger inside the sample bottle itself to hold the container from dropping into the 3" hole. If at all possible, a different sample point should be identified or the current one somehow re-configured.

Spill/Slug Control Plan: Slug control plan determined not necessary. No slug discharge potential identified.

Sampling Point: See above remarks about "Self-Monitoring Procedures".

Chemical Storage: Adequate, no comment.

II. Pre-Inspection Meeting**A. General Information**

Date and Time Inspection Started: 11/9/11 @ 8:05 a.m.		SIC/NAICS code(s): 3469/32551 & 332116	
IU Reps/Titles: Carmela Simmons / Safety Engineer & Ray Miller / Wastewater Technician		ADEQ Reps/Titles: Allen Gilliam / State Pretreatment Coordinator	
End product(s): Metal parts for buses and trucks		Approx. 180,000 "equivalent units"/month produced.	
Days of Operation: 7		Days of Production (if different): same	
Hours of Operation: 24		Hours of Production (if different): same	
Shift 1, hrs.: 6 a.m. to 2 p.m.	Shift 2, hrs.: 2 p.m. to 10 p.m.	Shift 3, hrs.: 10 p.m. to 6 a.m.	
# of Employees: ~300	Peak Mos.: Feb. thru June	"Off" Mos.: July thru ~Dec	
Are there any scheduled plant shutdowns? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> If yes, when? "possibly for Christmas".			
Are there designated plant clean-up days? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> If yes, when?			
Is the facility currently in compliance with all pretreatment reporting requirements and limits? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>			
If No, explain: No narrative process description could be located in ADEQ's files. Facility rep. needs to submit a narrative description of processes and pretreatment system [per 40 CFR 403.12(b)] to "match-up" with the flow schematic. It is not known if a process narrative had been previously submitted and subsequently removed from this office's file.			
Are there any Special Entry Procedures for the Discharge/Sample point locations? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
If Yes, explain: Inspector must contact facility representative as an escort to the pretreatment system and sampling point.			
Are there any Safety Concerns or Identified Hazards that the inspector should be aware of: <input checked="" type="checkbox"/> Yes. <input type="checkbox"/> No			
If Yes, explain: Eye and ear protection is required as well as steel-toed boots. There are physical and chemical hazards throughout the process/pretreatment areas.			
Has there been any changes since the last inspection regarding the following items:			
Plant/flow/process layout? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, obtain copy of updated schematic for facility file.			
Processes? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, explain: Facility has changed the first stage of their process from a hot city water bath to a Magna spray solution.			
Production Levels? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, explain: There has been an increase in customer orders.			
Raw materials? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, explain:			
Flow rates? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, explain:			
Are regulated and non-regulated wastestreams combined? yes <input type="checkbox"/> no <input checked="" type="checkbox"/>			
Prior to Pretreatment System? yes <input type="checkbox"/> no <input type="checkbox"/> N/A <input checked="" type="checkbox"/>			
If Yes, was the CWF used to calculate limits? yes <input type="checkbox"/> no <input type="checkbox"/> N/A <input checked="" type="checkbox"/>			
Prior to connection to the POTW sanitary sewer? yes <input type="checkbox"/> no <input type="checkbox"/> N/A <input checked="" type="checkbox"/>			
At connection to sanitary sewer? yes <input checked="" type="checkbox"/> no <input type="checkbox"/> N/A <input type="checkbox"/>			
What is the current avg. process flow? 8,000 to ~12,000 gpd from last (5/17/11) semi-annual report.			

B. Facility Permits

Permit / ID Type	Permit / ID No.	Expiration Date
Air	N/A	
RCRA	ARR000009480	"inactive"
NPDES (stormwater)	ARR000444 (general)	6/30/14
NPDES (Pretreatment)	ARP001047	Tracking # only

C. Additional Comments

(Note which section or attachment comments are regarding)

Attachment C: Pretreatment System: See Attachment A-1 from 11/09 CAV. There is no floating "floc" rising to the top of the clarifier unit. Upon viewing the same system during this site visit, there was a mass of "floc" floating above the clarifier plates to the point of plugging ~1/3 of the small port holes which feed into the discharge trough from which samples are taken. The chemical precipitation system/clarifier is meant to help the "floc" settle to the bottom for feed to the sludge holding tank. This brings into question whether the pretreatment system is being operated and maintained as designed. Ray mentioned the "floc" is just scooped off the top of the clarifier with a half-cut plastic jug. It was pointed out the "floc" pushing its way into the trough could contaminate the samples.

Attachment A: Industrial Process(es)

List process(es) generating wastewater. Note if it's categorical (federally regulated w/pretreatment limits) or not

1. Cleaner Bath	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	4. Zn Phosphate rinse	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. City water rinses	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. De-I water rinse	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3. Rinse conditioner	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	6.	Yes <input type="checkbox"/> No <input type="checkbox"/>

Were processes visually inspected? Yes No N/A

Brief description of process(es): Process steps includes: 1) a 6% Magna spray cleaner bath; 2) 7-10% Magna spray cleaner bath; 3) a city water rinse; 4) rinse conditioner bath; 5) heated Zn Phosphate; 6) city water "halo" rinse; 7) city water rinse; 8) non-chrome sealer (w/air knives for minimizing drag-out); 9) countercurrent De-I water rinse; 10) city water "halo rinse"; 11) sloped (~10' to 12' deep) dip paint tank w/~20% E-Coat (positive charged black paint in De-I water); 12 & 13) two permeate rinses; 13) a final De-I water rinse followed by an air knives to reduce dragout.

Then parts are sent through a cure oven (375 F) for about 26 minutes for the finished product. Parts are subjected to gradually increasing temperatures causing them to be dried off and finally "cured" in the hottest part of the oven and then sent through a cooling tunnel.

Tanks #3 and #6 (some rinse water from #6 is also counter current flowed) are continuously overflowed to below grade grated troughs to the below grade mixing sump, then to pretreatment or holding tanks. Rinses #6 (some of), #9 and #13 are counter-current flowed back to previous bath for make-up water.

Facility has scheduled tank "dumps" for all of the above.

Bag filters (25 to 50 micron, depending bath/rinse) are used to help keep some of the baths, rinses and E-coat paint filtered for maximum usage and longevity.

Wastewater storage tanks are used when the pretreatment system is not in operation. Wastewater is pretreated usually from about 5 a.m. till about 5:30 p.m.

They have a vibratory tumbler with ceramic media and soapy water used on raw material. The volume discharged was not determined, but it does drain to the same below grade grated trough which gravity feeds into the below grade mixing sump prior to pretreatment.

Good pollution prevention (P2) is being practiced with counter-current flows, air knives, in-process filtration and "halo" rinses.

The process and pretreatment "room" is surrounded by a 4" curb keeping all process, rinses and pretreatment wastewater contained in case of a spill.

Other non-wastewater generating operations include machining, forming, welding and assembly.

General observations of facility's indoor housekeeping: Overall, clean and uncluttered. No mist or smoke filled areas observed.

General observations of area outside facility's building: Overall, clean and orderly.

Check all sources of wastewater being discharged into the City's collection system. Indicate avg. gal/day, measured estimated. If batch discharged, list frequency and volume (1000 gal/month, e.g.).

<input checked="" type="checkbox"/> Process Rinse Overflows ~3,000 gpd continuous	<input type="checkbox"/> Equip. Cleanup	<input checked="" type="checkbox"/> Floor Cleanup "negligible"	<input checked="" type="checkbox"/> Spent Bath Solutions ~3,000 gallons batch discharged weekly.
<input type="checkbox"/> Product Cleaning	<input type="checkbox"/> Forklifts Maint./Wash	<input checked="" type="checkbox"/> Tank Dragout "negligible"	<input type="checkbox"/> Air Pollution Devices
<input type="checkbox"/> Boiler Blowdown	<input checked="" type="checkbox"/> Spent Rinse Tanks Batch discharge ~3,000/week	<input type="checkbox"/> Equipment Coolants	<input type="checkbox"/> Non-Contact Cooling Water
<input type="checkbox"/> Stormwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

List Major Raw Materials and Chemicals used: Cold and hot rolled steel, some aluminum; very little galvanized material; Sodium Metasilicate; Sodium Tripolyphosphate; Zinc phosphate; Manganese Phosphate, Zinc Nitrate; Nickel Nitrate; Triethanolamine, Nitric Acid and Hydrofluozirconic Acid

Check Waste Stream Pollutants of Concern from Process(es):

<input checked="" type="checkbox"/> pH	<input checked="" type="checkbox"/> CN	<input checked="" type="checkbox"/> Metals (List) All 40 CFR 433 metals	<input type="checkbox"/> Solvents (List) Facility submitted an approvable TOMP dated 6/29/09.
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Are there floor drains in the Process area? Yes No If yes list number and the location of all floor drains:

Attachment B: Pollution Prevention (P2) / Recycling Activities

Does the facility have a written P2 Plan? Yes No

Does this facility practice P2? Yes No

Environmental Management System in place? Yes No

ISO Certified? (9001) Yes No

Written Standard Operating Procedures? Yes No

Explain: Facility follows Technical Spec. #16949 (automotive sector-specific Quality Management System)

Preventative Maintenance Program Yes No (hydraulic systems, valves, pumps, etc)

Explain: They have a scheduled program.

Water Reuse: Yes No

Explain: They utilize counter-current flows in their process and small volume "halo" spray rinses.

Cost Accounting to Track Savings: Yes No

Explain: Facility employs a Superior Performance and Rewards through Communications (SPARC) in-house program. Process improvement teams have to work on at least one process improvement activity per quarter. They have 7 different areas they concentrate on.

Inventory Control / "Green Purchasing": Yes No (lean manufacturing/"env. friendly purchasing", etc)

Explain: "SPARC" program.

Employee Training: Yes No

Explain: Scheduled employee training for safety, quality and production processes.

Spent Solvent Reclamation? Yes No

Explain: It is a non-hazardous solvent, but they do have it hauled off-site for blending as a fuel supplement. "Probably referring to the DP90IF paint"

Recycle Paper, Aluminum, Steel, Boxes, and Pallets? Yes No

Explain: All the above except paper was mentioned. They have an in-house cardboard compactor.

Recycle Waste Oil, Solvents, and Lubricants? Yes No

Explain: Facility recycles waste oil. Non-hazardous "solvent" is hauled off every ~three months.

Other Activities

P2 Equipment/Practices in use:

<input type="checkbox"/> Overflow Alarms	<input type="checkbox"/> Aqueous Cleaning Solutions
<input checked="" type="checkbox"/> De-I water "halo" misting rinse stages (0.2 gpm); low volume-hi pressure	<input checked="" type="checkbox"/> Countercurrent Rinsing
<input checked="" type="checkbox"/> Dragout Collection Trays	<input type="checkbox"/> Seal-Less Pumps
<input checked="" type="checkbox"/> Air Knives to Reduce Drag-out	<input checked="" type="checkbox"/> Secondary Containment of Process Solutions
<input type="checkbox"/> Aqueous Paint Stripping Solutions	<input type="checkbox"/> Bead Blasting to Remove Paint
<input checked="" type="checkbox"/> Water Soluble drawing compounds in press room	<input type="checkbox"/> Recycle Overspray
<input type="checkbox"/> In-Process Recycle (Ion Exchange, Reverse Osmosis)	<input checked="" type="checkbox"/> Conductivity Meters
<input type="checkbox"/> Dead Rinse Tanks	<input checked="" type="checkbox"/> Bath / Rinse Filtration (bags/filters)

Attachment C: Pretreatment System

Are wastestreams segregated before pretreatment? Yes No N/A

Are they pretreated prior to discharge to the sanitary sewer? Yes No N/A

Was the pretreatment system visually inspected during this visit? Yes No N/A

Check which of the following are utilized for pretreatment prior to discharge to sanitary sewer:

<input type="checkbox"/> Dissolved air floatation	<input type="checkbox"/> Membrane Tech.	<input type="checkbox"/> Ion Exchange	<input type="checkbox"/> Biological Treatment
<input type="checkbox"/> Centrifugation	<input checked="" type="checkbox"/> Flow Equalization	<input type="checkbox"/> Ozonation	<input type="checkbox"/> Chlorinating
<input checked="" type="checkbox"/> Chemical Precipitation	<input type="checkbox"/> Oil/Water Separation	<input type="checkbox"/> Reverse Osmosis	<input type="checkbox"/> Grit Removal
<input checked="" type="checkbox"/> Sludge Filter Press	<input type="checkbox"/> Grease Trap	<input type="checkbox"/> Screen	<input type="checkbox"/> Solvent Separation
<input checked="" type="checkbox"/> pH Adjustment	<input type="checkbox"/> Sand Trap	<input type="checkbox"/> Sedimentation	<input type="checkbox"/>
<input type="checkbox"/> Belt/Disk Oil Skimmer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Provide Brief Description of Pretreatment System (leaks, cleanliness, equipment not in working order): Need a more detailed narrative of the process and the pretreatment system with actual chemicals (not trade names) used.

All regulated process w.w. is pumped into one of 4 holding tanks and then into a below grade concrete sump (~6' wide X 8' length X 4' deep - where sulfuric acid and ferric chloride is mixed). From there the w.w. is pumped into mixing tank where pH is auto-adjusted, polymer mixed-in, then flows to the clarifier to facilitate flocculation/settling. Floc overflows into another sludge thickening tank which feeds their filter press. Sludge is sent off-site as a non-hazardous waste. Excess fluid from sludge press is sent back to the concrete sump. From the clarifier, the water is discharged to the City sewer after any necessary pH adjustment.

During this site visit "floc" was observed floating above the clarifier to the point of plugging a good percentage of ports feeding the sampling trough. It was this inspector's opinion the pretreatment system was not being operated and maintained properly although Ray did not indicate otherwise. The previous CAV in 11/09 showed no floating floc whatsoever (see Attachment A-1). During this CAV, floc had actually pushed its way through many ports which could lead to contamination of any samples taken.

All equipment appeared clean with no leaks observed, no rusting supports and good paint protection. Ray is on duty when the pretreatment system is in operation. The pretreatment system is not operated during all 3 shifts. Facility has enough holding capacity for the other 2 shifts' wastewater.

Does the description match the schematic currently on file? Yes & No

System Operator(s) Name: Ray Miller

Is the System Operator(s) licensed by the State of Arkansas? Yes No N/A

List Name(s) and License classification: Basic Industrial Wastewater License

Is training provided to the Pretreatment System Operator(s)? Yes No N/A

If Yes, list type and frequency: Ray will have to have 12 more hours of training completed by June '13.

Is the discharge from the Pretreatment System? Batch* Continuous Combination (*during one shift)

If any discharges are batch type or combination, describe the following:

Volume of each batch: ~8,000 to 12,000 gallons per one daily shift.

Describe process from which batch originated (spent bath, e.g.): All process rinses overflow and batched discharged baths are commingled in below grade concrete holding pit or storage tanks, then pumped up to their pretreatment system.

Approximate duration of batch discharge:

Meter Type	Calibration Procedure and Frequency	Comments (Totalizer Reading)
In-line "GPI" totalizer (made in Wichita, KS)	Not determined/discussed	

Attachment D: Chemical Storage Area(s)

Does the facility have a designated chemical storage area(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Was this area(s) visually inspected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Describe Chemical Storage Area(s)	Are there floor drains in this area?	If yes, where does this drain lead to?
1. Bulk chemical storage area is fenced in with all barrels stored on top of grated holding containers	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Pretreatment <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer
2. Various work (Zn phosphate, eg) stations had some chemicals stored next to work area, but were out of areas of traffic	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Pretreatment <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer
3.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Pretreatment <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer
4.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Pretreatment <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer

Does the Chemical Storage Area(s) contain any of the following?

<input type="checkbox"/> Dikes, Berms for Containment	<input type="checkbox"/> Plugs for Floor Drains
<input type="checkbox"/> Secondary Tanks for Holding	<input type="checkbox"/> Premix (low) Concentrations
<input checked="" type="checkbox"/> Alarms	<input type="checkbox"/> Chain restraints, limited access
<input checked="" type="checkbox"/> Spills Control Kits for Cleanup	<input type="checkbox"/> Notification Procedures
<input type="checkbox"/> Chemical desegregation within Storage Area	<input type="checkbox"/> Other

Chemical Inventory List (MSDS) on file?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Were any new MSDS reviewed during the Inspection?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A

If yes, list below: Facility rep. made them available, but time constraints did not allow for a thorough review.

Chemical storage comments: Volume (small) of chemicals stored, size of building and configuration of process/pretreatment area would preclude any massive slug from entering City's sewer system.

Chemical handling procedures (totes, dolly, buckets, hardline, etc): Basically, all these practices are used depending on volumes to be transported and which workstation the chemicals are to be used.

Attachment E: Spill/Slug Control Plan

Does the facility have a Spill/Slug control plan? <i>Slug discharge potential determined negligible.</i>	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If yes are the following: 403.8(f)(2)(v)(A-D) requirements in place?	
(A) Describes discharge practices including non routine batch (slug) discharges	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A
(B) Describes storage and handling of chemicals	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A
(C) Procedures for immediate notification to POTW of slug discharges	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A
(D) 1. Describes measures for controlling toxic/hazardous pollutants	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A
2. Describes procedures and equipment for emergency response	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A
3. Describes follow-up to limit damage suffered by POTW or environment	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A
4. Does the facility have Spill/Slug Notification Procedures posted?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> N/A
5. Are worker personnel provided training in the event of a spill or slug discharge?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> N/A
If no:	
Does the facility have Spill/Slug Notification Procedures posted?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Is it posted in areas where chemicals are used and stored?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If Yes how many?	
Are appropriate personnel provided training in the event of a spill or slug discharge?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Has there been any non-routine, episodic discharges or chemical spills in the past year?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
(Briefly Describe, Include Dates)	
Was the City notified of these occurrences? <input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A	
Visual Inspection of Discharge Lines/Points	
Provide description of manhole condition and flow channel of the following where applicable:	
Sampling / Monitoring Point: Sampling point is a ~3" hole in the middle of a hanging metal trough in the clarifier. Water from the final clarifier enters the trough through numerous holes which drain to this 3" hole (see Attachment A-1 from previous 11/09 CAV). Observations of the trough this CAV revealed floating floc on top of the clarifier actually plugging port holes into the sampling trough.	
Total Flow Monitoring Point: In-line flow meter.	
Upstream Manhole: N/A	
Point of Connection: 3" hole (in trough with clarifier supernatant spilling into) drops straight down into connection to City sewer system.	

Attachment F: Self-Monitoring & if CFR 433, TTO/TOMP Requirements

Have Operator (or person collecting the sample) to describe how composite and grab samples are collected and preserved. Record descriptions. Include name of individual and title.

Samples are taken from inside the 3" hole in the clarifier's trough. Wide-mouth sample bottles could not be used. Facility rep indicated he holds his sample bottles with a finger inside the sample bottle itself. Contamination was discussed.

Where is the sample point located?

<input type="checkbox"/> End of Process	<input checked="" type="checkbox"/> Pretreatment Effluent	<input type="checkbox"/> Total Flow
<input type="checkbox"/> Combined Flow	<input type="checkbox"/> Metered Flow	<input type="checkbox"/> Flow Actuator
<input type="checkbox"/> Private Manhole	<input type="checkbox"/> Utility Manhole	<input type="checkbox"/> Advance Notice Required
<input type="checkbox"/> Safety Hazards Identified	<input type="checkbox"/>	<input type="checkbox"/>

Is the Sample Collection Site Adequate? Danger of sample bottles dropping into sampling "hole" without placing a finger inside of the bottle itself possibly causing contamination. Yes No N/A

Does the facility rep. request a split sample on this sampling/inspection? Yes No

Does the facility perform self-monitoring tests in-house? Yes No N/A

If no, record the name and address of Contract Lab: Arkansas Testing Labs in Searcy

Automatic Sampler or Manual

IU Self-Monitoring Results reviewed: Yes No N/A

Is the Contract Lab certified by ADEQ for test parameters? Yes No N/A

Facility has its own AA Flame unit they're going to start using for compliance.

Dates and Times of Sample Analysis Recorded? Yes No N/A

Correct Methods Used for Test Analysis (Refer To 40CFR Part 136) Yes No N/A

EPA recommended holding times being met (Refer to 40CFR Part 136) Yes No N/A

Chain of Custody Records for Self-Monitoring Samples Reviewed Yes No N/A

Were correct Sample Types Collected (grabs) Yes No N/A

Dates and times of Sample Collection Recorded? Yes No N/A

Were Samples preserved correctly (refer to 40CFR Part 136) Preservatives not recorded, but assumed "yes" since bottles came from a certified lab Yes No N/A

Were Self Monitoring records on file for past 3 years? Yes No N/A

List the parameters the facility monitors and the frequency: Very frequently they use their in-house AA unit to test for Zn, but send samples to certified lab for their semi-annual reports to ADEQ.

<input checked="" type="checkbox"/> Cd(t)	<input checked="" type="checkbox"/> Cu(t)	<input checked="" type="checkbox"/> Cr(t)	<input checked="" type="checkbox"/> Ni(t)	<input checked="" type="checkbox"/> Pb(t)
<input checked="" type="checkbox"/> Ag(t)	<input checked="" type="checkbox"/> Zn(t)	<input type="checkbox"/> pH	<input checked="" type="checkbox"/> CN(t)	<input type="checkbox"/> CN(a-c)
<input type="checkbox"/> TTO-Vol	<input type="checkbox"/> TTO-B/N	<input type="checkbox"/> TTO-A.E.	<input type="checkbox"/> TTO-Pest	<input type="checkbox"/> Cr(hex)

TOMP submitted/approved on 6/29/09.

Toxic Organic Management Plan (TOMP) for Metal Finishers under CFR 433

How does the IU report TTO? Analysis Certification Statement (TOMP submitted/approved ~6/09)

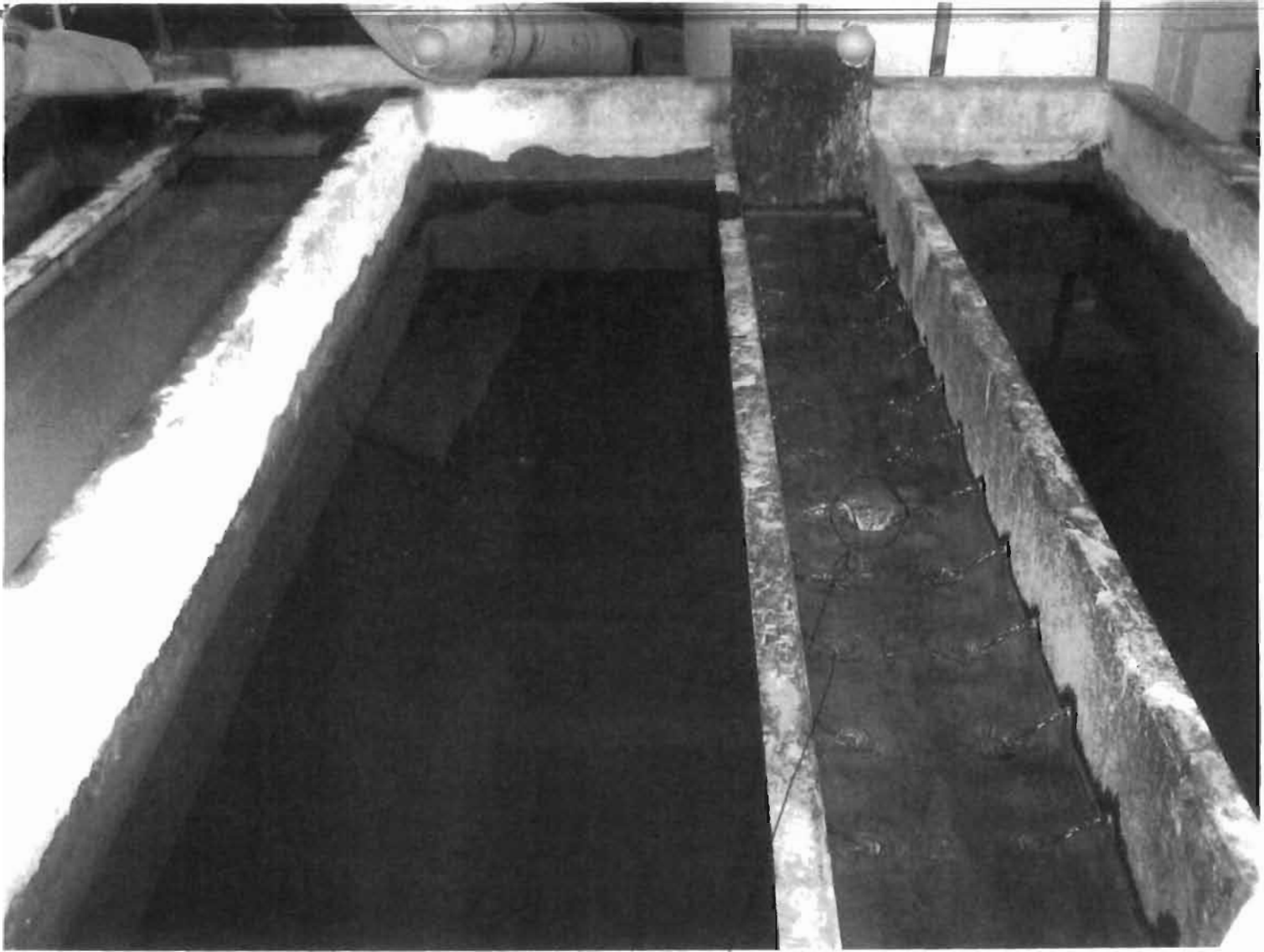
Does the facility have a Toxic Organic Management Plan? Yes No N/A

If yes, Does the plan show how toxic organics are used, stored, and disposed? Yes No N/A

List the date of the last revision to the TOMP: 6/29/09

Is the TOMP being followed as written? Yes No N/A (If no, provide explanation in comments.)

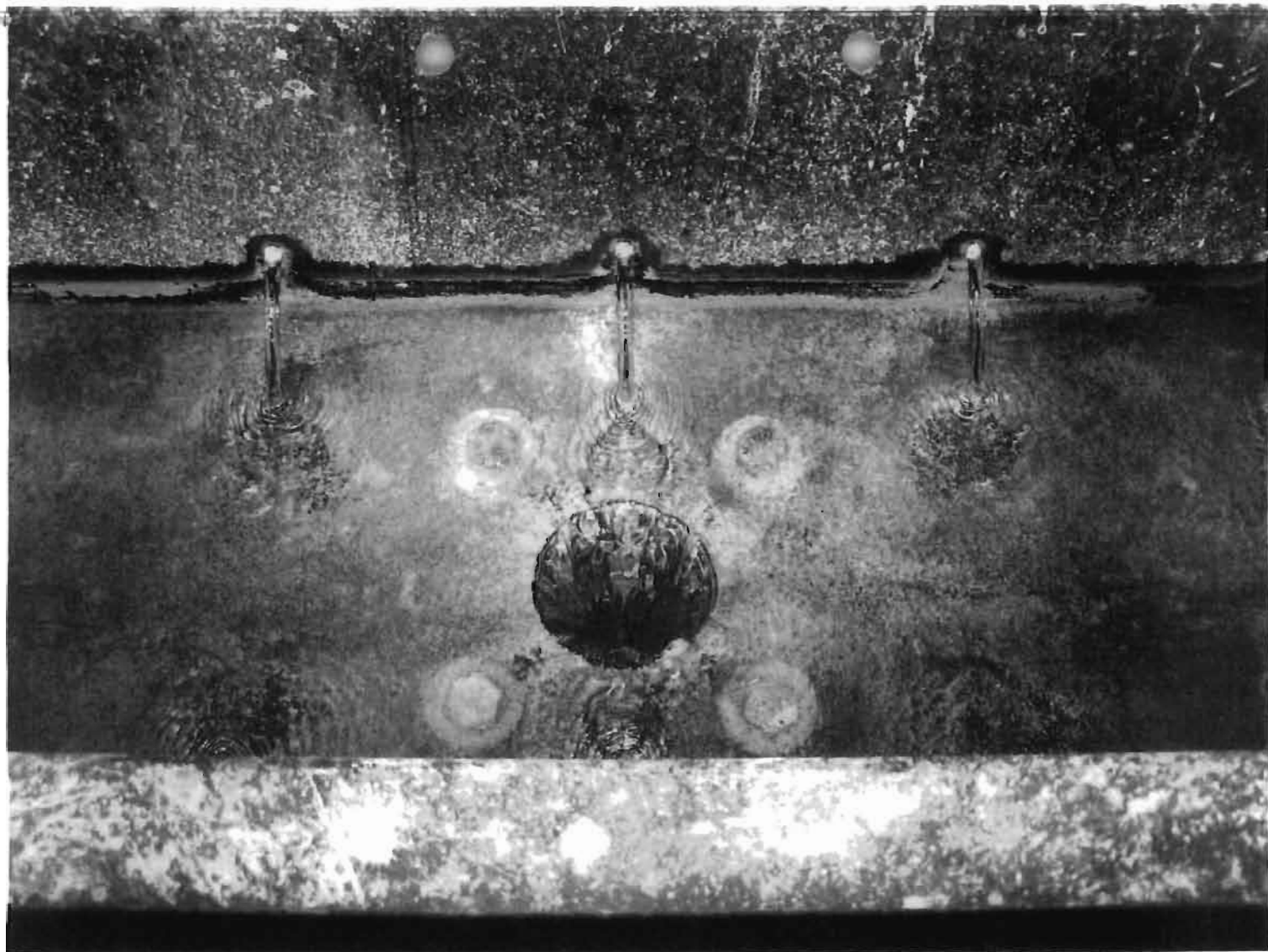
Comments: It is doubtful any of facility's toxic organics (few to begin with) could enter the sewer system in toxic amounts the way the facility is handling them.



At elevation
Sample point
1/100
#

Location to - 1/100

Attachment A-1



Close up of sample 1

Attachment A-2

Arkansas Department of Environmental Quality
 5301 Northshore Drive
 North Little Rock, AR 72118

Laboratory Contact: Jeff Ruehr
 Ruehr@adeq.state.ar.us
 501-682-0955

Client: Special Samples **Client Sample ID:** DMP # 1 Discharge Tank
Lab ID: 2011-3510 **Collection Date:** 11/9/2011 9:04:00 AM
Matrix: Water

Analyses

<i>Total Metals by EPA 200.8</i>	<i>EPA 200.8</i>	<i>Batch: 11112201 Run: 1</i>			
	Result	Reporting Limit	MDL	Qual	Unit
Aluminum	<100	100	20		ug/L
Antimony	<50.0	50.0	5		ug/L
Arsenic	12.6	5.00	0.5		ug/L
Barium	<50.0	50.0	2.0		ug/L
Beryllium	<2.5	2.5	0.1		ug/L
Boron	230	125	5.0		ug/L
Cadmium	<5.00	5.00	0.3		ug/L
Calcium	64.0	0.2	0.04		mg/L
Chromium	7.26	5.00	0.3		ug/L
Cobalt	7.12	5.00	0.5		ug/L
Copper	287	5.00	0.5		ug/L
Iron	5460	100	10.0		ug/L
Lead	<5.00	5.00	0.1		ug/L
Magnesium	1.71	0.5	0.1		mg/L
Manganese	540	5.00	0.2		ug/L
Nickel	930	12.5	0.5		ug/L
Potassium	810	5.00	0.05		mg/L
Selenium	<10.0	10.0	0.5		ug/L
Silver	<25.0	25.0	1.0		ug/L
Sodium	877	0.2	0.02		mg/L
Thallium	<12.5	12.5	0.05		ug/L
Vanadium	<12.5	12.5	1.0		ug/L
Zinc	808	15.0	2.0		ug/L
Dilution Factor	1.00				
Analyzed By	Joe Semberski				
Analysis Date/Time	Nov 21 2011 2:21PM				
Prep By					
Prep Date/Time					