ADEQ

A R K A N S A S
Department of Environmental Quality

October 26, 2011

Brian Niswonger
President
Industrial Metal Finishing Inc. #2
P.O. Box 326
Pocahontas, AR 72455

Re: Industrial Metal Finishing Inc. #2 (IMF #2) Pretreatment Compliance Assurance Visit-CAV (ARP001024; Walnut Ridge #AR0046566)

Dear Mr. Niswonger,

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..."

Please find attached the completed CAV conducted at your facility on 10/18/11. Your facility appears to be compliant with the categorical Metal Finishing pretreatment requirements under 40 CFR 433.

There were no production operations ongoing the day of the CAV; therefore, no regulated/pretreated wastewater could be sampled. As such, compliance with the Metal Finishing (40 CFR 433.17) numeric limitations could not be ascertained.

The remaining paperwork required under 40 CFR 433 was found to be in order and accurate. Your toxic organic management plan (TOMP) has been submitted and approved on 9/1/11.

Please reference future correspondence regarding this new facility with "IMF #2 (ARP001024)".

If you should have further questions or comments regarding this report, please feel free to contact this office at (501) 682-0625.

Sincerely,

Allen Gilliam

Allen Gilliam
ADEQ State Pretreatment Coordinator

Attachment: 10/17/11 "Pretreatment Industrial Inspection"

Pretreatment Industrial Inspection

Facility Information

Facility Name: Industrial Metal Finishing #2	Site Address: 105 Beacon Road, Walnut Ridge, 72746
Signatory Authority (Name & Title): Brian Niswonger / President	
Phone: 870.886.7531	Mailing Address (if different): P.O. Box 326, Pocahontas, AR 72455
Fax: 870.886.9546	
Address: same	Corporate Owner Name and address (if applicable): N/A
Contact Person (Name & Title): Brian Niswonger / President	
e-mail: bniswonger@indmetalfinishings.com	e-mail: N/A
Facility Tracking #ARP001024 AFIN # none to date	**Last Inspection Date:** New Facility, first Compliance Assurance Visit (CAV)
POTW (City) IU discharges to: Walnut Ridge, NPDES #AR0046566	
Industrial Classification: ☒ Categorical	☐ Significant
If Categorical, list which CFR #(s) the facility is subject to: 40 CFR 433.17, the Metal Finishing Pretreatment Standards for New Sources	

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Comments :

Inspector's Name (Print): Allen Gilliam	Signature: Allen Gilliam
IU Rep's Name (Print) Brian Niswonger	Signature: Brian Niswonger
Date and Time Inspection Ended: 10/18/11 @ 1:55 pm.	

I. Summary of Inspection

A. Inspection and Objective (Complete Before Inspection)

☐ Permit Renewal	☒ Bi-Annual	☐ Spill/Slug	☐ Unscheduled
☐ New Construction	☐ Noncompliance	☐ Follow-up	☐ Complaint

Inspection Objective(s): Compliance Assurance Visit. No production was ongoing the day of the site visit; therefore, there was no regulated process flow to sample.

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

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

Comments:

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 in the following areas:

Records Review: Adequate, no comment.

Process Area(s): Company (Industrial Metal Finishing #2) has moved into an older existing building. It has been a "work in progress" to salvage the building, moving the old Zn plating line to a different location more in line with the pretreatment system. The building itself is being upgraded from roof to the concrete floor as resources allow.

Pretreatment System: Adequate, no comment.

Self-Monitoring Procedures: Sampling would be as simple as holding the sample bottles under the 2" PVC pipe that allows downward flow into a concave "bowl" which has a downspout into the City's sewage system. The sampling point has a concrete berm constructed around it. Approximate dimensions of this berm were estimated at ~ 4" high X ~4" thick encircling the sampling point with an outside diameter of ~3'.

Spill/Slug Control Plan: Adequate, no comment. A slug potential discharge was deemed negligible considering the amount of chemicals stored in the facility and the way the concrete flooring sloped to a below grade concrete flow channel which gravity flows to a floor pit which is continually mixed and float controlled pumped to the next "switch" tank which can only be pumped up to their Pretreatment system.

Sampling Point: See above.

Chemical Storage: Very small amounts of chemicals were stored at this facility, mostly in 55 gallon drums.

II. Pre-Inspection Meeting

A. General Information

Date and Time Inspection Started: 10/18/11 @ 11:50 a.m.	SIC/NAICS code(s): 3471 / 332813
IU Reps/Titles: Brian Niswonger / President	ADEQ Reps/Titles: Allen Gilliam / ADEQ State Pretreatment Coordinator
End product(s): Zn plated fixtures ("job shop")	Approx. # of units produced: Company is so new, production was impossible to estimate because they have not had time to build up customer base.
Days of Operation: 3 to 5 per week	Days of Production (if different): same
Hours of Operation: 8 a.m. to 4:30 p.m.	Hours of Production (if different): same

Shift 1, hrs. 8 a.m. to 4:30 p.m.	Shift 2, hrs.: N/A to	Shift 3, hrs.: N/A to
# of Employees: 4	Peak Mos.: N/A	"Off" Mos.: N/A

Are there any scheduled plant shutdowns? Yes ☒ No ☐ N/A ☐ If yes, when? Holidays

Are there designated plant clean-up days? Yes ☒ No ☐ N/A ☐ If yes, when? "As needed"

Is the facility currently in compliance with all pretreatment reporting requirements and limits? Yes ☐ **No** ☐

If **No**, explain:

Are there any Special Entry Procedures for the Discharge/Sample point locations? Yes ☒ No ☐

If Yes, explain: Outside inspector needs to call facility rep. first to determine if they have any work they're conducting if sampling is to be conducted. Production is customer driven and sporadic. Facility may be closed with doors locked if there's no ongoing production.

Are there any Safety Concerns or Identified Hazards that the inspector should be aware of: ☒ Yes. ☐ No

If Yes, explain: Safety glasses.

Has there been any changes since the last inspection regarding the following items:

Plant/flow/process layout? Yes ☐ No ☐ N/A ☒ New facility. New schematics are on file as well as their BMR and TOMP.

Processes? Yes ☐ No ☐ N/A ☒ New facility. If yes, explain:

Production Levels? Yes ☐ No ☐ N/A ☒ New facility. If yes, explain:

Raw materials? Yes ☐ No ☐ N/A ☒ New facility. If yes, explain:

Flow rates? Yes ☐ No ☐ N/A ☒ New facility. If yes, explain:

Are regulated and non-regulated wastestreams combined?	yes ☐	no ☒	
Prior to Pretreatment System?	yes ☐	no ☒	N/A ☐
If Yes, was the CWF used to calculate limits?	yes ☐	no ☐	N/A ☒
Prior to connection to the POTW sanitary sewer?	yes ☒	no ☐	N/A ☐
At connection to sanitary sewer?	yes ☐	no ☒	N/A ☐

B. Facility Permits		
Permit / ID Type	Permit ID No.	Expiration Date
Air	None found	
RCRA	"	
NPDES	"	
Other		

C. Additional Comments

(Note which section or attachment comments are regarding)

Attachment E: Spill/~~Slug~~ Control Plan: The entire building is built on a concrete slab which is sloped towards a below grade concrete drainage trough which is sloped towards the first below ground concrete pit which will have a mixer in it. It would be difficult for any catastrophic spills to leave the building or drain into the City's sewer system.

Attachment A: Industrial Process(es)

List process(es) generating wastewater.

1. Zn Plating	Yes ☒ No ☐	4.	Yes ☐ No ☐
2. Rinses	Yes ☒ No ☐	5.	Yes ☐ No ☐
3.	Yes ☐ No ☐	6.	Yes ☐ No ☐

Were processes visually inspected? Yes ☒ No ☐ N/A ☐

Brief description of process(es): Facility has 12 tanks in its Zn rack plating operations. Their process is as follows: alkaline cleaner (~12 pH); electrolytic alkaline cleaner; city water cleaner rinse; 29% muriatic acid bath followed by a city water acid rinse; zinc electroplating solution with caustic soda, zinc, brighteners, a purifier and a starting agent; city water rinse; 2% nitric acid rinse; clear tri-chromate or tri-chromate with yellow dye bath; city water chromate rinse; heated (not "hooked-up" yet) city water final rinse with parts dried in a forced hot air tank. No counter-current rinses nor in-process filtration were mentioned. All rinse tanks are continuously overflowed to the pretreatment system. Acid and caustic tanks will periodically be pumped into holding totes while their tanks are cleaned out; then filled back up with the acids and caustics. Once the acid and caustic baths are "spent", they will be metered in slowly with the continuous overflowing rinses to pretreatment. Frequency of these discharges is as yet unknown.

General observations of facility's indoor housekeeping: As this is an old building they've set up operations in, the facility rep. indicated rehabilitation of it is a work in progress as revenue allows. It appeared the process and pretreatment systems were operational, but some of the process tanks were in need of some minor clean-up efforts including the joist system.

General observations of area outside facility's building: Uncluttered and clear of debris.

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.).

☒ Process Rinse Overflows Continuous; volume unknown at this time.	☐ Equip. Cleanup	☐ Floor Cleanup	☒ Spent Bath Solutions Unknown at this time.
☐ Product Cleaning	☐ Forklifts Maint./Wash	☐ Tank Dragout	☐ Air Pollution Devices
☐ Boiler Blowdown	☐ Spent Rinse Tanks	☐ Equipment Coolants	☐ Non-Contact Cooling Water

List Major Raw Materials and some major Chemicals used:

Steel, alkaline cleaners, muriatic acid, caustic soda, Zinc, tri-valent chromate (clear or with yellow dye) and nitric acid. Other chemicals such as the brightener, purifier and starting agent in the Zn electroplating solution had no CAS numbers to identify exact chemistry.

Check Waste Stream Pollutants of Concern from Process(es)

☐ BOD	☒ CN^-	☒ Metals (List) All 40 CFR 433 metals	☒ Solvents: TOMP was submitted and approved on 9/1/11
☐ TSS	☐ Cl_2	☐ pH	☐ O&G

Are there floor drains in the Process area? ☒ Yes ☐ No If yes list number and the location of all floor drains: The only floor drain is the one pretreated wastewater is discharged into. As described above, it has been bermed with concrete which would not allow any catastrophic tank rupture/spills to enter it.

Attachment B: Pollution Prevention (P2) / Recycling Activities		
Does the facility have a written P2 Plan?	Yes ☐	No ☒
Does this facility practice P2?	Yes ☐	No ☒ (not evident)
Environmental Management System in place?	Yes ☐	No ☒
ISO Certified?	Yes ☐	No ☒
Written Standard Operating Procedures?	Yes ☒	No ☐
Explain: Facility rep. indicated they'd have detailed "operation" sheets for different customer parts.		
Preventative Maintenance Program	Yes ☐	No ☒ (hydraulic systems, valves, pumps, etc)
Explain:		
Water Reuse:	Yes ☐	No ☒
Explain: Facility rep. indicated they would be looking into it as production increases.		
Cost Accounting to Track Savings:	Yes ☐	No ☒
Explain:		
Inventory Control / "Green Purchasing":	Yes ☒	No ☒ (lean manufacturing/"env. friendly purchasing", etc)
Explain: Facility rep. indicated they'd only have an additional barrel or tote of a chemical "on hand".		
Employee Training:	Yes ☒	No ☐ Explain: "On-site, as needed".
Spent Solvent Reclamation?	Yes ☐	No ☒ None on location.
Explain:		
Recycle Paper, Aluminum, Boxes, and Pallets?	Yes ☒	No ☐
Explain: Pallets and newspapers.		
Recycle Waste Oil, Solvents, and Lubricants?	Yes ☐	No ☒ None on location.
Explain:		
Other Activities:		
P2 Equipment/Practices in use:		

☐ In-process bath filtration	☐ Aqueous Cleaning Solutions
☐ Fog Spray Rinsing	☐ Countercurrent Flows *(will be in future)*
☐ Dragout Collection Trays	☐ Seal-Less Pumps
☐ Air Jets to Blow Parts Dry	☐ Secondary Containment of Process Solutions
☐ Aqueous Paint Stripping Solutions	☐ Bead Blasting to Remove Paint
☐ Water Soluble Cutting Fluids	☐ Recycle Overspray
☐ In-Process Recycle (Ion Exchange, Reverse Osmosis)	☐ Conductivity Meters

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:

☐ Dissolved air floatation	☐ Membrane Tech.	☐ Ion Exchange	☐ Biological Treatment
☐	☒ Flow Equalization	☐ Ozonation	☐ Chlorinating
☒ Chemical Precipitation	☐ Oil/Water Separation	☐ Reverse Osmosis	☐ Grit Removal
☒ Sludge Filter Press	☐ Grease Trap	☐ Screen	☐ Solvent Separation
☒ pH Adjustment	☐ Sand Trap	☐ Sedimentation	☐ Silver Recovery
☐ Belt/Disk Oil Skimmer	☐	☐	☐

Provide Brief Description of Pretreatment System (leaks, cleanliness, equipment not in working order): Facility uses a typical chemical precipitation system consisting of a mixing sump where process flows are then pumped to their "switch" tank, then pumped to the first pH (caustic) mixing tank, then to a second mix tank where ionic polymers are added. From this tank, the wastewater gravity flows down into the Lamella clarifier. Sludge is pumped to a filter press with the supernatant from the clarifiers discharged to the City. Filter press water is sent back to the "switch" tank for another pass through the pretreatment system. The system had been idle for some time and was at the time of this site visit. It appeared clean and operational.

Does the description match the schematic currently on file? ☒ Yes ☐ No ☐ N/A

System Operator(s) Name: Brian Niswonger, Jim Duncan, Doug Coley or Doug Rodney

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

List Name(s) and License classification:

Is the discharge from the Pretreatment System? ☐ Batch ☒ Continuous from overflow rinses ☒ Combination

"Batch" discharges from acid or caustic tanks will be highly dependent on production. They'll be slowly metered in with continuous rinse overflows once spent.

Volume of discharge: ~ 1,500 gpd (depends highly on production)

Describe process from which batch originated (spent bath, e.g.): As mentioned above, only infrequently will the facility batch discharge their spent baths (alkaline, muriatic, zinc plating, nitric acid and tri-valent chrome).

Approximate duration of batch discharge: Undetermined at this time.

Meter Type	Calibration Procedure and Frequency	Comments (Totalizer Reading)
City		

Attachment D: Chemical Storage Area(s)		
Does the facility have a designated chemical storage area(s)?	☒Yes ☐No	
Was this area(s) visually inspected?	☒Yes ☐No ☐N/A	
Describe Chemical Storage Area(s)	Are there floor drains in this area?	If yes, where does this drain lead to?
1. Various chemicals in varying amounts are stored near where they are to be used.	☐Yes ☒No	☐ Pretreatment ☐ Sanitary Sewer ☐ Storm Sewer
2.	☐Yes ☐No	☐ Pretreatment ☐ Sanitary Sewer ☐ Storm Sewer
3.	☐Yes ☐No	☐ Pretreatment ☐ Sanitary Sewer ☐ Storm Sewer
4.	☐Yes ☐No	☐ Pretreatment ☐ Sanitary Sewer ☐ Storm Sewer
Does the Chemical Storage Area(s) contain any of the following?		
☐ Dikes, Berms for Containment	☐ Plugs for Floor Drains	
☒ Secondary "Catch Pits" under barrels	☐ Premix (low) Concentrations	
☐ Alarms	☐ Chain restraints, limited access	
☒ Spills Control Kits for Cleanup	☐ Notification Procedures	
☐ Chemical desegregation within Storage Area	☐ Other	
Chemical Inventory List (MSDS) on file?	☒Yes ☐No ☐N/A	
Were any new MSDS reviewed during the Inspection?	☐Yes ☐No ☒N/A	
If yes, list below:		
Chemical storage comments:		
Chemical handling procedures (fork lift, totes, barrel dolly, buckets, hardline, etc.): All the above except for hardline.		

Attachment E: Spill/Slug Control Plan (Slug potential evaluated as highly unlikely by this inspector)	
Does the facility have a Spill/~~Slug~~ control plan? *Slug discharge potential determined to be negligible.*	☐ yes ☒ no
If yes are the following: 403.8(f)(2)(v)(A-D) requirements in place?	
Is the spill/slug control plan <2 years old?	☐ yes ☐ no ☒ N/A
(A) Describes discharge practices including non routine batch (slug) discharges	☐ yes ☐ no ☒ N/A
(B) Describes storage and handling of chemicals	☐ yes ☐ no ☒ N/A
(C) Procedures for immediate notification to POTW of slug discharges	☐ yes ☐ no ☒ N/A
(D) 1. Describes measures for controlling toxic/hazardous pollutants	☐ yes ☐ no ☒ N/A
2. Describes procedures and equipment for emergency response	☐ yes ☐ no ☒ N/A
3. Describes follow-up to limit damage suffered by POTW or environment	☐ yes ☐ no ☒ N/A
4. Does the facility have Spill/~~Slug~~ Notification Procedures posted?	☐ yes ☒ no ☐ N/A
5. Are worker personnel provided training in the event of a spill ~~or slug~~ discharge?	☒ yes ☐ no ☐ N/A
If no:	
Does the facility have Spill/Slug Notification Procedures posted?	☐ yes ☒ no
Is it posted in areas where chemicals are used and stored?	☐ yes ☒ no
If Yes how many?	
Are appropriate personnel provided training in the event of a spill or slug discharge?	☒ yes ☐ no
Has there been any non-routine, episodic discharges or chemical spills in the past year?	☐ yes ☒ no
(Briefly Describe, Include Dates)	
Was the City notified of these occurrences? ☐ yes ☐ no ☒ N/A	
Visual Inspection of Discharge ~~Lines~~/Point	
Provide description of manhole condition and flow channel of the following where applicable:	
Sampling / Monitoring Point: the 2" PVC pipe from the clarifier allows downward flow into a concave "bowl" which has a downspout into the City's sewage system. The sampling point has a concrete berm constructed around it. Approximate dimensions of this berm were estimated at ~ 4" high X ~4" thick encircling the sampling point with an outside diameter of ~3'.	
Total Flow Monitoring Point: Strictly using City water usage meter and subtracting sanitary sewage usage (~20 gpd) from the few employees they have.	
Point of Connection: Same as sampling/monitoring point (see above).	

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. Sampling would be as simple as holding the sample bottles under the 2" PVC pipe that allows downward flow into a concave "bowl" which has a downspout into the City's sewage system. The sampling point has a concrete berm constructed around it. Approximate dimensions of this berm were estimated at ~ 4" high X ~4" thick encircling the sampling point with an outside diameter of ~3'.

Where is the sample point located?

☐ End of Process	☒ Pretreatment Effluent	☐ Total Flow
☐ Combined Flow	☐ Metered Flow	☐ Flow Actuator
☐ Private Manhole	☐ Utility Manhole	☒ Advance Notice Required (intermittent production)
☐ Safety Hazards Identified	☐	☐

Is the Sample Collection Site Adequate?	☒ 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: American Interplex	
Automatic Sampler ☐ or Manual ☒	
IU Self-Monitoring Results reviewed: *1st lab report has not been received yet.*	☐ Yes ☐ No ☒ N/A
Is the Contract Lab certified by ADEQ for test parameters?	☐ Yes ☐ No ☒ N/A
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	☐ Yes ☐ No ☒ N/A
Dates and times of Sample Collection Recorded?	☐ Yes ☐ No ☒ N/A
Were Samples preserved correctly (refer to 40CFR Part 136)	☐ Yes ☐ No ☒ N/A
Were Self Monitoring records on file for past 3 years?	☐ Yes ☐ No ☒ N/A *facility just began operations.*

List the parameters the facility monitors and the frequency: All parameters sampled/analyzed semi-annually.

☒ Cd(t)	☒ Cu(t)	☒ Cr(t)	☒ Ni(t)	☒ Pb(t)
☒ Ag(t)	☒ Zn(t)	☐ pH	☒ CN^-(t)	☐ CN^-(a-c)
☐ TTO-Vol	☐ TTO-B/N	☐ TTO-A.E.	☐ TTO-Pest	☐ Cr(hex)

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

How does the IU report TTO? ☐ Analysis ☒ Certification Statement with 9/1/11 TOMP in file.

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: 9/1/11

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

~~**If no,**~~ Is there evidence that a TOMP is needed? ☐ Yes ☒ No ☐ N/A (If yes, provide description of evidence in comments.)

Comments: Facility's 9/1/11 TOMP is fairly simple. In this inspector's opinion, the facility does not have the quantity of any toxic organics on-site, which, if all were poured into the City's sewer system at the same time would constituted a toxic quantity. Facility's TOMP reflects this.