

ADEQ

ARKANSAS
Department of Environmental Quality

May 18, 2011

Cliff Hufstedler
Mac-Lean ESNA
Plant Manager
611 Country Club Road
Pocahontas, AR 72455

Re: Mac-Lean ESNA Pretreatment Compliance Assurance Visit-CAV (ARP001048; Pocahontas #AR0034835)

Dear Mr. Hufstedler,

Under 40 CFR 403.8(f)(1)(i): “[ADEQ is required to] Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by [Mac-Lean ESNA], compliance or noncompliance with applicable Pretreatment Standards and Requirements...Representatives of [ADEQ] shall be authorized to enter [the] premises of [Mac-Lean ESNA] in which a Discharge source or treatment system is located or in which records are required to be kept under §403.12(o) to assure compliance with Pretreatment Standards...”

Please find attached the completed CAV conducted at your facility on 12/15/10. Apologizes are extended for the tardiness of this report. Mac-Lean ESNA appears to be compliant with the categorical Metal Finishing pretreatment standards under 40 CFR 433.15.

The two (2) grab samples taken were analyzed by ADEQ’s laboratory (see Attachment A-1), averaged and showed compliance with the most stringent “monthly average shall not exceed” pretreatment standards for existing sources in 40 CFR 433.15. All metals analyzed were below the federal guideline limitations using the combined wastestream formula (CWF) factor of 0.565.

However, this inspector identified a deficiency that Mac-Lean ESNA must address in writing within sixty (60) days from the date on this correspondence. Please address the “Recommendation” also.

Requirement:

Under **40 CFR 403.12(b)(3)** “Description of operations. [Mac-Lean ESNA] shall submit a brief [narrative] description of the nature...of the operation(s) carried out by [Mac-Lean ESNA]. This description should include a schematic process diagram which indicates points of Discharge to the POTW from the regulated processes.”

Attachments 2 and 3 are very general schematics (marked-up during the site-visit) of old copies of what this office currently has in Mac-Lean ESNA’s file. These are deemed inadequate. During the site-visit walk through, it was confusing to differentiate process tanks from rinse tanks, what chemicals (not trade names) were in them and work-piece flow.

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK / ARKANSAS 72118-5317 / TELEPHONE 501-682-0744 / FAX 501-682-0880

www.adeq.state.ar.us

X

Mr. Steve Thielemier did an excellent job in attempting to describe the different process baths, rinses, workpiece flow, other manufacturing operations and "pretreatment", but this inspector feels my description of your operations was neither orderly nor comprehensive. See page 5 of the attached "Pretreatment Industrial Inspection". The schematics were of limited help.

The "pretreatment" basin was also in need of a few schematic revisions. If it is not a true "aeration" basin, designed only for wastewater circulation and oily waste removal, so state in the entire process through "pretreatment" narrative description of operations.

The only brief narrative process description on file (see Attachment A-4) is included in your 11/17/05 Toxic Organic Management Plan (TOMP). This document needs to be revisited, revised if necessary, dated and signed by the appropriate Mac-Lean ESNA signatory.

Ideally, a comprehensive manufacturing operation narrative coupled with a more detailed schematic of wastewater producing processes through "pretreatment" to the discharge/sampling point would create a more complete and compliant "picture" of your operations. A process bath/rinse numbering system with a legend describing the chemicals (not trade names) in each separate tank would be desirable. Mr. Thielemier and I discussed this during the site-visit.

Recommendation:

The "pretreatment" basin (20' X 15') appeared to be adequate for its purpose. However, being open to the elements a 10 year rain event in your area could produce 6" of rainfall in a 24 hour period. That translates into an additional 150 ft³ which is equivalent to over 1,120 gpd (Source: The U.S. Soil Conservation Service, Technical Release #55). It is strongly recommended to cover this basin. If the basin isn't covered, Mac-Lean ESNA will have to take into account this stormwater dilution in future calculations. If these calculations result in limits which are below approved EPA CFR 136 method detection levels, covering of the basin will become a requirement.

The current non-contact cooling water's (dilution) volume is being taken into account for compliance purposes through the combined wastestream formula (CWF) and is acceptable. This "open to the elements treatment basin" would potentially cause more issues over estimates of additional dilution.

It was a pleasure working with Mr. Thielemier. His open cooperation and willingness to share requested information was greatly appreciated.

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
ADEQ State Pretreatment Coordinator

Attachments: 12/15/10 "Pretreatment Industrial Inspection", A-1 (ADEQ's analysis), A-2 & 3 (rough process & "pretreatment" schematics), A-4 (Mac-Lean ESNA's 11/17/05 Toxic Organic Management Plan - TOMP)

E:\NPDES\NPDES\Pretreatment\Reports

Pretreatment Industrial Inspection

Facility Information

Facility Name: Mac-Lean ESNA	Site Address: 611 Country Club Road Pocahontas, AR 72455
Signatory Authority (Name & Title): Cliff Hufstedler – Plant Manager	
Phone: 870.892.5201	Mailing Address (if different):
Fax: 870.892.8938	
Address: Same	Corporate Owner Name and address (if applicable):
Contact Person (Name & Title): Jeff Orrick – Engineering Manager	
Steve Thielemier X-243	Phone:
Phone: 870.892.5201 x 248 (Jeff's)	Fax:
Fax: Same	Corporate CEO:
e-mail: jorrick@macleanfogg.com sthielemier@	e-mail:
Facility Tracking #ARP001048	Last Inspection Date: 6/21/05

POTW (City) IU discharges to: Pocahontas	POTW's NPDES #AR0034835
Industrial Classification: <input checked="" type="checkbox"/> Categorical	<input type="checkbox"/> Significant

If Categorical, list which CFR #(s) the facility is subject to: Metal Finishing under 40 CFR 433

Table of Contents

I. Summary of Inspection	Page	of
A. Inspection Objectives		
B. Inspection Analysis		
II. Pre-Inspection Meeting	Page	of
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 type="checkbox"/> no <input type="checkbox"/>	Page of
B. Pollution Prevention Activities	yes <input type="checkbox"/> no <input type="checkbox"/>	Page of
C. Pretreatment System	yes <input type="checkbox"/> no <input type="checkbox"/>	Page of
D. Chemical Storage	yes <input type="checkbox"/> no <input type="checkbox"/>	Page of
E. Spill/Slug Control Plan	yes <input type="checkbox"/> no <input type="checkbox"/>	Page of
F. Self-Monitoring/TOMP	yes <input type="checkbox"/> no <input type="checkbox"/>	Page of

Comments :

Inspector's Name (Print): Allen Gilliam	Signature:
IU Rep's Name (Print): STEVE THIELEMIER	Signature:
Date and Time Inspection Ended: 12/15/10 @ 1:45 pm	

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) to ensure compliance with CFRs 403 and 433.

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

<input checked="" type="checkbox"/> Pre-inspection Meeting	<input type="checkbox"/> Permit Conditions	<input 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 N/A	<input checked="" type="checkbox"/> Process/Flow/Pretreatment Schematics
<input checked="" type="checkbox"/> IU sampling procedures	<input type="checkbox"/> Flow/pH Meter(s)	<input checked="" type="checkbox"/> Calibration Records
<input type="checkbox"/> MSDS Inventory List	<input type="checkbox"/> New MSDS	<input type="checkbox"/>

Comments: Time constraints did not allow for a comprehensive review of MSDS.

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. Contract lab's results and the combined wastestream formula calculations are now being sent with IU's semi-annual reports. Schematic(s) need to be more comprehensive/complete.

Process Area(s): Clean/orderly.

Pretreatment System: Mechanical aeration/mixing basin and oil skimming

Self Monitoring Procedures: Adequate

Spill/Slug Control Plan: Slug discharge potential determined negligible.

Sampling Point: Needs to be covered.

Chemical Storage: Adequate

II. Pre-Inspection Meeting

A. General Information

Date and Time Inspection Started: 12/15/10 @ 8:05 a.m.		SIC/NAICs code(s): 3452/332722	
IU Reps/Titles: Steve Thielemier / Maintenance Supv.		Control Authority Reps/Titles	
		Allen Gilliam / ADEQ State Pretreatment Coordinator	
End product(s): Fasteners (lock-nuts)		Approx. # of tons produced: ~2 to 3/day	
Days of Operation: Monday - Friday		Days of Production (if different): Same	
Hours of Operation: 5:00 a.m. to 2:00 a.m.		Hours of Production (if different): Same	
Shift 1, hrs.: 5:00 am. To 3:30 p.m.	Shift 2, hrs.: 3:30 p.m. to 2:00 a.m.	Shift 3, hrs.: to N/A	
# of Employees: ~80	Peak Mos.: market driven	"Off" Mos.: market driven	
Are there any scheduled plant shutdowns? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> If yes, when? 12/24/09 – 1/3/10			
Are there designated plant clean-up days? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> If yes, when? "As necessary"			
Is the facility currently in compliance with all pretreatment reporting requirements and limits? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
If No, explain:			
Are there any Special Entry Procedures for the Discharge/Sample point locations? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
If Yes, explain:			
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: Safety glasses and ear protection required.			
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 type="checkbox"/> No <input checked="" type="checkbox"/> If yes, explain:			
Production Levels? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, explain: "Maybe slightly higher than levels back in '05"			
Raw materials? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, explain: " " "			
Flow rates? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, explain: " " "			
Are regulated and non-regulated wastestreams combined? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>			
Prior to Pretreatment System? yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A <input type="checkbox"/>			
If Yes, was the CWF used to calculate limits? yes <input checked="" type="checkbox"/> no <input type="checkbox"/>			
Prior to connection to the POTW sanitary sewer? yes <input checked="" type="checkbox"/> no <input type="checkbox"/> N/A <input type="checkbox"/>			
At connection to sanitary sewer? yes <input type="checkbox"/> no <input type="checkbox"/> N/A <input checked="" type="checkbox"/>			
What is the current avg. production rate and process flow? ~1,700 gpd			

Attachment A: Industrial Process(es)

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

1. Passivation	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	4.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Phosphoric acid (rarely used)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5.	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Process rinses	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): Facility brings in "bar stock" (1/2" to 3/4" "wire") to manufacture nylon fasteners (lock/stop nuts) some with protective caps. Process includes "cut-off"; stamping or multi-head forming punches; precision tapping (screw) machining, nylon inserts insertion. Two self-contained CNC machining units are also used. Their water soluble coolants are hauled off-site when spent. Tramp oil from any machining is captured and hauled off-site. Nitric acid dip is used to passivate most of the products followed by a fresh water rinse, then sealed with heated sodium di-chromate. Phosphoric acid de-rusting (cleaning) system w/hot water rinse may be used ~2 to 3 times/year. Tumbler (de-burring) wastewater is discharged ~twice/day. Its drain has its own "sedimentation sumps" with capturing the larger particulate matter leaving the unit. The 3 baffles (plates) inside the sump are height staggered to only allow the lesser sediment free water to flow over and then sent to "pretreatment". It is periodically pumped out to remove the captured "sludges". Some parts are cleaned in one of three caustic (self-contained) rotating drums. Wastewater from these units is evaporated. The very small electric induction heating unit's ("Lepel" - a ~ 2.5' "cube") non-contact wastewater is passed once-through, is continuously discharged/commingled with regulated process wastewater and is taken into account via the CWF for correct permit limits. Zn electro-plating and black oxidizing done by an outside firm(s).

General observations of facility's indoor housekeeping: Clear, clean and uncluttered. No evidence of spills.

General observations of area outside facility's building: Excellent

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

<input checked="" type="checkbox"/> Process Rinse Overflows continuously discharged ~1,700 gpd (M)	<input type="checkbox"/> Equip. Cleanup	<input type="checkbox"/> Floor Cleanup	<input checked="" type="checkbox"/> Spent Bath Solutions Periodically shipped off-site
<input checked="" type="checkbox"/> Deburring - seldom used	<input checked="" type="checkbox"/> Forklifts Maint./Wash negligible	<input type="checkbox"/> Tank Dragout	<input type="checkbox"/> Air Pollution Devices
<input type="checkbox"/> Boiler Blowdown	<input type="checkbox"/> Spent Rinse Tanks	<input type="checkbox"/> Equipment- Oils & Coolants (shipped off-site)	<input checked="" type="checkbox"/> Non-Contact Cooling Water - ~1,300 gpd continuously discharged (M)
<input type="checkbox"/> Stormwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

List Major Raw Materials and Chemicals used: Brass, carbon and stainless steel, Aluminum, Nitric and (rarely) Phosphoric acid, acetyl alcohol (cleaning), lubricating and hydraulic oils.

Check Waste Stream Pollutants of Concern from Process(es)

<input type="checkbox"/> BOD	<input checked="" type="checkbox"/> CN ⁻	<input type="checkbox"/> Metals (List): See CFR 433 Metals	<input checked="" type="checkbox"/> Solvents (List): Facility submitted an approvable TOMP dated 11/17/05
<input type="checkbox"/> O&G	<input type="checkbox"/> S ⁻		
<input type="checkbox"/> pH	<input type="checkbox"/>		

Are there floor drains in the Process area? Yes No If yes list number and the location of all floor drains: There's one that is used to transfer (pump) process rinses to the aeration basin.

Attachment B: Pollution Prevention (P2) / Recycling Activities

Does the facility have a written P2 Plan? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Does this facility practice P2? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> P2 opportunities not visually evident to this Auditor	
Environmental Management System in place? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
ISO Certified? 14001 Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Written Standard Operating Procedures? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Explain: Quality Assurance System (QAS) operating procedures for each station.	
Preventative Maintenance Program Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (hydraulic systems, valves, pumps, etc)	
Explain: All machinery is checked by operator daily.	
Water Reuse: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Explain:	
Cost Accounting to Track Savings: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Explain:	
Inventory Control / "Green Purchasing": Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (lean manufacturing/"env. friendly purchasing", etc)	
Explain: Inventory Controls	
Employee Training: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Explain: Explain: per ISO 14001 requirements	
Spent Solvent Reclamation? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Recycle Paper, Aluminum, Boxes, and Pallets? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	
Explain: All of the above	
Recycle Waste Oil, Solvents, and Lubricants? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Explain: All the above	
Other Activities	
P2 Equipment/Practices in use:	
<input type="checkbox"/> Overflow Alarms	<input type="checkbox"/> Aqueous Cleaning Solutions
<input type="checkbox"/> Dragout Collection Trays	<input type="checkbox"/> Seal-Less Pumps
<input type="checkbox"/> Air Jets to Blow Parts Dry	<input 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 Cutting Fluids	<input type="checkbox"/> Recycle Overspray
<input type="checkbox"/> In-Process Recycle (Ion Exchange, Reverse Osmosis)	<input type="checkbox"/> Conductivity Meters
<input type="checkbox"/> Dead Rinse Tanks	<input type="checkbox"/> Bath / Rinse Filtration

Attachment C: Pretreatment System				
Are wastestreams segregated before pretreatment?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Are they "pretreated" prior to discharge to the sanitary sewer?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Was the pretreatment system visually inspected during this visit?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> 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 type="checkbox"/> Flow Equalization	<input type="checkbox"/> Ozonation	<input type="checkbox"/> Chlorinating	
<input type="checkbox"/> Chemical Precipitation	<input type="checkbox"/> Oil/Water Separation	<input type="checkbox"/> Reverse Osmosis	<input type="checkbox"/> Grit Removal	
<input type="checkbox"/> Sludge Filter Press	<input type="checkbox"/> Grease Trap	<input type="checkbox"/> Screen	<input type="checkbox"/> Solvent Separation	
<input type="checkbox"/> pH Adjustment	<input type="checkbox"/> Sand Trap	<input checked="" type="checkbox"/> Sedimentation	<input type="checkbox"/> Silver Recovery	
<input checked="" type="checkbox"/> Rotary Plate Oil Skimmer	<input checked="" type="checkbox"/> Aeration basin w/circulation	<input type="checkbox"/>	<input type="checkbox"/>	
Aeration really did not seem apparent. IU rep indicated the basin was mainly circulated to help keep the sediment stirred up. Provide Brief Description of Pretreatment System (leaks, cleanliness, equipment not in working order): Their "pretreatment" system appears to be mainly for oily wastes to be removed. It measures 20'X 15'X 5' deep. The first channel contains the chain driven oil plate skimmer (~3' diameter). A concrete wall hangs down, but leaves enough room for oil free water to continue to the circulation pit. Chemicals for metals precipitation are not necessary. Their aeration (circulation) basin, being outside, needs to be covered to prevent further dilution from rain events. Rough schematic on file, needs revised/updated also.				
Does the description match the schematic currently on file?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Detailed version was asked for during site visit. Processes were not accurately portrayed on the old schematic.				
System Operator(s) Name: Steve Thielemier / Maintenance Supervisor				
Does discharge permit require licensed operator?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Is the System Operator(s) licensed by the State of Arkansas?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
List Name(s) and License classification: Steve Thielemier, Class I				
Is training provided to the Pretreatment System Operator(s)?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If Yes, list type and frequency: once/year at the AWW&WEA conference				
Is the discharge from the Pretreatment System?		<input type="checkbox"/> Batch	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Combination
If any discharges are batch type or combination, describe the following:				
Volume of each batch: N/A gallons per				
Describe process from which batch originated (spent bath, e.g.): N/A				
Approximate duration of batch discharge: N/A (totalizer is ready once/month)				
Meter Type	Calibration Procedure and Frequency	Comments (Totalizer Reading)		
Blue/White Inc.	Once/year	No reading, but it was in good operating order		

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. Main storage area in a caged area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Pretreatment <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Storm Sewer
2. Nitric Acid is held in steel "kegs" and on spill pallets.	<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 checked="" 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 type="checkbox"/> Alarms	<input checked="" 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: Time constraints did not allow for a comprehensive review of their MSDS notebook.		
Chemical storage comments: Various chemicals in 55 gallon drums brought in by forklift.		
Chemical handling procedures (totes, dolly, buckets, hardline, etc.): Forklift, barrel dollies and 5 gallon buckets - hand carried		

Attachment E: Spill/Slug Control Plan

Does the facility have a Spill/Slug control plan? <i>Slug discharge potential deemed negligible</i>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> N/A
If yes are the following: 403.8(f)(2)(v)(A-D) requirements in place?	
Is the spill/slug control plan <2 years old?	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> N/A
(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 type="checkbox"/> no <input checked="" 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? Once/year	<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: Easily accessible, but inside a closed/locked chain link fence. Sampling point adequate. The 15' X 20' mechanical aeration basin/oil skimming devices open to rain-fall events. Needs to be covered.	
Total Flow Monitoring Point: Adequate with a "Blue-White Inc." totalizer calibrated annually.	
Upstream Manhole: N/A	
Point of Connection: N/A	

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.

Steve Thielemier, the Maintenance Supervisor comes out every two (2) hours for a grab sample, twice per year.

Where is the sample point located?

<input type="checkbox"/> End of Process	<input checked="" type="checkbox"/> Pretreatment Effluent	<input type="checkbox"/> Total Flow
<input checked="" type="checkbox"/> Combined Flow	<input checked="" 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? Except no "accounting" for rain events 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? pH for Storm Water Yes No N/A

If no, Record the name and address of Contract Lab: American Interplex, 8600 Kanis Road, Little Rock, AR 72204-2322

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

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

List the parameters the facility monitors and the frequency: all 40 CFR 433 metals and CN. *11/17/05 TOMP may need updating

<input checked="" type="checkbox"/> Cd(t)	<input checked="" type="checkbox"/> Cu(t)	<input 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)

Toxic Organic Management Plan (TOMP) for Metal Finishers under CFR 433 (TOMP dated 11/17/05, signed 12/1/05)

How does the IU report TTO? Analysis Certification Statement

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: 11/17/05 (on file)

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

Comments: During the site visit, this auditor did not see evidence of large quantities of toxic organics used/stored.

Attachment A-1



5301 Northshore Drive
North Little Rock, AR 72118
Telephone: 501-682-0744

Client Report For: MacLean-ESNA 61-00061 2010 3891-3892

Attention:

Client Address:

Report Date:

March 18, 2011

LAB ID:

AR10DEC17-03

Comment:

A-1

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:** Aeration Basin Discharge1
Lab ID: 2010-3891 **Collection Date:** 12/15/2010 11:00:00 AM
Matrix: Water

Analyses

Total Metals by EPA 200.8 EPA 200.8

	Reporting	MDL	Run: 1	Qual	Unit
Aluminum	20.0	20			ug/L
Antimony	10.0	5			ug/L
Arsenic	1.00	0.5			ug/L
Barium	10.0	2.0			ug/L
Beryllium	0.5	0.1			ug/L
Boron	25.0	5.0			ug/L
Cadmium	1.00	0.3			ug/L
Calcium	0.04	0.04			mg/L
Chromium	1.00	0.3			ug/L
Cobalt	1.00	0.5			ug/L
Copper	1.00	0.5			ug/L
Iron	20.0	10.0			ug/L
Lead	1.00	0.1			ug/L
Magnesium	0.1	0.1			mg/L
Manganese	1.0	0.2			ug/L
Nickel	2.5	0.5			ug/L
Potassium	1.00	0.05			mg/L
Selenium	2.00	0.5			ug/L
Silver	5.00	1.0			ug/L
Sodium	0.04	0.02			mg/L
Thallium	2.5	0.05			ug/L
Vanadium	2.5	1.0			ug/L
Zinc	3.00	2.0			ug/L

Dilution Factor
Analyzed By: Joe Semberski
Analysis Date/Time: Dec 30 2010 1:12PM
Prep By:
Prep Date/Time:

A1

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
Lab ID: 2010-3892

Client Sample ID: Aeration Basin Discharge2
Collection Date: 12/15/2010 1:45:00 PM

Matrix: Water

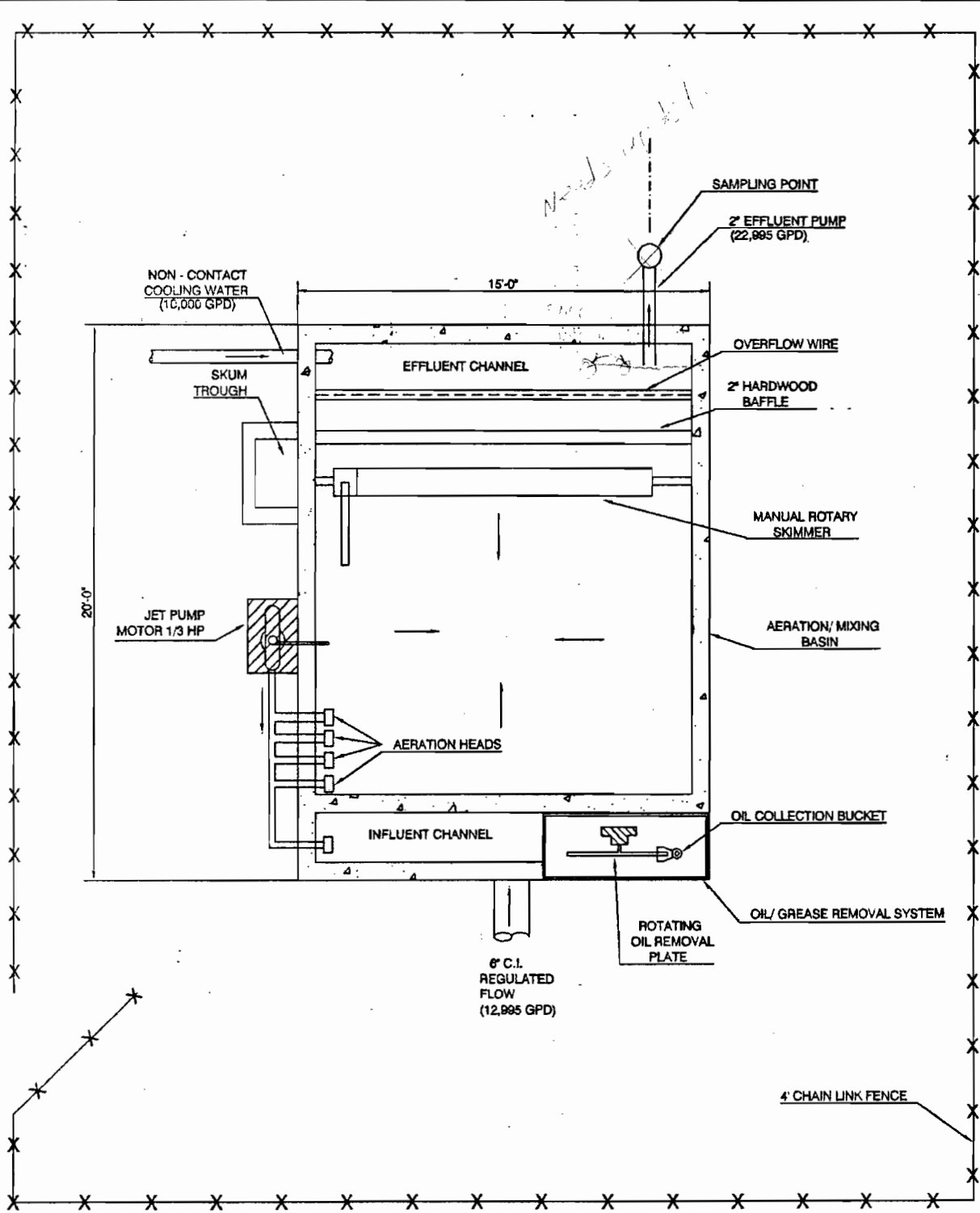
Analyses

Total Metals by EPA 200.8 EPA 200.8

Batch: 11010310 Run: 1

	<u>Result</u>	<u>Reporting</u>	<u>MDL</u>	<u>Qual</u>	<u>Unit</u>
Aluminum	53.8*	20.0	20		ug/L
Antimony	<10.0*	10.0	5		ug/L
Arsenic	2.23*	1.00	0.5		ug/L
Barium	33.9*	10.0	2.0		ug/L
Beryllium	<0.5*	0.5	0.1		ug/L
Boron	56.3*	25.0	5.0		ug/L
Cadmium	1.69*	1.00	0.3		ug/L
Calcium	31.2*	0.04	0.04		mg/L
Chromium	73.1*	1.00	0.3		ug/L
Cobalt	<1.00*	1.00	0.5		ug/L
Copper	138*	1.00	0.5		ug/L
Iron	1600*	20.0	10.0		ug/L
Lead	<1.00*	1.00	0.1		ug/L
Magnesium	21.1*	0.1	0.1		mg/L
Manganese	23*	1.0	0.2		ug/L
Nickel	190*	2.5	0.5		ug/L
Potassium	1.62*	1.00	0.05		mg/L
Selenium	<2.00*	2.00	0.5		ug/L
Silver	<5.00*	5.00	1.0		ug/L
Sodium	49.9*	0.04	0.02		mg/L
Thallium	<2.5*	2.5	0.05		ug/L
Vanadium	<2.5*	2.5	1.0		ug/L
Zinc	70.8*	3.00	2.0		ug/L

Dilution Factor
Analyzed By Joe Semberski
Analysis Date/Time Dec 30 2010 1:36PM
Prep By
Prep Date/Time



PRETREATMENT PROCESS
MACLEAN / ESNA MANUFACTURING PLAN



ETC ENGINEERS, INC.

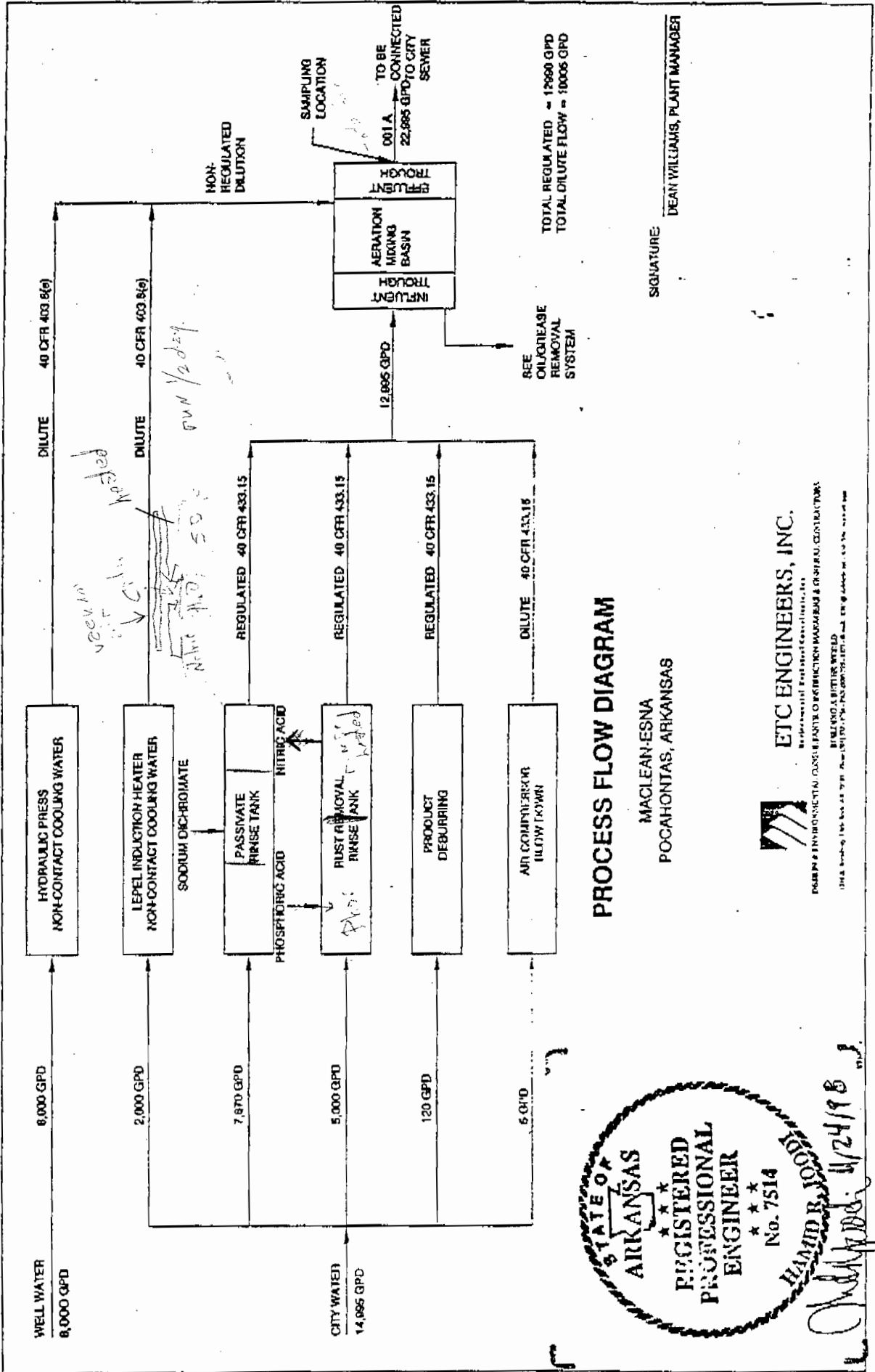
Environmental Technical Consultants, Inc.

DESIGN & ENVIRONMENTAL CONSULTANTS, CONSTRUCTION MANAGERS & GENERAL CONTRACTORS

BUILDING A BETTER WORLD

1510 S. Broadway, Little Rock, AR 72201 - Phone (501) 375-1786 - FAX (501) 375-1277 - E-mail: ETC@Arctecinc.net - Web Site: www.etc.com

Attachment A-3



PROCESS FLOW DIAGRAM

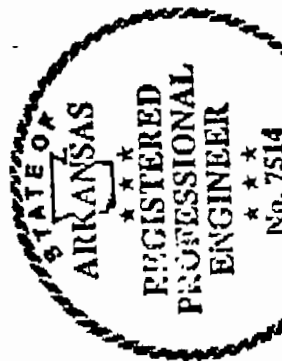
MACLEAN-ESNA
POCAHONTAS, ARKANSAS



ETC ENGINEERS, INC.

REGISTERED PROFESSIONAL ENGINEERS
REGISTERED PROFESSIONAL CHEMISTS
REGISTERED PROFESSIONAL SANITATION ENGINEERS
REGISTERED PROFESSIONAL WATER TREATMENT ENGINEERS
REGISTERED PROFESSIONAL WASTE MANAGEMENT ENGINEERS
REGISTERED PROFESSIONAL INDUSTRIAL ENGINEERS

SIGNATURE
DEAN WILLIAMS, PLANT MANAGER



Handwritten signature and date: *Handwritten Signature* 4/24/98

Attachment A-4
MACLEAN ESNA
611 COUNTRY CLUB ROAD
POCAHONTAS, ARKANSAS 72455

November 17, 2005

TOXIC ORGANIC MANAGEMENT PLAN

MANAGEMENT APPROVAL

This plan will be implemented as herein described.

Signature: Dean Williams

Name: Dean Williams
Title: Plant Manager

Certification

I hereby certify that I have examined the facility and being familiar with the provisions of 40 CFR 433, attest that this Toxic Organic Management Plan has been prepared in accordance with good engineering practices.

Mizan Rahman
Mizan Rahman, P.E.
Engineer
ETC Engineers, Inc.

Dec 1, 2005
Date

Arkansas Registration
Number: 4223



1.7 40 CFR 433.13 through 433.17-TTO Effluent Limits

The maximum concentration of TTO at any time shall not exceed 2.13 mg/l.

The TTO concentration is the summation of all quantitative values greater than 0.01 mg/l for toxic organic located in Appendix I.

Analysis indicated that some TTO compounds were detected above detection limits.

1.8 Toxic Organics Management Plan

This plan is based on the requirements of 40 CFR 433 Metal Finishing

40 CFR 433.12 requires the toxic organic management plan to include a list of the toxic organic compounds used (see attachment 2), the method of disposal used instead of dumping and procedures for ensuring that toxic organics do not routinely spill or leak into the wastewater.

❖ Toxic Organic Compounds

- The complete list of toxic organic substances as defined by 40 CFR 433 can be found in Appendix I.
- MSDS documents reviewed indicated no substances appear on the priority pollutant list.

1.9 Preventive Measures

SMP

The following measures will be used to prevent toxic organic substances from entering into the sanitary sewer system:

❖ Storage Areas – Storage areas shall be maintained in a neat and orderly fashion.

- Storage areas shall be inspected weekly.
- Containers shall be labeled and maintained in good condition.
- Containers must be kept closed except when filling or removing material.
- Leaks or spills will be cleaned up immediately.

❖ Process Area – Process equipment shall be maintained in good working condition.

- Leaking Equipment, valves and/or piping will be repaired immediately.
- Leaks or spills will be cleaned up immediately

❖ Emergency Planning – The plant has an emergency plan, which includes procedures for spill events. These procedures include suitable alarms, response methods and equipment.

❖ Spill Response – The plant shall have the personnel and equipment available to respond to a spill of toxic organic materials.

A-4

- ❖ **Training** – All employees who are directly involved in material handling receive a hazardous waste management procedures training.

List of Toxic Organic Compounds Used

1. 4-Chlorobenzotrifluoride (Replaced Oxsol 100)
Benzene
2. Aluminum Alloy Bars
Lead
Chromium
Copper
Silver
Zinc
3. Bore and/or Flux-Coated Bronze
Copper
Zinc
4. Copper Alloy Bars
Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Nickel
Selenium
Silver
Zinc
5. Diamond or Cubic Boron Nitride Grinding Wheels
Copper
Nickel
Silver
6. Buehler EPO-MET F, EPO-MET G
Antimony Oxide
7. FARBOSET 9544 Red
Antimony Trioxide
8. Gasoline, Unleaded
Benzene
Benzene, Methyl (toluene)
Benzene, Dimethyl
Ethylbenzene
9. G-N Metal Assembly Paste
Zinc Phosphate

List of Toxic Organic Compounds Used (Cont'd)

10. High Speed Steel
 - Chromium
 - Copper
 - Nickel
11. Lead-Acid Battery
 - Lead
 - Antimony
 - Arsenic
12. Magnesium Alloys
 - Zinc
13. Micarta
 - Phenol
14. Mobilux EPO
 - Zinc
15. Nickel Base Alloy Bars
 - Nickel
 - Chromium
 - Copper
16. Buehler Phenolic Powder & Premolds
 - Phenol
17. Project 70 & Type 303 Stainless Steel Bars
 - Chromium
 - Copper
 - Nickel
18. Project 70 & Type 316/316L Stainless Steel
 - Chromium
 - Nickel
 - Copper
19. Carbon Steel Electrode
 - Copper
20. Tool & Die Steel, High Speed Steel
 - Chromium
21. Resin Bonded Abrasive Products
 - Zinc Compound
22. Sodium Bichromate
 - Chromium
23. Stainless Steel Wire or Bars
 - Nickel
 - Chromium
 - Selenium
 - Copper

List of Toxic Organic Compounds Used (cont'd)

24. 300 Series Stainless Steel Welding Rods

Chromium

Nickel

25. Sunnen Honing Stones

Copper

26. Type 302/304/304L Stainless Steel

Chromium

Nickel

Copper

40 CFR §433.15 Pretreatment Standards For Existing Sources (PSES).

Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources (PSES):

PSES FOR ALL PLANTS EXCEPT JOB SHOPS AND INDEPENDENT PRINTED CIRCUIT BOARD MANUFACTURERS

Pollutant or pollutant property	Maximum	Monthly
	for any 1 day	average shall not exceed
Milligrams per liter (mg/l)		
Cadmium (T).....	0.69	0.26
Chromium (T).....	2.77	1.71
Copper (T).....	3.38	2.07
Lead (T).....	0.69	0.43
Nickel (T).....	3.98	2.38
Silver (T).....	0.43	0.24
Zinc (T).....	2.61	1.48
Cyanide (T).....	1.20	0.65
TTO.....	2.13

No user introducing wastewater pollutants into a publicly owned treatment works under the provisions of this subpart shall augment the use of process wastewater as a partial or total substitute for adequate treatment to achieve compliance with this standard.

An existing source subject to this subpart shall comply with a daily maximum pretreatment standard for TTO of 4.57 mg/l.