



Re: Mercer County  
Celina Aluminum Precision Technology  
Indirect Discharge Permit

September 25, 2013

Mr. Steve Webb  
Celina Aluminum Precision Technology  
7059 Staeger Road  
Celina, Ohio 45822

Dear Mr. Webb:

On September 10, 2013, a pretreatment compliance inspection was conducted at your facility. A tour of the facility was given and you provided answers for our inspection checklist. Our inspection indicated compliance with the pretreatment rules at this time.

The new piston line was being installed during the inspection and should be in operation within the next 12 months. This line will have one washer at the end of the line that will discharge up to 720 gallons per day if production is running 24 hours. Due to issues with using recycled water in production, the facility has gone back to discharging all of their water. The facility discharges an average of 42,149 gallons per day.

During the inspection, a pH probe issue in the wastewater treatment process was causing solids to be discharged instead of settling properly. The probe had been replaced and a sample taken showed that the solids were settling properly.

A review of your monthly reports from January 2012 through June 2013 indicates violations of the terms and conditions of your indirect discharge permit. The specific instances of noncompliance are below:

Violation Date	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value
4/15/2012	001	00550	Oil and Grease, Total	1D Conc	33.94	163.
4/1/2012	001	00550	Oil and Grease, Total	30D Conc	11.34	46.6

A copy of the inspection report is enclosed. If you have any questions, please contact me at 419-373-3019.

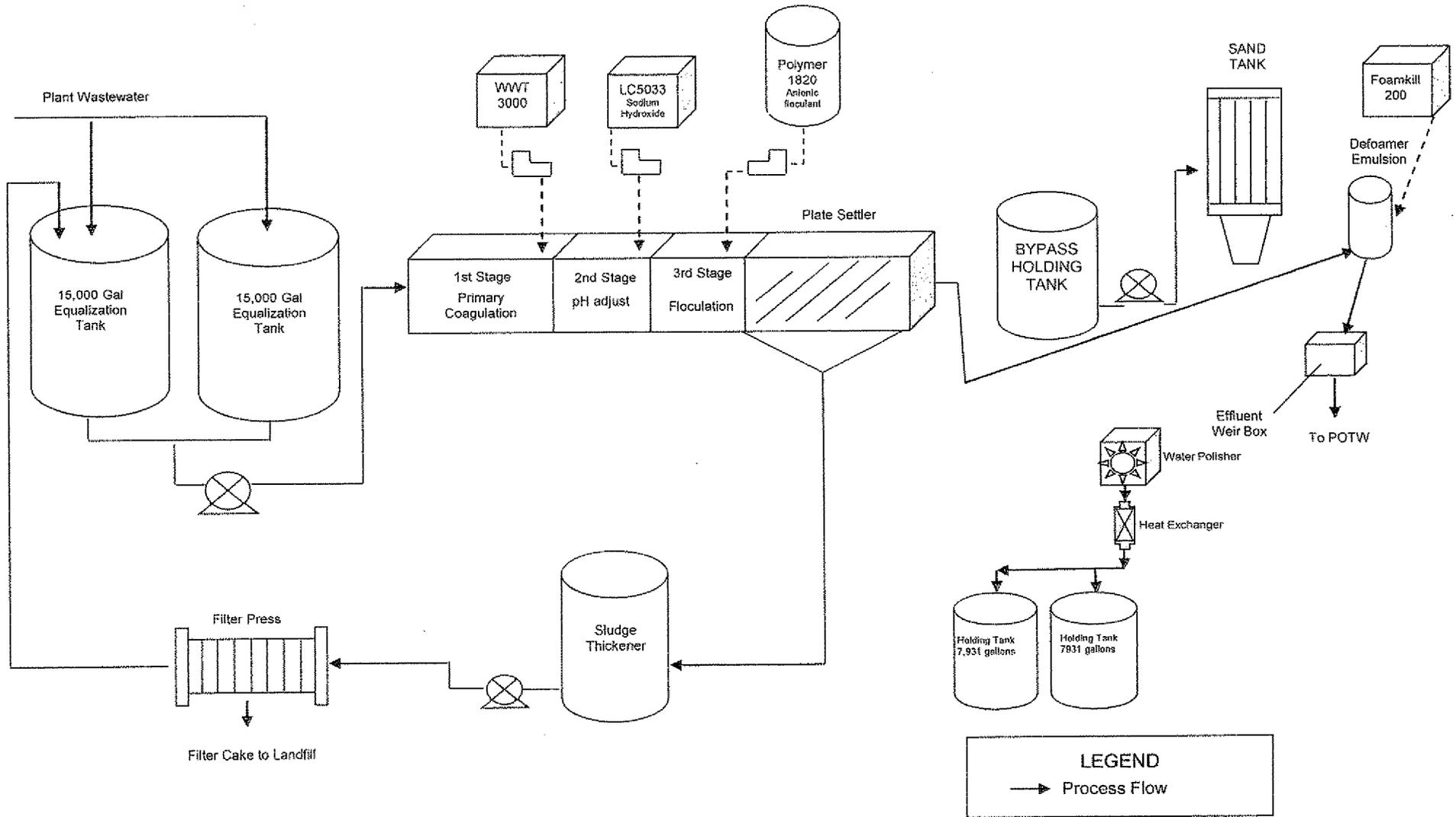
Sincerely,

Michelle Mix  
Division of Surface Water

/jlm  
Enclosures

pc: Kerry Duncan, Superintendent, Celina WWTP  
ec: DSW, CO  
Tracking

# CAPT WASTE WATER FLOW SCHEMATIC



### CAPT WASTE WATER PROCESS FLOW SUMMARY

DEPT	Process Name	Process Description	Flow Type	AVG FLOW (GPD)	MAX. FLOW (GPD)	(C)ontinuous OR (B)atch	Frequency of Discharge
Piston	Casting Quench	One quench tank for each casting line (4 lines total). Pistons are quenched immediately after casting before having the risers cut off. Quench tanks are closed-loop systems w/ filtration and chilling. Still have drag out. Quench tanks still drained weekly.	Regulated	1100	1500	C	Daily
			Regulated	200	200	B	Weekly
Piston	Wash M/C 1	In-line wash station after machine line #1 used to remove coolant and shavings.	Unregulated	2580	1000	C	Daily
Piston	Wash M/C 2	In-line wash station after machine line #2 used to remove coolant and shavings.	Unregulated	630	1000	C	Daily
Piston	Wash M/C 3	In-line wash station after machine line #3 used to remove coolant and shavings.	Unregulated	19000	750	C	Daily
Piston	Wash M/C 4	In-line wash station after machine line #4 used to remove coolant and shavings.	Unregulated	617	2500	C	Daily
Piston	Heat Treat Quench	One quench tank. Baskets of pistons are dumped into hot water in between the 2 furnaces for proper curing.	Regulated	4000	3000	C	Daily
Piston	QC Check Tables (Line 1-4)	Quality check tables that has continuous water overflow. However, these tables are closed-loop systems. Drained at shutdowns.	Unregulated	0	200	B	Semi-Annual
Piston	RO System	CAPT installed a new RO System to supply water to Piston Machining. This system sends approximately 1,500 gal/day to WWTP.	Dilute	2200	3000	B	Daily
Piston	Non-Contact Cooling - Piston DCM	Non-contact cooling water flows through piston casting pins. Normally, closed loop system with chiller and filtration so no discharge to WWTP. Under abnormal circumstances (repair), closed-loop system is by-passed and city water used for cooling that is sent to WWTP. Avg frequency 1x/yr for 1 day - 2 weeks.	Dilute	0	57,600	C	Daily (Abnormal - repair only)
New parts (Tech Bldg)	Casting Quench	After casting, parts are quenched in water tank. To clarity and temperature, water flow is continuous overflow.	Regulated	0	4000	C	Intermittent (R&D)
New parts (Tech Bldg)	Die Cooling (Non-contact)	Non-contact cooling for die cast machine.	Dilute	0	2500	C	Intermittent (R&D)

### CAPT WASTE WATER PROCESS FLOW SUMMARY

DEPT	Process Name	Process Description	Flow Type	AVG FLOW (GPD)	MAX. FLOW (GPD)	(C)ontinuous OR (B)atch	Frequency of Discharge
Cylinder Head	Non-Contact Cooling - CH DCM	Non-contact cooling water flows through die channels in C/H dies. Normally, closed loop system with chiller and filtration so no discharge to WWPT. Under abnormal circumstances (repair), closed-loop could be by-passed and city water used for cooling that is sent to WWPT.	Dilute	0	51,840	C	Daily (Abnormal - repair only)
Cylinder Head	Water Softener (Die Cooling System)	Wastewater associated with recharging (demineralizer backwash) and blowdown (high conductivity) of water softener.	Dilute	200	400	B	Monthly
Cylinder Head	Heat Treat #1 Quench	Baskets of cylinder heads and water passage are "dipped" into hot quench tank between the age & solution furnaces (heat treat).	Regulated	1300	2800	C	Daily
Cylinder Head	Heat Treat #1 Pumps (Sand Separation)	Water is used to "cool" the pump seals. Some contact with quench tank bath occurs.	Regulated			C	Daily
Cylinder Head	Heat Treat #2 Quench	Baskets of cylinder heads and water passage are "dipped" into hot quench tank between the age & solution furnaces (heat treat).	Regulated	3900	2600	C	Daily
Cylinder Head	Heat Treat #2 Pumps (Sand Separation)	Water is used to "cool" the pump seals. Some contact with quench tank bath occurs.	Regulated			C	Daily
Cylinder Head	FL #1 Parts Washer 3	In-line parts washer rinse coolant and "chips" from cylinder head units. Solenoid valves added to drain 25 gallons per hour.	Unregulated	600	750	C	Daily
Cylinder Head	FL #1 Parts Washer 4	In-line parts washer rinse coolant and "chips" from cylinder head units. Solenoid valves added to drain 25 gallons per hour.	Unregulated	600	750	C	Daily
Cylinder Head	Leak Test #1	Cylinder Heads are submerged in tank of water to test for leaks. Some overflow exist during normal operation to keep water clean. Every few months, the tank is drained completely for maintenance or cleaning.	Unregulated	500	1500	C	Daily
				225	225	B	Bi-monthly

### CAPT WASTE WATER PROCESS FLOW SUMMARY

DEPT	Process Name	Process Description	Flow Type	AVG FLOW (GPD)	MAX. FLOW (GPD)	(C)ontinuous OR (B)atch	Frequency of Discharge
Water Passage	Wash M/C #1	In-line parts washer washes coolant and chips from water passages.	Unregulated	175	175	B	Weekly
C/H, Piston, W/P, L/B	Air Scrubber Clarifier Tank	Water used in CAPT's wet scrubber system is a closed-loop system. However, approximately 100 - 200 gallons per day is drained off and replenished with clean water.	Regulated	100	200	C	Daily
ALL	Color Check	Process involves using a red penetrant and developer to look for "cracks" in the parts. Using a 2-compartment sink, water is run 4 -5 limes per shift for 1-2 minutes each time.	Unregulated	250	500	B	Daily
ALL	Floor Scrubber	CAPT uses one rider-type and one walk-behind floor scrubber. The floor scrubber picks up water, coolant and dust. The wastewater is dumped into CAPT's WWPT system.	Unregulated	50	100	B	Daily
Lower Block	Wash M/C 1	In-line wash station used to remove coolant and shavings.	Unregulated	1250	1500	C	Daily
Lower Block	Leak Test (off-line)	Lower blocks are submerged in tank of water to test for leaks. Some overflow exist during normal operation to keep water clean. Every month, the tank is drained completely for maintenance or cleaning.	Unregulated	0	50	C	Daily
				225	225	B	Monthly
Lower Block	Die Maintenance Wash	High pressure wash to clean dies after each die change. Each manual wash takes approximately 1 hour.	Unregulated	50	100	B	Weekly
Lower Block	Non-Contact Cooling - DCM #1	Closed-loop system for die cooling. Blow down will occur if conductivity is too high.	Dilute	200	300	B	Monthly
Lower Block	Non-Contact Cooling - DCM #2	Closed-loop system for die cooling. Blow down will occur if conductivity is too high.	Dilute	200	300	B	Monthly
Lower Block	Water Softener (Die Cooling System)	Wastewater associated with recharging (demineralizer backwash) and blowdown (high conductivity) of water softener.	Dilute	250	500	B	Monthly
Lower Block	Die Lube System	Die lube (diluted) sprayed onto high-pressure casting dies. Spray collected in sump with level control. Pumped intermittently to WWPT. Est volumes include both DCMs.	Regulated	100	150	B	Daily
Knuckle	Heat Treat Quench Tank#1	Baskets of knuckle parts are "dipped" into hot quench tank between the age & solution furnaces (heat treat).	Regulated	2500	3000	C	Daily
Knuckle	Heat Treat Quench Tank#2	Baskets of knuckle parts are "dipped" into hot quench tank between the age & solution furnaces (heat treat).	Regulated	2500	3000	C	Daily
Knuckle	Zyglu Inspection #1	Knuckle parts are dipped in zyglu fluorescent penetrant for quality inspection process. After 5 min dry, parts are rinsed with water which is reused then overflows to WWPT.	Unregulated	4320	4320	C	Daily

### CAPT WASTE WATER PROCESS FLOW SUMMARY

DEPT	Process Name	Process Description	Flow Type	AVG FLOW (GPD)	MAX. FLOW (GPD)	(C)ontinuous OR (B)atch	Frequency of Discharge
Knuckle	Casting Quench	One quench tank for each tilt die cast machine (8 total). Knuckles are quenched after casting before having the risers cut off. Quench tanks are closed-loop systems w/ filtration and chilling. Still have drag out. Quench tanks drained weekly. Closed loop chiller system - Jan 2010	Regulated	0	24480	C	Daily (Abnormal - repair only)
			Regulated	200	400	B	Weekly
Knuckle	Non-Contact Cooling DCM #1-8	Closed-loop re-circulation chiller system will be used for all Knuckle DCMs. Under abnormal circumstances (repair), closed-loop system is bypassed and city water used for cooling that is sent to WWPT. Closed loop chiller system Jan 2010	Dilute	0	76000	C	Daily (Abnormal - repair only)
Knuckle	Non-Contact Cooling - ADC 1-8	Closed-loop system for knuckle die cooling. Blow down will occur if conductivity is too high.	Dilute	250	500	B	Monthly
Transfer Case	Heat Treat #2 Quench	Baskets of transfer cases are "dipped" into hot quench tank between the age & solution furnaces (heat treat).	Regulated	3900	2600	C	Daily
Transfer Case	Heat Treat #2 Pumps (Sand Separation)	Water is used to "cool" the pump seals. Some contact with quench tank bath occurs.	Regulated			C	Daily
Transfer Case	Machine Washer	dip tank used to rinse 2 pc at a time after machining	Regulated	0	100	B	Weekly
Transfer Case	Water Table	City water is used to fill this 30 gallon tank and then the water is recirculated inside of a closed-loop system. Small amounts of additional city water is electronically supplied thereafter when needed.	Unregulated	0	30	B	Bi-Weekly
Transfer Case	Assembly Washer	spin wash (1pc) for final wash prior to assembly	Regulated	0	50	B	Weekly
Transfer Case	Leak Test	This Leak Tester does not use water.					

<b>TOTAL FLOW (GPD)=</b>	<b>54,172</b>	<b>256,695</b>	<b>115,200 (system capacity)</b>
		<b>209,920</b>	Abnormal (During repair only)
		<b>46,775</b>	Normal Max. Flow (GPD)

**PRODUCTION RATE (POTENTIAL) =**  
 (Based on Melt Furnace Capacities)  
**AVG. PRODUCTION RATE =**  
 (Based on Est. Actual Ingot Consumption)

**203.4 SHORT TONS / DAY**  
**152.55 SHORT TONS / DAY**

## IU SITE VISIT DATA SHEET

I. IU SITE VISIT REPORT FORM	
INSTRUCTIONS: Record observations made during the IU site visit. Provide as much detail as possible.	
Name and address of industry: Celina Aluminum Precision Technology 7059 Staeger Rd Celina Ohio 45822	
Date of visit: September 10, 2013	Time of visit: 9:45 AM
Name(s) of inspector(s): Michelle Mix, ESII	
Provide Name(s) and titles(s) of industry representative(s):	
Name	Title
Steve Webb	Coordinator
Classification assigned by CA: Metal Finisher	
Did the CA inspector review/obtain the following as part of the industrial inspection?	
<ol style="list-style-type: none"> <li>1. Description of the products manufactured or the services provided by the IU.</li> <li>2. Verification of the IU's classification or discussion of any changes.</li> <li>3. Description of any significant changes in processes or flow.</li> <li>4. Identification of the raw materials and processes used. (Including a discussion of where wastewater is produced and discharged and attach a step-by-step diagram if possible.)</li> <li>5. Description of the sample location and any differences in Ca and IU locations.</li> <li>6. Description of the treatment system which is in place.</li> <li>7. Identification of the chemicals that are maintained onsite and how they are stored. (Attach list of chemicals, if available.) Discussion regarding the adequacy of spill prevention.</li> <li>8. Discussion regarding whether hazardous wastes are stored or discharge and any related problems.</li> </ol>	
Notes:	



## INDUSTRIAL USER INSPECTION CHECKLIST

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Facility: Celina Aluminum Precision Technology

Date of inspection: September 10, 2013

OH Number: OHP000026

IDP Number: 2DP00007

Facility Representative: Steve Webb

Inspector(s): Michelle Mix

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### COMPLIANCE

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1. Date of last pretreatment inspection: March 29, 2012
  
2. Has the facility been in compliance with its permit limits since the last inspection? Y  
If no, explain:
  
  
3. Is the facility in compliance with all other requirements? Y  
Sampling procedures Y  
Reporting (late reporting, failure to report, etc) NA  
Compliance schedules NA  
Submitted BMR and 90 day compliance reports NA  
Any other requirements NA  
  
If any of the above five answers is no, explain:
  
  
  
  
  
  
  
  
  
  
4. Was the facility required to perform any actions as a result of the last inspection? N  
Explain any unresolved actions:

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### FACILITY OPERATIONAL CHARACTERISTICS

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5. Number of Employees: 591
6. Shifts/Day: 3 Shifts
7. Production Days/Year: 250
8. Hours/shift: 8 hours
  
9. Any production changes since the last inspection? N  
If yes, explain:
  
  
  
  
  
  
  
  
  
  
10. General facility description and operations:  
Aluminum foundry with some machining.

**FACILITY OPERATIONAL CHARACTERISTICS CONTINUED**

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11. Any change in materials used in production since the last inspection?  
If yes, explain: N
12. Any expansion or production increase expected within the next year?  
If yes, explain: Y  
Installation of new piston line within the next 12 months.

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**WASTEWATER TREATMENT**

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13. Provide a schematic diagram and description of the wastewater treatment system:  
See Attached
14. Was a PTI issued for the treatment system? Y
15. Were there any modifications to the treatment system since the previous inspection? N  
If yes, was a PTI obtained? NA  
PTI Number: Date:
16. What is the treatment mode of operation? Continuous  
If batch, list the frequency and duration:
17. Who is responsible for operating the treatment system?  
Lonnie Jones, Bill Gasher, and Bob Kirkpatrick is being trained to replace Lonnie Jones on the first shift. Technicians check on the system during other shifts.
18. How often is the treatment system checked?  
Several times a shift.

**WASTEWATER TREATMENT CONTINUED**

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19. Is there an alarm system for the system? Y  
Explain:  
Some high level alarms and pH alarms.

20. Is there an operations and maintenance manual? Y

21. Is an inventory of critical spare parts maintained? Y  
If yes, list:  
Pump parts, pH meters, probes, and mixers.

22. Are there any bypasses in the system? N  
If yes, describe the location:

Have bypasses occurred since the last inspection? NA

Was the POTW notified? NA

23. Are residuals or sludges generated? Y  
Method of disposal:  
Cherokee Run Landfill

Frequency and amount of disposal:  
1 – 20 cubic yard rolloff approximately 3 times per year.

Name of hauler/landfill/disposal facility:  
Allied Waste

Is any sludge generated subject to RCRA regulations? N

If land applying sludge, is there a sludge management plan? NA

**PROCESS AND WASTEWATER INFORMATION**

24. List all processes generating wastewater, current wastewater flows, and where applicable, production rates as well as values on which the permit limits are based:

REGULATED PROCESS	SAMPLE LOCATION	WASTEWATER FLOW (GPD)		PRODUCTION DATA (SPECIFY UNITS)	
		Permit	Current	Permit	Current
See Attached					
<b>Total Regulated Process Flow</b>					
<b>Noncontact Cooling</b>					
<b>Blowdown</b>					
<b>Reverse Osmosis Condensate</b>					
<b>Demineralizer Regeneration</b>					
<b>Filter Backwash</b>					
<b>Compressor Condensate</b>					
<b>Storm water</b>					
<b>Other Dilute Flows</b>					
<b>Unregulated Flows(provide list)</b>					
<b>Sanitary</b>					
<b>TOTAL FLOW</b>					

25. For the above flows not discharged to the POTW, list point of discharge and permit (if any).

None

**SELF MONITORING**

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26. Sample location(s) described in the facility's permit:  
Weir box.
27. Is the facility sampling at the location(s) described in the permit? Y  
If no, describe the actual location:
28. Is the location(s) where the facility is sampling representative? Y  
If no, indicate a representative location:
29. Is the flow measured or estimated? Measured  
If measured, how often is the meter calibrated?  
Monthly  
If estimated, describe method of estimation:
30. Is pH monitored continuously? Y  
If yes, how often is the meter calibrated?  
Once per week.
31. Does the facility collect its own samples? N  
If no, specify the sample collector:  
Alloway
32. Are appropriate sampling procedures followed? Y  
Monitoring frequencies Y  
Sample collection (grab for pH, O&G, CN, phenols, VOCs) NA  
Flow proportioned samples Y  
Proper preservation techniques Y  
Sample holding times Y  
Chain-of-custody forms Y
33. Are samples analyzed in accordance with 40 CFR 136? Y
34. Laboratory conducting analyses:  
Alloway

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**TOXICS MANAGEMENT**

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35. Are any listed toxic organics used in the facility? N  
If yes, identify organics:
36. Does the facility have a current toxic organic management plan(TOMP)? NA  
If yes, is it being implemented? Facility tests O&G in liue of TTO NA
37. Has the facility had any uncontrolled releases or spills to the POTW since the previous inspection? If yes, please explain: N
38. Does the facility need a spill prevention plan or slug discharge control plan? Y  
If yes, does the facility have a written plan? Has SPCC for oil Y
39. Identify any potential slug load or spill areas:

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**REQUIRED FOLLOW-UP ACTIONS**

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