



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

December 6, 2012

Mr. Andrew Sheldrick
General Dynamics Armament and Technical Products – Springboro Facility
200 Pioneer Boulevard
Springboro, Ohio 45066-0430

**RE: General Dynamics, Springboro, Annual Inspection, 2012
NOTICE OF VIOLATION**

Dear Mr. Sheldrick:

On November 27, 2012, I conducted the annual Industrial User (IU) Inspection at your facility (Facility). Jenny Leverett and Billy Huston of Crown Environmental Services and Greg Bowlin represented the Facility. The Facility is regulated under the Metal Finishing New Source Pretreatment Categorical Standard, 40 CFR 433.17. The inspection covered the bonderlube lines, the chrome plating area, the zinc phosphate area, the pretreatment system, the anodizing line, and the manufacturing area.

The Facility had one pH violation since the last inspection. The wastewater treatment is still being done continuously. Crown Solutions is the contract operator for the pretreatment system. Since the last inspection, the Facility has changed ownership. General Dynamics is now the owner of the Facility. The indirect discharge paperwork was submitted to reflect this change. Ohio EPA is in the process of modifying the permit. The Facility will receive an overall rating of satisfactory.

Brief Description of Facility

Gayston Corporation manufactured various parts for the recreational products and defense industries. Manufacturing processes at the facility include anodizing, drawing, lubricating, stamping, punch pressing, heat treating, machining, tumbling, cleaning, chromating, and the painting of aluminum and copper parts. Since General Dynamics took over, the operations are in the process of being split. The operations related to the manufacturing of ordnance will remain at the facility. The operations related to the recreational products and bottles are being moved out of the Facility. Gayston Corporation will be relocating the operations elsewhere in Springboro. General Dynamics is currently doing a ball bat shell for Gayston.

Regulated Flows and Pretreatment

The processes have remained the same since the last inspection (report dated December 10, 2002). The anodize line is now being used for a fin and housing part. There is one dye being used. A neutralization pretreatment system was added to this line. It discharges to the plant sewer. This wastestream is present at the sampling location.

The baseball bat line and bottle lines will be moving from the Facility. The regulated process flows will be staying with General Dynamics. Gayston will be moving two powder coat lines (without metal finishing lines for preparation), a soap cleaner, and CNCs to its new location. The bottle test lines will also be moved out. The fiber bottle line should be moved out in December 2012. These areas were in the process of being moved out on the day of the inspection. General Dynamics is not expecting any immediate changes in the process areas. The company is in the process of looking for new work to take up the capacity at the Facility. After the first of the year, changes may be made. The anodize, chromate and lube lines will be staying, but production will be cutting back until there is new work. New equipment being brought into the Facility includes presses and CNC machines with coolant. There will be no wastewater associated with this equipment.

The pretreatment system is operating in a continuous mode. The sludge bins under the filter press need to be replaced. There are holes rusted through the sides of the bins. Cardboard was used to cover the holes on one side. These should be replaced to prevent any unnecessary problems. There was a notch cut into the secondary containment at the pretreatment system. The calculations were done to ensure it could still contain the volume of the largest tank in the event of a tank failure. The goal is to operate the pretreatment system in a batch mode once the transfers are completed. The batch treatment system for the concentrate tanks is operational. The pretreatment system is operated by Crown Solutions. The filtrate from deionization canisters from the chrome tanks are now discharging to the sewer system. The canisters are being recharged by ACM. Crown Solutions arranges for the disposal of the pre-filter waste. The chrome line tanks prior to the chrome tank are discharged to the Facility's pretreatment system, and treated. From the chrome tank on in the line, this flow is treated with the resin canisters.

The Facility was issued a new indirect discharge permit. The Combined Wastestream Formula (CWF) was used to calculate the limits. With the changes currently occurring, the Facility must ensure there are no significant changes in the quantity and quality of the regulated and dilution flows. If there is a change of 20%, either up or down, then the permit would need to be modified to reflect these changes to the limit. The dilution flow must also be reported in the comments section of the self-monitoring reports. This is a new requirement in the renewed indirect discharge permit.

Sampling

The Facility is still using TestAmerica for sample collection and analysis. The chain-of-custody forms are being completed as required. The Facility is using eDMR for the submittal of its indirect discharge permit sampling. The Facility has been reporting its sampling for manganese.

There was one pH violation March 6, 2012. The Facility had a pH of 4.16 SU. They resampled, and had pH values of 6.25 and 6.38 SU. This letter will serve as the Notice of Violation (NOV) for this violation. The Facility has since returned to compliance.

With the renewal of the permit, a Toxic Organics Management Plan (TOMP) was submitted and approved. The Facility certified for TTOs in the report due July 20, 2012.

Waste Disposal

The sludge generated by the pretreatment system and the bonderlube is hauled to Rumpke. If there is just cake from the pretreatment system, then the waste is hauled to Stoney Hollow Landfill. The scrap metal is still being taken for recycling by Midwest Metal. Rineco takes the waste organics and paint thinners; and US Ecology takes the concentrated waste nitric and phosphoric acids. Clean Water Ltd. is taking the used coolants.

The assistance provided by your staff was appreciated. Should you have any additional questions, feel free to contact me at (937) 285-6108.

Sincerely,



Marianne Piekutowski
District Pretreatment Coordinator
Division of Surface Water

MP/tb

Enclosures

cc: Greg Bowlin, General Dynamics
Terry Morris, Springboro
Ryan Laake, DSW/CO



State of Ohio Environmental Protection Agency
Southwest District Office

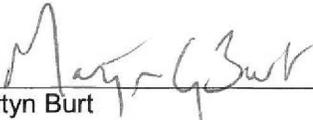
Pretreatment Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1DP00006*HP	OHP000060	11/27/2012	I	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
General Dynamics Armament & Technical Products Springboro Plant 200 Pioneer Blvd. Springboro, Ohio 45066	8:45 am	05/01/2012
	Exit Time	Permit Expiration Date
	10:25 am	04/30/2017
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Greg Bowlin	(513)465-1575	
POTW Receiving Discharge	Categorical Standard(s) or Other Classification	
City of Springboro WWTP	40 CFR 433.17	

Section C: Areas Evaluated During Inspection			
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)			
S	Pretreatment		

Section D: Summary of Findings (Attach additional sheets if necessary)
See attached report.

Inspector	Reviewer
 Marianne Piekutowski Division of Surface Water Southwest District Office Date: 12/6/12	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office Date: 12/6/12

INDUSTRIAL USER INSPECTION CHECKLIST

Facility: **General Dynamics Armaments & Technical Products** Date of inspection: **November 27, 2012**
Springboro Facility

OH Number: **OHP000060**

IDP Number: **1DP00006*HP**

Facility Representative: **Greg Bowlin, Billy Huston, Jenny Leverett**

Inspector(s): **Mari Piekutowski**

COMPLIANCE

1. Date of last pretreatment inspection: **November 29, 2011**

2. Has the facility been in compliance with its permit limits since the last inspection? Y/N

If no, explain:

There was a pH violation in March 2012. Returned to compliance immediately with next sample.

3. Is the facility in compliance with all other requirements?

Sampling procedures

Y/N/NA

Reporting (late reporting, failure to report, etc)

Y/N/NA

Compliance schedules

Y/N/NA

Submitted BMR and 90 day compliance reports

Y/N/NA

Any other requirements

Y/N/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? Y/N

Explain any unresolved actions:

Issue was resolved.

FACILITY OPERATIONAL CHARACTERISTICS

5. Number of Employees: **218**

6. Shifts/Day: **2 for most operations; Fin & Housing 3 shifts**

7. Production Days/Year: **350**

8. Hours/shift: **7.5**

9. Any production changes since the last inspection? Y/N

If yes, explain:

The facility was purchased by General Dynamics. Operations are being split. The military components are staying with this facility. All other products are moving with Gayston. The employees at the facility will be reduced to approximately 150 after January 1, 2013. As General Dynamics gets more work, additional employees will be hired.

10. General facility description and operations:

Manufacture precision metal parts such as ordnance. New work at the facility is expected to be military in nature.

FACILITY OPERATIONAL CHARACTERISTICS CONTINUED

11. Any change in materials used in production since the last inspection? Y / N
If yes, explain:

12. Any expansion or production increase expected within the next year? Y / N
If yes, explain:

The facility brought in fin and housing units that run on the existing anodize line. Currently a ball bat shell is still being done.

WASTEWATER TREATMENT

13. Provide a schematic diagram and description of the wastewater treatment system:

See attached sheet.

14. Was a PTI issued for the treatment system? Y / N

15. Were there any modifications to the treatment system since the previous inspection? Y / N

If yes, was a PTI obtained? Y / N

PTI Number: **870717**

Date: **May 22, 2012**

16. What is the treatment mode of operation? Batch / **Continuous** / Combination

If batch, list the frequency and duration:

The system is running continuously. Eventually want to get back to batch operations.

17. Who is responsible for operating the treatment system?
Crown Solutions

18. How often is the treatment system checked?

The system is monitored when discharging.

WASTEWATER TREATMENT CONTINUED

19. Is there an alarm system for the system? Y / N
Explain:

There are alarms for level, pH, loss of air, and low chemical.

20. Is there an operations and maintenance manual? Y / N
Added new batch treat portion to SOP. Need to add the new anodize line to this.

21. Is an inventory of critical spare parts maintained? Y / N
If yes, list:

pH probes, pumps, valves, pH modules for the controller, mixers.

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

Have bypasses occurred since the last inspection? Y / N

Was the POTW notified? Y / N

23. Are residuals or sludges generated? Y / N

Method of disposal:

Solids are landfilled. The chrome canisters are taken by ACM (Maryland) for regeneration. Crown supplies the resin and canisters. Scrap metals are taken by Midwest Metals. The disposal of the pre-filter for the chrome line is coordinated by Crown Solutions for disposal with Rineco. Rineco in Arkansas take the flammable wastes. The nitric acid goes to US Ecology in Michigan. Clean Waters Ltd. takes the used coolants. The chromic acid is disposed of at EQ via US Ecology.

Frequency and amount of disposal:

Approximately 20 yards are disposed of a minimum of three times a month.

Name of hauler/landfill/disposal facility:

If there is just filter cake being disposed of, it is taken to Stoney Hollow Landfill. If there is bonderlube and filter cake being disposed of, this is taken to Rumpke where the waste has been profiled.

Is any sludge generated subject to RCRA regulations? Y / N

If land applying sludge, is there a sludge management plan? Y / N

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
Lubrication & Anodizing	<i>End-of-Pipe</i>	55,000	40,000		
Chromating	<i>End-of-Pipe</i>	20,000	8,000		
Heat Treat & Parts Washing	<i>End-of-Pipe</i>	35,000	30,000		
Total Regulated Process Flow		110,000	78,000	<i>The facility is permitted for 110,000 gallons of categorical flow.</i>	
Non-Contact Cooling			30,000		
Blowdown			-		
Reverse Osmosis & Softener		14,000	12,000		
Demineralizer Regeneration			-		
Filter Backwash			-		
Compressor Condensate			<100		
Storm Water			-		
Other Dilute Flows			-		
Unregulated Flows (provide list)			-		
Sanitary		15,000	15,000		
TOTAL FLOW		129,000	126,100		

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

*The facility has a general NPDES permit for the discharge of non-contact cooling water (OHN00001). The facility also has coverage under the "No Exposure" certification for its storm water discharges (1GRN00555*EG).*

SELF MONITORING

26. Sample location(s) described in the facility's permit:

Samples shall be collected from the manhole located at the end of Pioneer Blvd. Approximately 25 feet west of the boulevard and approximately 20 feet south of Parking Lot B.

27. Is the facility sampling at the location(s) described in the permit? Y / ~~N~~
If no, describe the actual location:

28. Is the location(s) where the facility is sampling representative? Y / ~~N~~
If no, indicate a representative location:

29. Is the flow measured or estimated? Measured / ~~Estimated~~

If measured, how often is the meter calibrated?

Take a water meter reading then subtract out the non-contact cooling water. The manufacturer did not recommend calibration.

If estimated, describe method of estimation:

30. Is pH monitored continuously? Y / ~~N~~
If yes, how often is the meter calibrated?

There is a final pH check tank prior to discharging, but there is not a recorder for continuous pH monitoring on the effluent. It is not used for the required sampling monitoring. It is done in the field at the manhole.

31. Does the facility collect its own samples? Y / ~~N~~
If no, specify the sample collector:

Test America

32. Are appropriate sampling procedures followed? Y / ~~N~~
Monitoring frequencies Y / ~~N~~
Sample collection (grab for pH, O&G, CN, phenols, VOCs) Y / ~~N~~
Flow proportioned samples **Time composited samples.** Y / ~~N~~
Proper preservation techniques Y / ~~N~~
Sample holding times Y / ~~N~~
Chain-of-custody forms Y / ~~N~~

33. Are samples analyzed in accordance with 40 CFR 136? Y / ~~N~~

34. Laboratory conducting analyses:

Test America
TOXICS MANAGEMENT

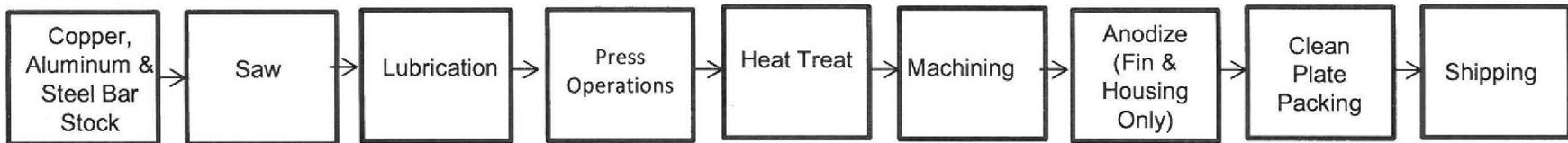
35. Are any listed toxic organics used in the facility? Y/N
If yes, identify organics:
Xylene in paint. Acetone in inks. Nothing goes to waste treatment.
36. Does the facility have a current toxic organic management plan(TOMP)? Y/N
If yes, is it being implemented? Y/N
37. Has the facility had any uncontrolled releases or spills to the POTW since the previous inspection? If yes, please explain: Y/N
38. Does the facility need a spill prevention plan or slug discharge control plan? Y/N
If yes, does the facility have a written plan? Y/N
39. Identify any potential slug load or spill areas:

REQUIRED FOLLOW-UP ACTIONS

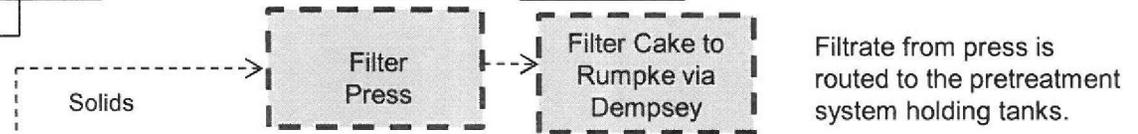
The facility must monitor its various flows to ensure that any changes impacting the combined wastestream formula are noted. If there is a 20% change, Ohio EPA must be notified so the indirect discharge permit can be modified.

General Dynamics Armaments & Technical Products Springboro Facility

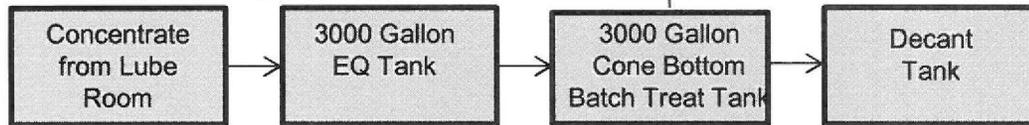
Process Schematic



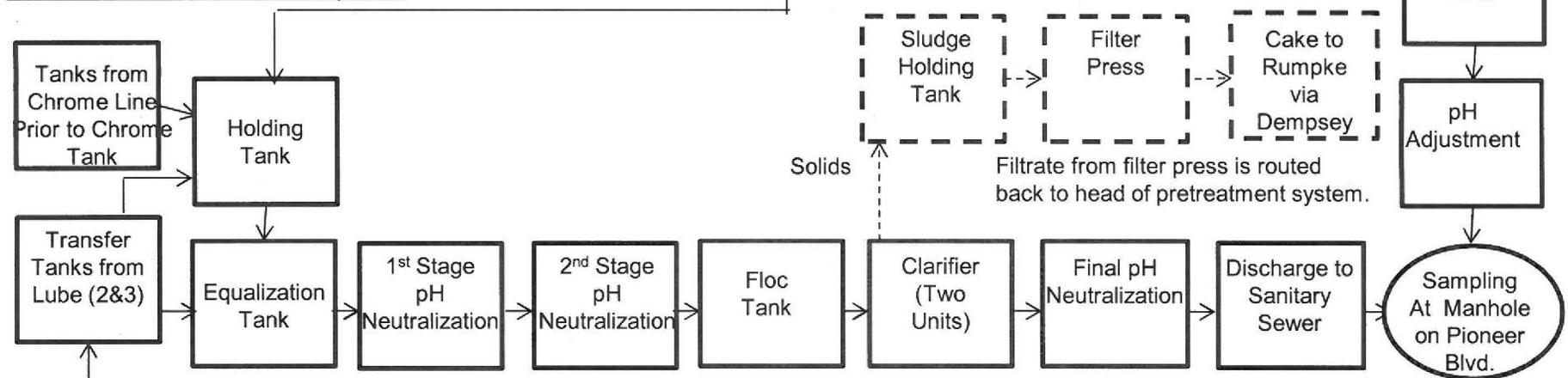
Pretreatment Schematic



Batch Treatment Process



Continuous Pretreatment System



Chrome Line Treatment after Chrome Tank

