



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

August 14, 2013

Ms. Ann Pence  
Greenfield Products, Inc.  
P.O. Box 99  
Greenfield, Ohio 45123

**RE: Greenfield Products, Inc., Greenfield, Annual IDP Inspection, 2013**  
**Notice of Violation**

Dear Ms. Pence:

On July 17, 2013, I conducted the annual pretreatment inspection at your facility. Steve McCoy and Gary Rhoads represented the facility. The facility is considered to be a significant industrial user (SIU) because it is regulated under the Metal Finishing Categorical Standard, 40 CFR 433.17. The inspection covered the PVC coating area, the shipping and storage areas, the iron phosphating and powder coat area, the zinc phosphating and e-coat area, the pretreatment system, and sampling location. The storm water pollution prevention plan and associated sampling was also discussed.

The facility is submitting its self-monitoring data as required. There were two daily and two average zinc violations since the last inspection. The facility did provide the 24 hour notification for the daily violations. Resampling showed the facility had returned to compliance for zinc the next week in May 2013. Because of this, the facility will receive an overall rating of marginal.

**Brief Description of Facility**

Greenfield Products, Inc. (GPI) does job shop and custom coatings. The facility provides parts washing followed by coating with powder coat, e-coat or PVC. The facility coats anchors, appliance parts, natural gas lines, and automotive parts. The parts are brought into the facility finished. These parts are then washed and prepared for coating. Once they are coated, the parts are then cured. They are packaged for shipment off-site. GPI may drill holes in some parts, but that is the only machining that is done on-site. The customer has the option of iron or zinc phosphating for surface preparation in addition to the coating choices.

**Regulated Flows and Pretreatment**

GPI has regulated process flows from the zinc and iron phosphating lines. The e-coat tank may also be dumped to the treatment system on an as-needed basis. The iron phosphate line

has three overflowing rinses and periodic dumps of the concentrated tanks. All of the discharges are collected in a holding tank. The zinc phosphating line has three rinses that are set up to counter flow so only one rinse is discharging.

Because of this, the flow rates have dropped from 6 gpm to 2 gpm. All of the flow was going to the treatment system. There are also periodic dumps from the concentrate tanks. If the e-coat tank must be disposed of, it would also be treated in the pretreatment system for the zinc line. The pretreatment system for the zinc line includes metals removal and pH adjustment. The discharge from this system is also collected and checked prior to discharge to ensure that it is in compliance. Solids are then dewatered in a sludge thickening tank and a plate-and-frame filter press. The sludge has been tested and determined to be non-hazardous. The zinc pretreatment system is now discharging approximately three times a day. This is because the iron phosphate line is also being treated through the zinc pretreatment system. This line runs galvanized metal so zinc levels are high. During the past year, the facility expanded its pretreatment system to treat the additional flows. A permit-to-install (PTI) was obtained for this expansion. The sludge is still being taken by Waste Management.

GPI is using a reverse osmosis (RO) unit for its water instead of a demineralizer. The RO reject water generated is being discharged to the sanitary sewer.

### **Storage Areas**

The storage areas haven't changed since the 2000 inspection (report dated August 18, 2000).

### **Sampling**

GPI is using Alloway Labs for its contract laboratory. The sampling reports were submitted as required. The preservation methods for the samples must be noted. This would include the chemical preservatives, as well as any icing or refrigeration of the samples. This is noted on the sample bottles, but is not transferred to the chain-of-custody forms. This should begin immediately.

### ***EFFLUENT LIMIT VIOLATIONS***

<b>Parameter</b>	<b>Code</b>	<b>Date</b>	<b>Reported</b>	<b>Units</b>	<b>Permit Limit</b>
Zinc, Total	01092	09/28/12	4,210	ug/L	2,610 ug/L (Daily)
Zinc, Total	01092	09/2012	2,377	ug/L	1,480 ug/L(Mo Avg)
Zinc, Total	01092	05/06/13	5,440	ug/L	2,610 ug/L (Daily)
Zinc, Total	01092	05/2013	2,668	ug/L	1,480 ug/L(Mo Avg)

Sampling on May 13, 2013 showed the facility had returned to compliance for the daily violation. The average for June 2013 showed the facility had returned to compliance for the monthly average.

Please be advised that failure to comply with the effluent limitations, or to satisfy monitoring or reporting requirements of your indirect discharge permit, may be cause for enforcement action pursuant to the Ohio Revised Code Chapter 6111.

### **Storm Water**

The facility has received coverage under the multi-sector general industrial storm water permit. Compliance with this permit was also evaluated as part of this inspection. Greenfield Products is covered under Subsector AA of the new permit. As part of this subsector, quarterly sampling for benchmark parameters is required. Questions relating to the storm water pollution prevention plan and sampling were discussed.

### **REQUIRED ACTION**

Greenfield Products, Inc. must note the preservation methods on its chain-of-custody forms. This must begin immediately.

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: Steve McCoy, Greenfield Products, Inc.  
Gary Rhoads, Greenfield Products, Inc.  
Jim McCoy, Greenfield

ec: 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
1DP00036*CP	OHP000067	07/17/2013	I	S	2

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Greenfield Products 1230 North Washington Street P.O. Box 99 Greenfield, Ohio 45123	10:00 am	06/01/2012
	Exit Time	Permit Expiration Date
	12:00 pm	05/31/2017
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Steve McCoy, Director of Operations Gary Rhoads	(937) 981-2696	
POTW Receiving Discharge	Categorical Standard(s) or Other Classification	
City of Greenfield WWTP	40 CFR 433.17	

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

M	Pretreatment	
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Section D: Summary of Findings (Attach additional sheets if necessary)

**See attached report.**

Inspector

Reviewer

	8/14/13		8/14/13
Marianne Piekutowski Division of Surface Water Southwest District Office	Date	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office	Date



## INDUSTRIAL USER INSPECTION CHECKLIST

Facility: **Greenfield Products**

Date of inspection: **July 17, 2013**

OH Number: **OHP000067**

IDP Number: **1DP00036\*CP**

Facility Representative: **Steve McCoy, Gary Rhoads**

Inspector(s): **Mari Piekutowski**

### COMPLIANCE

1. Date of last pretreatment inspection: **July 17, 2012**
2. Has the facility been in compliance with its permit limits since the last inspection? Y/N  
If no, explain:

***There were two daily and two monthly violations for zinc. In-house testing indicated the discharge was in compliance, but results from the laboratory showed violations.***

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:

### FACILITY OPERATIONAL CHARACTERISTICS

5. Number of Employees: **45**
6. Shifts/Day: **2**
7. Production Days/Year: **260**
8. Hours/shift: **8 hours/5 days a week.**
9. Any production changes since the last inspection? Y/N  
If yes, explain:

***Powder coat is up 25% from last year. E-coat is up 10% from last year. The dip PVC is also still running, but is flat. This is tied to anchor production being down. The PVC was not running on the day of the inspection.***

10. General facility description and operations:

***The facility receives finished parts and coats them with PVC and powder coat. The facility also does custom coating and job shopping for coating. Parts include anchors, tent stakes, appliance products, and some automotive parts.***

**FACILITY OPERATIONAL CHARACTERISTICS CONTINUED**

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

***The facility is using Galaxy cleaners for the iron phosphate line. The facility is also switched to RO water instead of DI water. The RO reject is being discharged to the city.***

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

***An increase in powder coat of 30% is expected.***

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**WASTEWATER TREATMENT**

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

***See attached schematic.***

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: **895848**

Date: **October 16, 2012**

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

If batch, list the frequency and duration:

***The discharges are three batches per day. This is mainly from the powder coat. The flow rate is approximately 8,000-12,000 gpd during production. All of the process water is being treated through the zinc treatment system. The facility modified the system by increasing the tank size.***

17. Who is responsible for operating the treatment system?

***The Lab Technicians (Gary Rhoads and Tim Miller) are responsible for the zinc phosphate treatment and the iron phosphate treatment. Two others have been trained, if needed.***

18. How often is the treatment system checked?

***Prior to the discharge of each batch.***

**WASTEWATER TREATMENT CONTINUED**

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

*There is no alarm on the system. However, the automatic valve was replaced with a manual double valve. Both valves have to be opened in order for the wastewater to be discharged.*

20. Is there an operations and maintenance manual? Y/N

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

*pH paper, pumps. The facility can get another pH probe within the day.*

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:

*Waste Management takes the sludge for off-site disposal.*

Frequency and amount of disposal:

*Approximately 1,645 pounds per month.*

Name of hauler/landfill/disposal facility:

*The facility had a TCLP run of its sludge. It was determined to be non-hazardous. The sludge is now being taken by Waste Management for disposal. Crystal Clean takes the toluene, alcohol, etc. off-site for disposal.*

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
E-coat and Zn phosphate Line (6 Stage)	<i>End-of-Process</i>		1,500		
Fe Phosphate line including Cleaners and rinses w/o Zinc	<i>End-of-Process</i>		8,000		
<b>Total Regulated Process Flow</b>			<b>9,500</b>		
<b>Non-Contact Cooling</b>			-		300 gallons of the RO reject is reused in the rinse tanks. Looking to increase this volume.
<b>Blowdown</b>			-		
<b>Reverse Osmosis</b>			<i>Reject water to drain.</i>		
<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>			<b>9,500</b>		

25. For the above flows not discharged to the POTW, list point of discharge and permit (if any).  
*Storm water flow is the only discharge not going to the Greenfield WWTP. This has received coverage under the general industrial storm water permit.*

**SELF MONITORING**

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

**Discharge pipe of the wastewater collection tank.**

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?

**Read from the tank volume.**

If estimated, describe method of estimation:

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

**Every batch is checked prior to discharge. The meter is calibrated daily.**

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

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 **Continuous pull when discharging.** Y / N

Proper preservation techniques **Need to note the preservation methods on forms.** 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:

**Alloway.**

**TOXICS MANAGEMENT**

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35. Are any listed toxic organics used in the facility? Y / N  
If yes, identify organics:

*MEK, Acetone, Toluene, Xylene, and Isobutyl Alcohol. These are being disposed of by Crystal Clean.*

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:

*None noted.*

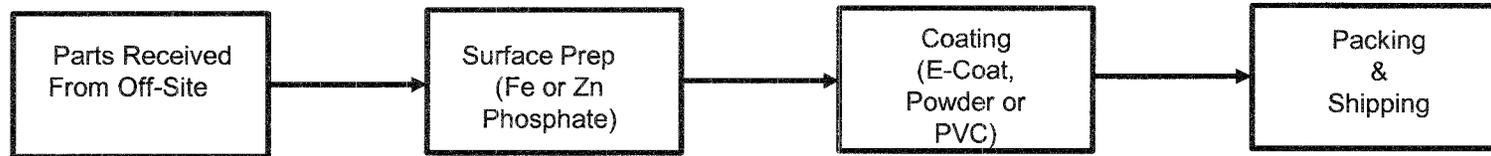
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**REQUIRED FOLLOW-UP ACTIONS**

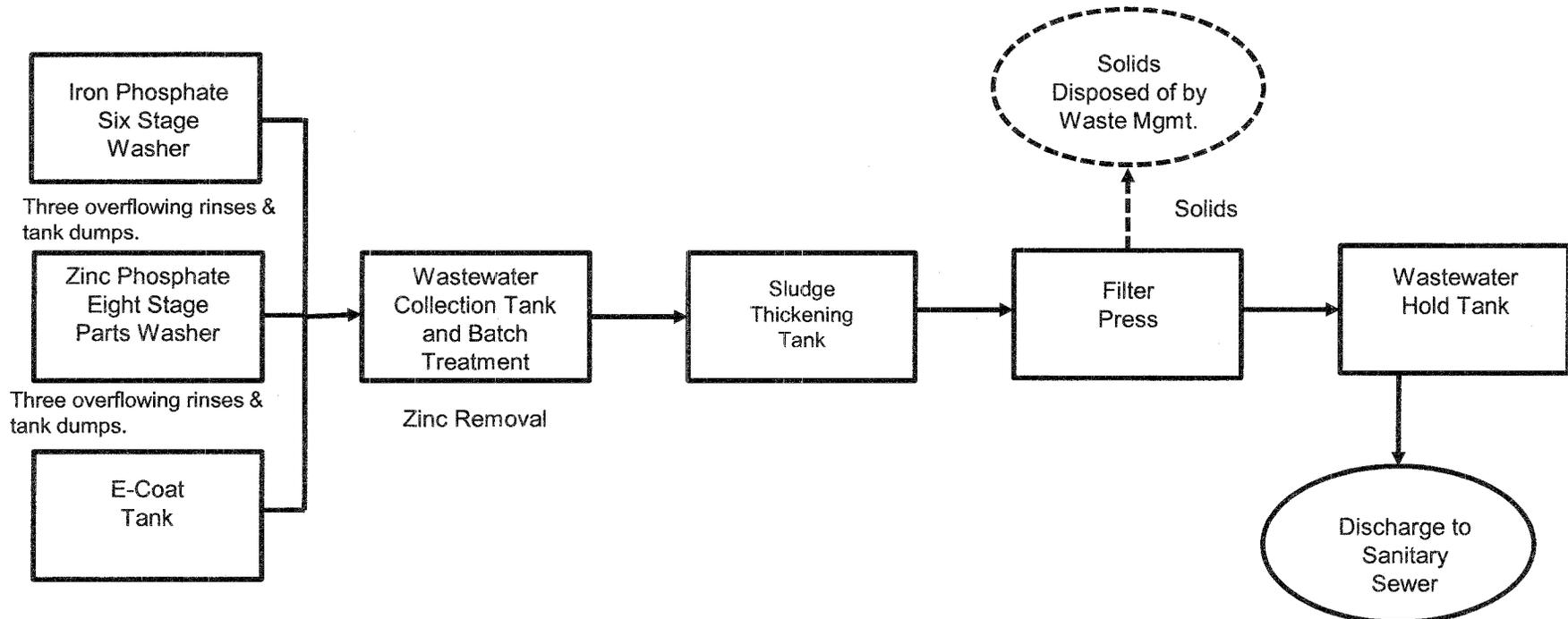
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*Greenfield Products must list the sample preservation methods on the chain-of-custody forms. The listing of the preservative on the sample bottle does not suffice.*

## Greenfield Products Process Schematic



## Greenfield Products Treatment Schematic



August 12, 2013

