



**Environmental  
Protection Agency**

Ten Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

September 16, 2010

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

**Re: Greenfield Products, Inc. -- Greenfield -- Annual Inspection -- 2010  
Notice of Violation**

Dear Ms. Pence:

On August 11, 2010, I conducted the annual pretreatment inspection at your facility. The facility was represented by Steve McCoy and Gary Rhoads. 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 facility had four monthly average zinc violations, and missed one sample event in the first half of 2010. The facility submitted its self-monitoring reports for the second half of 2008 and the first half of 2009 as required in last year's inspection report. 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. Each of the lines has its own pretreatment system. 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 pH is checked, and if it is in compliance, the tank is discharged to the sanitary sewer. 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. 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 still discharging approximately once a week. The sludge is still being taken by Waste Management. GPI is investigating elimination of the e-coat line, and putting in additional powder coating operations. If the facility proceeds with this, then the immersion zinc phosphate line and e-coat would be removed. A spray iron phosphate line with powder coat would be added. The volumes of wastewater generated would remain the same, and no additional treatment is anticipated at this time. GPI would then do light color powder coating on one line, and dark color powder coating on the other line.

GPI is using a reverse osmosis (RO) unit for its water instead of a demineralizer. The RO reject water that is generated is being collected in a tank, and then used in the rinses of the washers. This saves on the use of City water. The facility currently uses a 300 gallon tank, but will install a larger permanent tank.

GPI's permit will be expiring on September 30, 2010. The facility must submit its renewal application prior to the existing permit expiring.

#### Storage Areas

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

#### Sampling

GPI is using Ginosko Labs for its contract laboratory. As a result of the personnel transition, the self-monitoring reports for the second half of 2008 and the first half of 2009 were not submitted as required. These have since been submitted as required in last year's inspection.

The following violations were noted:

**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	09/2008	2,057	ug/L	1,480 ug/L (Avg)
Zinc, Total	01092	10/2008	1,502	ug/L	1,480 ug/L (Avg)
Zinc, Total	01092	01/2010	2,086	ug/L	1,480 ug/L (Avg)
Zinc, Total	01092	05/2010	1,653	ug/L	1,480 ug/L (Avg)

The following frequency violations were noted:

<b><u>Date</u></b>	<b><u>Parameter</u></b>	<b><u>Code</u></b>	<b><u>Number Required</u></b>	<b><u>Number Reported</u></b>
01/01/10	TTOs	82090	1/ Six Months	0
01/01/10	Chromium, Total	01034	1/ Two Months	0
01/01/10	Silver, Total	01077	1/ Two Months	0
01/01/10	Copper, Total	01042	1/ Two Months	0
01/01/10	Lead, Total	01051	1/ Two Months	0
01/01/10	Nickel, Total	01067	1/ Two Months	0
01/01/10	Cadmium, Total	01027	1/ Two Months	0

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

Storm Water

The facility has received coverage under the general industrial storm water permit.

**REQUIRED ACTIONS**

Greenfield Products, Inc. must submit renewal application for its indirect discharge permit by September 30, 2010. Failure to submit the renewal application in a timely manner is a violation of Ohio Revised Code 6111 and Ohio Administrative Code 3745-36(G)(1).

Greenfield Products, Inc. must receive the completed chain-of-custody from its contract laboratory. This must begin immediately.

September 16, 2010  
Page 4

The assistance provided by your staff was appreciated. Should you have any additional questions, feel free to contact me at 937.285.6108.

Sincerely,

A handwritten signature in black ink, appearing to read 'Marianne Piekutowski', with a long horizontal flourish extending to the right.

Marianne Piekutowski  
District Pretreatment Coordinator  
Division of Surface Water

Enclosures

Cc: Steve McCoy, Greenfield Products, Inc.  
Jim McCoy, Greenfield  
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*BP	OHP000067	08/11/2010	I	S	2

Section B: Facility Data		
<b>Name and Location of Facility Inspected</b> Greenfield Products 1230 North Washington Street P.O. Box 99 Greenfield, Ohio 45123	<b>Entry Time</b>	<b>Permit Effective Date</b>
	10:00 am	10/01/2005
	<b>Exit Time</b>	<b>Permit Expiration Date</b>
11:50 am	09/30/2010	
<b>Name(s) and Title(s) of On-Site Representatives</b>		<b>Phone Number(s)</b>
Steve McCoy, Director of Operations Gary Rhoads		937.981.2696
<b>POTW Receiving Discharge</b>		<b>Categorical Standard(s) or Other Classification</b>
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		
---	--------------	--	--

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

*See attached report.*

Inspector	Date	Reviewer	Date
	9/16/10		9/17/10
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: *August 11, 2010*

OH Number: *OHP000067*

IDP Number: *1DP00036\*BP*

Facility Representative: *Steve McCoy, Gary Rhoads*

Inspector(s): *Mari Piekutowski*

COMPLIANCE

1. Date of last pretreatment inspection: *August 13, 2009*

2. Has the facility been in compliance with its permit limits since the last inspection? *Y/N*  
If no, explain:

*There were four average zinc violations. These were in September and October 2009 and January and May 2010. The self-monitoring reports for the second half of 2008 and first half of 2009 were submitted. In addition, samples were not taken for the first two month period of 2010 for TTOs, chromium, silver, copper, lead, nickel and cadmium. The samples were collected the other four months in the first half of 2010.*

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:

*The facility submitted its self-monitoring reports as required in the inspection.*

FACILITY OPERATIONAL CHARACTERISTICS

5. Number of Employees: *53*

6. Shifts/Day: *1*

7. Production Days/Year: *260*

8. Hours/shift: *4 10 hours Friday work is increasing.*

9. Any production changes since the last inspection? *Y/N*  
If yes, explain:

*Powder coat is up 40% from last year. E-coat is about the same as last year. The dip PVC is also still running, but is flat. This is tied to anchor production being down. There was no PVC 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.*

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 switching to RO water instead of DI water. The RO reject is being captured and used in the rinse tanks instead of City water. Currently, this is 300 gallons. The facility is looking at putting in a bigger tank to hold more reject water.*

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

*The facility is looking at completely eliminating the e-coat line and putting in more powder coat. This would allow the facility to use one line for dark powder coat, and one line for the light powder coat. This would be an iron phosphate line instead of the zinc phosphate. Instead of being immersion tanks, it would be spray booths. The quantity of wastewater would remain the same so no additional treatment equipment would be needed. The facility is expecting a 40% increase in powder coat during the next year.*

**WASTEWATER TREATMENT**

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: Date:

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

If batch, list the frequency and duration:

*The zinc discharge is three times a month. The iron phosphate discharges are three batches per day. This is mainly from the powder coat. The flow rate is approximately 5,500 gpd during production.*

17. Who is responsible for operating the treatment system?

*The Lab Technician (Gary Rhoads) is responsible for the zinc phosphate treatment and the iron phosphate treatment.*

18. How often is the treatment system checked?  
*Prior to the discharge of each batch.*

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 900 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)	End-of-Process		1,500		
Fe Phosphate line including Cleaners and rinses w/o Zinc	End-of-Process		6,000		
<b>Total Regulated Process Flow</b>			<b>7,500</b>		
Non-Contact Cooling			-		300 gallons of the RO reject is reused in the rinse tanks. Looking to increase this volume.
Blowdown			-		
Reverse Osmosis			<i>Reject water To recycle.</i>		
Demineralizer Regeneration			-		
Filter Backwash			-		
Compressor Condensate			-		
Storm Water			-		
Other Dilute Flows			-		
Unregulated Flows (provide list)			-		
Sanitary			-		
<b>TOTAL FLOW</b>			<b>7,500</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 stormwater 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 Y / N  
Sample holding times Y / N  
Chain-of-custody forms **Need to get back signed form from the lab.** Y / N

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

34. Laboratory conducting analyses:

**Ginosko.**

**TOXICS MANAGEMENT**

---

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.*

---

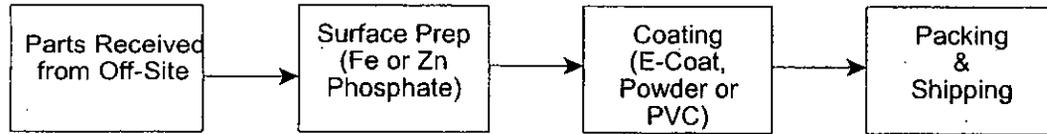
**REQUIRED FOLLOW-UP ACTIONS**

---

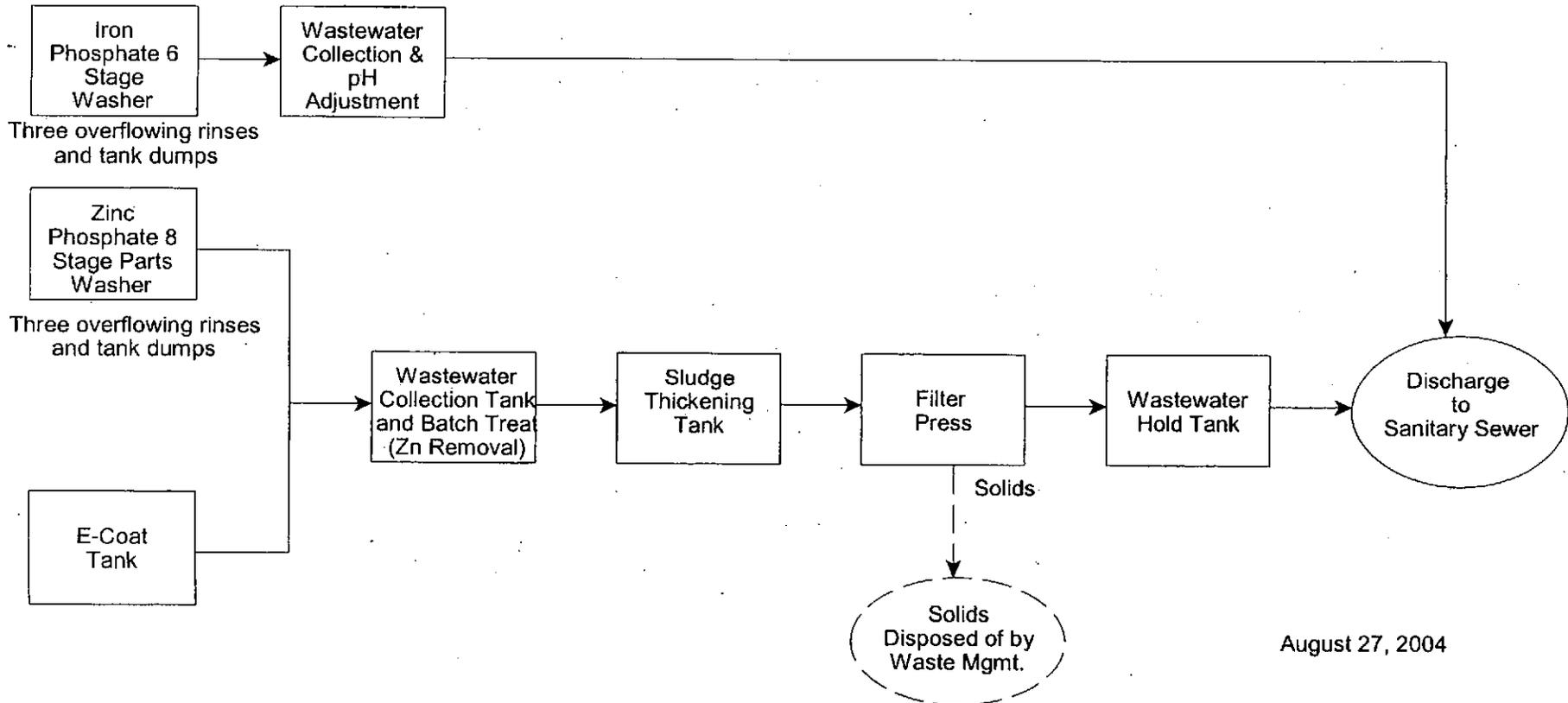
*Greenfield Products must submit renewal application for their indirect discharge permit.*

*Greenfield Products must receive a copy of the signed chain-of-custody form their contract laboratory.*

# Greenfield Products Process Schematic



# Greenfield Products Treatment Schematic



August 27, 2004