



Environmental  
Protection Agency

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

August 16, 2012

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

**RE: GREENFIELD PRODUCTS, INC., GREENFIELD, STORM WATER CEI AND  
ANNUAL IDP INSPECTION, NOTICE OF VIOLATION, 2012**

Dear Ms. Pence:

On July 17, 2012, I conducted the annual Pretreatment Inspection and Storm Water Compliance Evaluation Inspection (CEI) at your facility. The facility was represented by Steve McCoy, Gary Rhoads, and Tim Miller. 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 polyvinyl chloride (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, sampling location, and storm water discharges.

The facility is submitting its self-monitoring data as required. There was one daily and one average zinc violation in December 2011. However, the facility did not provide the 24 hour notification for the daily violation. Resampling showed the facility had returned to compliance for zinc in February 2012. The facility must resample within 30 days of a daily maximum violation. 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 still discharging approximately once a week. The iron phosphate line is also being treated through the zinc pretreatment system. This line runs galvanized metal so zinc levels are high. 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 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.

### **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. The sampling reports were submitted as required.

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

<b>Parameter</b>	<b>Code</b>	<b>Permit Date</b>	<b>Reported Units</b>	<b>Limit</b>
Zinc, Total	01092	12/31/2011	4,530	ug/L 2,610 ug/L (Daily)
Zinc, Total	01092	12/2011	4,530	ug/L 1,480 ug/L (Month Avg.)

In addition, the facility did not provide the 24 hour notification and resampling within 30 days for the daily violation. Please note, notification and resampling are required. Because of this violation, the facility was in significant non-compliance for the Technical Review Criteria (TRC) for both the daily and monthly average zinc limits. Sampling in February 2012 showed the facility had returned to compliance.

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 Storm Water Industrial Multi-Sector General Permit (MSGP). Compliance with this permit was also evaluated as part of this inspection. Greenfield Products, Inc. is covered under Subsector AA of the new permit. As part of this subsector, quarterly sampling for benchmark parameters is required. The facility is also required to provide an annual report. Copies of these forms, a copy of the subsector requirements and a General Permit fact sheet were provided at the time of the inspection. Ohio EPA water quality hardness data was provided in an email.

The facility was not able to produce a copy of its Storm Water Pollution Prevention Plan (SWP3). The SWP3 must be developed. As part of this, the quarterly sampling for the benchmarks must be addressed. A template for the SWP3 was provided in a separate email.

A site walk-through was conducted for the storm water discharges. Although it was not raining on the day of the inspection, there was no evidence of contaminated storm water being discharged. The roof drains and run-off from the front portions of the anchor building and coating building drain to the ditch in the front of the facility next to the road. The ditch ends up in a storm water detention area. There was no water in the detention area. The facility stores pallets and racks on the concreted area between the two buildings. There was no evidence of any contamination from these areas.

The storm water from the back of the buildings ran to a small ditch along the back of the facility. There were also pallets stored on concrete pads in the back of the facility. There was no flow in the ditch, and no evidence of any contamination.

There is not any air pollution control equipment on the building roofs. The only items on the roof are the air conditioners.

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**REQUIRED ACTIONS**

Greenfield Products, Inc. must develop and implement a Storm Water Pollution Prevention Plan (SWP3) for its facility. The plan should include the schedule for the benchmark monitoring for Subsector AA and the annual inspections. This must be done immediately.

Greenfield Products, Inc. must provide notification within 24 hours of becoming aware of a violation of a daily maximum in its self-monitoring. In addition, the facility must resample within 30 days until they come into compliance with the limit. 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

Enclosures

cc: Steve McCoy, Greenfield Products, Inc.  
Jim McCoy, City of Greenfield  
Ryan Laake, DSW/CO

MP\bp

Industrial Storm Water Compliance Evaluation Inspection;

Name of facility; Greenfield Products

Address; 1230 North Washington Street, Greenfield, Ohio 45123

Permit number; 1GR00587\*EG Applicable permit sector; AA2

Date of visit; 07/17/2012 Time started; 10:00 AM Time ended; 10:40 AM

Facility representative(s); Steve McCoy

OEPA inspector; Mari Piekutowski

SWP3;

- A. Did the facility representative produce an SWP3? ~~Y/N~~ ~~/Not requested~~
- A1. Did it include a site map? ~~Y/N~~ **Did not have plan.**
- A2. Did it include schedules and procedures for the quarterly routine facility inspections? ~~Y/N~~
- A3. Did it include schedules and procedures for the comprehensive annual facility inspection? ~~Y/N~~
- A4. Did it include schedules and procedures for the quarterly visual assessment of storm water discharges? ~~Y/N~~
- A5. If benchmark monitoring is required, does the SWP3 describe how and when that will be done?  
~~Y/N/NA~~

Comments; The facility must develop their SWP3 and include each of these items. There is benchmark monitoring for Subsector AA2. I provided a copy of hardness data from Ohio EPA's database to the company in a separate email. I also provided copies of the forms for the quarterly sampling and annual report. In addition, a template for an SWP3 was provided in a separate email.

Inspection records:

- B. Were inspection records available? ~~Y/N~~

Comments: There were no storm water records to review. There was no evidence when the site walk through was done of contaminated storm water reaching waters of the State. The facility must conduct these are required.

Site Observations;

C. Are materials stored exposed to weather? ~~Y~~/N. If Yes, list materials.

**Racks for the phosphating lines, pallets and solid waste dumpsters were exposed. There were no chemicals being exposed to the weather.**

D. Are there any structural storm water management practices used onsite? Examples include grassed swales, permeable pavement, inlet filters, detention ponds, engineered wetlands, mulch berms, silt fence, rain gardens .

**The storm water flows to a grass ditch both in front and behind the facility. The front lines, where the bulk of the exposed materials are, goes to a storm water pond.**

E. No. outfalls from site/no. inspected   2   /   2   \_

G. Did any show evidence of pollutants discharged in the storm water? ~~Y~~/N

If yes, describe;

H. Other observations/comments;

**There does not appear to be contaminated storm water leaving the site. The paperwork portion and the benchmark monitoring of the storm water permit do need to be implemented.**



State of Ohio Environmental Protection Agency  
Southwest District Office

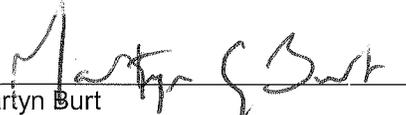
Pretreatment Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1DP00036*CP	OHP000067	07/17/2012	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
	12:40 pm	05/31/2017
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Steve McCoy, Director of Operations Gary Rhoads, Tim Miller	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		

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

Inspector	Reviewer
 Date 8/15/12	 Date 8/16/2012
Marianne Piekutowski Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

## INDUSTRIAL USER INSPECTION CHECKLIST

Facility: **Greenfield Products**

Date of inspection: **July 17, 2012**

OH Number: **OHP000067**

IDP Number: **1DP00036\*BP**

Facility Representative: **Steve McCoy, Gary Rhoads, Tim Miller** Inspector(s): **Mari Piekutowski**

### COMPLIANCE

1. Date of last pretreatment inspection: **July 27, 2011**

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

***There was one daily and one monthly violation for zinc. The 24 hour notification and 30 day resampling were not done as required.***

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:

***The 24 hour notification and resampling were not done.***

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 renewal application for its indirect discharge permit.***

### 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 25% 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. 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 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:

*An increase in powder coat of 10 to 15% is expected.*

## 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. All of the process water is being treated through the zinc treatment system. The facility is looking modifying 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. 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 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)	<i>End-of-Process</i>		1,500		
Fe Phosphate line including Cleaners and rinses w/o Zinc	<i>End-of-Process</i>		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. (See attached storm water inspection.)*

**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 Y /N

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

34. Laboratory conducting analyses:

***Alloway, formerly Ginosko.***

## 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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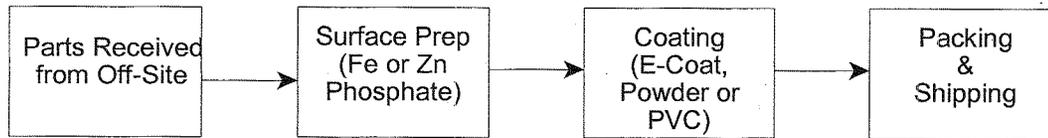
## REQUIRED FOLLOW-UP ACTIONS

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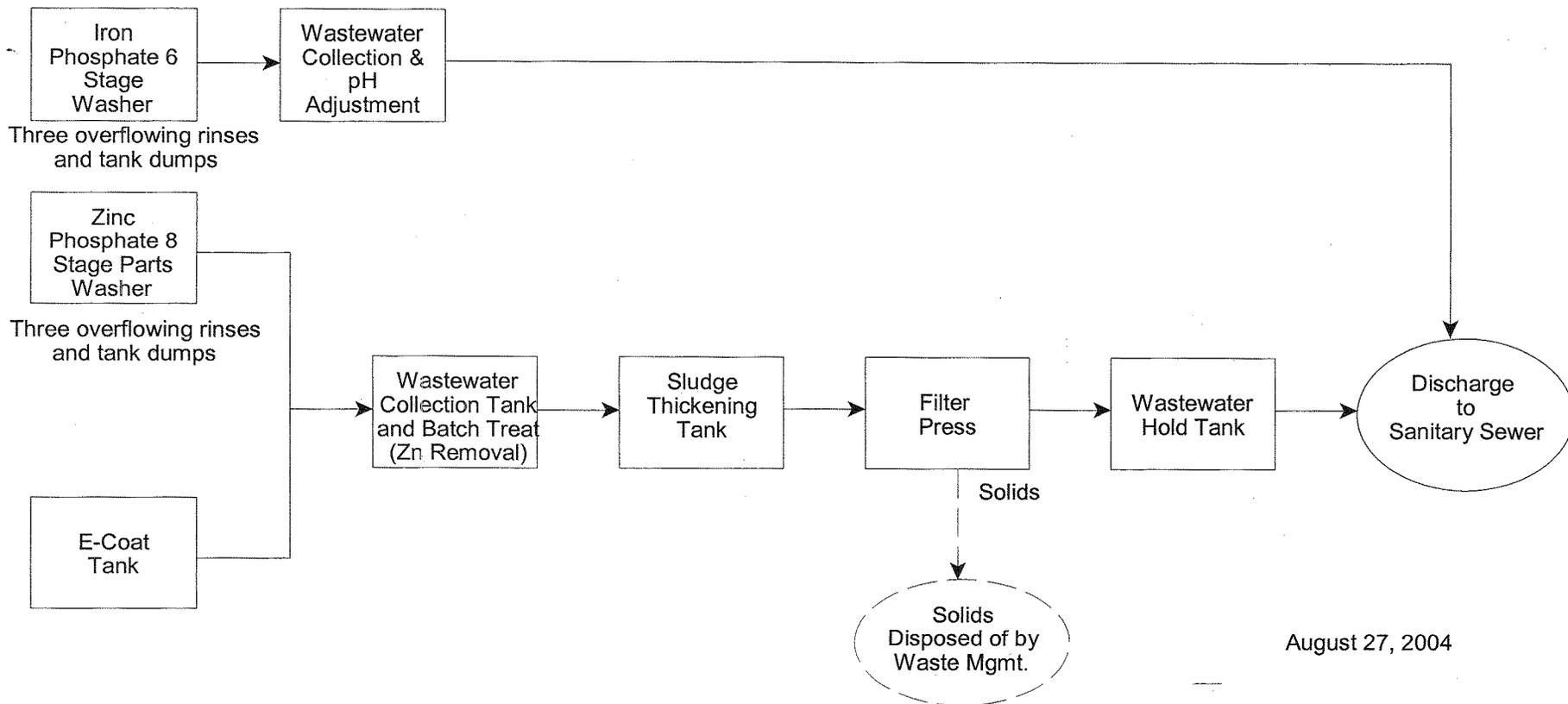
*Greenfield Products must notify this office within 24 hours of becoming aware of a daily self-monitoring report violation and resample within 30 days.*

*Greenfield Products must develop an SWP3.*

# Greenfield Products Process Schematic



# Greenfield Products Treatment Schematic



August 27, 2004