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

Re: Putnam County
Whirlpool
Pretreatment

November 23, 2011

Mr. Glenn Kaufman
Whirlpool Corporation
Ottawa Division
P.O. Box 310
Ottawa, Ohio 45875

Dear Mr. Kaufman:

On November 16, 2011, an inspection was conducted at Whirlpool, 677 Woodland Drive, Ottawa, Ohio, Putnam County. You were present and provided information on the operations and maintenance at the plant. The process wastewater discharged to the Village Ottawa results from the zirconium phosphate cleaning system and the E-coat line pretreatment system.

The zirconium phosphate system consists of: stage 1 at 4,780 gallon alkaline cleaner tank, stage 2 at 2,250 gallon city water rinse tank, stage 3 at 4,780 gallon zirconium phosphate tank and stage 4 at 840 gallon city water rinse tank. Stages 2 and 4 have a continuous overflow to the Ottawa WWTP. The tanks for Stages 1 and 3 are dumped and hauled off site for treatment and disposal.

For the E-coat line pretreatment system, the paint residuals from the E-coat process are sent to a detackifer tank, and then the liquid waste is sent to the wastewater holding tank. Wastewater from the stage 1 and stage 2 cleaner tanks goes into the cleaner dump tank where sulfuric acid is added. An oil skimmer follows, and the skimmed oil is placed in a storage drum. The wastewater is then discharged to the wastewater holding tank, which also accepts the paint wastewater. The combined wastewater is then sent through pH adjustment tanks, where sulfuric acid and caustic soda are added along with calcium chloride and an oil emulsion-breaking polymer (5729 demulsifier). The liquid then passes through a flash tank, where a flocculent polymer is added. The solids are settled out in a clarifier and the wastewater then flows into a dwell tank. The solids are sent to a filter press and taken to a land fill. The wastewater is sampled at the dwell tank and discharged to the Ottawa WWTP.

A review of the discharge monitoring reports (DMRs) from July 2010 to November 2011 shows that there has been one effluent violation for zinc. The specific violation is enclosed on a separate sheet.

If you have any questions, please contact me at (419) 373-3053.

Sincerely,

Ryan Gierhart
Division of Surface Water

/jlm
Enclosures
pc: Ryan Laake, DSW, CO
Doug Schroeder
DSW-NWDO File

Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402-9398

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www.epa.ohio.gov

Get New Data

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
2DP00047*CP		101	01092	Zinc, Total (Zn)	30D Conc	1480	1910.	9/1/2010

INDUSTRIAL USER INSPECTION CHECKLIST

Facility:	**Whirlpool Corporation**	Date of inspection: **11/16/2011**
OH Number:	**OHP000166**	IDP Number: **2DP00047*CP**
Facility Representative:	**Glenn Kaufman**	Inspector(s): **Ryan Gierhart**

COMPLIANCE

1. Date of last pretreatment inspection: 7/14/2010

2. Has the facility been in compliance with its permit limits since the last inspection? N
   If no, explain: One violation for Zinc in September 2010. The violation is attached

3. Is the facility in compliance with all other requirements? Y
   Sampling procedures Y
   Reporting (late reporting, failure to report, etc) Y
   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:

FACILITY OPERATIONAL CHARACTERISTICS

5. Number of Employees: 350
6. Shifts/Day: **2/5 days/week**
7. Production Days/Year: **260**
8. Hours/shift: **8**
9. Any production changes since the last inspection? N
   If yes, explain:
10. General facility description and operations:
Manufacturer upright freezers and chests. Washes steel frames in zirconium phosphate and powder coats. Uses electron deposition (e-coat) on evaporator shelves and other small parts

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

12. Any expansion or production increase expected within the next year? Y
    If yes, explain: **Installing compacter line by next July.**

WASTEWATER TREATMENT

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

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? Batch / Continuous / **Combination**

If batch, list the frequency and duration: Continuous overflow from the zirconium phosphate cleaning system rinse stages. Batch discharge from the E-coat line treatment system.

17. Who is responsible for operating the treatment system? One Operator on day and night shift in charge of system.

18. How often is the treatment system checked?

The system is inspected and operated daily when plant is in operation.

19. Is there an alarm system for the system? Y
Explain: **E-coat-yes/ Zirconium Phosphate-no**

20. Is there an operations and maintenance manual? Y

21. Is an inventory of critical spare parts maintained? Y
If yes, list: **Pumps, pH meters, pH probes, hoses, test equipment**

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

Have bypasses occurred since the last inspection? N/A

Was the POTW notified? N/A

WASTEWATER TREATMENT CONTINUED

23. Are residuals or sludges generated? Y

Method of disposal:

Landfill

Frequency and amount of disposal:

E-coat – 24 cu. Yd – per year
Zirconium-phosphate – 1 cu. Yd – per year

Name of hauler/landfill/disposal facility:

Allied Waste Services – disposed of at Vanlue Landfill.

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
1. E-Coat			2,880		
2. Zirconium-Phosphate			9,600		
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
Total Regulated Process Flow					
Non-contact Cooling					
Blowdown					
Reverse Osmosis Condenstate					
Demineralizer Regeneration					
Filter Backwash					
Compressor Condensate					
Storm Water					
Other Dilute Flows					
Unregulated Flows (provide list)					
Sanitary Approx.			7,260		
TOTAL FLOW			19,740		

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

SELF MONITORING

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

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 / **Estimated**

If measured, how often is the meter calibrated?

If estimated, describe method of estimation: Flow is estimated by bucket fill method for the flow rate and using total time of production for total flow.

30. Is pH monitored continuously? N
E-Coat continuously/Zirconium-phosphate when sampled
If yes, how often is the meter calibrated?

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

32. Are appropriate sampling procedures followed?

Monitoring frequencies	Y
Sample collection (grab for pH, O&G, CN, phenols, VOCs, hexavalent chromium)	Y
Flow proportioned samples	N
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:
Brookside-New Knoxville

TOXICS MANAGEMENT

35. Are any listed toxic organics used in the facility? Y
If yes, identify organics: Xylene, Toluene, Ethyl benzene

36. Does the facility have a current toxic organic management plan (TOMP)? Y
If yes, is it being implemented? Y

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? Y

39. Identify any potential slug load or spill areas: Foam Chemicals tanks have secondary containment

REQUIRED FOLLOW-UP ACTIONS