Ohio EPA
40 years and moving forward

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

June 25, 2013

RE: Pretreatment Compliance Inspection
Notice of Violation and
Significant Non-Compliance

Mr. Eliot Baggs
Beach Manufacturing Company
PO Box 129
Donnelsville, OH 45319

Dear Mr. Baggs:

On June 4, 2013, I met with Mr. Don Fielder to conduct a pretreatment compliance inspection; I appreciate that he was able to accommodate me on the day I contacted him. A summary of my inspection findings are as follows:

Discharge Violations

A review of your Discharge Monitoring Reports (DMRs) since my previous inspection revealed Beach Manufacturing violated its monthly average copper limit of 2,070 ug/l in June 2012 when it reported a value of 6,160 ug/l.

During the period of July through December 2012, Beach violated its monthly average Zinc limit of 1,480 ug/l in July when a value of 1,900 ug/l was reported.

In both cases, you did not report the violation as required by Part III, Item 3.H of your permit nor did you conduct and report the results of resampling required by your permit to be done within 30 days of becoming aware of the violation.

With thirty-three percent or more of the monthly average measurements during a six-month period exceeding the limit by twenty percent or more, these violations meet the technical review criteria (TRC) for Significant Non-Compliance (SNC) for the periods of both January through June and July through December 2012. Both violations are likely associated with Beach's switch from using hexafluorozirconic acid to zinc phosphate.

A quick review of available analytical data for the current period (report due July 20th) did not indicate any violations of your discharge limits.

Please ensure to provide the required notification for any future violations and to perform the required extra resampling and reporting.

Process Line Changes

There have been changes to the process line that I have attempted to document in the diagram attached to the end of the inspection form. In particular, a new rinse has been added after the alkaline wash stage, a titanium salt conditioner is used ahead of the zinc phosphate stage, a halo rinse was added right after the zinc phosphate stage and the final sealer stage is now periodically dumped to the sewer.

Please review the diagram carefully and make any necessary amendments to reflect the actual operating conditions (tank volumes, contents, discharge amount, discharge frequency, management, solids generation and handling, and any other relevant information) by July 22nd. I would like the diagram to portray a reasonable water balance for what is reported as being discharged.

Change in Chemicals

You have selected a new supplier (Solutions Plus) for the chemicals you use in the process tanks. Because their website does not provide Material Data Safety Sheets (MSDS), it will be necessary for you to provide me copies by July 22nd.

Documentation of Sampling Events

With the switch to MASI Environmental, documentation of sample collection (start dates and times, sampler programming, actual composite volume) was being recorded on a log sheet. However, recent documentation was lacking this information. Mr. Fielder said he planned to contact the laboratory and let them know of the need to record all the information the log sheet calls for. Please work to ensure this information is recorded for future sampling events.

Total Toxic Organics Monitoring

Last year I informed you of the need to amend your DMR for the reporting period of July through December 2011 when you reported Total Toxic Organic values that were identical to the copper results. It is necessary for you to address this outstanding issue by amending the DMR for that period and either report results from TTO monitoring or submit the alternate TTO certification statement. This deficiency needs to be resolved by July 22nd.

Please provide a written response to this letter by July 22nd that addresses the items I have presented. If you have any questions concerning this letter or the inspection form please call me at (937) 285-6095.

Sincerely,

Matt Walbridge
Pretreatment Coordinator
Division of Surface Water

MW/kb

Enclosure

ec: Debbie Stultz – Beach Mfg.

cc: Ryan Laake – Ohio EPA / Central Office / DSW
Joe Sampson – Village of Saint Paris

Ohio Environmental Protection Agency

Southwest District Office

PRETREATMENT INSPECTION REPORT

PERMIT NUMBER	PERMIT APPLICATION NUMBER	DATE CONDUCTED
*1DP00001*DP*	*OHP000011*	*June 4, 2013*

INSPECTION TYPE	INSPECTOR	FACILITY TYPE	TIME IN	TIME OUT
I	*S*	*2*	*1100*	*1200*

GENERAL INFORMATION

NAME AND LOCATION OF FACILITY	POTW RECEIVING DISCHARGE
Beach Manufacturing Company ***500 S. Springfield Street*** ***St. Paris, OH 43072***	***Village of St. Paris WWTP***
MAILING ADDRESS OF FACILITY ***Beach Manufacturing Company*** ***500 S. Springfield Street*** ***St. Paris, OH 43072***	***Mr. Eliot Baggs*** ***Beach Manufacturing Company*** ***PO Box 129*** ***Donnelsville, OH 45319-0129***

CONTACT (NAME/TITLE/PHONE/E-MAIL)
Ms. Debbie Stultz / Plant Manager / (937) 663-5531 / debbiestultz@beachmfgco.com
Mr. Don Fielder / Paint Shop Supervisor

FACILITY EVALUATION (See Inspection letter for more complete description)

(S = Satisfactory, M = Marginal, U = Unsatisfactory, NA = Not Applicable)

S	Sampling Procedures	*NA*	Compliance schedule requirements
S	Reporting	*U*	Notification – ***Changed chemicals and stages without notification***
M	Compliance with effluent limits ***June and July 2012***	*U*	Other – ***Failure to resample and report after a violation***

Name and Signature of Inspector(s)	Agency / Office / Telephone	Date
Matt Walbridge	***Ohio EPA / Southwest District Office / (937) 285-6095***	6-25-13
Signature of Reviewer	***Ohio EPA / Southwest District Office / (937) 285-6034***	Date 6/26/13

INDUSTRIAL USER INSPECTION CHECKLIST

Facility ***Beach Manufacturing Company*** Date of inspection: ***June 4, 2013***

Permit Application Number: ***OHP000011*** IDP Number: ***1DP00001*DP***

Facility Representative: ***Mr. Don Fielder*** Inspector(s): ***Matt Walbridge***

COMPLIANCE

1. Date of last pretreatment inspection: ***June 20, 2012***

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

   Violation of monthly average limit for Copper (2,070 ug/l) in June 2012 when they reported a value of 6,160 ug/l. This meets the technical review criteria (TRC) for Significant Non-Compliance (SNC) for the period of January through June 2012.

   They also violated their monthly average limit for Zinc (1,480 ug/l) in July 2012 when they reported a value of 1,900 ug/l. This violation caused them to be in SNC (for TRC) during the period of July through December 2012.

   A quick review of available analytical data for the current period (report due July 20th) did not reveal any 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:

   They failed to conduct special zinc monitoring as promised and as requested in my inspection letter. The also failed to correct the TTO reporting for July 21st, September 15th and November 10th 2011 when they reported the same values as was reported for copper on the same dates.

FACILITY OPERATIONAL CHARACTERISTICS

5. Number of Employees: ***9***

6. Shifts/Day: ***1***

7. Production Days/~~Year~~ week : ***4 (sometimes 5)***
   (One week off at the beginning of July and approximately a week off in December)

8. Hours/shift: ***8***

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

   (Mostly truck components for Navistar from hot and cold-rolled steel)
   They replaced the hexafluorozirconic acid solution with a zinc phosphatesolution.
   They made changes to some of the stages of the paint prep line.
   They got rid of the water softener system.

10. General facility description and operations:

    Parts washing and painting operation (powder coat).

FACILITY OPERATIONAL CHARACTERISTICS CONTINUED

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

Still mostly cold-rolled steel

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

WASTEWATER TREATMENT

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

There is no treatment system. See attached diagram of the, now, 7-stage paint prep line.

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

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

If yes, was a PTI obtained? ***N.A.*** ~~Y / N~~

PTI Number: Date:

16. What is the treatment mode of operation? ***N.A.*** ***(No treatment)*** ~~Batch / Continuous / Combination~~

If batch, list the frequency and duration:

17. Who is responsible for operating the ~~treatment~~ system?

Dee Harvey

18. How often is the treatment system checked?

Stages are checked three times throughout the day.
(Flow rates, spray patterns, conductivity, pH, chemical titrations)

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

High level alarms on all tanks except rinse tank.

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

There is a 'Line Check Sheet' for the production process line that is kept at the line.

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

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

Have bypasses occurred since the last inspection? ***N.A.*** ~~Y/N~~

Was the POTW notified? ***N.A.*** ~~Y/N~~

23. Are residuals or sludges generated? Y /~~N~~

Alkaline Cleaner tank is cleaned once per year. Draining includes power washing the inside of the tank. Spent alkaline cleaner, tank cleaning water and solids are drained to the sanitary sewer. They continue to say there isn't a significant amount of solids.

The zinc phosphate solution tank has a small line-side centrifuge to remove solids from the solution. it is operated periodically with solids put in a 55-gallon drum.

Method of disposal:

Solids from the alkaline cleaner tank are discharged to the sanitary sewer.
Solids from zinc phosphate tank that are removed by the centrifuge go into a drum for disposal by Heritage Crystal Clean.

Frequency and amount of disposal:

I was not able to determine how much or how frequently zinc phosphate sludge from the centrifuge is disposed.

Alkaline cleaner tank (~2,350 gallons) is drained to sewer approximately once per six months).

Name of hauler/landfill/disposal facility:

Heritage Crystal Clean hauls the sludge from zinc phosphate centrifuge

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

If land applying sludge, is there a sludge management plan? ***N.A.*** ~~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*
1. Alkaline Cleaner		*Not Limited*	*~2,000 gal every 6 months*	*N.A.*	*N.A.*
2. Tap Water Rinse (running rinse) (not metered said to be small)			*ND*	*N.A.*	*N.A.*
3. Tap Water Rinse (dead rinse)			*2,440 gal dump once every 45 days.*	*N.A.*	*N.A.*
4. Zinc Phosphatizing (no discharge)			*1,100 gal dump every 6 months*	*N.A.*	*N.A.*
5. RO Water Rinse (flow to zinc phosphate tank)			*1,000 gal dump every two weeks*	*N.A.*	*N.A.*
6. Tap Water Rinse			*5-6 gpm*	*N.A.*	*N.A.*
7. Sealer			*1,000 gallon tank dump every 2 months*	*N.A.*	*N.A.*
Total Regulated Process Flow	*Clean out located in the alley*	*Not limited*	*~4,000 (1)*		
Noncontact Cooling	-	-	-		
Boiler Condensate	-	-	-		
Reverse Osmosis	-	-	*ND (2)*		
Demineralizer Regeneration	-	-	-		
Softener Regeneration	-	-	-		
Filter Backwash	-	-	-		
Compressor Condensate	-	-	-		
Storm water	-	-	-		
Total of Dilute Flows	*N.A.*	*N.A.*	*ND (2)*		
Unregulated Flows	*N.A.*	-	-		
Sanitary	*N.A.*	*N.A. (1)*	*N.A. (2)*		
TOTAL FLOW	*N.A.*	*N.A.*	*~2,800 (1)*		

(1) This is reported flow from July through December 2012, which is taken from the meter that measures total water usage. Regulated process flow should be about 30 % less because of the RO reject rate. This puts process flow at about 2,800 gpd. This is consistent with the rinse overflow rate and hours of operation.

(2) Only process wastewater is present at the sampling point. Sanitary, RO reject are discharged via a separate line. Based on typical reject rates, this should be about 1,200 gpd

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:

"Samples shall be collected from the cleanout located outside of the south wall of the main building prior to the effluent mixing with sanitary flow."

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~~

Main water meter is said to be used which represents water sent to the deionization systems, so process waste water should be around 2,800 gpd. Readings are taken at the beginning and end of sampling events.

If measured, how often is the meter calibrated?

The main line meter has not be calibrated. Flow meters on the feed lines to process line are no longer used.

If estimated, describe method of estimation:

30. Is pH monitored continuously? ~~Y~~/ **N**

If yes, how often is the meter calibrated?

31. Does the facility collect its own samples? ~~Y~~/ **N**
If no, specify the sample collector:
Personnel with MASI Environmental Labs

32. Are appropriate sampling procedures followed?
Monitoring frequencies Y /~~N~~
Sample collection (grab for pH, O&G, CN, phenols, VOCs) Y /~~N~~
Flow proportioned samples ***(flow rates are consistent so time-proportioned samples are likely adequate)*** ~~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: ***MASI Environmental Labs***

TOXICS MANAGEMENT

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

Touch-up primer & paint and xylene-based solvent.

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:

Zinc phosphate solution tank, but the drain line is capped.

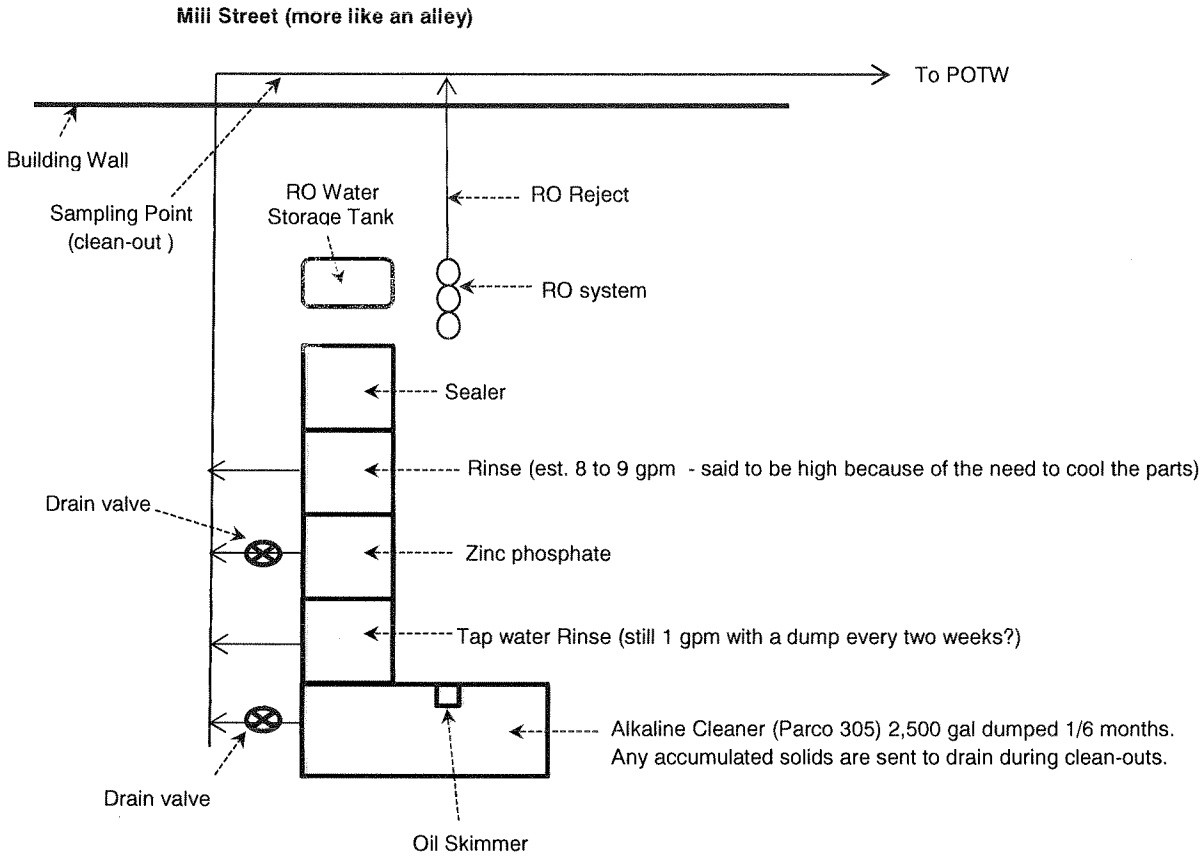
REQUIRED FOLLOW-UP ACTIONS

See inspection letter.

OBSERVATIONS

- ***Sample period is 24-hours. The automatic composite sampler has been set to collect 100 milliliters every 20 minutes and continues to attempt to pull aliquots. At the end of the 8-hour work day, all water to the production line is said to be shut off with a solenoid valve. Unless they also close the drain valve, the tap water rinse tank following zinc phosphating would also drain to the sewer. Recent composite sample volumes are what would be expected for a 1-shift operation.***
- ***They need to record the sampler pacing and composite sampler volume on the chain of custody sheet or field sampling log – MASI did this for a while, but then they stopped.***
- ***Flows are based on meter readings at the beginning and end of sampling events but there is likely significant evaporation on the line and reject through the RO system (reject is discharged through a different drain line).***
- ***They installed an air sparge and centrifuge on the zinc phosphate tank to remove solids.***
- ***The have switched their chemical supplier to Solutions Plus out of Cincinnati. Their website does not provide any information about the products used at the facility. Need MSDS for each chemical.***
- ***For the sampling event on March 20-21, 2013, they discharged 1,482 gallons.***
- ***Water softening system was removed last year.***
- ***Beginning in July 2012, their reported flow jumped from ~500 gpd to ~4,000 gpd. This corresponds to their switch from using hexafluororzirconic acid to zinc phosphate. It is unclear when they made the other changes to the line (it now has seven stages instead of five).***

Below is my understanding of the paint prep line configuration after my 2012 inspection



Below is my understanding of the paint prep line configuration from my 2013 inspection