



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

July 2, 2013

**RE: PBM Covington, LLC
 Pretreatment Compliance Inspection and
 Notice of Violation**

Mr. Kent Mowry
 PBM Covington
 400 Hazel Street
 Covington, OH 45318

Dear Mr. Mowry:

On June 13, 2013 I met with you to conduct a wastewater pretreatment inspection. There have been no changes in production processes or products since the previous inspection. A review of your discharge monitoring reports for the period of July through December 2012 revealed that PBM violated its discharge permit limits on the following occasions:

Parameter	Date	Limit	Reported Value
Oil and Grease	September 28, 2012	100 mg/l (daily maximum)	119.9
	December 27, 2012		152 mg/l
pH	December 27, 2012	Not less than 5.0	4.5*
* See further discussion below			

As was the case in the two previous discharge monitoring reports, you did not provide the required notification of these violations as specified in Part III.3.H of your Indirect Discharge Permit and as you were made aware in my two previous inspection letters. You also did not provide an explanation for the violations. You indicated that the root cause for the lack of notifications is that the sampling results are reported by Jack Grimmer at PBM's Vermont facility.

Because these reporting violations have been continuing, I believe you need to take the necessary steps to get monitoring results and reporting authority transferred to PBM's Covington facility. Please let me know how you plan to address this issue.

DAF Performance

The two DAF units are operated to treat equal flow rates. However, there was a notable difference in the quality of their effluent. Please investigate why the foam in the first

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(original) DAF unit was tan whereas the newer DAF unit's was whiter. Also, I believe it is necessary to investigate why the second DAF exhibited significant air turbulence inside the separation zone and had more solids in the discharge. Please let me know your findings and of any system adjustments that are made.

Ammonia Nitrogen Monitoring

You have been reporting bi-weekly ammonia nitrogen results despite your permit not requiring you to either monitor or report this parameter. Along with the lack of a monitoring requirement, the results that have been reported do not show appreciable levels of ammonia nitrogen. As such, it is appropriate to discontinue monitoring and reporting this parameter.

Sample Holding Times

In reviewing sampling documentation for the reporting period of January through June 2013, I noted that biochemical oxygen demand (BOD) analysis for a sample collected on May 29th and received at the lab the same day, was not analyzed until June 10th. This is outside the allowable 48-hour holding time yet there was no qualifier on the lab analytical report. In your response to this same issue, raised in my previous inspection, you assured me that you would discuss this with your contracted lab to make sure proper holding times were followed. If your lab continues to be unable to provide you analysis within the maximum holding times, it may be necessary for you to find a lab that will. Please note that, while forty-eight hours is the maximum holding time, analysis should ideally begin within six hours after sample collection.

pH Monitoring

In addition to the reported pH violation in December 2012, in reviewing your records for the reporting period of January through June 2013 (due July 20th) I noted you recorded an effluent pH of 3.0 on April 12, 2013; there was no notification made to this office and no indication that the discharge was halted to remedy the situation despite you having equalization that would allow you to suspend discharging. This information was available in near real time which makes the lack of notification all the more troubling. It is necessary to provide an explanation for the violation, what actions were taken (and when) to remedy the situation, and when the discharge returned to compliance. I am particularly interested in knowing how the pH of the effluent can be so low when the pH of the wastewater in the DAF feed tank is supposed to be controlled to be between 8.5 and 9.0.

Aside from the violations, pH monitoring is being performed on composite samples instead of from grab samples as required by your discharge permit. Aside from this monitoring issue, I am concerned about what the discharge conditions were during the compositing periods that led to the composite samples exhibiting such low pH values.

In light of the violations and the nature of the PBM's wastewater, I believe PBM needs to provide continuous pH monitoring of its effluent with controls to both alarm on-site

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operators and stop wastewater discharges that are outside acceptable limits. Please provide a schedule for when this system and capability will be installed.

Composite Sampler

To demonstrate that proper sample preservation is being provided during composite sampling events, it is necessary to start a log sheet to record the temperature of the refrigerator (as measured by the thermometer kept inside the refrigerator. This temperature log is required for each day that monitoring occurs. The log needs to be in ink indicating who recorded the temperature, the date and time of observation, the reading and any notes (lost power, open door, ice, etc.).

Also, I noted that the composite sample jug was very dirty. I believe it is the only jug that is used and that samples are collected from it every day. Sampling equipment (including all tubing) must be kept clean and I recommend you obtain at least one other jug to facilitate the daily sampling you perform for the village of Covington. A second jug could either be regularly rotated into use or be dedicated to the compliance monitoring required by PBM's Indirect Discharge Permit. Please let me know your plan for addressing this issue.

pH Meter Calibrations

To demonstrate that the pH meter used for compliance monitoring is properly calibrated, it is necessary to include the calibration slope along with the date, time and name or initials of the person who performed the calibration. This information should be recorded in a bound log book kept with the meter. The pH meter's manual should establish what is an acceptable slope.

Please provide a written response to this letter by July 26th addressing the items I've presented. If you have any questions concerning this letter or the attached inspection form, please call me at (937) 285-6095.

Sincerely,



Matt Walbridge
Pretreatment Coordinator
Division of Surface Water

Attachment

CC: Jack Grimmer – PBM
Ray Kimmel – Village of Covington
Ryan Laake – Ohio EPA / Central Office / DSW

MW\bp



Southwest District Office

PRETREATMENT INSPECTION REPORT

PERMIT NUMBER
1DP00011*DP

FACILITY NUMBER
OHP000090

DATE CONDUCTED
June 13, 2013

INSPECTION TYPE
I

INSPECTOR
S

FACILITY TYPE
2

TIME IN
1000

TIME OUT
1140

GENERAL INFORMATION

NAME AND LOCATION OF FACILITY

**PBM Covington, LLC
400 Hazel Street
Covington, OH 45318**

POTW RECEIVING DISCHARGE

Village of Covington WWTP

MAILING ADDRESS OF FACILITY

**PBM Covington, LLC
400 Hazel Street
Covington, OH 45318**

CONTACT (NAME/TITLE/PHONE/E-MAIL)

**Kent Mowry - Maintenance Manager & Safety Coordinator
(937) 473-2050 / kmowry@pbmnutritionals.com**

FACILITY EVALUATION (See inspection letter for a more complete description of findings)

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

M	Sampling Procedures (<i>dirty sampling equipment</i>)	NA	Compliance schedule requirements
S	Reporting	U	Notification (<i>Failure to notify after violations</i>)
M	Compliance with limits (<i>O&G violations, pH violation</i>)		Other

Name and Signature of Inspector(s) Matt Walbridge	Agency / Office / Telephone Ohio EPA / Southwest District Office / (937) 285-6095	Date 7-3-13
Signature of Reviewer Matt G. Swartz	Agency / Office / Telephone Ohio EPA / Southwest District Office / (937) 285-6034	Date 7/3/13

INDUSTRIAL USER INSPECTION CHECKLIST

Facility: **PBM Covington, LLC**

Date of inspection: **June 13, 2013**

OH Number of receiving POTW: **OH0020761**

IDP Number: **1DP00011*DP**

Facility Representative: **Kent Mowry**

Inspector(s): **Matt Walbridge**

COMPLIANCE

1. Date of last pretreatment inspection: **June 26, 2012**
2. Has the facility been in compliance with its permit limits since the last inspection? Y / N
If no, explain:

Oil and grease violations in September and December 2012
Very high BOD in September 2012 (2,049 mg/l)
pH violation in December 2012 and April 2013 (not yet reported)

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 have not provided notification upon becoming aware of violations.

FACILITY OPERATIONAL CHARACTERISTICS

5. Number of Employees: **~50** 6. Shifts/Day: **2 (14 on day shift, ~7 on third shift in production)**
7. Production Days/Year: **~260 (5-day work weeks)** 8. Hours/shift: **12**
(blending and cleaning on weekends)
9. Any production changes since the last inspection? Y / N
If yes, explain:

The facility continues to operate below capacity (approx. 60% based on days per week they can operate efficiently which is based on humidity in the atmosphere)

10. General facility description and operations:

Processes include mixing (formulation), homogenization, pasteurization and spray drying of finished infant formula.

Production operations are five days/week but wastewater processing can occur over seven days.

Coagulant and flocculant feed rates are different depending on presence of normal or CIP wastewater.

FACILITY OPERATIONAL CHARACTERISTICS - CONTINUED

11. Any change in materials used in production since the last inspection? Y/N
If yes, explain:
Typically twice as much dairy product is produced than is soy product. Predominant ingredients are: Four-blend vegetable oil, casenates (dairy proteins), lactose, reduced sodium corn syrup solids (looking to return to liquid corn syrup), non-fat milk and whey (or soy) protein concentrates.
12. Any expansion or production increase expected within the next year? Y/N
If yes, explain:

WASTEWATER TREATMENT

13. Provide a schematic diagram and description of the wastewater treatment system:
Daily wash down water and wastewater from general CIPs flow to a sump and then on to equalization tanks, flocculation tank and dissolved air flotation system. During full drier CIP events, which occur about once every week or two, wastewater is sent to the two large storage silos

See attached diagram.
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
A second DAF unit was installed. The pH adjustment system added to influent sump ahead of EQ silos is said to be working well.

If yes, was a PTI obtained? Y/N

PTI Number: **812055** Date: **February 2, 2012**
16. What is the treatment mode of operation? Batch / Continuous / Combination
If batch, list the frequency and duration:
17. Who is responsible for operating the treatment system?
Mr. Kent Mowry. Lombardi Water Management are also said to check the system periodically to make sure it is operating properly.
18. How often is the treatment system checked?
Approximately three times per shift. Maintenance staff are also said to check in on the system.

The pretreatment system is automated with seven monitors. Mr. Mowry can monitor operating conditions at his desk via his PC.

WASTEWATER TREATMENT CONTINUED

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

There is an alarm that is activated if the flow rate is exceeded and there are many level alarms but not on the pretreatment system. pH meters are checked and calibrated by Lombardi. pH alarm for the water in the EQ tank is triggered 10.5 and 5.

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

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

Spare pumps for EQ and DAF units, injection pumps, and air filter for air mixer blowers. The second DAF is essentially an installed spare.

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

All process waste waters only go to the treatment system. Floor drains in the treatment building all drain to the sump that feeds the treatment system.

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

Method of disposal:

Hauled to lagoon treatment system operated by Mike's Sanitation. Hauling occurs on Fridays.

Frequency and amount of disposal:

The treatment system generates a little more than the 2,500 gallons per week of wastewater at 3 to 5 % than it used to generate.

Name of hauler/landfill/disposal facility:

Mike's Sanitation

Is any sludge generated subject to RCRA regulations? 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
<i>Clean-in-Place, general cleaning and washdowns.</i> ⁽¹⁾	Effluent from DAF Treatment system	*	~ 50,000 ⁺	NA	NA
Total Regulated Process Flow		*	~ 50,000 ⁺	<p>* Flow is not limited by the permit.</p> <p>+ Average for second half of 2012. Flows ranged from ~27,000 to ~70,000 gpd</p> <p>(1) Individual contributions from these operations are not known.</p> <p>(2) The RO reject (25 gpm) discharges to its own sewer connection.</p> <p>It is estimated that a full dryer CIP generates approximately 30,000 gal.</p>	
Noncontact Cooling					
Boiler Condensate					
Reverse Osmosis			(2)		
Demineralizer Regeneration					
Softener Backwash					
Filter Backwash					
Compressor Condensate					
Water Softener Regeneration			~1,200		
Total of Dilute Flows			~1,200		
Unregulated Flows					
Sanitary					
TOTAL FLOW		*	~ 51,000		

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

(All wastewaters from the facility are discharged to the POTW)

SELF MONITORING

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

"The sampling point shall be the effluent from the dissolved air flotation (DAF) system either at the flow monitoring manhole located just outside the pretreatment building or the overflow weir of the DAF. Samples for Oil and Grease (reporting code 00050) should be collected at the overflow weir of the DAF unit."

27. Is the facility sampling at the location(s) described in the permit? Y / ~~N~~
 If no, describe the actual location:

Except for grab samples for Oil and Grease, the collection point is the sampling manhole outside the pretreatment building. O&G grab samples are collected from each DAF unit overflow with the average of the analytical results reported.

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~~

Flow meter readings from each DAF unit.

If measured, how often is the meter calibrated?

Calibrated by 'Master Leo' (a contracted firm) once a year.

If estimated, describe method of estimation:

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

However, there is a pH meter on the DAF feed tank that is controlled to 8.5 to 9.0. Not sure why there would be pH violations at the effluent if this system is operating properly.

If yes, how often is the meter calibrated?

Prior to analysis.

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

PBM delivers samples to Brookside Laboratories. pH is field-measured by PBM.

32. Are appropriate sampling procedures followed? Y / ~~N~~
 Monitoring frequencies Y / ~~N~~
 Sample collection (grab for pH, O&G, GN, phenols, VOCs) Y / ~~N~~
 Flow proportioned samples * Y / ~~N~~
 Proper preservation techniques Y / ~~N~~
 Sample holding times Y / ~~N~~
 Chain-of-custody forms Y / ~~N~~

**** Sample collection is time-proportional (once every 20 minutes) but the sampler is only activated when the DAF feed pump is activated. So long as the flow rate from the DAF is fairly constant, this method effectively results in flow-proportional samples.***

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

34. Laboratory conducting analyses: ***Brookside Laboratories***

TOXICS MANAGEMENT

35. Are any listed toxic organics used in the facility? Y/N
If yes, identify organics:
36. Does the facility have a current toxic organic management plan(TOMP)? N.A. Y/N
If yes, is it being implemented? N.A. 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
(There is good flow equalization.)
- If yes, does the facility have a written plan? N.A. Y/N
39. Identify any potential slug load or spill areas:
Could occur if a DAF unit went down the second DAF provides redundancy/back-up.

REQUIRED FOLLOW-UP ACTIONS

See inspection letter.

General Observations

1. *The effluent from DAF unit #1 was tan whereas the effluent from DAF unit #2 white-ish*
2. *There was air turbulence in DAF #2 with solids in the effluent.*
3. *One of the skimmer flight chains on DAF #2 looked like it needed to have the tension adjusted.*
4. *The pretreatment system is operated in either 'normal mode' or 'CIP mode'. These modes are programmed so that it just takes a push of a button to operate the system in the appropriate mode.*
5. *Lombardi Water Management will periodically check the treatment system to make sure it is operating properly.*
6. *Flows are said to always split evenly between the two DAF units.*
7. *On April 12, 2013, a pH of 3.00 was recorded. No notification to Ohio EPA. For the current reporting period I noted generally low pH values. pH is being measured on the composite sample instead of a grab sample.*
8. *Chain of custody sheets need to record the date and time sampling starts and stops and note the date and time the sample is relinquished. The method/means of sample preservation also needs to be recorded.*
9. *A sample collected on May 29, 2013 and received at the lab the same day was not analyzed for biochemical oxygen demand until June 10th which is outside the holding time. No note on the lab analytical report.*
10. *pH meter calibrations, including the calibration slope, need to be recorded in the log book.*
11. *The composite sampling jug was very dirty; regular cleaning is necessary. A second sampling container, used for compliance monitoring, is highly recommended.*