



Environmental Protection Agency

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

July 26, 2012

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 26, 2011, I met with you to conduct a wastewater pretreatment inspection. Since my previous inspection, PBM has completed the installation of a second dissolved air flotation (DAF) unit that brings the maximum treatment capacity up to 100 gpm. The pretreatment system appeared orderly and to be operating well.

Limit Violations

A review of your discharge monitoring reports for the period of January 2011 to June 2012 revealed that PBM violated its oil and grease limit of 100 mg/l on the following occasions:

Date	Reported Value (mg/l)
February 18, 2011	144
August 5, 2011	103.7
December 16, 2011	128.94
May 25, 2012	405.1

None of these violations were made known to me by the notification required by Part III.3.H of your Indirect Discharge Permit and as you were made aware in my previous inspection letter. Please provide an explanation for the May 25th violation and ensure timely notification of any future violations.

Monitoring Violations

1. In addition to these limit violations, PBM failed to meet its monitoring obligation for Total Suspended Solids, Flow, Oil & Grease, Biochemical Oxygen Demand and pH during the two-week period of November 15th – 28th, 2011. Please explain why a sample wasn't collected during this time period. If there was no discharge during a two-week monitoring period, you need to use reporting code "AC" (plant not discharging) for each parameter.

2. PBM failed to conduct any phosphorous monitoring (required once every two weeks) during the reporting period of January through June 2011, and in July 2011 when the monitoring requirement ended. You instead used reporting code "AH" and noted that phosphorous monitoring was conducted by the Village of Covington. This does not satisfy your monitoring requirements and must be corrected by amending the reports for the referenced periods to add the required monitoring data; as long as the analytical results provided to you by the Village were for samples you collected, and the City's results are based on the use of an analytical method listed in 40 CFR, Part 136.

Please notify me of your plans to amend the reports or otherwise indicate if the reports cannot be amended because the conditions for reporting cannot be met. Finally, please note that your permit does not require you to conduct phosphorous monitoring after July 31, 2011.

3. Technical monitoring violations occurred in July 2011 and March 2012 when sampling occurred either twice during a monitoring period or on a date after a monitoring period. These occurrences do not require your attention, but I do ask that you ensure future monitoring meets the expectation that once per two-week monitoring occurs during calendar days 1 through 14 and 15 through 28.

High Biochemical Oxygen Demand

PBM has, on occasion, discharged enormous amounts of BOD. As illustrated on the attached chart, the mass has exceeded the design capacity of the village of Covington's wastewater treatment plant. While your permit currently does not contain limits for Biochemical Oxygen Demand (BOD) or Total Suspended Solids (TSS), the levels you have reported appear to justify both the need for limits and possibly treatment. Please address this significant issue by providing your perspective after consulting with the village of Covington.

Sample Holding Times

A review of your records revealed an instance when BOD monitoring conducted on August 5, 2011, and received at the laboratory the same day, was not analyzed until August 15th. This means the sample was held outside the allowable holding time. Please ensure all future samples are analyzed in a timely manner.

Oil and Grease Monitoring

Now that you are operating two DAF units, it is necessary for you to either collect oil and grease samples for analysis from the sampling manhole outside the pretreatment building or, if the flow rate through each DAF is equal, collect individual grab samples from each of the DAF unit overflows. These two grab samples would then each be analyzed in the lab with the average of the results reported or the samples properly

Mr. Kent Mowry
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composited in the lab prior to analysis. Please let me know which collection method you plan to follow.

Upper pH Level

I believe there may be an opportunity to increase the upper operating level for pH in the pretreatment system that would reduce the amount of acid you currently use to control it to less than 9.0. I encourage you to contact the village of Covington to explore the possibility of your discharge having a pH higher than 9.0.

Please provide a written response to this letter by August 20th 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,

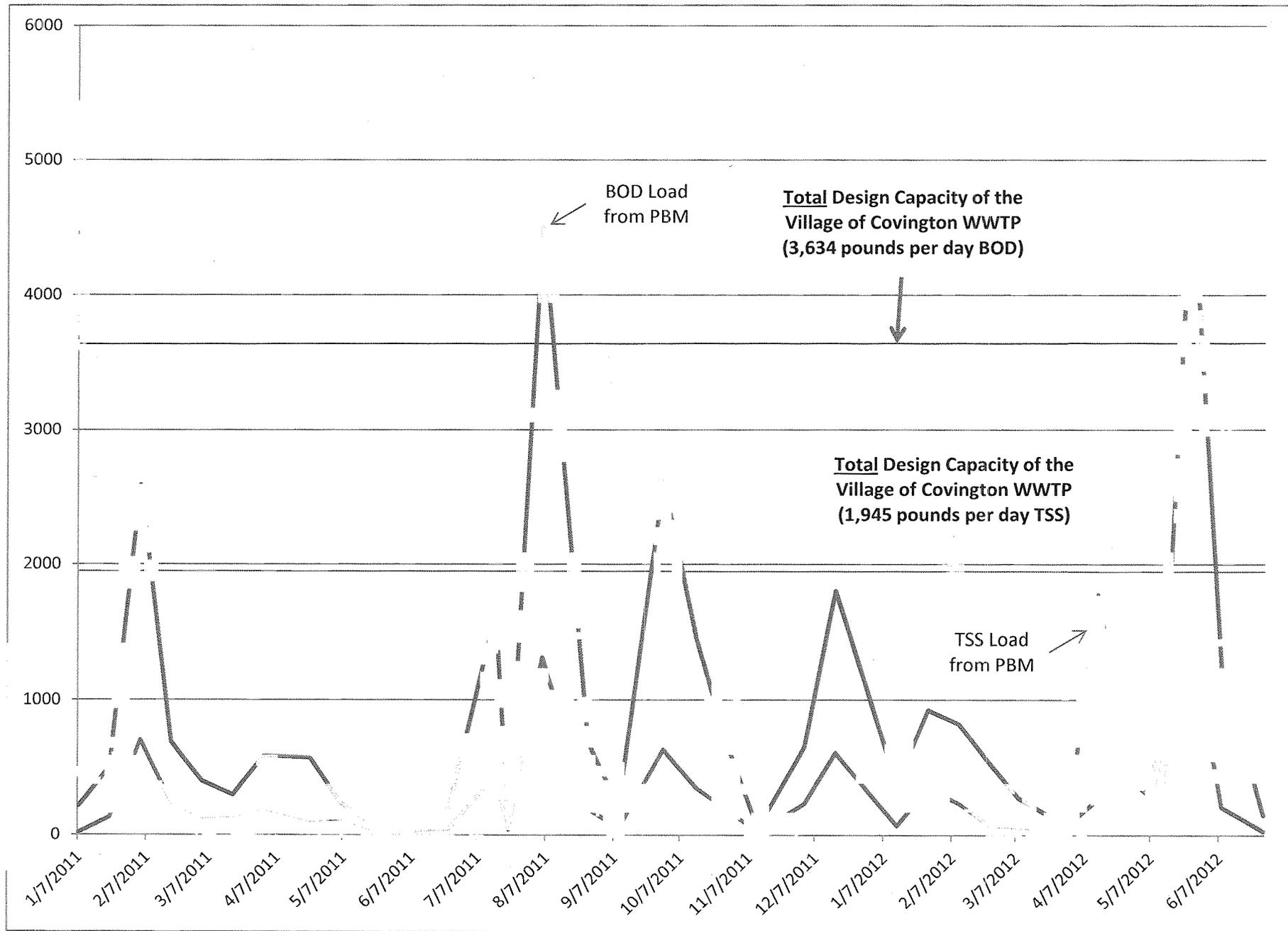
A handwritten signature in black ink, appearing to read 'MWB for', is written over the typed name.

Matt Walbridge
Pretreatment Coordinator
Division of Surface Water

MW/tf

Enclosures

cc: Ray Kimmel, Village of Covington
Ryan Laake, Ohio EPA, Central Office, DSW





Southwest District Office

PRETREATMENT INSPECTION REPORT

PERMIT NUMBER 1DP00011*DP	FACILITY NUMBER OHP000090	DATE CONDUCTED June 26, 2012		
INSPECTION TYPE I	INSPECTOR S	FACILITY TYPE 2	TIME IN 1300	TIME OUT 1500

GENERAL INFORMATION

NAME AND LOCATION OF FACILITY PBM Covington, LLC 400 Hazel Street Covington, OH 45318	POTW RECEIVING DISCHARGE Village of Covington WWTP
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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)

S	Sampling Procedures	NA	Compliance schedule requirements
S	Reporting	U	Notification
M	Compliance with limits (<i>periodic O&G violations</i>)	U	Other (<i>Monitoring Frequency</i>)

Name and Signature of Inspector(s) Matt Walbridge	Agency / Office / Telephone Ohio EPA / Southwest District Office / (937) 285-6095	Date 7-25-12
Signature of Reviewer 	Ohio EPA / Southwest District Office / (937) 285-6034	Date

INDUSTRIAL USER INSPECTION CHECKLIST

Facility: **PBM Covington, LLC**

Date of inspection: **June 26, 2012**

OH Number of receiving POTW: **OH0020761**

IDP Number: **1DP00011*DP**

Facility Representative: **Kent Mowry and Eric Matovich**

Inspector(s): **Matt Walbridge**

COMPLIANCE

1. Date of last pretreatment inspection: **March 21, 2011**
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 February, August and December 2011.
Also, very high BOD in February, July, August, September, October and December 2011.
Very high TSS in August 2011.**

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:

None.

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. 40%)

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 occurs 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:

Although they are adding more soybean-based protein isolates. Predominant ingredients are: Four-blend vegetable oil, casenates (dairy proteins), lactose, reduced sodium corn syrup, non-fat milk and whey protein concentrates (WPC).

12. Any expansion or production increase expected within the next year? Y/N

If yes, explain:

Significant production increases expected to occur beginning in late 2011 did not come to pass. Said to be associated with people not having as many babies.

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**

18. How often is the treatment system checked?

Approximately three times per shift. Maintenance staff also 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 (such as pH) on the pretreatment system.

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

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. (1)</i>	Effluent from DAF Treatment system	<i>50 gpm (72,000 gpd)*</i>	<i>~ 60,000</i>	<i>NA</i>	<i>NA</i>
Total Regulated Process Flow		<i>50 gpm (72,000 gpd)*</i>	<i>~ 60,000</i>	<p><i>* Flow is not limited by the permit.</i></p> <p><i>(1) Individual contributions from these operations are not known.</i></p> <p><i>(2) The RO reject (25 gpm) discharges to its own sewer connection.</i></p> <p><i>It is estimated that a full dryer CIP generates approximately 30,000 gal.</i></p>	
Noncontact Cooling					
Boiler Condensate					
Reverse Osmosis			<i>(2)</i>		
Demineralizer Regeneration					
Softener Backwash					
Filter Backwash					
Compressor Condensate					
Water Softener Regeneration			<i>~1,200</i>		
Total of Dilute Flows			<i>~1,200</i>		
Unregulated Flows					
Sanitary					
TOTAL FLOW		<i>50 gpm (72,000 gpd)*</i>	<i>~ 61,200</i>		

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:

Where it used to collect from the DAF overflow trough, with the addition of the second DAF, the collection point has been returned to the sampling manhole outside the pretreatment building.

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

Where they previously stated that had switched to using the flume/flow meter in the outside monitoring station, they now say they use the DAF flow meter. This needs to be clarified.

(The outside flume was surcharged (poorly designed) and the meter was reading 212 gpm)

If measured, how often is the meter calibrated?

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

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. Raising the upper limit might be helpful.

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, CN, 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 out of New Knoxville**

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. *DAF effluent was a cloudy tan color. There wasn't much floatable solids coming off the DAF unit.*
2. *Sampler pacing was 100 ml every 750 gallons. At ~60,000 gpd, that would mean sample aliquots are collected approximately every 20 minutes.*
3. *The flow rate reading was 212 gpm which shouldn't be possible (and is otherwise twice the design flow of the DAF system).*
4. *The sampler program equates a 4 mA signal from the flow meter to a discharge flow rate of 1 gpm and a 20 mA signal to a flow rate of 40 gpm. This upper signal/flow is equal to about 60,000 gpd which means the signal would have to be at the maximum for 24 hours.*
5. *Sampling typically occurs on Fridays.*
6. *The DAF units are currently operating at a total rate of about 70 gpm.*
7. *There is a display screen showing the flow rate to each DAF unit.*
8. *They said they try to get rid of as much build-up in the drier as practicable before using wash water.*
9. *Test and off-spec batches are hauled off-site by Mikes Sanitation.*
10. *Typical schedule has sanitization occurring on Sundays, wet wash of blending mid-week and wet wash of the drier on Friday through Sunday.*