



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno Pigott
Commissioner

August 12, 2020

Via Email to: robert.maciел@arcelormittal.com

Mr. Rob Maciel, Environmental Manager
ArcelorMittal Burns Harbor, LLC
250 W US Highway 12
Burns Harbor, Indiana 46304

Dear Mr. Maciel:

Re: Inspection Summary/ Noncompliance Letter
Microbac Laboratories, Inc. – Chicagoland 250
West 84th Drive Merrillville, Indiana 46410
Contracted Laboratory for: ArcelorMittal Burns
Harbor LLC and ArcelorMittal Burns Harbor LLC
NPDES Permit No. IN0000175
Burns Harbor, Porter County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Office of Water Quality (IDEM), pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: June 22, 2020 , July 15, 2020
Type of Inspection: Complaint Investigation
Inspection Results: Violations were observed.

The following concerns were noted:

These inspections at Microbac Laboratory and ArcelorMittal Burns Harbor (AMBH) were performed as the result of a complaint received by IDEM about the handling of samples at AMBH and handling of those same samples at Microbac Laboratory.

1. The Self Monitoring Program was rated as unsatisfactory. At the time of the inspection it was determined that the facility was not flow proportioning the effluent composite samples correctly. This is a violation of Part I. C. 3. d. of the permit, which defines 24-hour flow proportioned composite sample.
 - a. In a July 23, 2020, correspondence to AMBH, IDEM specified that composite samples for Cyanide and Phenols must be manually collected flow proportioned composites and must be documented appropriately. At the time of this inspection the permittee was not flow proportioning these samples. This must begin immediately.

- b. During this inspection it was determined that the automatic samplers at Outfall 002 and 011 were not set to collect a flow proportioned composite sample. Any parameter that requires the 24 hour composite sample collected at both of these outfalls must be flow proportioned.
2. Flow Measurement was rated as unsatisfactory due to a failure to monitor final effluent at the frequency required by the permit. This is a violation of Part I. A. 1 of the permit which sets forth the effluent limitations and monitoring frequencies applicable to the discharges. Specifically, in correspondence to IDEM from the permittee on July 27, 2020, the permittee stated that there are no totalized flow readings for Outfall 002 and 011. The permit requires continuous flow monitoring and reporting of a 24 hour total. The permittee must respond with how flow is recorded and reported to IDEM if in fact there is no totalized flow for these outfalls.
3. The Laboratory evaluation generated an unsatisfactory rating.
 - a. IDEM inspectors observed the processing of samples received at Microbac Laboratory from AMBH during the inspection on June 22, 2020. The Field Service person from Microbac indicated that he measured the temperature of one sample container. This temperature was then recorded for the 60+ samples from three different days brought into the lab on that Monday morning. These samples were packed into three coolers for transport to the lab. Taking the temperature of one sample from three full coolers is not representative, especially considering the samples were from different days and were most likely at different temperatures before transport. 40 CFR 136 requires that samples be held at or below six degrees C for several analytes. In order to document the appropriate temperature, the lab must record the temperature of a representative sample from each cooler.
 - b. Since the last inspection was conducted, AMBH had another analytical result which indicated a cyanide effluent limitation exceedance. This exceedance was attributed to insufficient glassware cleaning at the laboratory. During this inspection we discussed in depth the current procedure and the proposed draft Glassware Cleaning SOP. IDEM recommends pairing the SOP with a permanent record documenting which cleaning procedure was used each time that a set of glassware is cleaned. IDEM also recommends a more robust cleaning procedure be utilized on a consistent basis.
 - c. Analysis for pH must be by an approved method listed at 40 CFR 136. An acceptable method for Automated Electrode measurement of pH is EPA 150.2. This method has very specific instructions for calibration of the pH equipment. It appears from the NPDES Outfall Calibration Sheet submitted to IDEM that calibration is not conducted at the required frequency. Please submit to IDEM a written procedure explaining the pH calibration process for Outfalls 001, 002 and 011. Also it was not clear whether the data and initials at the top of the Calibration Sheet also applied to the pH calibration or was just relevant to flow meter calibration. The sheet should be changed to clearly indicate the data and initials for both pH calibration and flow

meter calibration.

- d. The sample storage refrigerator in the Environmental Building at AMBH must have a thermometer inside. The temperature must be recorded each day that samples are stored there. This assures samples are held at the required temperature prior to pickup by the contract lab.
- e. IDEM reviewed the sample handling procedures with the "Early Man" employee (an AMBH subcontract employee). He described the procedure for sample collection, but parts of the procedure were very difficult for IDEM staff to follow and appeared to be somewhat contradictory. IDEM is requesting a written SOP for sample handling by the "Early Man" position. During this discussion it was determined that the field services personnel from the contract lab are at AMBH seven (7) days per week to pour sample aliquots into the appropriate preserved containers. However, the chain of custody is not signed over until Monday morning for samples collected on Saturday and Sunday. This results in a break in the chain of custody over the weekend. Specifically, the Microbac employee pours samples, then puts them in a refrigerator at AMBH. The AMBH employee then signs over custody to Microbac employee on Monday morning. The permittee must review this procedure and determine a way to clearly document all exchanges of custody and assure the security of the samples at all times.

- 4. The Other: Duty to Provide Information area was rated as unsatisfactory. In accordance with 327 IAC 5-1-3, the permittee must provide the commissioner with any information reasonably requested.

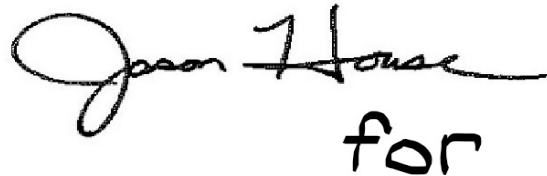
This inspection was announced due to COVID-19 pandemic procedures in place for the protection of IDEM staff and facility staff. During the announced inspection, the facility personnel were unable or unwilling to provide answers to some of the questions inspectors asked during the inspection. An inspection is an information gathering activity. Fundamental facility information should be available at the time of the inspection. For example, facility personnel were not willing or unable to explain fundamental procedures pertaining to the routine calibration of the pH meter and the location of the Outfall 011 flow measurement device. IDEM had to request the information in writing after the inspection. Even after on-site verbal and subsequent written requests for information, there were unreasonable delays in providing IDEM responses to fundamental questions pertaining to the sampling protocols. This is not as efficient or complete as having meaningful discussion during the inspection. Many of the answers provided in writing prompted follow up questions which are addressed in this inspection report.

Part II. A. 1. of your permit requires you to comply with its terms and conditions. Any noncompliance with the terms of your permit may subject you to an enforcement action which can include the imposition of penalties. You are required to immediately take all necessary measures to comply with the terms and conditions of your NPDES Permit,

specifically those violations identified above.

Within 15 days of receipt of this letter, a written detailed response documenting correction of the concerns listed above and/or a plan for assuring future compliance must be submitted to this office. These items will also be forwarded to the IDEM Office of Water Quality Enforcement Section for appropriate action. Please direct your response to this letter to our letterhead address or via email to wwViolationResponse@idem.in.gov . **If the non-compliance issues addressed in the report/letter are attributable to the COVID-19 pandemic please provide this information in your response to this office.** Any questions should be directed to Becky Ruark at 317-691-1909 or by email to bruark@idem.IN.gov . Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Jason House". The signature is fluid and cursive, with the first name "Jason" and the last name "House" clearly visible. Below the signature, the word "for" is written in a simple, lowercase, sans-serif font.

Samantha Groce, Chief
Wastewater Inspection Section
Office of Water Quality

Enclosure

Cc: Carey Gadzala, Microbac



NPDES Industrial Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NPDES Permit Number: IN0000175	Facility Type: Industrial	Facility Classification: Major	Facility Classification: D	TEMPO AI ID 12029
Date(s) of Inspection: June 22, 2020 , July 15, 2020				
Type of Inspection: Complaint Investigation				
Name and Location of Facility Inspected: Microbac Laboratories, Inc. – Chicagoland 250 West 84th Drive Merrillville, Indiana 46410 Contracted Laboratory for: ArcelorMittal Burns Harbor LLC and ArcelorMittal Burns Harbor LLC 250 W US Hwy 12 Burns Harbor IN 46304		Receiving Waters/POTW: East Branch of the Little Calumet River and Lake Michigan	Permit Expiration Date: 6/30/2021 Design Flow: NA	
County: Porter				
On Site Representative(s):				
First Name	Last Name	Title	Email	Phone
Ron	Misiunas	Lab Director, Microbac	ron.misiunas@microbac.com	
Shon	Ahrendt	Operations Manager, Microbac	shon.ahrendt@microbac.com	
Amy	Sheehy	Quality Manager, Microbac	amy.sheehy@microbac.com	
Carey	Gadzala	Project Manager, Microbac	carey.gadzala@microbac.com	
Brian	Otto	Field Services, Microbac		
Dave	Bryant	Sample Receipt Supervisor, Microbac		
Carey	Mathias (by phone)		carey.mathias@arcelormittal.com	
JoAnn	Laramie			
Joyce	Casillas	Operator, ArcelorMittal		
Rob	Maciel	Environmental Manager, ArcelorMittal	robert.maciell@arcelormittal.com	
Chet	Dulin	Early Man, ArcelorMittal		
Was a verbal summary of the inspection given to the on-site rep? No				
Certified Operator: Pat Gorman	Number: 9310	Class: D	Effective Date: 7-1-19	Expiration Date: 6-30-22
Email: pat.gorman@arcelormittal.com				
Cyber Security Contact				
Name: _____ Email: _____				
Responsible Official: Mr. Rob Maciel, Environmental Manager 250 W US Highway 12 Burns Harbor, Indiana 46304			Permittee: ArcelorMittal Burns Harbor, LLC Email: robert.maciell@arcelormittal.com Phone: _____ Fax: _____	
			Contacted? No	
INSPECTION FINDINGS				
<input type="radio"/> Conditions evaluated were found to be satisfactory at the time of the inspection. (5)				
<input type="radio"/> Violations were discovered but corrected during the inspection. (4)				
<input type="radio"/> Potential problems were discovered or observed. (3)				

- ☒ Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)
- ☐ Violations were discovered and may subject you to an appropriate enforcement response. (1)

AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

N	Receiving Waters	N	Facility/Site	U	Self-Monitoring	N	Compliance Schedules
N	Effluent/Discharge	N	Operation	U	Flow Measurement		
N	Permit	N	Maintenance	U	Laboratory	N	Effluent Limits Compliance
		N	Sludge	N	Records/Reports	U	Other: Duty to Provide Information

DETAILED AREA EVALUATIONS

These inspections at Microbac Laboratory and ArcelorMittal Burns Harbor were performed as the result of a complaint received by IDEM about the handling of samples at ArcelorMittal and handling of those same samples at Microbac Laboratory.

Self-Monitoring:

Comments:

The Self Monitoring Program was rated as unsatisfactory. At the time of the inspection it was determined that the facility was not flow proportioning the effluent composite samples correctly. This is a violation of Part I. C. 3. d. of the permit, which defines the 24-hour flow proportioned composite sample.

- In a July 23, 2020, correspondence to ArcelorMittal, IDEM specified that composite samples for Cyanide and Phenols must be manually collected flow proportioned composites and must be documented appropriately. At the time of this inspection the permittee was not flow proportioning these samples. This must begin immediately.
- During this inspection it was determined that the automatic samplers at Outfall 002 and 011 were not set to collect a flow proportioned composite sample. Any parameter that requires the 24 hour composite sample collected at both of these outfalls must be flow proportioned.

Flow Measurement:

Comments:

Flow Measurement was rated as unsatisfactory due to a failure to monitor final effluent at the frequency required by the permit. This is a violation of Part I. A. 1 of the permit which sets forth the effluent limitations and monitoring frequencies applicable to the discharge. Specifically, in correspondence to IDEM from the permittee on July 27, 2020, the permittee stated that there are no totalized flow readings for Outfall 002 and 011. The permit requires continuous flow monitoring and reporting of a 24 hour total. The permittee must respond with how flow is recorded and reported to IDEM if in fact there is no totalized flow for these outfalls.

Laboratory:

The following laboratory records were reviewed:

Chain-of-Custody Contract Lab Reports Sample Receipt SOP

Contract Lab Information

Microbac Laboratory - Chicagoland Merrillville

Comments:

The Laboratory evaluation generated an unsatisfactory rating.

- IDEM inspectors observed the processing of samples received at Microbac Laboratory from AMBH during the inspection on June 22, 2020. The Field Service person from Microbac indicated that he measured the temperature of one sample container. This temperature was then recorded for the 60+ samples from three different days brought into the lab on that Monday morning. These samples were packed into three coolers for transport to the lab. Taking the temperature of one sample from three full coolers is not representative, especially considering the samples were from different days and were most likely at different temperatures before transport. 40 CFR 136 requires that samples be held at or below six degrees C for several analytes. In order to document the appropriate temperature, the lab must record the temperature of a representative sample from each cooler.
- Since the last inspection was conducted, AMBH had another analytical result which indicated a cyanide effluent limitation exceedance. This exceedance was attributed to insufficient glassware cleaning at the laboratory. During this inspection we discussed in depth the current procedure and the proposed draft Glassware Cleaning SOP. IDEM recommends pairing the SOP with a permanent record documenting which cleaning procedure was used each time that a set of glassware is cleaned. IDEM also recommends a more robust cleaning procedure be utilized on a consistent basis.
- Analysis for pH must be by an approved method listed at 40 CFR 136. An acceptable method for

Automated Electrode measurement of pH is EPA 150.2. This method has very specific instructions for calibration of the pH equipment. It appears from the NPDES Outfall Calibration Sheet submitted to IDEM that calibration is not conducted at the required frequency. Please submit to IDEM a written procedure explaining the pH calibration process for Outfalls 001, 002 and 011. Also it was not clear whether the data and initials at the top of the Calibration Sheet also applied to the pH calibration or was just relevant to flow meter calibration. The sheet should be changed to clearly indicate the data and initials for both pH calibration and flow meter calibration.

- d. The sample storage refrigerator in the Environmental Building at AMBH must have a thermometer inside. The temperature must be recorded each day that samples are stored there. This assures samples are held at the required temperature prior to pickup by the contract lab.
- e. IDEM reviewed the sample handling procedures with the "Early Man" employee (an AMBH subcontract employee). He described the procedure for sample collection but parts of the procedure were very difficult for IDEM staff to follow and appeared to be somewhat contradictory. IDEM is requesting a written SOP for sample handling by the "Early Man" position. During this discussion it was determined that the field services personnel from the contract lab are at AMBH seven (7) days per week to pour sample aliquots into the appropriate preserved containers. However, the chain of custody is not signed over until Monday morning for samples collected on Saturday and Sunday. This results a break in the chain of custody over the weekend. Specifically, the Microbac employee pours samples, then puts them in a refrigerator at AMBH. The AMBH employee then signs over custody to Microbac employee on Monday morning. The permittee must review this procedure and determine a way to clearly document all exchanges of custody and assure the security of the samples at all times.

Effluent Limits Compliance:

No 1. Were DMRs reviewed as part of the inspection?

Comments:

Other:

Duty to Provide Information

Comments:

The Other: Duty to Provide Information area was rated as unsatisfactory. In accordance with 327 IAC 5-1-3, the permittee must provide the commissioner with any information reasonably requested.

This inspection was announced due to COVID-19 pandemic procedures in place for the protection of IDEM staff and facility staff. The facility personnel were unable or unwilling to provide answers to some of the questions inspectors asked during the inspection. An inspection is an information gathering activity. Fundamental facility information should be available at the time of the inspection. For example, facility personnel were not willing or unable to explain fundamental procedures pertaining to the routine calibration of the pH meter and the location of the Outfall 011 flow measurement device. IDEM had to request the information in writing after the inspection. Even after on-site verbal and subsequent written requests for information, there were unreasonable delays in providing IDEM responses to fundamental questions pertaining to the sampling protocols. This is not as efficient or complete as having meaningful discussion during the inspection. Many of the answers provided in writing prompted follow up questions which are addressed in this inspection report.

IDEM REPRESENTATIVE

Inspector Name:	Email:	Phone Number:
Becky Ruark	bruark@idem.IN.gov	317-691-1909
Other staff participating in the inspection:		
Name(s)	Phone Number(s)	
Nick Ream	219-730-1691	

IDEM MANAGER REVIEW

IDEM Manager:	Date:
Andy Schmidt	8/4/2020