

# **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

March 12, 2020

Via email to: Robert.maciel@arcelormittal.com

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

Dear Mr. Maciel:

Re: Inspection Summary/ Enforcement Referral

ArcelorMittal Burns Harbor LLC NPDES Permit No. IN0000175 Burns Harbor, Porter County

An inspection of the above-referenced facility's laboratory and self-monitoring practices was conducted by representatives of the Indiana Department of Environmental Management (IDEM) at the site of the facility's contract laboratory, Microbac Laboratories, located in Merrillville, IN, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection: Fel

February 05, 2020

Type of Inspection:

Reconnaissance Inspection

Inspection Results:

Violations were observed

The following concerns were noted:

- 1. The Self-Monitoring Program was rated as unsatisfactory.
  - Part I. C. 4 of the permit requires analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified.

During the inspection, sample collection/preservation practices were found to not conform to the requirements of 40 CFR Part 136, as described in item 2.a below.

- b. Part I.C.1 of the permit requires samples and measurements taken as required by the permit to be representative of the volume and nature of the monitored discharge.
  - Part I. C. 4 of the permit requires analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified.

Part I. C. 5 of the permit requires, for each sample or measurement taken, specific information to be recorded, including:

- a. the date, exact place and time of sampling or measurements;
- b. the person who performed the sampling or measurements;
- c. the date(s) analyses were performed;
- d. the person(s) who performed the analyses;
- e. the analytical techniques or methods used; and
- f. the results of such measurements and analyses.

During the inspection, sample chain of custody records were found to be deficient, as described below.

- i. A review of the sole chain of custody associated with Microbac Laboratories Work Order 1910789 indicated the following issues:
  - (a) The chain of custody identifies one Outfall 011 composite sample, but does not identify any parameters to be analyzed using this sample. However, the laboratory analytical report associated with this work order includes results for an Outfall 011 composite sample analyzed for Lead (Pb), Zinc (Zn), Total Cyanide, Free Cyanide, Ammonia, Total Phenols, and Total Suspended Solids (TSS), raising questions as to whether these results were derived from analysis of the composite sample identified on the chain of custody or from analysis of another sample not accounted for on the chain of custody.
  - (b) The chain of custody identifies one Outfall 011 grab sample, with a volume of 125 mL, to be analyzed for pH. However, the laboratory analytical report associated with this work order includes results for an Outfall 011 grab sample analyzed for Oil and Grease (O&G), raising questions as to what sample was used to conduct the O&G analysis.
  - (c) The chain of custody identifies one Outfall 001 composite sample, to be analyzed for Ammonia. However the laboratory analytical report associated with this work order includes results for an Outfall 001 composite sample analyzed for Copper (Cu), Pb, Zn, Silver (Ag), Total Cyanide, Free Cyanide, Ammonia, Total Phenols, and TSS, raising questions as to what sample was used to conduct the analyses for the parameters other than Ammonia.
  - (d) The chain of custody identifies one Outfall 001 grab sample, with a volume of 125 mL, to be analyzed for pH. However, the laboratory analytical report associated with this work order includes results for an Outfall 001 grab sample analyzed for O&G, raising questions as to what sample was used to conduct the O&G analysis.

- ii. A review of the sole chain of custody associated with Microbac Laboratories Work Order 20B0169 indicated the following issues:
  - (a) Time collected is not recorded for any of the samples.
  - (b) Number of containers and preservatives are not recorded for any of the samples.
  - (c) The sampler signature does not match the initial relinquished by signature.
  - (d) The initial received by signatory failed to relinquish the sample to the next received by signatory.

The above noted deficiencies reflect a failure to record all information required pursuant to Part I.C.5 of the permit, in violation of Part I.C.5 of the permit. The above noted deficiencies also reflect a failure to record all information necessary to document that the requirements of Part I.C.1 and Part I.C.4 of the permit were met. For example, the failure to document all exchanges of custody for the samples associated with Work Order 20B0169 creates an inability to account for the whereabouts of the samples at times, and results in a lack of adequate documentation that the samples analyzed by the laboratory were representative of the volume and nature of the monitored discharge, as is required by Part I.C.1 of the permit. Additionally, the failure to record information such as sample collection time, method of preservation, and parameters to be analyzed results in a lack of documentation that the requirements of 40 CFR Part 136 were met, as is required by Part I.C.4 of the permit.

# Required correction actions include:

AMBH must determine what samples are being analyzed for O&G. If composite samples are used, this practice must be stopped immediately, as grab samples are required for this parameter.

AMBH must ensure that all chain of custody sheets clearly indicate all samples collected, with an accurate sample type, sample time (start and stop time for composites), and preservative used for each parameter. The chain of custody must also indicate the parameter(s) for which the sample in each container will be analyzed.

AMBH must ensure that all exchanges of custody for all samples are clearly and accurately documented on the chain of custody records.

- 2. The Laboratory evaluation generated an unsatisfactory rating.
  - a. Part I.C.4 of the permit requires the analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified. During the inspection, sample collection/preservation practices were found to not conform to the requirements of 40 CFR Part 136, as described below.
    - i. The 24 hour composite samples for Cyanide and Total Phenols are collected using an automatic sampler. Additionally, these samples are not immediately analyzed or preserved, as preservation does not occur until after the samples are transported to the laboratory. As an example, the lab report designated as Microbac 20B0169, indicates that samples were collected at an unknown time on 2-4-20. No preservation was indicated on the associated chain of custody. Samples were distilled on 2-5-20 at 12:08 pm and analyzed for Cyanide at 3:25 and 3:27 pm.
    - ii. Note that, for Cyanide and Total Phenols, an automatic sampler cannot be used for sample collection, and, as reiterated below, if analysis is not conducted immediately, immediate preservation of the samples, defined as no more than 15 minutes after sample collection, is required per 40 CFR Part 136.
    - iii. The 24 hour composite samples for Dissolved Iron are not filtered. Additionally, these samples are not immediately analyzed or preserved, as preservation does not occur until after the samples are transported to the laboratory.
    - iv. The Chemical Oxygen Demand (COD) and Ammonia samples are not immediately analyzed or preserved, as preservation does not occur until after the samples are transported to the laboratory.

The aforementioned deficiencies evidence a failure to meet the requirements of 40 CFR Part 136, in violation of Part I.C.4 of the permit. Note that an issue underlying several of the deficiencies is the practice of taking one large sample container to the lab, unpreserved, which is not acceptable for parameters such as Cyanide, Total Phenols, Dissolved Iron, COD, and Ammonia, which must be analyzed or preserved, immediately, defined as no more than 15 minutes after sample collection, to meet the requirements of 40 CFR Part 136.

### Required corrective actions include:

AMBH must collect the Cyanide and Total Phenols samples via manual composite sampling, ensuring that the samples are immediately preserved during the course of manual composite sample collection.

AMBH must filter the Dissolved Iron samples, and immediately analyze the samples or preserve the samples prior to transportation to the laboratory.

AMBH must immediately analyze the COD and Ammonia samples or preserve the samples prior to transportation to the laboratory.

- b. Part I.C.4 of the permit requires the analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified. During the inspection, potential issues with analytical methods/practices were found, as described below:
  - A review of records during the inspection indicated that an approved method for pH analysis is not being used. The method listed on the bench sheet, 9045
     D, is a solid waste analytical method.

In addition, per 40 CFR 136, samples for pH must be analyzed immediately, defined as no more than 15 minutes after sample collection. According to a lab report, Microbac 1910789, the grab samples collected on 9-12-19 at 6:35 am and 6:15 am for Outfalls 001 and 011, respectively, were analyzed for pH on 9-13-19 at 8:30 am, placing these samples more than 25 hours out of holding time at the time of analysis.

However, subsequent to the inspection, AMBH representatives verbally advised that AMBH does not utilize the pH analysis results generated by Microbac Laboratories for NPDES permit compliance reporting purposes, and uses instead, the results of pH analysis conducted on-site. If this is the case, then the issues with pH analysis noted above, pertaining to analytical method and holding time, need not be addressed. However, for clarity, AMBH must indicate on the chain of custody records for the samples provided to the laboratory, the intended purpose of the pH analysis.

ii. Per 40 CFR 136, samples for Chlorine must be analyzed immediately, defined as no more than 15 minutes after sample collection. According to a lab report, Microbac 19l0789, the samples collected on 9-12-19 at 6:35 am and 6:15 am for Outfalls 001 and 011, respectively, appeared to be analyzed for Chlorine on 9-13-19 at 8:30 am, placing these samples more than 25 hours out of holding time.

However, subsequent to the inspection, AMBH representatives verbally advised that AMBH does not utilize the Chlorine analysis results generated by Microbac Laboratories for NPDES permit compliance reporting purposes, and uses instead, the results of Chlorine analysis conducted on-site. If this is the case, then the issue with Chlorine analysis noted above, pertaining to holding time, need not be addressed. However, for clarity, AMBH must indicate on the chain of custody records for the samples provided to the laboratory, the intended purpose of the Chlorine analysis.

iii. Several Microbac analytical reports indicate that analysis of blank samples yielded concentration results above the method detection limit but below the reporting limit for various parameters, including Ammonia, Cyanide, and Zinc. IDEM recommends that the laboratory review the frequency of these instances and determine if/when corrective action should be initiated.

- iv. Microbac analytical reports contain outdated analytical method references for parameters including Total Cyanide and TSS. Additionally, the analytical method listed for Free Cyanide is a solid waste analytical method, designated as SW-846 9014. All analytical methods used must conform to the current version of 40 CFR Part 136, and the analytical reports must accurately reflect the analytical methods used.
- v. Microbac Laboratories marks partially complete analytical reports, i.e. those containing some but not all of the analytical results associated with a given work order, as "Preliminary Report: Data Subject to Change." Microbac Laboratories personnel confirmed during the inspection that use of the terminology is intended to denote only that additional results associated with the work order are pending and will be added to the report when available. However, this terminology creates the misimpression that the analytical results already included in the report are subject to change. IDEM would prefer use of terminology such as "partial report," without the statement "data subject to change," as a means of denoting that additional results will be added to the report when available, without creating the impression that the results already contained in the report are subject to change.
- 3. In the report for the compliance evaluation inspection dated January 6, 2020 (conducted on November 7, 8, and 27, 2019), IDEM rated laboratory practices as "unsatisfactory," based on issues with AMBH's sample reanalysis practices. During the inspection, IDEM representatives inquired about the laboratory's policy for reanalysis of samples, given that AMBH has requested reanalysis of samples for Total Cyanide several times over the last few months. IDEM representatives noted that the laboratory needs to document each of these occasions in a consistent way. Laboratory representatives indicated that the laboratory is developing a standard operating procedure (SOP). It was not complete at the time of the inspection.

US EPA representatives suggested that the laboratory conduct a study on how long a preserved sample can be kept and reanalyzed without degradation occurring that would affect the reanalysis results. The holding times listed at 40 CFR 136 are maximum holding times and are not necessarily effective for all samples.

With regard to AMBH's reanalysis practices, this Office requests the following additional information be provided within 15 days:

- For the two year period of February 5, 2018 to February 5, 2020, please
  provide a listing of all AMBH samples that were reanalyzed, including for
  each listed sample: the analytical lab sheets for the initial and subsequent
  analyses; the reason for the reanalysis; and all email correspondence or
  written correspondence between Microbac Laboratories and AMBH or its
  consultants.
- Provide the laboratory's SOP for the reanalysis of samples.

As indicated above, the agency continues to evaluate AMBH sample reanalysis and will inform AMBH if deficiencies beyond those previously cited are identified. In the meantime, to reiterate, the agency's position regarding the appropriate use of sample reanalysis and the proper reporting of analytical data is as follows:

If a representative sample is properly collected and analyzed using an approved analytical method, and no Quality Assurance or Quality Control issue that renders the analytical result unsuitable for its intended purpose is identified and documented by the laboratory during the course of the analysis, the result must be reported to IDEM.

Sample reanalysis should not be conducted if samples have degraded to a degree that would affect the reanalysis results. Sample reanalysis must not be selective; rather reanalysis must be conducted as part of a larger, robust, documented Quality Control and Quality Assurance program in which samples, regardless of initial result, are reanalyzed on a regular basis. Additionally, the use of matrix spikes and duplicates should be incorporated into the documented Quality Control and Quality Assurance program to increase the confidence in the analytical results. In this context, the results of sample reanalysis can and should be included in the calculation and reporting of the sample results reported to IDEM for NPDES permit compliance purposes.

If AMBH wishes to utilize the results of sample reanalysis in the calculation of results reported to IDEM for NPDES permit compliance reporting purposes, AMBH must meet these requirements, in addition to satisfactorily correcting the deficiencies noted in items 1 and 2 above.

The results of the February 5, 2020 inspection are being referred to the OWQ Enforcement Section for appropriate action. If formal action is initiated, you will be notified. Please provide IDEM a written response of the actions taken to correct the unsatisfactory items listed in this report within thirty (30) days of the date of this letter. Please direct any questions to Becky Ruark at 317-691-1909 or by email to bruark@idem.IN.gov. A copy of the NPDES Wastewater Facility Inspection Report is enclosed for your records.

Sincerely,

Jason House, Chief

Wastewater Compliance Branch

Office of Water Quality

**Enclosure** 



# NPDES Industrial Facility Inspection Report INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

-	816										
NPDE	S Permit Number:	Facility Type:						Facility Classification:		TEMPO AI ID	
	IN0000175	Industrial				Ма	ijor	D		12029	
Date(s) of Inspection: February 05, 2020											
		nnaissance	Inspe	ction							
Name and Location of Facility Inspected:						Receiving Waters/POTW: Permit					it Expiration Date:
Microbac Laboratories, Inc. – Chicagoland 250 West 84th Drive Merrillville, Indiana 46410										6/30/2021	
Contracted Laboratory for:						East Branch of the Little Calumet					
ArcelorMittal Burns Harbor LLC						•					gn Flow:
250 \	W US Hwy 12	County:				]					NA
	s Harbor	IN 4630	)4	Porter							
On Site Representative(s):  First Name Last Name Title Email Phone											
	arey Gadzala Project Manager, carey.gadzala@microbac.com						i ilolic				
	,			boratory		. 3					
Sho	Shon Ahrendt Operations Manager, shon.ahrendt@microbac.com  Microbac Laboratory										
Amy	y Sheehy	Quality		•	amy.	sheehy@	microba	c.com			
		Microb	ac La	boratory							
	Was a verbal sum							No			
Certifie	ed Operator: Pat Gorman	Number: 0	Class:	Effective Date 7-1-19		iration Date: 6-30-22	Email: pat.gorm	nan@arc	elormittal	.com	
Cybe	er Security Contact	33.3			<u> </u>	0 00 ==	l b s.u.g s				
Name				Email:							
Responsible Official:						Permittee: ArcelorMittal Burns Harbor, LLC					
Mr. Rob Maciel, Environmental Manager 250 West US Highway 12						Email: robert.maciel@arcelormittal.con					n
200	vvoot oo riigiiway 12					Phone:					Contacted?
Burns Harbor, Indiana 46304						Fax:					No
				INSPECTI	ON FI	NDINGS					
	O Conditions evaluated	were found t	o be sa	itisfactory at	the tir	ne of the in	spection. (	(5)			
	O Violations were discov	vered but cor	rected	during the ir	rspecti	on. (4)					
O Potential problems were discovered or observed. (3)											
$\bigcirc$ 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)											
				VALUATE M = Marginal,				aluated			
N	Receiving Waters	N		ty/Site	U	Self-Moni		N	Complia	nce S	Schedules
N	Effluent/Discharge	N	Oper	ation	N	Flow Mea	surement	t			
N	Permit	N	Main	tenance	U	Laborator	у	N	Effluent	Limit	s Compliance
		N	Sludg	je	N	Records/F	Reports	N	Other:		
DETAILED AREA EVALUATIONS											
This	Reconnaissance inspec	tion was an	evalua	ation of the	labora	itory work t	that Micro	bac Lah	oratory in	Mer	rillville does

This Reconnaissance inspection was an evaluation of the laboratory work that Microbac Laboratory in Merrillville does on behalf of ArcelorMittal Burns Harbor. The inspection took place at Microbac Laboratory. Contract lab reports and the associated chain of custody and field data sheets submitted to IDEM by ArcelorMittal Burns Harbor were also reviewed.

#### **Self-Monitoring:**

Comments:

The Self-Monitoring Program was rated as unsatisfactory.

Part I. C. 4 of the permit requires analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified.

During the inspection, sample collection/preservation practices were found to not conform to the requirements of 40 CFR Part 136, as described below.

Part I.C.1 of the permit requires samples and measurements taken as required by the permit to be representative of the volume and nature of the monitored discharge.

Part I. C. 4 of the permit requires analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified.

Part I. C. 5 of the permit requires, for each sample or measurement taken, specific information to be recorded, including:

- a. the date, exact place and time of sampling or measurements;
- b. the person who performed the sampling or measurements;
- c. the date(s) analyses were performed;
- d. the person(s) who performed the analyses;
- e. the analytical techniques or methods used; and
- f. the results of such measurements and analyses.

During the inspection, sample chain of custody records were found to be deficient, as described below.

A review of the sole chain of custody associated with Microbac Laboratories Work Order 1910789 indicated the following issues:

The chain of custody identifies one Outfall 011 composite sample, but does not identify any parameters to be analyzed using this sample. However, the laboratory analytical report associated with this work order includes results for an Outfall 011 composite sample analyzed for Lead (Pb), Zinc (Zn), Total Cyanide, Free Cyanide, Ammonia, Total Phenols, and Total Suspended Solids (TSS), raising questions as to whether these results were derived from analysis of the composite sample identified on the chain of custody or from analysis of another sample not accounted for on the chain of custody.

The chain of custody identifies one Outfall 011 grab sample, with a volume of 125 mL, to be analyzed for pH. However, the laboratory analytical report associated with this work order includes results for an Outfall 011 grab sample analyzed for Oil and Grease (O&G), raising questions as to what sample was used to conduct the O&G analysis.

The chain of custody identifies one Outfall 001 composite sample, to be analyzed for Ammonia. However the laboratory analytical report associated with this work order includes results for an Outfall 001 composite sample analyzed for Copper (Cu), Pb, Zn, Silver (Ag), Total Cyanide, Free Cyanide, Ammonia, Total Phenols, and TSS, raising questions as to what sample was used to conduct the analyses for the parameters other than Ammonia.

The chain of custody identifies one Outfall 001 grab sample, with a volume of 125 mL, to be analyzed for pH. However, the laboratory analytical report associated with this work order includes results for an Outfall 001 grab sample analyzed for O&G, raising questions as to what sample was used to conduct the O&G analysis.

A review of the sole chain of custody associated with Microbac Laboratories Work Order 20B0169 indicated the following issues:

- (a) Time collected is not recorded for any of the samples.
- (b) Number of containers and preservatives are not recorded for any of the samples.
- (c) The sampler signature does not match the initial relinquished by signature.

(d) The initial received by signatory failed to relinguish the sample to the next received by signatory.

The above noted deficiencies reflect a failure to record all information required pursuant to Part I.C.5 of the permit, in violation of Part I.C.5 of the permit. The above noted deficiencies also reflect a failure to record all information necessary to document that the requirements of Part I.C.1 and Part I.C.4 of the permit were met. For example, the failure to document all exchanges of custody for the samples associated with Work Order 20B0169 creates an inability to account for the whereabouts of the samples at times, and results in a lack of adequate documentation that the samples analyzed by the laboratory were representative of the volume and nature of the monitored discharge, as is required by Part I.C.1 of the permit. Additionally, the failure to record information such as sample collection time, method of preservation, and parameters to be analyzed results in a lack of documentation that the requirements of 40 CFR Part 136 were met, as is required by Part I.C.4 of the permit.

Required correction actions include:

AMBH must determine what samples are being analyzed for O&G. If composite samples are used, this practice must be stopped immediately, as grab samples are required for this parameter.

AMBH must ensure that all chain of custody sheets clearly indicate all samples collected, with an accurate sample type, sample time (start and stop time for composites), and preservative used for each parameter. The chain of custody must also indicate the parameter(s) for which the sample in each container will be analyzed.

AMBH must ensure that all exchanges of custody for all samples are clearly and accurately documented on the chain of custody records.

# Laboratory:

The following laboratory records were reviewed:

Contract Lab Reports Chain-of-Custody Chlorine Bench Sheets

pH Bench Sheets

- U 1. The laboratory practices and protocol reviewed were adequate, including:
  - a. A written laboratory QA/QC manual was available.
  - b. Samples were found to be properly stored.
  - c. Approved analytical methods were used.
  - d. Calibration and maintenance of instruments was adequate.
  - e. QA/QC procedures were adequate.
  - f. Dates of analyses (and times, where required) were recorded.
  - g. Name of person performing analyses was recorded.
- U 2. Review of lab records and/or on-site field testing equipment and protocols was found to be adequate.

Contract Lab Information				
Microbac Laboratories, Inc.	250 W 84th Drive, Merrillville, IN 46410			
Ron Misiunas, Lab Director	219-769-8378			

Comments:

The Laboratory evaluation generated an unsatisfactory rating.

Part I.C.4 of the permit requires the analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified.

During the inspection, sample collection/preservation practices were found to not conform to the requirements of 40 CFR Part 136, as described below.

The 24 hour composite samples for Cyanide and Total Phenols are collected using an automatic sampler. Additionally, these samples are not immediately analyzed or preserved, as preservation does not occur until after the samples are transported to the laboratory. As an example, the lab report designated as Microbac 20B0169, indicates that samples were collected at an unknown time on 2-4-20. No preservation was indicated on the associated chain of custody. Samples were distilled on 2-5-20 at 12:08 pm and analyzed for Cyanide at 3:25

and 3:27 pm.

Note that, for Cyanide and Total Phenols, an automatic sampler cannot be used for sample collection, and, as reiterated below, if analysis is not conducted immediately, immediate preservation of the samples, defined as no more than 15 minutes after sample collection, is required per 40 CFR Part 136.

The 24 hour composite samples for Dissolved Iron are not filtered. Additionally, these samples are not immediately analyzed or preserved, as preservation does not occur until after the samples are transported to the laboratory.

The Chemical Oxygen Demand (COD) and Ammonia samples are not immediately analyzed or preserved, as preservation does not occur until after the samples are transported to the laboratory.

The aforementioned deficiencies evidence a failure to meet the requirements of 40 CFR Part 136, in violation of Part I.C.4 of the permit. Note that an issue underlying several of the deficiencies is the practice of taking one large sample container to the lab, unpreserved, which is not acceptable for parameters such as Cyanide, Total Phenols, Dissolved Iron, COD, and Ammonia, which must be analyzed or preserved, immediately, defined as no more than 15 minutes after sample collection, to meet the requirements of 40 CFR Part 136.

Required corrective actions include:

AMBH must collect the Cyanide and Total Phenols samples via manual composite sampling, ensuring that the samples are immediately preserved during the course of manual composite sample collection.

AMBH must filter the Dissolved Iron samples, and immediately analyze the samples or preserve the samples prior to transportation to the laboratory.

AMBH must immediately analyze the COD and Ammonia samples or preserve the samples prior to transportation to the laboratory.

Part I.C.4 of the permit requires the analytical and sampling methods used to conform to the current version of 40 CFR, Part 136, unless otherwise specified. During the inspection, potential issues with analytical methods/practices were found, as described below:

A review of records during the inspection indicated that an approved method for pH analysis is not being used. The method listed on the bench sheet, 9045 D, is a solid waste analytical method.

In addition, per 40 CFR 136, samples for pH must be analyzed immediately, defined as no more than 15 minutes after sample collection. According to a lab report, Microbac 19l0789, the grab samples collected on 9-12-19 at 6:35 am and 6:15 am for Outfalls 001 and 011, respectively, were analyzed for pH on 9-13-19 at 8:30 am, placing these samples more than 25 hours out of holding time at the time of analysis.

However, subsequent to the inspection, AMBH representatives verbally advised that AMBH does not utilize the pH analysis results generated by Microbac Laboratories for NPDES permit compliance reporting purposes, and uses instead, the results of pH analysis conducted on-site. If this is the case, then the issues with pH analysis noted above, pertaining to analytical method and holding time, need not be addressed. However, for clarity, AMBH must indicate on the chain of custody records for the samples provided to the laboratory, the intended purpose of the pH analysis.

Per 40 CFR 136, samples for Chlorine must be analyzed immediately, defined as no more than 15 minutes after sample collection. According to a lab report, Microbac 19I0789, the samples collected on 9-12-19 at 6:35 am and 6:15 am for Outfalls 001 and 011, respectively, appeared to be analyzed for Chlorine on 9-13-19 at 8:30 am, placing these samples more than 25 hours out of holding time.

However, subsequent to the inspection, AMBH representatives verbally advised that AMBH does not utilize the Chlorine analysis results generated by Microbac Laboratories for NPDES permit compliance reporting purposes, and uses instead, the results of Chlorine analysis conducted on-site. If this is the case, then the issue with Chlorine analysis noted above, pertaining to holding time, need not be addressed. However, for clarity, AMBH must indicate on the chain of custody records for the samples provided to the laboratory, the intended purpose of the Chlorine analysis.

Several Microbac analytical reports indicate that analysis of blank samples yielded concentration results above

the method detection limit but below the reporting limit for various parameters, including Ammonia, Cyanide, and Zinc. IDEM recommends that the laboratory review the frequency of these instances and determine if/when corrective action should be initiated.

Microbac analytical reports contain outdated analytical method references for parameters including Total Cyanide and TSS. Additionally, the analytical method listed for Free Cyanide is a solid waste analytical method, designated as SW-846 9014. All analytical methods used must conform to the current version of 40 CFR Part 136, and the analytical reports must accurately reflect the analytical methods used.

Microbac Laboratories marks partially complete analytical reports, i.e. those containing some but not all of the analytical results associated with a given work order, as "Preliminary Report: Data Subject to Change." Microbac Laboratories personnel confirmed during the inspection that use of the terminology is intended to denote only that additional results associated with the work order are pending and will be added to the report when available. However, this terminology creates the misimpression that the analytical results already included in the report are subject to change. IDEM would prefer use of terminology such as "partial report," without the statement "data subject to change," as a means of denoting that additional results will be added to the report when available, without creating the impression that the results already contained in the report are subject to change.

#### **Effluent Limits Compliance:**

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

Comments:

# **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, EPA Kenneth Gunter, EPA Joan Rogers, EPA Robert Lugar, IDEM

IDEM MANAGER REVIEW						
IDEM Manager:	Date:					
Rick Massoels	3/12/2020					