FILED January 17, 2023 INDIANA UTILITY REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

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PETITION OF INDIANA-AMERICAN WATER COMPANY, INC. FOR (1) APPROVAL OF SERVICE ENHANCEMENT IMPROVEMENT COSTS ASSOCIATED WITH SERVICE ENHANCEMENT IMPROVEMENTS UNDER IND. CODE § 8-1-31.7-7(2) AND APPROVE RECOVERY THEREOF.

CAUSE NO. 45609 SEI-1 S1

PUBLIC'S EXHIBIT NO. 1

TESTIMONY OF CARL N. SEALS

ON BEHALF OF

THE INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

January 17, 2023

Respectfully submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

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CERTIFICATE OF SERVICE

This is to certify that a copy of *OUCC Public's Exhibit No. 1, Testimony of Carl N. Seals* has been served upon the following counsel of record in the captioned proceeding by electronic service on January 17, 2023.

Nicholas K. Kile Hillary J. Close Lauren M. Box **BARNES & THORNBURG LLP** 11 South Meridian Street Indianapolis, Indiana 46204 Email: <u>Nicholas.kile@btlaw.com</u> <u>hillary.close@btlaw.com</u> <u>lauren.box@btlaw.com</u>

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TESTIMONY OF OUCC WITNESS CARL N. SEALS CAUSE NO. 45609 SEI-1 S1 INDIANA AMERICAN WATER COMPANY, INC.

I. INTRODUCTION

1	Q:	Please state your name and business address.
2	A:	My name is Carl N. Seals, and my business address is 115 West Washington Street, Suite
3		1500 South, Indianapolis, Indiana 46204.
4	Q:	By whom are you employed and in what capacity?
5	A:	I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC") as
6		Assistant Director in the Water/Wastewater Division. My qualifications and experience are
7		set forth in Appendix A.
8	Q:	What is the purpose of your testimony?
9	A:	The purpose of my testimony is to evaluate cost recovery of projects completed by Indiana
10		American Water Company, Inc.'s ("Indiana American" or "Petitioner") as "replacement
11		projects" under Ind. Code 8-1-31.7-7(2). My testimony will address whether Indiana
12		American should recover expenses for certain projects appearing in Petitioner's
13		Attachment DH-1 ¹ , and seek Commission guidance on whether these projects should be
14		included as a "service enhancement improvement" ("SEI"). The projects that I challenge
15		fall into three categories: 1) unplanned new additions, rather than replacement of existing
16		plant or equipment, 2) recovery of expenses incurred on plant that is no longer used and
17		useful and 3) projects that do not meet the statutory SEI requirements criteria. Finally, I

¹ Petitioner's Exhibit No. 3, Direct Testimony of Daniel Halverstadt, Attachment DH-1.

- 1 make some recommendations for future reporting that may aid the IURC's and OUCC's
- 2 review and analysis.

3 Q: What have you done to prepare your testimony?

A: I reviewed Indiana American's Petition and the testimonies submitted in this case. I
reviewed Petitioner's prior SEI case, Cause No. 45609. I reviewed Monthly Reports of
Operations filed with the Indiana Department of Environmental Management ("IDEM")
for Indiana American's Charlestown system. Finally, I wrote discovery requests and
reviewed Petitioner's responses.

II. ADDITIONS TO PLANT (NOT REPLACEMENTS)

9 Q: Do you believe that all projects described as additions and appearing in Attachment 10 DH-1 are eligible projects for inclusion as a Service Enhancement Improvement?

11 A: No. Ind. Code § 8-1-31.7-2 defines "eligible additions" for a public utility as being "used 12 and useful," and as being "procured, installed, or constructed by the public utility with 13 expenditures that are service enhancement improvements." (emphasis added) "Service 14 enhancement improvements" are defined in Ind. Code 8-1-31.7-7(2) as "Replacement of a 15 plant or equipment to maintain existing health, safety, or environmental protection for the 16 eligible utility's customers, employees, or the public." (emphasis added) Ind. Code § 8-1-17 31.7-9(e) states "An eligible utility is not required to seek preapproval of a plan in order to 18 seek recovery under section 12 of this chapter for eligible additions that are described in 19 section 7(2) of this chapter." Therefore, because service enhancement improvements are 20 defined in this way, new additions to plant or equipment that are not part of a pre-approved 21 plan are not eligible for SEI treatment and recovery. Petitioner witness Halverstadt

- 1 discusses these replacement projects in his testimony as "replacement eligible projects,"
- 2 although this term is not defined in the statute.²

Q: Which proposed replacement projects proposed for cost recovery by Petitioner do you believe are not eligible for SEI treatment because they are new additions to plant and not replacements?

- 6 A: Based upon my review of Attachment DH-1 and Indiana American's responses to certain
- 7 OUCC data requests, I recommend that the following line items from attachment DH-1 be
- 8 disallowed as service enhancement improvements.

Line Number	Project Number	Project Description	In-Service Date	Total Net
104	R10-50Q1.22-P-0002	New Auto Flusher for Hydrants at Montgomery County main installation	3/30/2022	\$2,760
123	R10-47Q1.22-P-0004	Bollards installed at Water Salesman	4/28/2022	\$2,045
133	R10-90Q1.21-P-0027	Rapid Mix Motor OD	7/14/2021	\$9 <i>,</i> 950

9 Q: Why did you select these specific projects for exclusion from the SEI?

10 A: Each of these projects are not *replacements* of plant and equipment, but instead *additions*

11 of *new* plant and equipment. This was confirmed in responses to OUCC Data Requests 2-

12 3, 2-4, 2-7, 2-9, 3-1 and 3-3, which I have included as OUCC Attachment CNS-1.

13Q:Please discuss why you believe project R10-50Q1.22-P-0002 is not an SEI-eligible
project.

- 15 A: Project R10-50Q1.22-P-0002 is simply the *addition* of an auto-flush device for a hydrant,
- 16 which releases water from the hydrant at pre-set intervals without manual intervention. It
- 17 is not replacing any existing plant or equipment as required by the statute but is instead

² *Id.*, p. 4, line 7 to p. 6, line 2.

1		replacing the process of water company personnel manually opening a hydrant. This was
2		confirmed in the attached responses to OUCC DR 2-3, 2-4 and 3-1.
3 4	Q:	Please discuss why you believe project R10-47Q1.22-P-0004 is not an SEI-eligible project.
5	A:	Indiana American's response to OUCC Data Request 2-7 states in part as follows:
6 7 8 9		The current equipment safety design is now outdated because <i>there were no bollards</i> protecting the valves and water salesman. <i>Adding</i> the bollards replaced and enhanced the existing equipment to protect the integrity of the existing valves and water salesman. (emphasis added)
10		Since there were no pre-existing bollards, this was not a replacement of plant and
11		equipment as required by the statute.
12 13	Q:	Please discuss why you believe project R10-90Q1.21-P-0027 is not an SEI-eligible project.
14	A:	Indiana American's response to OUCC Data Request 3-3 states in part as follows:
15 16 17 18 19 20 21		 a. The <i>second</i> rapid mix motor was <i>added</i> for redundancy purposes to maintain compliance at our Ogden Dune plant in NW Indiana. The rapid mixer mixes coagulant into the raw water to lower turbidity in the settling basins to extend the filter run times and lower filter effluent turbidity below the required threshold. b. One rapid mix motor was in place before the installation. c. Two rapid mix motors were in place following the installation.
22		Since this project involved the addition of a second rapid mix motor to the process, this
23		was not a <i>replacement</i> of plant and equipment as required by the statute.
24 25	Q:	What is the total value of these additions that you seek to remove from the proposed SEI?
26	A:	The total net value of these additions is \$14,755.
27	Q:	What do you recommend be done with these projects?
28	A:	I recommend that these three projects be excluded from this SEI as they do not meet the
29		definition of an SEI as set out in Ind. Code § 8-1-31.7-7(2) and were not included in the
30		pre-approved plan investments. While these may be relatively small-dollar projects, I

1		believe it is important to establish whether these unplanned additions of plant and
2		equipment should or should not be part of replacement SEI projects.
		III. PLANT NOT USED AND USEFUL
3 4	Q:	Do you believe that the project appearing as line 173 in Attachment DH-1 is an eligible service enhancement improvement?
5	A:	No, this project, which is described as "Replaced entire electrical system from acquired
6		system" on line 173 in Attachment DH-1, involved work done to a plant that is no longer
7		used and useful, as required by Ind. Code § 8-1-31.7-2(2)(A)(i).
8 9	Q:	How did you verify that this plant was no longer used and useful as required in Ind. Code 8-1-31.7-2(2)(A)(i)?
10	A:	I verified that the plant was no longer in service via a data request to Indiana American, a
11		review of Monthly Reports of Operations ("MROs") filed with IDEM, and finally by visual
12		inspection on January 1, 2023.
13	Q:	Please describe Indiana American's response to the data request.
14	A:	In response to OUCC Data Request 3-4 Indiana American indicated that the Charlestown
15		plant was no longer in service as of October 10, 2022. This was a follow-up question to
16		OUCC Data Request 2-11, and both responses appear as OUCC Attachment CNS-2.
17 18	Q:	Please describe the results of the review of the Monthly Reports of Operation ("MRO's") of the Charlestown system.
19	A:	A review of MRO's ³ from the May 2022 through November 2022 period shows a
20		changeover from the use of chlorine at use in the old plant to sodium hypochlorite as used
21		in the new plant. This changeover in disinfectants due to operation of the new plant is
22		consistent with Indiana American's response to OUCC Data Request 3-4.
23	Q:	Please describe the results of the visual inspection that you made.

³ See OUCC Attachment CNS-3.

1 A: On January 1, 2023, while in the area, I drove to the location of the old plant which I had 2 last visited in October 2017. As shown in OUCC Attachment CNS-4 the previous 3 Charlestown plant has been replaced by the new facility. 4 Do you have concerns with the inclusion of this project as an SEI project? **Q**: 5 Yes. Including this project for SEI recovery, when the replacement project, as part of the A: 6 old facility, has already been retired, is problematic. As of the date of this filing, the project 7 was not used and useful, as required for an eligible addition under Ind. Code 8-1-31.7-8 2(2)(A)(i). 9 While I understand the need to continue operation of the existing plant in a safe 10 manner, I do wonder if it could have been performed at less expense, given Indiana 11 American's pending replacement of the facility anyway. Again, it would be helpful to 12 receive Commission guidance on whether an eligible addition should be used and useful at 13 the time of the filing to receive SEI treatment and recovery and whether it is reasonable for 14 a utility to earn a return on and of an investment that is no longer used and useful. 15 **Q**: What is the value of this project to be removed from total SEI projects? The total net cost of this project was \$464,516. 16 A: 17 **O**: What do you recommend be done with this project? 18 A: I recommend that this project be excluded from the SEI as it does not meet the definition 19 of an eligible addition as set out in Ind. Code § 8-1-31.7-2(2)(a)(i). PROJECTS THAT DO NOT MEET SEI REQUIREMENTS CRITERIA IV. What does Ind. Code § 8-1-31.7-7(2) state? 20 **O**: 21 For a "replacement project", Ind. Code § 8-1-31.7-7(2) defines an SEI as "Replacement of A: 22 a plant or equipment to maintain existing health, safety, or environmental protection for the eligible utility's customers, employees, or the public." 23

- 1Q:Do all of the projects presented in Attachment DH-1 provide for the maintenance of2the "existing health, safety, or environmental protection for the eligible utility's3customers, employees, or the public?"
- 4 A: No, they do not.
- Q: Which projects do you believe fail to provide for the maintenance of the "existing health, safety, or environmental protection for the eligible utility's customers, employees, or the public?"
- 8 A: The projects appearing on lines 196, 208 and 209 do not appear to provide for the
- 9 maintenance of the "existing health, safety, or environmental protection for the eligible
 - Long description of all work performed under the Number Total Net **Project Number Project Description** WBS The 2nd Lab renovation including replacing the old lab cabinets with new, replacing the flooring, drywall, and R10-15Q1.21-P-0007 196 2nd Lab Renovation \$155,939 ceiling, and repainting. Replacing a refrigerator, credenz and some other office furniture. Replaced walls & floor control rm HS Building, Replaced 208 R10-25Q1.21-P-0002 HS Building Improvements \$45,596 locks & Cores. Replaced Cabinets & powered hand tools 209 R10-25Q1.20-P-0010 Win High Service Project \$41,428 Epoxy Flooring in plant. File Cabinets and Shelves

10 utility's customers, employees, or the public."

Q: Please explain why these projects fail to provide for the maintenance of the "existing health, safety, or environmental protection for the eligible utility's customers, employees, or the public."

14 A: While these may be necessary and worthwhile projects in their own right, that does not 15 necessarily mean that they qualify for approval as an SEI. It is difficult to imagine how lab 16 cabinets, file cabinets, a credenza, office furniture, drywall and shelves will provide for the 17 maintenance of the "existing health, safety, or environmental protection for the eligible 18 utility's customers, employees, or the public." Having an office or office equipment would 19 assist Indiana American in its functions, but "maintain[ing] existing health, safety, or 20 environmental protection for the eligible utility's customers, employees, or the public" is a 21 secondary effect of this project. Office equipment does not directly accomplish these goals 22 as does the replacement of chlorine analyzers or well motors. The question is how direct

1		the connection of a project would be to these goals to be considered a "service enhancement
2		improvement." Would the replacement of a copy machine or coffee maker be too tenuous
3		for these goals, but cabinets and a credenza are not? As with the other types of projects
4		described, Commission guidance is needed on how directly a project would meet the
5		statutory goals for an SEI.
6	Q:	What is the value of this projects to be removed from total SEI projects?
7	A:	The total net cost of these projects is \$242,963.

- 8 Q: What do you recommend be done with these projects?
- 9 A: I recommend that these projects be excluded from the SEI as they do not meet the definition
- 10 of an SEI as set out in Ind. Code § 8-1-31.7-7(2).

V. OTHER CONCERNS

Do you have any other concerns with the proposed projects presented in Attachment 11 **Q**: **DH-1?** 12 Yes. First, I am concerned that the specific requirements as set out in Ind. Code § 8-1-31.7-13 A: 14 6 are not described with any specificity for certain projects. There is presumably a specific citation to OSHA, IDEM, or other regulations that initially drove Indiana American's 15 16 desire and perceived need to pursue these projects. It would be helpful in the OUCC's and 17 IURC's reviews of future filings if Indiana American would provide these citations for each of the projects instead of generalities such as "Affected the ability to deliver safe 18 quantities of water to the distribution system."⁴ Specific citations were provided for many 19 20 projects, but not all.

⁴ Attachment DH-1, line 59.

1	Finally, it would be helpful for Indiana American to include in future SEI filings
2	under something like Attachment DH-1 to provide information on the districts where these
3	service enhancement improvements are being made. This would help with any current or
4	future cases and/or data gathering and analysis that the OUCC or IURC prepare. I sought
5	and received this information in OUCC Data Request 2-1, but it would be better to have it
6	at the front end of the process especially given the short time frame available for review
7	and analysis of these cases.

VI. <u>RECOMMENDATIONS</u>

8 Q: Please provide a summary of your recommendation.

9 A: Based on projects that are 1) unplanned new additions, rather than replacement of existing
10 plant or equipment, 2) recovery of expenses incurred on plant that is no longer used and
11 useful and 3) projects that do not meet the statutory SEI requirements criteria, I recommend
12 removal for recovery of projects totaling \$722,233.
13 Q: Does this conclude your testimony?

14 A: Yes, it does.

APPENDIX A

1 Q: Please describe your educational background and experience.

2 A: In 1981 I graduated from Purdue University, where I received a Bachelor of Science degree 3 in Industrial Management with a minor in Engineering. I was recruited by the Union Pacific Railroad, where I served as mechanical and maintenance supervisor and industrial engineer 4 5 in both local and corporate settings in St. Louis, Chicago, Little Rock and Beaumont, 6 Texas. I then served as Industrial Engineer for a molded-rubber parts manufacturer before 7 joining the Indiana Utility Regulatory Commission ("IURC") as Engineer, Supervisor and 8 Analyst for more than ten years. It was during my tenure at the IURC that I received my 9 Master of Health Administration degree from Indiana University and began volunteer and 10 part-time work as Firefighter and Emergency Medical Technician in Marion County. After 11 the IURC, I worked at Indiana-American Water Company, initially in their rates 12 department, then managing their Shelbyville operations for eight years, and later served as 13 Director of Regulatory Compliance and Contract Management for Veolia Water 14 Indianapolis. I joined Citizens Energy Group as Rate & Regulatory Analyst following the 15 October 2011 transfer of the Indianapolis water utility and joined the Office of Utility 16 Consumer Counselor in April of 2016. In March 2020 I was promoted to my current 17 position of Assistant Director of the Water and Wastewater Division. In summary, in 18 addition to working in manufacturing and transportation, I have been working in or with 19 utilities since 1988, more than 34 years.

AFFIRMATION

I affirm the representations I made in the foregoing testimony are true to the best of my knowledge, information, and belief.

By: Carl N. Seals

By: Carl N. Seals Cause No. 45609 SEI-1 S1 Office of Utility Consumer Counselor (OUCC)

Date:____/17/23_____

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Is the auto flusher shown on line 104 of attachment DH-1 new or a replacement item?

Objection:

Petitioner objects to the request on the grounds and to the extent it is vague and ambiguous in that the term "replacement item" is not defined and provides no basis from which Petitioner can determine what information is sought. Ind. Code § 8-1-31.7-12(g) permits Petitioner to combine for recovery both pre-approved service enhancement improvement costs and those costs associated with service enhancement improvements for which approval of a plan is not required. Under Ind. Code § 8-1-31.7-7(2), service enhancement improvements that do not require pre-approval are defined as expenditures for "replacement of a plant or equipment to maintain existing health, safety, or environmental protection for the eligible utility's customers, employees, or the public." When referring to "replacement item" Petitioner understands this question to be referring to a service enhancement improvement that qualifies under Ind. Code § 8-1-31.7-7(2) and does not require pre-approval.

Information Provided:

Subject to and without waiver of the foregoing objection, Petitioner responds as follows:

The auto flusher is a replacement service enhancement improvement under Ind. Code § 8-1-31.7-7(2) because it replaced plant or equipment in order to maintain existing health, safety, or environmental projection of the Indiana American's customers, employees or the public. Currently, the water mains at issue are flushed manually to maintain the chlorine residual in the system at all times of day per the The Federal Safe Drinking Water Act. The auto flusher replaced the existing outdated equipment (manual flusher) with upgraded technology to maintain compliance with the Federal Safe Drinking Water Act. It also replaced the manual flushing aspect on a state highway making it safer for Indiana American employees.

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Was the auto flusher shown on line 104 of attachment DH-1 installed as part of a main extension?

Information Provided:

No, see response to OUCC DR 2-3. The auto flusher replaced the existing manual flushing process in order to help maintain the chlorine residual in the system at all times of day per the The Federal Safe Drinking Water Act. It also replaced the manual flushing aspect on a state highway making it safer for our employees.

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Were the bollards listed on line 123 of attachment DH-1 new or replacement items?

Objection:

Petitioner objects to the request on the grounds and to the extent it is vague and ambiguous in that the term "replacement item" is not defined and provides no basis from which Petitioner can determine what information is sought. Ind. Code § 8-1-31.7-12(g) permits Petitioner to combine for recovery both pre-approved service enhancement improvement costs and those costs associated with service enhancement improvements for which approval of a plan is not required. Under Ind. Code § 8-1-31.7-7(2), service enhancement improvements that do not require pre-approval are defined as expenditures for "replacement of a plant or equipment to maintain existing health, safety, or environmental protection for the eligible utility's customers, employees, or the public." When referring to "replacement item" Petitioner understands this question to be referring to a service enhancement improvement that qualifies under Ind. Code § 8-1-31.7-7(2) and does not require pre-approval.

Information Provided:

Subject to and without waiver of the foregoing objection, Petitioner responds as follows:

The bollards are a replacement service enhancement improvement under Ind. Code § 8-1-31.7-7(2) because they replaced plant or equipment to maintain existing health, safety, or environmental projection of the Indiana American's customers, employees, or the public. The current equipment safety design is now outdated because there were no bollards protecting the valves and water salesman. Adding the bollards replaced and enhanced the existing equipment to protect the integrity of the existing valves and water salesman.

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Was installing a second rapid mix motor as shown on line 133 of attachment DH-1 a new or replacement item?

Objection:

Petitioner objects to the request on the grounds and to the extent it is vague and ambiguous in that the term "replacement item" is not defined and provides no basis from which Petitioner can determine what information is sought. Ind. Code § 8-1-31.7-12(g) permits Petitioner to combine for recovery both pre-approved service enhancement improvement costs and those costs associated with service enhancement improvements for which approval of a plan is not required. Under Ind. Code § 8-1-31.7-7(2), service enhancement improvements that do not require pre-approval are defined as expenditures for "replacement of a plant or equipment to maintain existing health, safety, or environmental protection for the eligible utility's customers, employees, or the public." When referring to "replacement item" Petitioner understands this question to be referring to a service enhancement improvement that qualifies under Ind. Code § 8-1-31.7-7(2) and does not require pre-approval.

Information Provided:

Subject to and without waiver of the foregoing objection, Petitioner responds as follows:

Installing a second rapid mix motor is replacement service enhancement improvement under Ind. Code § 8-1-31.7-7(2) because it replaced plant or equipment to maintain existing health, safety, or environmental projection of the Indiana American's customers, employees, or the public. The current equipment/process is outdated and needed updated to current safety protocols because there is currently no redundancy at the plant. The rapid mix motor replaced the outdated equipment/process and allows Indiana American to have redundancy at the plant and maintain compliance.

OUCC DR 3-1

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Please refer to Indiana American's response to OUCC DR 2-3.

- a. What is a "manual flusher?" If manual flusher refers to anything other than an individual manually operating a hydrant, please describe in detail.
- b. Will the addition of an automatic flusher replace (or eliminate) any operating personnel (staff reduction)?

Information Provided:

- a. A "manual flusher" refers to an individual manually operating a hydrant in order to flush.
- b. Indiana America's staffing plan is not, and has never been, designed to be one employee for each hydrant, and the automatic flusher does not replace any operating personnel. The replacement does allow us to focus our attention on other places in the distribution system. It also increases the safety of our employees in areas such as this one that are on a busy major road.

OUCC DR 3-3

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Please refer to Indiana American's response to OUCC DR 2-9.

- a. Please indicate the plant or equipment the second rapid mix motor replaced.
- b. How many rapid mix motors were in place *before* the installation of the second rapid mix motor?
- c. How many rapid mix motors were in place *following* the installation referenced on line 133 of DH-1?

Information Provided:

- a. The second rapid mix motor was added for redundancy purposes to maintain compliance at our Ogden Dune plant in NW Indiana. The rapid mixer mixes coagulant into the raw water to lower turbidity in the settling basins to extend the filter run times and lower filter effluent turbidity below the required threshold.
- b. One rapid mix motor was in place before the installation.
- c. Two rapid mix motors were in place following the installation.

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Was the entire replacement of the Charlestown electrical equipment for \$464,516 as shown in line 173 of attachment DH-1 done in addition to the new Charlestown plant? Please explain.

Information Provided:

Yes, these electrical upgrades were made at the old Charlestown plant prior to Indiana American making the decision to construct a new plant. It was necessary to replace the entire electrical system at the old plant because it was undersized, did not have the means to connect an emergency generator, and had numerous safety issues. While Indiana American ultimately made the decision to construct a new plant, there was an immediate need to replace the electrical system at the existing plant when it was acquired to maintain existing health, safety, or environmental projection of the Indiana American's customers, employees or the public.

OUCC DR 3-4

DATA REQUEST Indiana-American Water Company, Inc.

Cause No. 45609 SEI-1

Information Requested:

Please refer to Indiana American's response to OUCC DR 2-11.

- a. Is the former Charlestown water plant that was operating when Indiana American purchased the Charlestown system currently in service? Please explain.
- b. If the former Charlestown water plant was taken out of service, please provide the date that it was removed from service.

Information Provided:

- a. No, it is not currently in service. There is now a new plant that was constructed in Charlestown that is fully operational.
- b. 10/10/2022.



PWS-ID:5210003



Month: Year Leap Year? May 2022 No

May 2022

	Water																							
	Water Treated Chemicals (LBS, Chemicals (LBS,				Cł	nemicals (lb	s)					Physica	al and Ch	emical Da	ata (mg/L)				Ch	lorine Res	idual (mg	:/L)	Misc
	-	7.1.1.0.2		Pharmhata	7.41612		Bharabata													5// 010		D:::: 612		
Data	(MCD)	(chloring)	HFS (Flueride)	Phosphate-	(oblasing)	HEE (Elucation)	Phosphate-	Down Alle	C44 A.IL.	Row ald	FH all	David Hand	Eff Lloyd	David Iron	Eff lean	Down Mars		54004	EIT	ETT CLZ	Eff CL2 Total	Dist CL2	Dist CL2	Remarks
5/1	2022 0 7270	73 38	(nuonue)	149 52	17.00	nrs (ridonde)	108 70	NOW MIN	LII AIK	7.42	7 28	Naw Haru	Lii Haiu	0.01	0.01	0.27	0.05	4.07	0.61	1.47	1.61	1 36	1.61	Air in HES feed line corrected
5/2	2022 0.6850	30.66	13.39	143.21	21.00	9	98.10			7.45	7.31	-	-	0.02	0.01	0.32	0.08	4.50	0.78	1.31	1.55	1.20	1.37	var in this feed line, concered
5/3	2022 0.6600	27.27	13.42	132.12	18.00	9	87.20	173	179	7.42	7.21	210	228	0.02	0.01	0.29	0.00	4.50	0.69	1.69	1.87	1.40	1.60	
5/4	2022 0.6810	29.37	14.38	144.05	20.00	10	98.10		-	7.44	7.26	-	-	0.01	0.00	0.30	0.06	4.10	0.66	1.61	1.78	1.41	1.59	
5/5	2022 0.6600	33.33	14.52	137.58	22.00	10	90.80		-	7.41	7.25	-	-	0.02	0.00	0.29	0.06	4.70	0.82	1.72	1.86	1.50	1.68	
5/6	2022 0.7010	29.96	14.84	135.12	21.00	10	94.72		-	7.44	7.23	-	-	0.02	0.01	0.28	0.07	4.60	0.79	1.62	1.82	1.54	1.68	
5/7	2022 0.6450	31.01	18.05	164.93	20.00	12	106.38		-	7.51	7.27	-	-	0.01	0.02	0.28	0.08	4.50	0.74	1.68	1.91	1.60	1.75	
5/8,	2022 0.7480	22.73	2.75	117.74	17.00	2	88.07		-	7.42	7.22	-	-	0.02	0.01	0.29	0.06	4.50	0.68	1.65	1.87	1.65	1.74	Air in HFS feed line, corrected
5/9,	2022 0.7010	32.81	14.69	147.09	23.00	10	103.11	171	174	7.41	7.19	227	228	0.01	0.03	0.29	0.07	4.34	0.93	1.69	1.98	1.58	1.78	
5/10	2022 0.7310	32.83	15.08	140.62	24.00	11	102.79		-	7.47	7.23	-	-	0.03	0.01	0.28	0.07	4.04	0.81	1.76	1.96	1.62	1.78	
5/11,	2022 0.7320	30.05	14.07	151.89	22.00	10	111.18	-	-	7.37	7.22	-	-	0.04	0.08	0.27	0.09	4.15	0.65	1.84	2.05	1.68	1.85	
5/12,	2022 0.7510	33.29	11.93	137.15	25.00	9	103.00		-	7.40	7.21	-	-	0.03	0.02	0.30	0.06	3.41	0.87	1.67	1.99	1.73	1.93	
5/13,	2022 0.7450	29.53	15.34	133.44	22.00	11	99.41		-	7.41	7.19	-	-	0.07	0.00	0.27	0.05	3.59	0.75	1.65	2.14	1.28	1.40	
5/14	2022 0.7240	31.77	12.67	118.78	23.00	9	86.00		-	7.42	7.21	-	-	0.02	0.01	0.29	0.06	3.43	0.77	1.81	2.04	1.65	1.94	
5/15,	2022 0.7730	27.17	7.19	168.51	21.00	6	130.26		-	7.43	7.21	-	-	0.03	0.05	0.29	0.08	3.58	0.69	1.94	2.14	1.81	1.94	
5/16,	2022 0.7100	33.80	14.21	132.03	24.00	10	93.74	172	173	7.37	7.23	220	216	0.06	0.02	0.29	0.05	3.82	0.75	1.85	2.02	1.72	1.94	
5/17,	2022 0.8610	25.55	15.55	143.94	22.00	13	123.93		-	7.39	7.22	-	-	0.02	0.01	0.30	0.06	3.81	0.74	1.84	2.12	1.78	1.93	
5/18,	2022 0.7300	32.88	12.56	124.53	24.00	9	90.91		-	7.42	7.25	-	-	0.01	0.01	0.31	0.06	3.65	0.69	1.86	2.07	1.78	1.96	
5/19,	2022 0.6/60	32.54	15.38	137.06	22.00	10	92.65		-	/.44	7.25	-	-	0.01	0.01	0.30	0.08	3.66	0.71	1.86	2.04	1.82	1.92	
5/20,	2022 0.6840	32.16	17.62	152.50	22.00	12	104.31		-	/.41	7.25	-	-	0.01	0.01	0.30	0.07	4.38	0.70	1.68	2.07	1.61	1./6	
5/21,	2022 0.7580	18.47	13.8/	130.28	14.00	11	98.75		-	7.39	7.25	-	-	0.02	0.00	0.30	0.05	3.51	0.73	1./1	1.93	1.75	1.90	
5/22	2022 0.8360	39.47	15.16	156.46	33.00	13	130.80		-	7.41	7.26	-	-	0.01	0.00	0.30	0.05	3.67	0.81	1.73	1.91	1.52	1.68	
5/23	2022 0.7/60	27.06	14.07	117.85	21.00	11	91.45	1/2	1/2	7.40	7.25	215	228	0.01	0.01	0.29	0.07	3.77	0.80	1.82	2.19	1.82	2.02	
5/24,	2022 0.6960	24.43	17.17	130.43	17.00	12	90.50		-	7.41	7.25	-	-	0.02	0.02	0.27	0.08	4.20	0.76	1.05	2.04	1.31	1.00	
5/25,	2022 0.6610	43.00	14.24	123.17	16.00	10	91.37			7.40	7.20			0.01	0.01	0.32	0.07	4.10	0.03	1.72	1.94	1.51	1.52	
5/20,	2022 0.0010	24.21	20.69	122.00	16.00	16	102.22			7.42	7.20			0.03	0.02	0.31	0.00	4.12	0.71	1.75	1.97	1.50	1.00	
5/28	2022 0.6990	32.90	10.17	124 75	23.00	7	87.20			7.40	7.27	-	-	0.02	0.02	0.30	0.04	4.10	0.67	1.67	1.30	1.51	1.05	
5/20	2022 0.0350	24.03	14.58	130.97	18.00	11	98.10			7.42	7.26			0.00	0.00	0.55	0.05	4.16	0.71	1.02	2.07	1.44	1.50	
5/20	2022 0.7770	37 32	4 90	126.25	29.00	4	98.10			7.40	7.20			0.00	0.00	0.23	0.24	4.10	0.68	1.60	1.89	1.35	1.04	Air in HES feed line corrected
5/31	2022 0.7770	25.74	13.78	134.53	20.00	11	104.53			7.47	7.22	-	-	0.01	0.01	0.30	0.07	3.90	0.70	1.82	2.05	1.67	1.82	
															0.02	0.00							2.02	
	Total 22.511	920.25	410.35	4251.08	667	297	3087.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ave	rage 0.7262	29.69	13.68	137.13	21.5	10	99.60	172	175	7.42	7.24	218	225	0.02	0.01	0.30	0.07	4.04	0.73	1.72	1.95	1.56	1.73	
	Min 0.6450	18.47	2.75	117.74	14.0	0	81.21	171	172	7.37	7.19	210	216	0.00	0.00	0.27	0.01	3.41	0.61	1.31	1.55	1.20	1.37	
	Max 0.8610	43.80	20.69	168.51	33.0	16	130.80	173	179	7.51	7.31	227	228	0.07	0.08	0.33	0.30	4.70	0.93	1.94	2.19	1.82	2.02]

omments: Chemicals are measured in wet lbs unless otherwise noted

Temporary filter system placed in service 5/14/2021



Monthly Report of Operation of Water Treatment Plant Form 100

Certification # WT3-021307 Icently, under pensity of law, by this signature that this document was prepared by me, or under my direction, and the information submitted is to the best of my knowledge and beiet(, mu, accurate and complete I.am also aware that there are significant penalities for submitting false information.

IDEM Field Rep: Anna Readle

June 2022 No

Indiana American Water

Charlestown-Plant

PWS-ID:5210003

Month: Year Leap Year? June 2022

	Water																							
	Treated	Chemi	cals (LBS/N	VIG)	Ch	emicals (lbs	;)					Physica	al and Ch	emical Da	ata (mg/l	L)				Chl	orine Resi	idual (mg	/L)	Misc
																			- "					
	Treated Water	Total CL2	HFS	Phosphate-	Total CL2	upp (planet da)	Phosphate-	D				Descriptional	Clinical and					5/1004	Eff	Eff CL2		Dist CL2	Dist CL2	Burnets
ite	(MGD)	(chlorine)	(Fluoride)	Blend (PO4)	(chlorine)	HFS (Fluoride)	Blend (PO4)	Raw Alk	Eff Alk	Raw pH	Eff pH	Raw Hard	Eff Hard	Raw Iron	Eff Iron	Raw Mn	Eff Mn	Eff PO4	Fluoride	Free	Eff CL2 Total	Free	Total	Remarks
6/1/2022	0.7020	29.91	14.47	135.87	21.00	10	95.38	1/1	1/5	7.47	7.20	200	208	0.01	0.01	0.31	0.05	3.90	0.80	1.72	1.88	1.57	1.74	
6/2/2022	0.7030	22.40	14.47	127.70	22.00	10	90.03	-		7.45	7.21	-	-	0.02	0.01	0.30	0.07	3.60	0.79	1.70	1.90	1.50	1.70	
6/4/2022	0.7030	37.64	6.85	158.71	30.00	5	126 55			7.40	7.20			0.00	0.00	0.22	0.07	4.10	0.85	1.70	1.57	1.53	1.71	
6/5/2022	0.7670	18 25	9.80	109.78	14.00	8	83.87			7.40	7.23			0.02	0.01	0.30	0.00	4.10	0.03	1.05	1.01	1.35	1.50	
6/6/2022	0.6570	36.53	13.96	130.73	24.00	9	85.89	172	172	7.35	7.16	200	218	0.01	0.00	0.30	0.00	3.61	0.52	1.69	1.03	1.55	1.50	
6/7/2022	0.6860	32.07	15.50	146.66	22.00	11	100.61	-	-	7.42	7.19			0.02	0.00	0.26	0.01	3.56	0.79	1.70	1.90	1.52	1.70	
6/8/2022	0.6710	31.30	14.59	135.80	21.00	10	91.12	-	-	7.45	7.25	-	-	0.02	0.00	0.28	0.07	3.40	0.84	1.61	1.85	1.47	1.65	
6/9/2022	0.8310	27.68	15.99	141.26	23.00	13	117.39	-		7.43	7.25	-	-	0.04	0.02	0.30	0.06	3.19	0.91	1.49	1.74	1.45	1.61	
6/10/2022	0.6650	31.58	14.26	126.71	21.00	9	84.26	-		7.42	7.19	-	-	0.03	0.03	0.31	0.07	3.21	0.80	1.62	1.80	1.43	1.60	
6/11/2022	0.7130	28.05	15.46	138.96	20.00	11	99.08	-	-	7.40	7.24	-	-	0.02	0.02	0.30	0.07	4.62	0.81	1.66	1.82	1.24	1.39	
6/12/2022	0.7030	25.60	4.84	144.20	18.00	3	101.37	-	-	7.40	7.22	-	-	0.04	0.00	0.29	0.06	3.43	0.85	1.52	1.70	1.30	1.46	
6/13/2022	0.7440	40.32	14.26	126.87	30.00	11	94.39	184	166	7.41	7.24	201	190	0.01	0.01	0.32	0.06	3.35	0.81	1.55	1.83	1.38	1.57	
6/14/2022	0.7410	31.04	15.14	145.18	23.00	11	107.58	-		7.39	7.23	-	-	0.00	0.01	0.28	0.08	3.66	0.88	1.54	1.95	1.50	1.77	
6/15/2022	0.7590	35.57	4.76	133.70	27.00	4	101.48		-	7.37	7.22			0.00	0.00	0.31	0.06	3.80	0.87	1.50	1.82	1.41	1.57	
6/16/2022	0.7900	30.38	15.65	144.59	24.00	12	114.23	-	-	7.42	7.25			0.02	0.00	0.28	0.07	3.65	0.81	1.58	1.89	1.50	1.70	
6/17/2022	0.7170	33.47	18.54	158.87	24.00	13	113.91	-	-	7.40	7.23			0.02	0.00	0.31	0.06	3.68	0.75	1.50	1.77	1.43	1.60	
6/18/2022	0.8220	31.63	15.04	141.09	26.00	12	115.98	-	-	7.41	7.23			0.01	0.01	0.29	0.09	4.54	0.85	1.52	1.85	1.58	1.76	
6/19/2022	0.8520	24.65	11.36	111.43	21.00	10	94.94	-	-	7.37	7.23	-	-	0.01	0.00	0.29	0.07	3.86	0.70	1.54	1.82	1.54	1.74	
6/20/2022	0.8370	44.21	15.26	147.03	37.00	13	123.06	174	163	7.39	7.24	206	207	0.01	0.00	0.31	0.07	5.20	0.71	1.53	1.74	1.57	1.68	
6/21/2022	0.8160	22.06	6.19	132.78	18.00	5	108.35	-	-	7.40	7.25	-	-	0.04	0.08	0.35	0.28	4.60	0.68	1.51	1.77	1.43	1.57	
6/22/2022	0.8110	49.32	16.77	134.67	40.00	14	109.22	-	-	7.41	7.26	-	-	0.01	0.01	0.26	0.12	4.00	0.70	1.31	1.61	1.56	1.76	
6/23/2022	0.8760	14.84	16.58	130.90	13.00	15	114.67	-	-	7.39	7.28	-	-	0.01	0.00	0.47	0.21	4.30	0.57	1.53	1.60	1.15	1.25	
6/24/2022	0.8800	36.36	14.64	127.45	32.00	13	112.16	-	-	7.40	7.27	-	-	0.00	0.00	0.35	0.21	4.10	0.38	1.45	1.60	1.10	1.23	
6/25/2022	0.8520	11.74	12.09	127.93	10.00	10	109.00	-	-	7.42	7.29	-	-	0.00	0.00	0.41	0.34	4.10	0.40	1.45	1.55	1.08	1.16	
6/26/2022	0.8110	34.53	13.21	120.96	28.00	11	98.10	-	-	7.41	7.28	-	-	0.01	0.01	0.30	0.24	4.30	0.67	0.62	0.83	0.70	0.81	
6/27/2022	0.7670	56.06	15.45	126.77	43.00	12	97.23	-	-	7.40	7.24	-	-	0.02	0.01	0.39	0.11	3.90	0.89	1.34	1.52	0.94	1.08	
6/28/2022	1.0130	25.67	16.27	140.52	26.00	16	142.35	-	-	7.40	7.22	-	-	0.01	0.01	0.27	0.16	4.40	0.89	1./1	1.96	1.23	1.49	
6/29/2022	1.1840	24.49	15.40	130.45	29.00	18	154.45	1/3	168	7.41	7.25	193	192	0.02	0.01	0.33	0.11	4.40	0.77	1.79	2.05	1.19	1.56	
6/30/2022	1.1//0	50.13	5.51	112.43	59.00	6	132.33	-	-	7.42	7.20	-	-	0.07	0.02	0.40	0.11	3.60	0.79	1.96	2.14	2.03	2.15	
l																								
Tetal	24.054	059.79	400.04	4038.31	760	210	2217.14	N/A	NI/A	NI/A	NI / A	N/A	N/A	NI/A	NI/A	NI/A	NI/A	N/A	NI / A	NI/A	NI / A	NI/A	N/A	
Iotai	24.054	330./8	400.04	4020.31	769	319	107.34	17F	160	T /A	IN/A	1V/A	IN/A	0.02	IN/A	1N/A	0.11	1N/A	0.77	1 5 C	1 70	IN/A	1 F.C	
Average	0.8018	31.96	13.33	134.28	25.0	11	107.24	175	169	7.41	7.23	200	203	0.02	0.01	0.31	0.11	3.95	0.77	1.56	1.78	1.39	1.56	
IVIIN Max	1 1940	11.74	4./6	109.28	10.0	19	154.45	1/1	103	7.35	7.10	193	2190	0.00	0.00	0.22	0.01	5.19	0.38	1.02	0.83	2.02	2.15	
IVIdX	1.1640	50.00	10.34	130.07	59.0	10	154.45	104	1/5	7.47	1.29	200	210	0.07	0.08	0.47	0.54	5.20	0.92	1.90	2.14	2.05	2.15	

mments: Chemicals are measured in wet lbs unless otherwise noted

Temporary filter system placed in service 5/14/2021

Indiana American Water - Charlestown WTP (PWSID IN5210003) - Form 100 July 2022 Monthly Report of Operation - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

	Site Wide Data	Disi	nfection	Fluoridation	Corrosi	ion Inhibitor	Water Chemistry																
DATE	System Delivery Meter	Chlorine Gas	NaOCI Day Tank	HFA New Plant Day Tank	Ortho/Poly Phosphate	Ortho Phosphate Day Tank	A	lkalinity	Hardnes	s (Weekly)	Phosphate		рH		Iron	Mar	nganese	F	luoride	Chl	orine	Distr Sy	ribution /stem
	Treated Water (MGal)	Lbs used (Lbs)	Amount Used (Lbs)	Amount Used (Lbs)	Ortho P Amount Used (Lbs)	Amount Used (Lbs)	Raw (mg/ L)	Plant Effluent (mg/L)	Raw (mg/L- CaCO3)	Plant Effluent (mg/L- CaCO3)	Plant Effluent (mg/L)	Raw	Plant Effluent	Raw (mg/ L)	Plant Effluent (mg/L)	Raw (mg/ L)	Plant Effluent (mg/L)	Raw (mg/ L)	Plant Effluent (mg/L)	Plant Effl. Free (mg/L)	Plant Effl. Total (mg/L)	Free Cl (mg/L)	Total Cl (mg/L)
1	0.898	38.0	-	14.42	120.9	-	-	-	-	-	4.40	7.39	7.17	0.020	0.020	0.263	0.026	0.34	0.88	1.79	1.98	1.56	1.77
2	0.958	45.0	-	13.39	115.4	-	-	-	-	-	3.39	7.33	7.23	0.000	0.020	0.249	0.014	0.29	0.81	1.50	1.98	1.23	1.51
3	0.875	33.0	-	14.42	115.3	-	-	-	-	-	4.40	7.35	7.15	0.120	0.020	0.555	0.015	0.07	0.69	1.60	1.77	1.49	1.64
4	0.959	37.0	-	12.36	134.3	-	-	-	-	-	4.20	7.40	7.16	0.160	0.020	0.402	0.019	0.17	0.81	1.58	1.78	1.42	1.52
5	0.973	29.0	-	10.30	112.0	-	177	157	182	182	3.50	7.54	7.15	0.090	0.050	0.344	0.018	0.15	0.86	1.65	1.86	1.45	1.62
6	0.905	6.0	370.8	10.30	121.8	-	-	-	-	-	3.39	7.52	7.29	0.110	0.020	0.322	0.015	0.34	0.80	1.50	1.70	1.10	1.30
7	0.903	5.0	317.8	15.45	115.5	-	-	-	-	-	3.53	7.73	7.25	0.240	0.060	0.377	0.014	0.28	0.70	1.67	1.93	1.33	1.51
8	0.841	4.0	305.1	21.32	104.0	-	-	-	-	-	3.80	7.51	7.17	0.610	0.040	0.962	0.024	0.04	0.81	1.67	1.91	1.38	1.55
9	0.825	4.0	279.0	24.62	104.4	-	-	-	-	-	3.57	7.46	7.25	0.410	0.070	1.389	0.026	0.38	0.83	1.66	1.89	1.37	1.54
10	0.880	5.0	376.0	10.30	118.7	-	-	-	-	-	3.44	7.55	7.20	0.060	0.030	0.433	0.014	0.18	0.80	1.63	1.79	1.32	1.48
11	0.895	4.0	390.7	26.70	112.7	-	150	153	180	185	3.62	7.51	7.24	0.060	0.050	0.497	0.022	0.11	0.85	1.51	1.71	1.32	1.58
12	0.879	6.0	361.7	10.30	124.2	-	-	-	-	-	3.55	7.39	7.26	0.210	0.030	0.414	0.022	0.23	0.84	1.55	1.78	1.43	1.72
13	0.908	4.0	386.1	12.05	107.9	-	-	-	-	-	3.70	7.54	7.49	0.520	0.040	0.587	0.018	0.14	0.75	1.57	1.87	1.50	1.65
14	0.984	5.0	390.3	14.94	107.9	-	-	-	-	-	3.53	7.60	7.20	0.060	0.020	0.286	0.020	0.42	0.77	1.61	1.93	1.52	1.77
15	0.902	5.0	346.5	14.63	118.4	-	-	-	-	-	3.89	7.38	7.33	0.130	0.020	0.330	0.025	0.22	0.87	1.56	1.87	1.55	1.73
16	0.868	4.0	467.0	12.46	126.3	-	-	-	-	-	3.82	7.32	7.27	0.380	0.000	0.472	0.015	0.20	0.73	1.63	1.83	1.50	1.71
17	0.835	4.0	319.0	13.29	118.6	-	-	-	-	-	3.92	7.29	7.31	0.050	0.000	0.255	0.011	0.05	0.70	1.53	1.77	1.40	1.59
18	0.852	5.0	458.0	11.33	88.7	-	155	151	199	193	1.60	7.37	7.29	0.020	0.010	0.243	0.008	0.11	0.78	0.63	0.74	0.41	0.58
19	0.794	0.0	578.0	-	94.3	-	-	-	-	-	4.20	7.38	7.31	0.010	0.000	0.331	0.011	0.08	0.75	1.28	1.61	0.71	0.80
20	0.981	0.0	371.0	-	130.9	-	-	-	-	-	4.00	7.37	7.29	0.000	0.000	0.280	0.017	0.17	0.73	1.84	2.09	1.53	1.60
21	0.979	0.0	355.0	-	105.7	-	-	-	-	-	4.30	7.39	7.27	0.000	0.000	0.224	0.018	0.09	0.63	2.55	2.85	2.10	2.20
22	0.863	3.0	389.0	-	93.3	-	-	-	-	-	4.10	7.41	7.29	0.000	0.010	0.247	0.018	0.10	0.71	2.47	2.65	2.12	2.20
23	0.922	1.0	347.0	18.12	65.9	-	-	-	-	-	4.10	7.39	7.39	0.000	0.000	0.240	0.021	0.11	0.71	2.24	2.44	2.10	2.20
24	0.888	1.0	270.0	13.18	73.1	-	-	-	-	-	4.20	7.41	7.28	0.000	0.000	0.239	0.019	0.14	0.72	2.16	2.43	2.08	2.20
25	0.879	1.0	264.0	2.16	63.4	-	-	-	-	-	3.83	7.40	7.35	0.080	0.030	0.319	0.024	0.22	0.72	1.67	1.82	1.46	1.68
26	0.831	2.0	252.0	0.00	2.4	9.1	-	-	-	-	1.59	7.39	7.41	0.020	0.060	0.274	0.023	0.27	0.71	1.23	1.38	1.32	1.43
27	0.808	1.0	308.9	0.00	0.7	34.8	147	157	197	193	0.97	7.44	7.39	0.030	0.030	0.281	0.023	0.28	0.50	1.09	1.28	0.97	1.09
28	0.911	1.0	349.6	0.00	0.0	2.1	-	-	-	-	2.06	7.43	7.31	0.030	0.060	0.265	0.023	0.21	0.42	1.21	1.36	1.00	1.11
29	0.854	2.0	232.4	0.00	43.8	0.0	-	-	-	-	2.10	7.45	7.39	0.030	0.020	0.267	0.017	0.10	0.31	1.43	1.60	1.19	1.32
30	0.847	1.0	286.8	0.00	46.9	0.0	-	-	-	-	1.86	7.40	7.31	0.030	0.060	0.263	0.017	0.40	0.43	1.31	1.43	1.15	1.29
31	0.811	2.0	325.3	1.80	2.5	56.2	-	-	-	-	1.56	7.42	7.40	0.020	0.010	0.277	0.015	0.08	0.32	1.29	1.36	0.98	1.09
Total	27.508		9,097.0	297.84		102.2																	
Max	0.984	45.0	578.0	26.70	134.3	56.2	177	157	199	193	4.40	7.73	7.49	0.610	0.070	1.389	0.026	0.42	0.88	2.55	2.85	2.12	2.20
Min	0.794	0.0	232.4	0.00	0.0	0.0	147	151	180	182	0.97	7.29	7.15	0.000	0.000	0.224	0.008	0.04	0.31	0.63	0.74	0.41	0.58
Avg	0.887	8.3	349.9	11.03	90.0	17.0	157	155	190	188	3.36	7.43	7.28	0.113	0.026	0.383	0.018	0.19	0.71	1.60	1.82	1.39	1.55

Site Wide Data	Fluoridation	
Phone Number: 502-509-6192	Type of FI Used: HFA FI Conc. %: 23%	I certify under penalty of law, by this signature that this document was prepared by me, or under my direction, and the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am also aware that there are significant penalties for submitting false information.
	FI Test Method. SPADINS	Reported by: Cert or Reg Number: WT3-021307

Indiana American Water - Charlestown WTP (PWSID IN5210003) - Form 100

Indian August 2 Monthly F

August 2022 Monthly Report of Operation - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

	Site Wide Data	Disi	nfection	Fluoridation	Corrosion Inhibitor							Water Chemistry										
	System Delivery Meter	Chlorine Gas	NaOCI Day Tank	HFA Day Tank	Ortho Phosphate Day Tank	A	lkalinity	Hardness	s (Weekly)	Phosphate		pН		Iron	M	anganese	F	luoride	Chle	orine	Distributi	on System
DAIL	Treated Water	Lbs used	Amount Used	Amount Used	Amount Used	Raw	Plant Effluen	t Raw	Plant Effluent	Plant Effluent	Raw	Plant Effluent	Raw	Plant Effluent	Raw	Plant Effluent	Raw	Plant Effluent	Plant Effl. Free	Plant Effl. Total	Free Cl	Total Cl
	(MGal)	(LDS)	(LDS)	(LDS)	(LDS)	(mg/L)	(mg/L)	(mg/L-CaCO3)	(mg/L-CaCU3)	(mg/L)	7.60	7.00	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1	0.854	1.0	329.8	4.70	/2.1	-	-	-	-	3.49	7.62	7.30	0.020	0.000	0.651	0.010	0.30	0.45	1.33	1.57	1.10	1.36
2	0.821	1.0	357.4	17.20	55.7	-	-	-	-	3.85	/.4/	7.37	0.040	0.020	0.283	0.018	0.24	0.55	1.18	1.38	1.04	1.22
3	0.835	2.0	338.3	14.60	37.5	157	156	178	182	2.56	7.50	7.34	0.040	0.020	0.279	0.006	0.40	0.61	1.31	1.41	1.10	1.25
4	0.854	2.0	374.4	18.20	45.7	-	-	-	-	3.85	7.82	7.37	0.020	0.030	0.270	0.024	0.23	0.96	1.45	1.70	1.03	1.20
5	0.809	1.0	361.4	17.70	37.1	-	-	-	-	3.34	7.53	7.30	0.040	0.040	0.270	0.003	0.30	0.72	1.64	1.89	1.13	1.30
6	0.818	2.0	353.6	17.70	38.1	-	-	-	-	3.47	7.39	7.21	0.040	0.010	0.278	0.008	0.09	0.78	1.67	1.86	1.45	1.64
7	0.842	1.0	391.4	19.00	41.2	-	-	-	-	3.57	7.40	7.26	0.060	0.030	0.265	0.002	0.49	0.85	1.68	1.92	1.60	1.70
8	0.905	2.0	361.4	18.00	38.9	156	153	183	190	3.76	7.49	7.36	0.020	0.020	0.270	0.007	0.04	0.79	1.87	2.31	1.59	1.79
9	0.825	2.0	369.6	23.80	39.6	-	-	-	-	3.70	7.53	7.36	0.050	0.020	0.248	0.011	0.26	0.73	1.61	1.95	1.66	1.90
10	0.850	3.0	245.7	14.10	26.4	-	-	-	-	3.76	7.51	7.40	0.020	0.010	0.265	0.000	0.26	0.73	1.68	1.90	1.68	1.86
11	0.859	2.0	263.4	16.80	7.9	-	-	-	-	3.85	7.48	7.32	0.020	0.020	0.272	0.011	0.21	0.74	1.63	1.89	1.50	1.73
12	0.850	2.0	381.2	21.70	40.9	-	-	-	-	3.68	7.36	7.27	0.010	0.010	0.271	0.009	0.22	0.73	1.53	1.86	1.46	1.63
13	0.840	2.0	239.3	14.40	28.4	-	-	-	-	3.74	7.58	7.35	0.020	0.020	0.261	0.011	0.30	0.78	1.51	1.72	1.40	1.55
14	0.881	3.0	313.9	22.70	43.4	-	-	-	-	3.65	7.37	7.32	0.020	0.020	0.275	0.008	0.31	0.77	1.37	1.59	1.24	1.41
15	0.872	4.0	231.0	15.30	29.9	-	-	-	-	3.69	7.44	7.33	0.010	0.010	0.284	0.007	0.28	0.74	1.04	1.22	0.77	0.84
16	0.934	6.0	307.0	19.70	39.1	154	147	180	193	4.28	7.45	7.34	0.010	0.010	0.269	0.004	0.17	0.73	1.42	1.64	1.21	1.44
17	0.892	7.0	311.4	19.40	37.3	-	-	-	-	4.24	7.43	7.29	0.010	0.000	0.270	0.010	0.10	0.71	1.45	1.65	0.99	1.01
18	0.945	6.0	288.2	18.30	37.7	-	-	-	-	4.36	7.49	7.32	0.010	0.010	0.243	0.006	0.19	0.72	1.46	1.63	1.20	1.28
19	0.820	6.0	334.7	20.60	41.3	-	-	-	-	4.43	7.44	7.30	0.010	0.010	0.267	0.005	0.19	0.71	1.39	1.58	1.14	1.21
20	0.813	6.0	249.9	17.80	34.5	-	-	-	-	4.43	7.43	7.29	0.010	0.000	0.269	0.044	0.15	0.72	1.42	1.66	1.16	1.25
21	0.813	6.0	222.0	16.80	34.4	-	-	-	-	4.79	7.40	7.30	0.000	0.000	0.278	0.006	0.17	0.73	1.38	1.59	1.21	1.29
22	0.893	6.0	219.8	17.30	39.9	-	-	-	-	3.67	7.52	7.35	0.030	0.000	0.295	0.013	0.24	0.77	1.32	1.46	1.15	1.27
23	0.877	6.0	432.0	3.80	12.8	-	-	-	-	4.10	7.41	7.31	0.020	0.010	0.303	0.000	0.34	0.86	1.31	1.45	1.09	1.21
24	0.884	7.0	407.9	22.40	20.4	156	155	145	185	4.40	7.47	7.27	0.030	0.020	0.291	0.012	0.24	0.84	1.69	1.90	1.07	1.17
25	0.972	4.0	372.2	19.10	36.3	-	-	-	-	4.20	7.48	7.29	0.050	0.030	0.435	0.014	0.08	0.80	1.83	2.07	1.50	1.72
26	0.896	3.0	334.0	19.50	37.1	-	-	-	-	4.20	7.41	7.29	0.010	0.010	0.290	0.009	0.34	0.80	1.59	1.79	1.42	1.59
27	0.849	4.0	307.0	19.20	37.4	-	-	-	-	4.40	7.47	7.38	0.010	0.010	0.291	0.011	0.30	0.71	1.51	1.78	1.42	1.61
28	0.912	3.0	326.3	18.90	36.1	-	-	-	-	4.00	7.45	7.26	0.020	0.000	0.301	0.015	0.35	0.80	1.39	1.57	1.34	1.61
29	0.840	3.0	309.0	19.00	36.7	-	-	-	-	4.40	7.57	7.37	0.030	0.030	0.269	0.013	0.31	0.85	1.54	1.82	1.40	1.58
30	0.816	3.0	293.4	15.90	32.0	-	-	-	-	3.78	7.42	7.27	0.020	0.030	0.274	0.003	0.38	0.92	1.49	1.72	1.38	1.55
31	0.833	4.0	351.3	23.00	42.4	166	165	183	170	4.20	7.44	7.36	0.050	0.020	0.327	0.011	0.32	0.76	1.42	1.57	1.33	1.49
Total	26.704		9,977.9	546.60	1,138.2																	
Max	0.972	7.0	432.0	23.80	72.1	166	165	183	193	4.79	7.82	7.40	0.060	0.040	0.651	0.044	0.49	0.96	1.87	2.31	1.68	1.90
Min	0.809	1.0	219.8	3.80	7.9	154	147	145	170	2.56	7.36	7.21	0.000	0.000	0.243	0.000	0.04	0.45	1.04	1.22	0.77	0.84
Avg	0.861	3.5	321.9	17.63	36.7	158	155	174	184	3.93	7.48	7.32	0.024	0.015	0.294	0.010	0.25	0.75	1.49	1.71	1.28	1.44
	Site Wide	Data			Disinfection				Fluoridatio	on												
Phone Nu	mbor: 502-500-6102	414		Type of Cl Used:	Gas							l certify	under pena	alty of law, by thi	is signature	e that this docum	nent was p	repared by me. c	r under my directi	on, and the informa	ation subm	itted is to the
FILONE NU	mbel. JUZ-309-019Z			Cl Conc %	100%			Fl Conc %' 2	3%			best of r	ny knowle	dge and belief, t	rue, accura	ite, and complete	e. I am also	o aware that the	re are significant p	enalties for submi	tting false i	nformation.
CI Test Method: DPD FI Test Method: SPADNS									PADNS			Day 1	\square	ADN	09/06	5/2022				0	De a Nicer I	
				or rear method.				i i rest metriod. 3				Reported	a by: 🚅		03/00					Cert or	Reg Numbe	er: W13-021307

Indiana American Water - Charlestown WTP (PWSID IN5210003) - Form 100 September 2022 Monthly Report of Operation - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

	Site Wide Data	Disir	nfection	Fluoridation	Corrosion Inhibitor			Water Chemistry															
	System Delivery Meter	Chlorine Gas	NaOCI Day Tank	HFA Day Tank	Ortho Phosphate Day Tank	A	lkalinity	Hardness	s (Weekly)	Phosphate		pН		Iron	Ma	anganese	F	luoride	Ch	lorine	Distributio	on System	
DAIL	Treated Water	Lbs used	Amount Used	Amount Used	Amount Used	Raw	Plant Effluent	Raw	Plant Effluent	Plant Effluent	Raw	Plant Effluent	Raw	Plant Effluent	Raw	Plant Effluent	Raw	Plant Effluent	Plant Effl. Free	Plant Effl. Total	Free Cl	Total Cl	
1	(MGal)	(LDS)	(LDS)	(LDS)	(LDS)	(IIIg/L)	(Hig/L)	(IIIg/L=CaCOS)	(IIIg/L=CaCOS)	(IIIg/L)	7.40	7.07	(IIIg/L)	(IIIg/L)	(IIIg/L)	(IIIg/L)	(IIIg/L)	(IIIg/L)	(IIIg/L)	(IIIg/L)	(IIIg/L)	(IIIg/L)	
	0.871	-	259.8	15.30	32.1	-	-	-	-	3.04	7.48	7.37	0.080	0.000	0.291	0.010	0.13	0.87	1.35	1.58	1.30	1.48	
2	0.809	3.0	325.0	19.10	35./	-	-	-	-	3.03	7.49	7.32	0.010	0.010	0.297	0.013	0.34	0.89	1.35	1.50	1.10	1.35	
3	0.756	3.0	279.0	15.00	20.0	-	-	-	-	3.54	7.40	7.30	0.020	0.010	0.301	0.011	0.35	0.72	1.32	1.00	1.10	1.30	
4	0.703	3.0	200.0	15.00	29.0	-	-	-	-	3.00	7.40	7.30	0.020	0.020	0.200	0.018	0.35	0.90	1.40	1.00	1.13	1.30	
5	0.017	2.0	220.1	20.00	30.0	- 151	-	- 105	- 190	3.00	7.45	7.30	0.030	0.020	0.294	0.035	0.27	0.71	1.44	1.05	1.33	1.49	
7	0.014	3.0	220.1	10.90	27 /	151	134	195	109	2.00	7.43	7.23	0.020	0.020	0.301	0.017	0.17	0.79	1.44	1.00	1.29	1.52	
/ 0	0.027	4.0	320.4	10.00	25.2	-	-	-	-	2.41	7.49	7.34	0.020	0.020	0.290	0.011	0.23	0.70	1.45	1.70	1.29	1.40	
0	0.840	2.0	281.0	16.10	31.7					3.50	7.43	7.31	0.010	0.010	0.302	0.013	0.31	0.78	1.49	1.62	1.40	1.09	
9 10	0.758		326.0	10.10	31.7					3.54	7.42	7.32	0.020	0.020	0.209	0.009	0.17	0.73	1.33	1.55	1.33	1.31	
10	0.738		280.6	14.70	30.3					3.52	7.41	7.37	0.020	0.000	0.299	0.003	0.40	0.73	1.33	1.00	1.17	1.33	
12	0.015		270.0	22.20	27.4	152	1/0	101	104	2.52	7.40	7.30	0.010	0.000	0.300	0.017	0.30	0.73	1.32	1.57	1.13	1.32	
12	0.816		379.9	16 50	30.2	152	140	191	194	3.33	7.40	7.37	0.020	0.010	0.294	0.014	0.33	0.74	1.23	1.54	1.17	1.40	
14	0.810	-	500.5	30.60	51.6	155	152	100	100	4.28	7.39	7.45	0.020	0.010	0.097	0.017	0.27	0.73	1.27	1.51	0.76	0.03	
14	0.875	-	242.0	13 90	25.2	-	-	-	-	3.87	7.40	7.40	0.010	0.000	0.302	0.013	0.19	0.74	1.20	1.50	1.09	1.25	
16	0.873	-	294.6	17.10	32.9	-	-	_	-	4 11	7.40	7.41	0.000	0.000	0.293	0.011	0.39	0.71	1.25	1.44	0.96	1.25	
17	0.832	-	280.0	17.10	29.9	-	-	-	-	3.95	7.42	7.40	0.000	0.000	0.287	0.001	0.10	0.73	1.10	1.35	1 11	1.13	
18	0.876	-	360.4	21.60	38.6	_	-		-	3.96	7.41	7.39	0.010	0.000	0.207	0.010	0.15	0.72	1.11	1.00	1.11	1.22	
10	0.860	-	239.6	17.30	20.5	_	-	-	-	3.28	7.50	7.00	0.010	0.010	0.200	0.011	0.10	0.73	1.12	1.01	0.03	1.21	
20	0.000	_	308.2	21.80	29.3				-	3.20	7.30	7.43	0.030	0.030	0.333	0.015	0.17	0.77	1.05	1.25	0.95	1.12	
20	0.776	-	267.6	9.70	35.3	_			_	3.21 / 10	7.40	7.33	0.020	0.010	0.321	0.013	0.33	0.70	1.01	1.19	0.00	1.02	
21	0.903	-	345.7	10 50	34.5	_				4.10	7.41	7.42	0.020	0.020	0.311	0.012	0.34	0.79	1.07	1.55	1.23	1.07	
22	0.004	-	382.0	23.80	37.8	150	150	103	188	4.00	7.40	7.31	0.040	0.030	0.324	0.019	0.27	0.00	1.23	1.52	0.01	1.44	
23	0.794	-	176.8	13 70	24.8	-	-	-	-	3.80	7.47	7.34	0.030	0.030	0.311	0.010	0.24	0.00	1.21	1.54	1.00	1.00	
25	0.735	-	380.3	23.00	40.5	_	-		-	4 10	7.42	7.31	0.000	0.030	0.308	0.010	0.17	0.77	1.40	1.00	1.00	1.10	
26	0.846	-	180.0	14 70	27.0	_	-		-	3 37	7.45	7.33	0.000	0.030	0.300	0.011	0.17	0.00	1.20	1.01	1.00	1.56	
20	0.879	-	377.0	14.70	34.9	-			-	3.37	7.30	7.40	0.000	0.030	0.312	0.014	0.21	0.00	1.00	1.70	0.93	1.00	
28	0.814	-	505.6	24.60	39.0	149	148	195	191	3.80	7.51	7.10	0.000	0.020	0.307	0.028	0.01	0.70	1.62	1.81	1.38	1.56	
29	0.856	-	333.4	14 50	29.7	-	-	-	-	3 17	7.01	7.10	0.040	0.020	0.316	0.020	0.32	0.78	1.02	2.35	1.00	1.00	
30	0.820	-	383.2	21.00	34.0	-	-	-	-	3.48	7.62	7.39	0.040	0.020	0.315	0.020	0.02	0.72	1.10	2.00	1.00	2.13	
Total	24.830		9.689.3	552.00	1 027 2			_		0110	7102	1.05		0.020	01010	01010	01E5	017 2				2.110	
Max	0.905	4.0	509.5	30.60	51.6	155	154	199	194	4 28	7 62	7 4 5	0.080	0.060	0.333	0.035	0.40	0.90	1 95	2 44	1 93	2 13	
Min	0.300	2.0	176.8	9 70	24.8	149	148	191	188	3 17	7.39	7 29	0.000	0.000	0.000	0.000	0.40	0.50	1.55	1 19	0.76	0.93	
Δνα	0.730	2.0	323.0	18.40	34.2	151	150	195	190	3.67	7.45	7.36	0.021	0.000	0.007	0.001	0.25	0.00	1.37	1.60	1 17	1.34	
Avg											7.43	7.50	0.021	0.017	0.294	0.014	0.23	0.75	1.52	1.00	1.17	1.54	
	Site Wide	e Data			Disinfection				Fluoridatio	on													
Phone Nu	mber: 502-509-6192			Type of Cl Used:	Gas		Ţ	/pe of FI Used: H	IFA			I certify	under pena	alty of law, by thi	s signature	that this docum	ent was pr	epared by me, or	r under my direct	ion, and the informa	tion submi	tted is to the	
				CI Conc. %:	100%			Fl Conc. %: 2	3%			best of my knowledge and beinef, true, accurate, and complete. I am also aware that there are significant penalties for submitting false information.											
Cl Test Method: DPD Fl Test Method: SPADNS										Denote		ADNS						Optit in	Dee Num-Fr	WT2 02100			
		CI Test Method: DPD										Reported	u by:	7.0						Cert or	keg numbe	er. wis-uzi30	

Indiana American Water - Charlestown WTP (PWSID IN5210003) - Form 100

October 2022 Monthly Report of Operation - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

	Site Wide Data	Disi	nfection	Fluoridation	Corrosion Inhibitor		Water Chemistry															
DATE	System Delivery Meter	Chlorine Gas	NaOCI Day Tank	HFA Day Tank	Ortho Phosphate Day Tank	AI	kalinity	Hardness	Phosphate		pН		Iron	Ma	inganese	Flue	uoride	Ch	orine	Distributio	on System	
DATE	Treated Water (MGal)	Lbs used (Lbs)	Amount Used (Lbs)	Amount Used (Lbs)	Amount Used (Lbs)	Raw (mg/L)	Plant Effluent (mg/L)	t Raw (mg/L-CaCO3)	Plant Effluent (mg/L-CaCO3)	Plant Effluent (mg/L)	Raw	Plant Effluent	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Plant Effl. Free (mg/L)	Plant Effl. Total (mg/L)	Free Cl (mg/L)	Total Cl (mg/L)
1	0.855	-	356.8	17.90	32.6	-	-	-	-	3.31	7.57	7.41	0.030	0.020	0.316	0.018	0.21	0.84	1.90	2.36	1.59	1.87
2	0.824	-	328.6	17.40	33.0	-	-	-	-	3.39	7.73	7.41	0.040	0.010	0.310	0.015	0.11	0.71	2.08	2.52	1.88	2.10
3	0.866	-	302.5	19.10	31.9	155	145	216	212	3.58	7.68	7.37	0.010	0.010	0.335	0.011	0.33	0.75	1.86	2.15	0.88	1.02
4	0.840	-	319.7	21.20	34.7	-	-	-	-	3.40	7.67	7.34	0.030	0.000	0.317	0.007	0.19	0.74	1.68	2.02	1.41	1.57
5	0.851	-	395.9	20.30	36.5	-	-	-	-	3.58	7.70	7.35	0.020	0.010	0.353	0.009	0.21	0.72	1.58	1.82	1.18	1.32
6	0.848	-	296.3	17.10	30.5	-	-	-	-	3.49	7.73	7.35	0.050	0.020	0.529	0.015	0.18	0.76	1.49	1.77	1.27	1.44
7	0.823	-	337.6	21.00	35.9	-	-	-	-	3.59	7.71	7.35	0.020	0.010	0.310	0.011	0.22	0.74	1.55	1.77	1.14	1.32
8	0.839	-	280.7	18.10	31.3	-	-	-	-	3.52	7.66	7.33	0.010	0.010	0.308	0.014	0.22	0.75	1.56	1.77	1.37	1.56
9	0.814	-	256.2	15.50	27.0	-	-	-	-	3.68	7.69	7.35	0.010	0.010	0.318	0.012	0.14	0.76	1.47	1.74	1.37	1.52
10	0.866	-	347.4	21.40	37.7	-	-	-	-	3.90	7.71	7.38	0.020	0.020	0.339	0.016	0.34	0.78	1.39	1.58	1.04	1.17
11	0.838	-	288.8	18.50	33.4	149	147	190	199	3.90	7.55	7.35	0.010	0.010	0.329	0.013	0.19	0.84	1.26	1.62	1.16	1.35
12	0.860	-	301.2	17.10	32.2	-	-	-	-	3.80	7.53	7.31	0.010	0.010	0.331	0.016	0.05	0.71	1.38	1.62	1.01	1.18
13	0.812	-	310.2	18.40	33.8	-	-	-	-	4.40	7.60	7.32	0.010	0.010	0.322	0.014	0.10	0.71	1.44	1.69	1.10	1.29
14	0.816	-	303.7	18.00	31.7	-	-	-	-	3.80	7.60	7.28	0.020	0.020	0.324	0.009	0.23	0.83	1.48	1.65	1.10	1.28
15	0.774	-	285.8	15.70	28.5	-	-	-	-	4.20	7.63	7.32	0.020	0.020	0.316	0.017	0.09	0.88	1.55	1.82	0.91	1.07
16	0.849	-	354.3	20.00	34.6	-	-	-	-	4.10	7.61	7.34	0.030	0.020	0.312	0.007	0.14	0.85	1.53	1.80	0.96	1.08
17	0.814	-	264.4	16.30	29.7	-	-	-	-	3.57	7.62	7.39	0.020	0.020	0.321	0.006	0.12	0.98	1.43	1.79	1.19	1.35
18	0.774	-	229.3	15.50	27.2	148	145	194	204	3.47	7.63	7.37	0.010	0.010	0.321	0.004	0.06	0.77	1.39	1.62	1.10	1.21
19	0.774	-	295.9	21.10	36.1	-	-	-	-	3.41	7.53	7.37	0.030	0.010	0.389	0.013	0.27	0.91	1.30	1.64	1.16	1.29
20	0.777	-	254.0	18.80	32.2	-	-	-	-	3.56	7.50	7.41	0.030	0.010	0.361	0.017	0.19	0.88	1.29	1.57	1.22	1.47
21	0.807	-	175.5	13.70	24.7	-	-	-	-	3.36	7.51	7.34	0.020	0.010	0.318	0.015	0.26	0.68	1.25	1.62	1.15	1.31
22	0.718	-	223.3	17.50	29.7	-	-	-	-	4.10	7.49	7.37	0.070	0.050	0.302	0.017	0.34	0.85	1.11	1.48	0.97	1.09
23	0.791	-	275.5	19.40	34.6	-	-	-	-	3.90	7.68	7.37	0.030	0.020	0.322	0.002	0.27	0.84	1.17	1.51	0.97	1.14
24	0.764	-	264.7	17.70	30.1	149	140	206	200	3.57	7.75	7.35	0.010	0.010	0.306	0.011	0.25	0.73	1.15	1.34	1.10	1.27
25	0.762	-	289.8	14.50	27.6	-	-	-	-	3.50	7.67	7.34	0.020	0.020	0.328	0.008	0.29	0.79	1.16	1.37	1.01	1.14
26	0.701	-	284.5	16.10	28.1	-	-	-	-	3.77	7.63	7.33	0.020	0.020	0.328	0.007	0.22	0.70	1.41	1.60	1.23	1.41
27	0.669	-	326.3	19.20	33.6	-	-	-	-	3.60	7.73	7.34	0.020	0.010	0.313	0.009	0.23	0.77	1.50	1.67	1.55	1.82
28	0.797	-	268.3	16.30	27.4	-	-	-	-	3.60	7.73	7.33	0.020	0.010	0.312	0.006	0.17	0.74	1.55	1.79	1.44	1.63
29	0.766	-	335.6	20.40	36.9	-	-	-	-	3.57	7.65	7.35	0.030	0.020	0.321	0.012	0.22	0.75	1.57	1.83	1.31	1.56
30	0.764	-	180.7	11.80	20.2	-	-	-	-	3.54	7.68	7.34	0.020	0.010	0.311	0.005	0.36	0.78	1.57	1.87	1.27	1.52
31	0.750	-	254.3	16.60	27.6	-	-	-	-	4.00	7.60	7.34	0.020	0.010	0.300	0.003	0.18	0.83	1.43	1.73	1.43	1.59
Total	24.803		8,987.8	551.60	971.0																	
Max	0.866	-	395.9	21.40	37.7	155	147	216	212	4.40	7.75	7.41	0.070	0.050	0.529	0.018	0.36	0.98	2.08	2.52	1.88	2.10
Min	0.669	-	175.5	11.80	20.2	148	140	190	199	3.31	7.49	7.28	0.010	0.000	0.300	0.002	0.05	0.68	1.11	1.34	0.88	1.02
Avg	0.800	-	289.9	17.79	31.3	150	144	202	204	3.68	7.64	7.35	0.023	0.015	0.330	0.011	0.21	0.79	1.47	1.75	1.21	1.39
Site Wide Data					Disinfection			Fluoridati														
Phone Number: 502-509-6192				Type of Cl Used: Cl Conc. %: Cl Test Method:	Gas 100% DPD	1	ype of FI Used: H FI Conc. %: 2 FI Test Method: S	IFA 3% PADNS	l certify best of r Reporte	I certify under penalty of law, by this signature that this document was prepared by me, or under my direction, and the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am also aware that there are significant penalties for submitting false information. Reported by: Cert or Rea Number: WT3-021307												

Indiana American Water - Charlestown WTP (PWSID IN5210003) - Form 100

November 2022 Monthly Report of Operation - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

	Site Wide Data	Disinfection	Fluoridation	Corrosion Inhibitor	Water Chemistry																
DATE	System Delivery Meter	/ Meter NaOCI Day Tank HF/		Ortho Phosphate Day Tank	Alkalinity H			rdness (Weekly) Phosp		iate pH			Iron	Manganese		Fluoride		Chlorine		Distribution System	
DATE	Treated Water (MGal)	Amount Used (Lbs)	Amount Used (Lbs)	Amount Used (Lbs)	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L-CaCO3	Plant Effluent (mg/L-CaCO3)	Plant Effluent (mg/L)	Raw	Plant Effluent	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Plant Effl. Free (mg/L)	Plant Effl. Total (mg/L)	Free Cl (mg/L)	Total Cl (mg/L)
1	0.735	258.5	15.90	29.3	148	153	200	191	3.80	7.57	7.33	0.020	0.020	0.286	0.005	0.21	0.71	1.37	1.60	1.32	1.51
2	0.761	268.9	19.90	34.3	-	-	-	-	3.80	7.60	7.30	0.020	0.020	0.309	0.013	0.27	0.78	1.26	1.49	1.25	1.46
3	0.719	211.3	15.70	27.0	-	-	-	-	4.20	7.58	7.29	0.030	0.030	0.315	0.013	0.35	0.84	1.09	1.26	1.03	1.22
4	0.726	211.9	16.70	28.2	-	-	-	-	4.00	7.60	7.31	0.020	0.010	0.316	0.009	0.28	0.76	1.02	1.21	0.96	1.14
5	0.762	237.3	16.20	30.3	-	-	-	-	4.20	7.63	7.31	0.030	0.020	0.306	0.008	0.31	0.87	0.95	1.14	0.88	1.03
6	0.753	244.8	17.50	30.5	-	-	-	-	4.10	7.69	7.29	0.020	0.020	0.310	0.014	0.36	0.82	0.93	1.15	0.81	0.94
7	0.768	252.7	18.80	32.4	149	142	217	212	3.44	7.70	7.34	0.030	0.020	0.311	0.003	0.13	0.91	0.93	1.23	0.72	0.97
8	0.717	230.2	16.70	29.3	-	-	-	-	4.10	7.48	7.37	0.030	0.020	0.327	0.006	0.14	0.72	0.96	1.15	0.88	1.03
9	0.715	232.5	16.30	28.4	-	-	-	-	4.00	7.45	7.37	0.040	0.020	0.638	0.012	0.17	0.71	0.94	1.24	0.84	0.99
10	0.756	493.9	16.50	28.8	-	-	-	-	4.10	7.47	7.35	0.070	0.020	0.340	0.012	0.34	0.92	0.91	1.32	0.88	1.09
11	0.713	265.1	17.20	34.3	-	-	-	-	4.00	7.47	7.32	0.040	0.010	0.320	0.009	0.26	0.74	1.02	1.30	0.98	1.28
12	0.705	187.2	14.10	24.5	-	-	-	-	3.90	7.53	7.35	0.030	0.020	0.331	0.013	0.24	0.90	1.14	1.27	1.12	1.22
13	0.571	199.6	14.50	25.1	-	-	-	-	4.10	7.50	7.34	0.050	0.020	0.334	0.006	0.15	0.82	1.00	1.20	0.80	1.02
14	0.984	398.8	26.20	44.8	145	140	211	209	3.49	7.65	7.34	0.010	0.010	0.319	0.012	0.17	0.77	0.93	1.11	0.74	0.99
15	1.189	458.8	29.60	51.7	-	-	-	-	3.55	7.72	7.36	0.020	0.020	0.324	0.013	0.32	0.74	1.22	1.48	1.05	1.26
16	1.129	360.7	23.60	41.7	-	-	-	-	3.50	7.66	7.32	0.030	0.010	0.327	0.011	0.30	0.79	1.29	1.55	1.25	1.52
17	1.169	465.6	24.00	42.1	-	-	-	-	3.52	7.69	7.36	0.030	0.010	0.344	0.011	0.13	0.72	1.25	1.55	1.16	1.37
18	0.974	337.2	17.80	32.6	-	-	-	-	3.52	7.69	7.34	0.020	0.010	0.336	0.016	0.31	0.73	1.22	1.46	1.04	1.25
19	1.162	470.4	27.70	48.2	-	-	-	-	3.52	7.63	7.36	0.010	0.010	0.318	0.011	0.29	0.71	1.27	1.45	0.88	1.01
20	0.739	297.9	16.80	30.5	-	-	-	-	3.55	7.64	7.36	0.020	0.010	0.375	0.019	0.27	0.74	1.26	1.51	1.17	1.37
21	0.878	315.9	18.70	32.8	-	-	-	-	4.00	7.71	7.36	0.030	0.030	0.358	0.019	0.28	0.80	1.40	1.65	1.36	1.51
22	0.680	206.4	12.10	23.0	145	143	213	185	4.20	7.69	7.35	0.010	0.010	0.343	0.022	0.28	0.78	1.44	1.75	0.91	1.11
23	1.000	410.2	26.00	45.3	-	-	-	-	4.10	7.71	7.36	0.010	0.010	0.339	0.017	0.22	0.72	1.40	1.71	1.21	1.39
24	0.702	261.4	16.70	29.2	-	-	-	-	4.10	7.72	7.38	0.010	0.010	0.324	0.017	0.27	0.74	1.42	1.72	1.45	1.69
25	0.659	232.8	15.50	25.8	-	-	-	-	4.10	7.70	7.39	0.020	0.010	0.348	0.014	0.33	0.80	1.40	1.63	0.83	0.95
26	0.660	270.9	14.50	26.1	-	-	-	-	3.90	7.74	7.37	0.020	0.010	0.339	0.017	0.33	0.78	1.29	1.57	1.28	1.48
27	0.708	235.7	13.40	23.5	-	-	-	-	4.10	7.72	7.38	0.020	0.020	0.336	0.011	0.27	0.81	1.67	1.95	1.43	1.61
28	1.135	444.0	24.50	45.4	-	-	-	-	4.20	7.61	7.41	0.050	0.000	0.335	0.023	0.06	0.72	1.72	2.02	1.68	1.88
29	1.178	417.0	25.60	43.6	148	141	185	196	4.00	7.70	7.41	0.030	0.030	0.353	0.011	0.09	0.84	1.67	1.91	1.61	1.83
30	0.877	299.5	-	33.2	-	-	-	-	4.10	7.50	7.36	0.110	0.010	0.905	0.012	0.31	0.69	1.50	1.75	1.46	1.62
Total	25.224	9,177.1	548.70	1,001.9																	
Max	1.189	493.9	29.60	51.7	149	153	217	212	4.20	7.74	7.41	0.110	0.030	0.905	0.023	0.36	0.92	1.72	2.02	1.68	1.88
Min	0.571	187.2	12.10	23.0	145	140	185	185	3.44	7.45	7.29	0.010	0.000	0.286	0.003	0.06	0.69	0.91	1.11	0.72	0.94
Avg	0.841	305.9	18.92	33.4	147	144	205	199	3.91	7.63	7.35	0.029	0.016	0.359	0.013	0.25	0.78	1.23	1.48	1.10	1.29
Site Wide Data Disinfection									Fluoridati	on											
Phone Number: 502-509-6192				Type of Cl Used: Gas			Ту	pe of FI Used: HI	l	I certify under penalty of law, by this signature that this document was prepared by me, or under my direction, and the information submitt best of my knowledge ang-belief, true, accurate, and complete. I am also aware that there are significant penalties for submitting false in											
				Cl Conc. %: 100% Cl Test Method: DPD	FI	FI Conc. %: 23	F	Reported by: Cert or Reg Number:													

