

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

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

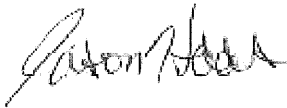
January 17, 2023

IURC
PUBLIC'S
EXHIBIT NO. 1
2-2-23
DATE REPORTER

Respectfully submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

OFFICIAL
EXHIBITS



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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.

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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-1¹, 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?**

4 A: I reviewed Indiana American's Petition and the testimonies submitted in this case. I
5 reviewed Petitioner's prior SEI case, Cause No. 45609. I reviewed Monthly Reports of
6 Operations filed with the Indiana Department of Environmental Management ("IDEM")
7 for Indiana American's Charlestown system. Finally, I wrote discovery requests and
8 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

discusses these replacement projects in his testimony as “replacement eligible projects,” 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?

A: Based upon my review of Attachment DH-1 and Indiana American’s responses to certain OUCC data requests, I recommend that the following line items from attachment DH-1 be 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	\$9,950

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

A: Each of these projects are not *replacements* of plant and equipment, but instead *additions* of *new* plant and equipment. This was confirmed in responses to OUCC Data Requests 2-3, 2-4, 2-7, 2-9, 3-1 and 3-3, which I have included as OUCC Attachment CNS-1.

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

A: Project R10-50Q1.22-P-0002 is simply the *addition* of an auto-flush device for a hydrant, which releases water from the hydrant at pre-set intervals without manual intervention. It 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 **Q: Please discuss why you believe project R10-47Q1.22-P-0004 is not an SEI-eligible**
4 **project.**

5 A: Indiana American's response to OUCC Data Request 2-7 states in part as follows:

6 The current equipment safety design is now outdated because *there were no*
7 *bollards* protecting the valves and water salesman. *Adding* the bollards replaced
8 and enhanced the existing equipment to protect the integrity of the existing valves
9 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 **Q: Please discuss why you believe project R10-90Q1.21-P-0027 is not an SEI-eligible**
13 **project.**

14 A: Indiana American's response to OUCC Data Request 3-3 states in part as follows:

- 15 a. The *second* rapid mix motor was *added* for redundancy purposes to
16 maintain compliance at our Ogden Dune plant in NW Indiana. The rapid
17 mixer mixes coagulant into the raw water to lower turbidity in the settling
18 basins to extend the filter run times and lower filter effluent turbidity below
19 the required threshold.
20 b. One rapid mix motor was in place before the installation.
21 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 *replacement* of plant and equipment as required by the statute.

24 **Q: What is the total value of these additions that you seek to remove from the proposed**
25 **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 **Q: Do you believe that the project appearing as line 173 in Attachment DH-1 is an eligible**
4 **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 **Q: How did you verify that this plant was no longer used and useful as required in Ind.**
9 **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 **Q: Please describe the results of the review of the Monthly Reports of Operation**
18 **("MRO's") of the Charlestown system.**

19 A: A review of MRO's³ 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 **Q: Do you have concerns with the inclusion of this project as an SEI project?**

5 A: Yes. Including this project for SEI recovery, when the replacement project, as part of the
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?**

16 A: The total net cost of this project was \$464,516.

17 **Q: 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).

IV. PROJECTS THAT DO NOT MEET SEI REQUIREMENTS CRITERIA

20 **Q: What does Ind. Code § 8-1-31.7-7(2) state?**

21 A: For a "replacement project", Ind. Code § 8-1-31.7-7(2) defines an SEI as "Replacement of
22 a plant or equipment to maintain existing health, safety, or environmental protection for
23 the eligible utility's customers, employees, or the public."

1 **Q: Do all of the projects presented in Attachment DH-1 provide for the maintenance of**
2 **the “existing health, safety, or environmental protection for the eligible utility's**
3 **customers, employees, or the public?”**

4 **A:** No, they do not.

5 **Q: Which projects do you believe fail to provide for the maintenance of the “existing**
6 **health, safety, or environmental protection for the eligible utility's customers,**
7 **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
10 utility's customers, employees, or the public.”

Number	Project Number	Project Description	Total Net	Long description of all work performed under the WBS
196	R10-15Q1.21-P-0007	2nd Lab Renovation	\$155,939	The 2nd Lab renovation including replacing the old lab cabinets with new, replacing the flooring, drywall, and ceiling, and repainting. Replacing a refrigerator, credenza and some other office furniture.
208	R10-25Q1.21-P-0002	HS Building Improvements	\$45,596	Replaced walls & floor control rm HS Building, Replaced 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

11 **Q: Please explain why these projects fail to provide for the maintenance of the “existing**
12 **health, safety, or environmental protection for the eligible utility's customers,**
13 **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

11 **Q: Do you have any other concerns with the proposed projects presented in Attachment**
12 **DH-1?**

13 A: Yes. First, I am concerned that the specific requirements as set out in Ind. Code § 8-1-31.7-
14 6 are not described with any specificity for certain projects. There is presumably a specific
15 citation to OSHA, IDEM, or other regulations that initially drove Indiana American's
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
18 each of the projects instead of generalities such as “Affected the ability to deliver safe
19 quantities of water to the distribution system.”⁴ Specific citations were provided for many
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. RECOMMENDATIONS

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
4 Railroad, where I served as mechanical and maintenance supervisor and industrial engineer
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
Cause No. 45609 SEI-1 S1
Office of Utility Consumer Counselor (OUCC)

Date: 1/17/23

OUCC DR 2-3

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 preapproval.

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 protection 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.

OUCC DR 2-4

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.

OUCC DR 2-7

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 preapproval.

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 protection 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.

OUCC DR 2-9

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 preapproval.

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 protection 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.

OUCG 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 OUCG 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.

OUCG 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 OUCG 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.

OUCC DR 2-11

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 protection 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:

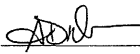
- a. No, it is not currently in service. There is now a new plant that was constructed in Charlestown that is fully operational.
- b. 10/10/2022.

Monthly Report of
Operation of Water
Treatment Plant
Form 300

Indiana American Water

Charlestown Plant
PWS-ID5210603

Month: May
Year: 2022
Leap Year? No

Operator Signature:  Date: 06/06/2022

Certification # WTS-021307

I hereby certify under penalty of law 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.

IDEM Field Rep: Anna Reade

Date	Water Treated				Chemicals (LBS/MG)				Chemicals (lbs)				Physical and Chemical Data (mg/L)												Chlorine Residual (mg/L)				Misc	
	Treated Water (MGD)	Total Cl2 (chlorine)	NPS (fluoride)	Phosphate Blend (PO4)	Total Cl2 (chlorine)	NPS (fluoride)	Phosphate Blend (PO4)	Raw Alk	Eff Alk	Raw pH	Eff pH	Raw Hard	Eff Hard	Raw Iron	Eff Iron	Raw Mn	Eff Mn	Eff PO4	Eff Fluoride	Eff Cl2 Free	Eff Cl2 Total	Dist Cl2 Free	Dist Cl2 Total	Remarks						
5/1/2022	0.7270	23.38		149.52	17.00	0	108.20	-	-	7.42	7.38	-	-	0.01	0.01	0.27	0.05	4.07	0.61	1.47	1.61	1.36	1.63	Air in HFS feed line, corrected						
5/2/2022	0.6350	30.66	13.39	143.31	21.00	9	84.30	-	-	7.45	7.31	-	-	0.02	0.01	0.32	0.09	4.50	0.78	1.33	1.55	1.20	1.37							
5/3/2022	0.6600	27.27	13.42	132.32	18.00	9	87.30	173	179	7.41	7.31	210	218	0.03	0.01	0.39	0.01	4.50	0.69	1.69	1.87	1.40	1.60							
5/4/2022	0.6510	29.37	14.38	144.05	20.00	10	98.10	-	-	7.44	7.35	-	-	0.01	0.00	0.50	0.06	4.10	0.66	1.65	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	4.20	0.82	1.75	1.86	1.50	1.68							
5/6/2022	0.7010	29.86	14.84	135.12	21.00	10	84.72	-	-	7.44	7.33	-	-	0.02	0.01	0.24	0.07	4.60	0.79	1.62	1.82	1.54	1.63							
5/7/2022	0.6450	31.01	16.05	164.89	20.00	12	106.38	-	-	7.31	7.37	-	-	0.01	0.02	0.38	0.08	4.50	0.74	1.68	1.91	1.60	1.75							
5/8/2022	0.7460	22.73	2.75	117.74	17.00	2	83.07	-	-	7.42	7.32	-	-	0.02	0.01	0.39	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	31.81	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	1.88	1.58	1.78							
5/10/2022	0.7310	31.81	15.08	140.61	24.00	11	102.79	-	-	7.47	7.23	-	-	0.03	0.01	0.18	0.07	4.04	0.81	1.76	1.96	1.63	1.78							
5/11/2022	0.7310	30.03	14.02	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	0.7310	31.28	11.01	137.15	23.00	9	103.09	-	-	7.40	7.33	-	-	0.01	0.02	0.10	0.00	3.41	0.87	1.67	1.99	1.73	1.91							
5/13/2022	0.7450	29.33	13.34	133.44	22.00	11	99.41	-	-	7.41	7.19	-	-	0.07	0.00	0.27	0.03	3.99	0.71	1.69	2.14	1.18	1.40							
5/14/2022	0.7240	31.77	12.67	118.78	23.00	9	86.00	-	-	7.42	7.31	-	-	0.02	0.01	0.39	0.06	3.41	0.77	1.83	2.04	1.65	1.94							
5/15/2022	0.7210	27.17	7.19	168.51	21.00	6	110.38	-	-	7.43	7.31	-	-	0.01	0.03	0.29	0.08	3.38	0.69	1.84	2.14	1.81	1.94							
5/16/2022	0.7100	31.80	14.21	132.01	24.00	10	87.74	172	173	7.37	7.33	220	216	0.06	0.01	0.39	0.05	3.81	0.75	1.85	2.01	1.71	1.94							
5/17/2022	0.8610	25.55	15.55	143.94	22.00	13	133.93	-	-	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	0.7200	32.88	12.56	124.53	24.00	9	90.91	-	-	7.43	7.25	-	-	0.01	0.01	0.31	0.06	3.65	0.69	1.68	2.07	1.78	1.99							
5/19/2022	0.6760	31.54	15.33	137.06	22.00	10	82.65	-	-	7.44	7.35	-	-	0.01	0.01	0.30	0.08	3.66	0.71	1.66	2.04	1.82	1.91							
5/20/2022	0.6840	32.16	17.62	152.50	22.00	12	104.31	-	-	7.41	7.35	-	-	0.01	0.01	0.30	0.07	4.38	0.70	1.68	2.07	1.81	1.78							
5/21/2022	0.7580	28.47	13.87	120.28	14.00	11	98.75	-	-	7.39	7.25	-	-	0.02	0.00	0.30	0.02	3.51	0.73	1.72	1.99	1.75	1.90							
5/22/2022	0.8160	39.47	15.16	156.46	33.00	13	130.89	-	-	7.41	7.35	-	-	0.01	0.00	0.30	0.05	3.67	0.81	1.75	1.91	1.52	1.68							
5/23/2022	0.7760	27.06	14.07	117.85	21.00	11	91.45	172	172	7.40	7.35	215	228	0.01	0.03	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	138.45	17.00	12	96.36	-	-	7.41	7.35	-	-	0.02	0.03	0.27	0.06	4.20	0.76	1.83	2.04	1.51	1.60							
5/25/2022	0.6850	43.80	13.89	133.17	30.00	10	84.37	-	-	7.40	7.35	-	-	0.01	0.01	0.32	0.07	4.18	0.69	1.72	1.84	1.31	1.52							
5/26/2022	0.6610	24.51	14.34	122.86	16.00	9	81.21	-	-	7.42	7.36	-	-	0.03	0.02	0.31	0.06	4.12	0.72	1.79	1.97	1.36	1.60							
5/27/2022	0.7210	29.79	20.89	133.70	16.00	16	103.21	-	-	7.40	7.37	-	-	0.01	0.01	0.30	0.04	4.18	0.67	1.67	1.90	1.51	1.65							
5/28/2022	0.6990	32.82	10.17	124.75	23.00	7	87.20	-	-	7.41	7.27	-	-	0.01	0.01	0.31	0.05	4.21	0.67	1.62	1.78	1.44	1.53							
5/29/2022	0.7190	24.01	14.58	110.97	18.00	11	89.19	-	-	7.42	7.36	-	-	0.05	0.00	0.29	0.04	4.16	0.71	1.85	2.07	1.53	1.64							
5/30/2022	0.7710	17.31	4.90	116.51	19.00	4	81.10	-	-	7.40	7.27	-	-	0.00	0.00	0.31	0.35	4.10	0.61	1.60	1.80	1.10	1.48	Air in HFS feed line, corrected						
5/31/2022	0.7770	25.74	13.78	114.53	20.00	11	104.53	-	-	7.47	7.28	-	-	0.01	0.01	0.30	0.07	3.90	0.70	1.82	2.05	1.67	1.83							
Total	22.531	920.25	410.33	4251.08	667	237	3587.43	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	N/A						
Average	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	1.71							
Min	0.6450	19.47	2.75	117.74	14.0	6	81.21	171	172	7.37	7.20	210	216	0.00	0.00	0.27	0.01	3.41	0.61	1.32	1.55	1.20	1.32							
Max	0.8610	43.80	20.89	168.51	33.0	16	130.89	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							

Comments: 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

Indiana American Water

Charlestown Plant
PWS-ID-5230002

Month:
Year:
Leap Year?

June
2022
No

Operator Signature: 

Date: 07/07/22

Certification # WTS-021307

I hereby, 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.

IDEM Field Rep: Anna Reagle

Date	Water Treated		Chemicals (LBS/MG)		Chemicals (lbs)		Physical and Chemical Data (mg/L)												Chlorine Residual (mg/L)				Misc	
	Treated Water (MGD)	Total Cl2 (chlorine)	HPF (fluoride)	Phosphate-Bland (PSA)	Total Cl2 (chlorine)	HPF (fluoride)	Phosphate-Bland (PSA)	Raw Alk	Eff Alk	Raw pH	Eff pH	Raw Hard	Eff Hard	Raw Iron	Eff Iron	Raw Mn	Eff Mn	Raw PO4	Eff PO4	Eff Fluoride	Eff Cl2	Eff Cl2 Total	Disin Cl2	Rem Alk
6/1/2022	0.7020	29.91	15.11	155.87	21.00	11	95.28	171	175	7.47	7.50	200	208	0.01	0.01	0.01	0.06	3.90	0.60	1.72	1.88	1.57	1.74	1.74
6/2/2022	0.7050	31.21	14.47	177.02	22.00	10	90.03	-	-	7.45	7.51	-	-	0.02	0.01	0.30	0.07	3.80	0.79	1.70	1.90	1.56	1.70	1.70
6/3/2022	0.7050	33.49	17.16	198.71	23.00	12	98.21	-	-	7.40	7.30	-	-	0.00	0.00	0.20	0.07	4.10	0.82	1.70	1.97	1.50	1.71	1.71
6/4/2022	0.7070	37.64	6.85	258.78	30.00	5	146.53	-	-	7.41	7.35	-	-	0.02	0.01	0.30	0.06	4.20	0.85	1.65	1.81	1.52	1.71	1.71
6/5/2022	0.7070	38.35	9.80	169.23	14.00	8	83.81	-	-	7.40	7.31	-	-	0.02	0.01	0.30	0.05	4.10	0.90	1.72	1.89	1.35	1.50	1.50
6/6/2022	0.6970	36.53	13.99	130.73	24.00	9	85.89	172	172	7.35	7.36	200	218	0.01	0.00	0.00	0.09	3.61	0.86	1.69	1.83	1.56	1.63	1.63
6/7/2022	0.6960	33.07	15.47	146.66	22.00	11	100.61	-	-	7.42	7.35	-	-	0.02	0.00	0.26	0.01	3.56	0.79	1.70	1.90	1.52	1.70	1.70
6/8/2022	0.6710	31.30	14.59	155.40	21.00	10	91.11	-	-	7.45	7.35	-	-	0.02	0.00	0.38	0.07	3.40	0.84	1.61	1.85	1.47	1.65	1.65
6/9/2022	0.6310	27.68	15.89	141.26	23.00	13	117.39	-	-	7.43	7.33	-	-	0.04	0.01	0.30	0.06	3.10	0.91	1.49	1.74	1.45	1.61	1.61
6/10/2022	0.6600	31.58	14.26	176.71	21.00	9	84.26	-	-	7.42	7.39	-	-	0.01	0.03	0.11	0.07	3.11	0.80	1.62	1.80	1.43	1.60	1.60
6/11/2022	0.7130	28.05	15.46	188.56	20.00	11	99.08	-	-	7.40	7.24	-	-	0.02	0.01	0.30	0.07	4.62	0.81	1.66	1.81	1.24	1.39	1.39
6/12/2022	0.7030	25.05	4.84	144.20	18.00	3	101.37	-	-	7.40	7.24	-	-	0.04	0.00	0.79	0.06	3.43	0.83	1.52	1.70	1.30	1.46	1.46
6/13/2022	0.7450	40.31	14.26	156.67	30.00	11	84.30	184	166	7.41	7.24	201	190	0.01	0.01	0.01	0.06	3.35	0.81	1.50	1.83	1.18	1.57	1.57
6/14/2022	0.7410	31.04	15.14	145.18	23.00	11	107.58	-	-	7.39	7.33	-	-	0.00	0.01	0.38	0.09	3.66	0.88	1.54	1.95	1.50	1.77	1.77
6/15/2022	0.7350	33.57	4.78	133.20	27.00	4	101.48	-	-	7.37	7.32	-	-	0.00	0.00	0.31	0.06	3.80	0.87	1.50	1.82	1.41	1.57	1.57
6/16/2022	0.7900	30.34	15.65	144.59	24.00	12	114.23	-	-	7.42	7.35	-	-	0.02	0.00	0.38	0.07	3.65	0.81	1.68	1.89	1.50	1.70	1.70
6/17/2022	0.7170	33.47	18.54	158.87	24.00	13	113.91	-	-	7.40	7.33	-	-	0.02	0.00	0.31	0.06	3.68	0.75	1.50	1.77	1.43	1.60	1.60
6/18/2022	0.8210	31.83	15.84	141.80	26.00	12	115.98	-	-	7.41	7.33	-	-	0.02	0.01	0.39	0.09	4.54	0.85	1.51	1.85	1.58	1.76	1.76
6/19/2022	0.8520	24.85	11.36	111.43	21.00	10	94.94	-	-	7.37	7.33	-	-	0.01	0.00	0.39	0.07	3.86	0.70	1.54	1.82	1.54	1.74	1.74
6/20/2022	0.8370	44.21	15.28	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	1.68
6/21/2022	0.8160	22.06	6.39	133.78	18.00	5	108.35	-	-	7.40	7.35	-	-	0.04	0.08	0.35	0.25	4.60	0.65	1.51	1.77	1.43	1.57	1.57
6/22/2022	0.8110	49.32	16.77	154.67	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	1.76
6/23/2022	0.8760	14.84	16.58	130.90	33.00	15	114.67	-	-	7.39	7.28	-	-	0.01	0.00	0.47	0.11	4.30	0.57	1.53	1.60	1.15	1.25	1.25
6/24/2022	0.8200	36.36	14.64	127.45	32.00	13	113.16	-	-	7.40	7.27	-	-	0.00	0.00	0.35	0.21	4.10	0.34	1.40	1.60	1.10	1.21	1.21
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	1.18	1.18
6/26/2022	0.8110	34.51	13.11	120.96	28.00	11	98.10	-	-	7.42	7.18	-	-	0.01	0.01	0.30	0.14	4.30	0.67	0.62	0.83	0.70	0.81	0.81
6/27/2022	0.7070	65.06	15.45	188.77	41.00	12	97.31	-	-	7.40	7.24	-	-	0.05	0.01	0.39	0.11	3.90	0.80	1.34	1.51	0.94	1.09	1.09
6/28/2022	1.0110	25.67	16.27	140.57	26.00	16	142.35	-	-	7.40	7.33	-	-	0.01	0.01	0.77	0.16	4.40	0.89	1.71	1.96	1.23	1.49	1.49
6/29/2022	1.1840	24.49	15.40	130.45	22.00	18	114.43	173	168	7.41	7.35	189	192	0.02	0.01	0.31	0.11	4.40	0.77	1.79	2.05	1.19	1.58	1.58
6/30/2022	1.1720	50.13	5.51	112.43	59.00	8	132.33	-	-	7.42	7.30	-	-	0.07	0.02	0.40	0.11	3.60	0.79	1.96	2.14	2.03	2.15	2.15
Total	24.054	958.78	400.04	4028.31	769	119	3317.14	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	N/A
Average	0.8018	31.98	13.33	134.28	25.8	11	107.24	175	169	7.41	7.33	200	203	0.02	0.01	0.31	0.11	3.95	0.77	1.55	1.78	1.39	1.50	1.50
Min	0.6270	11.74	4.76	109.28	10.0	3	83.81	171	163	7.35	7.18	189	190	0.00	0.00	0.27	0.01	3.19	0.38	0.62	0.83	0.70	0.81	0.81
Max	1.1840	55.05	18.54	158.87	59.0	18	154.45	184	175	7.47	7.33	206	218	0.07	0.05	0.47	0.34	5.20	0.92	1.96	2.14	2.03	2.15	2.15

Comments: 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

OUEC Attachment CNS-3
Cause No. 45609 SEI-1 S1
Page 3 of 7

DATE	Site Wide Data	Disinfection		Fluoridation		Corrosion Inhibitor		Water Chemistry																	
		System Delivery Meter	Chlorine Gas	NaOCl Day Tank	HFA New Plant Day Tank	Ortho/Poly Phosphate	Ortho Phosphate Day Tank	Alkalinity		Hardness (Weekly)		Phosphate		pH		Iron		Manganese		Fluoride		Chlorine		Distribution System	
		Treated Water (MGa)	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 Eff. Free (mg/L)	Plant Eff. 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	1.78	
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	0.339	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	-	-	-	-	-	2.05	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						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	
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	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	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		Distribution System	
Phone Number:	502-509-6192	Type of FI Used:	HFA	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 Conc. %:	23%		
		FI Test Method:	SPADNS		
Reported by: <u>ADW</u>				Cert or Reg Number: WT3-021307	



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

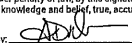
OUGC Attachment CNS-3
Cause No. 45609 SEI-1 S1
Page 4 of 7

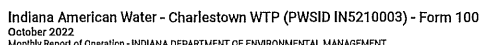
DATE	Site Wide Data		Disinfection		Fluoridation		Corrosion Inhibitor		Water Chemistry												Distribution System			
	System Delivery Meter	Chlorine Gas (Lbs used)	NaOCl Day Tank Amount Used (Lbs)	HFA Day Tank Amount Used (Lbs)	Ortho Phosphate Day Tank Amount Used (Lbs)	Alkalinity		Hardness (Weekly)		Phosphate Plant Effluent (mg/L)	pH		Iron		Manganese		Fluoride		Chlorine		Free Cl (mg/L)	Total Cl (mg/L)		
						Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L-CaCO3)	Plant Effluent (mg/L-CaCO3)		Raw	Plant Effluent	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Plant Eff. Free (mg/L)	Plant Eff. Total (mg/L)						
1	0.854	1.0	329.8	4.70	72.1	-	-	-	-	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	7.47	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		Fluoridation		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: <u>ADW</u> 09/06/2022 Cert or Reg Number: WT3-021307	
Phone Number: 502-509-6192		Type of Cl Used: Gas Cl Conc. %: 100% Cl Test Method: DPD		Type of FI Used: HFA FI Conc. %: 23% FI Test Method: SPADNS			



DATE	Site Wide Data		Disinfection		Fluoridation		Corrosion Inhibitor		Water Chemistry													
	System Delivery Meter	Chlorine Gas	NaOCl Day Tank	HFA Day Tank	Ortho Phosphate Day Tank	Alkalinity	Hardness (Weekly)	Phosphate	pH	Iron		Manganese		Fluoride		Chlorine		Distribution System				
	Treated Water (MGal)	Lbs used (Lbs)	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	Plant Effluent	Raw	Plant Effluent	Plant Eff. Free	Plant Eff. Total	Free Cl (mg/L)	Total Cl		
1	0.871	-	259.8	15.30	32.1	-	-	-	3.64	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	325.6	19.10	35.7	-	-	-	3.63	7.49	7.32	0.010	0.010	0.297	0.013	0.34	0.89	1.35	1.56	1.18	1.35	
3	0.738	3.0	279.0	16.60	31.2	-	-	-	3.54	7.46	7.30	0.020	0.010	0.301	0.011	0.35	0.72	1.32	1.60	1.18	1.38	
4	0.765	3.0	260.0	15.00	29.0	-	-	-	3.66	7.48	7.30	0.020	0.020	0.288	0.018	0.35	0.90	1.48	1.66	1.13	1.30	
5	0.817	2.0	345.1	20.00	38.0	-	-	-	3.66	7.45	7.30	0.030	0.020	0.294	0.035	0.27	0.71	1.44	1.65	1.33	1.49	
6	0.814	3.0	320.1	16.90	31.3	151	154	195	189	3.68	7.43	7.29	0.020	0.020	0.301	0.017	0.17	0.79	1.44	1.66	1.29	1.52
7	0.827	4.0	320.4	18.80	37.4	-	-	-	3.41	7.49	7.34	0.020	0.020	0.290	0.011	0.23	0.76	1.45	1.70	1.29	1.46	
8	0.846	2.0	323.3	19.10	35.3	-	-	-	3.36	7.43	7.31	0.010	0.010	0.302	0.013	0.31	0.78	1.49	1.82	1.48	1.69	
9	0.811	-	281.0	16.10	31.7	-	-	-	3.54	7.42	7.32	0.020	0.020	0.289	0.009	0.17	0.75	1.35	1.55	1.35	1.51	
10	0.758	-	326.9	19.00	35.7	-	-	-	3.52	7.41	7.37	0.020	0.000	0.299	0.005	0.40	0.73	1.33	1.60	1.17	1.33	
11	0.815	-	280.6	14.70	30.3	-	-	-	3.52	7.40	7.36	0.010	0.000	0.300	0.017	0.38	0.73	1.32	1.57	1.13	1.32	
12	0.815	-	379.9	22.20	37.4	152	148	191	194	3.53	7.40	7.37	0.020	0.010	0.294	0.014	0.33	0.74	1.29	1.54	1.17	1.40
13	0.816	-	330.8	16.50	39.2	-	-	-	3.73	7.39	7.45	0.020	0.010	0.097	0.017	0.27	0.73	1.27	1.51	1.17	1.31	
14	0.831	-	509.5	30.60	51.6	155	152	199	190	4.28	7.40	7.40	0.010	0.000	0.302	0.013	0.19	0.74	1.28	1.58	0.76	0.93
15	0.875	-	242.0	13.90	25.2	-	-	-	3.87	7.40	7.41	0.000	0.000	0.293	0.011	0.39	0.71	1.25	1.44	1.09	1.25	
16	0.861	-	294.6	17.10	32.9	-	-	-	4.11	7.42	7.40	0.000	0.000	0.234	0.001	0.16	0.73	1.10	1.38	0.96	1.15	
17	0.832	-	280.0	17.20	29.9	-	-	-	3.95	7.41	7.39	0.010	0.000	0.287	0.010	0.19	0.72	1.11	1.35	1.11	1.22	
18	0.876	-	360.4	21.60	38.6	-	-	-	3.96	7.39	7.38	0.010	0.010	0.288	0.011	0.16	0.73	1.12	1.31	1.08	1.21	
19	0.860	-	239.6	17.30	29.5	-	-	-	3.28	7.50	7.43	0.030	0.030	0.333	0.015	0.17	0.77	1.03	1.23	0.93	1.12	
20	0.778	-	398.2	21.80	37.7	-	-	-	3.21	7.46	7.33	0.020	0.010	0.321	0.015	0.33	0.76	1.01	1.19	0.85	1.02	
21	0.905	-	267.6	9.70	35.3	-	-	-	4.10	7.41	7.42	0.020	0.020	0.311	0.012	0.34	0.79	1.07	1.53	0.91	1.07	
22	0.864	-	345.7	19.50	34.5	-	-	-	4.00	7.48	7.31	0.040	0.030	0.324	0.019	0.27	0.68	1.29	1.52	1.23	1.44	
23	0.794	-	382.9	23.80	37.8	150	150	193	188	3.80	7.47	7.34	0.030	0.030	0.311	0.016	0.24	0.68	1.21	1.54	0.91	1.00
24	0.799	-	176.8	13.70	24.8	-	-	-	3.80	7.42	7.31	0.030	0.030	0.307	0.018	0.17	0.77	1.48	1.68	1.00	1.13	
25	0.838	-	380.3	23.00	40.5	-	-	-	4.10	7.45	7.39	0.030	0.030	0.308	0.011	0.17	0.66	1.20	1.51	1.39	1.56	
26	0.846	-	180.0	14.70	27.0	-	-	-	3.37	7.56	7.43	0.000	0.030	0.316	0.014	0.21	0.68	1.56	1.70	1.41	1.56	
27	0.879	-	377.0	18.70	34.9	-	-	-	3.41	7.44	7.40	0.020	0.030	0.312	0.025	0.04	0.87	1.11	1.34	0.93	1.04	
28	0.814	-	505.6	24.60	39.0	149	148	195	191	3.80	7.51	7.40	0.000	0.020	0.307	0.008	0.27	0.70	1.62	1.81	1.38	1.56
29	0.856	-	333.4	14.50	29.7	-	-	-	3.17	7.44	7.39	0.040	0.060	0.316	0.020	0.32	0.78	1.43	2.35	1.05	1.15	
30	0.820	-	383.2	21.00	34.0	-	-	-	3.48	7.62	7.39	0.040	0.020	0.315	0.013	0.29	0.72	1.95	2.44	1.93	2.13	
Total	24.830	-	9,699.3	552.00	1,027.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Max	0.905	4.0	509.5	30.60	51.6	155	154	199	194	4.28	7.62	7.45	0.080	0.060	0.333	0.035	0.40	0.90	1.95	2.44	1.93	2.13
Min	0.738	2.0	176.8	9.70	24.8	149	148	191	188	3.17	7.39	7.29	0.000	0.000	0.097	0.001	0.04	0.66	1.01	1.19	0.76	0.93
Avg	0.828	2.9	323.0	18.40	34.2	151	150	195	190	3.67	7.45	7.36	0.021	0.017	0.294	0.014	0.25	0.75	1.32	1.60	1.17	1.34

Site Wide Data		Disinfection		Fluoridation			
Phone Number: 502-509-6192		Type of Cl Used: Gas		Type of FI Used: HFA			
		Cl Conc. %: 100%		FI Conc. %: 23%			
		Cl Test Method: DPD		FI Test Method: SPADNS			
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 Reg Number: WT3-021307		



Monthly Report of Operation - IRAWA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT																							
Site Wide Data				Disinfection		Fluoridation		Corrosion Inhibitor		Water Chemistry													
DATE	System Delivery Meter Treated Water (MGal)	Chlorine Gas Lbs Used (lbs)	NaOCl Day Tank Amount Used (lbs)	HFA Day Tank Amount Used (lbs)	Ortho Phosphate Day Tank Amount Used (lbs)	Alkalinity		Hardness (Weekly)		Phosphate		pH		Iron		Manganese		Fluoride		Chlorine		Distribution System	
						Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L-CaCO3)	Plant Effluent (mg/L-CaCO3)	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Raw (mg/L)	Plant Effluent (mg/L)	Plant Eff. Free (mg/L)	Plant Eff. 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	0.64	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	1.5	
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	31.5	-	-	-	-	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	28.7	-	-	-	-	4.20	7.63	7.32	0.020	0.020	0.316	0.017	0.09	0.88	1.55	1.82	0.91	0.97	
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	

Site Wide Data	Disinfection	Fluoridation	
Phone Number: 502-509-6192	Type of CI Used: Gas CI Conc. %: 100% CI Test Method: DPD	Type of FI Used: HFA FI Conc. %: 23% FI Test Method: SPADNS	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:  Certi or Reg Number: WTS-021307



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

OUCC Attachment CNS-3
Cause No. 45609 SEI-1 S1
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DATE	Site Wide Data	Disinfection	Fluoridation	Corrosion Inhibitor	Alkalinity		Hardness (Weekly)		Phosphate	pH		Iron		Manganese		Fluoride		Chlorine		Distribution System	
	System Delivery Meter Treated Water (MGd)	NaOCl Day Tank Amount Used (lbs)	HFA Day Tank Amount Used (lbs)	Ortho Phosphate Day Tank 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 Eff. Free (mg/L)	Plant Eff. Total (mg/L)	Free Cl (mg/L)	Total Cl (mg/L)
1	0.735	259.5	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	1.27	1.60	1.32	1.51
2	0.761	269.9	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	0.698	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	Fluoridation	
Phone Number: 502-509-6192	Type of Cl Used: Gas Cl Conc. %: 100% Cl Test Method: DPD	Type of FI Used: HFA FI Conc. %: 23% FI Test Method: SPADNS	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: <u>ADW</u> Cert or Reg Number: WT3-021907

