

September 7, 2017

INDIANA UTILITY  
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF WESTERN HANCOCK UTILITIES, )  
LLC, d/b/a AQUA INDIANA, INC., FOR ISSUANCE )  
PURSUANT TO IND. CODE § 8-1-2-89 OF A )  
CERTIFICATE OF TERRITORIAL AUTHORITY )  
PERMITTING IT TO PROVIDE WASTEWATER )  
UTILITY SERVICE WITHIN PORTIONS OF BUCK )  
CREEK AND VERNON TOWNSHIPS OF HANCOCK )  
COUNTY, INDIANA AND FOR THE COMMISSION'S )  
CONSENT PURSUANT TO IND. CODE § 36-2-2-23 TO )  
WESTERN HANCOCK'S USE OF PROPERTY )  
OWNED BY HANCOCK COUNTY, INDIANA. )

CAUSE NO. 44954

TESTIMONY OF

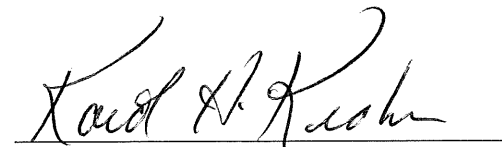
JAMES T. PARKS – PUBLIC'S EXHIBIT NO. 1

ON BEHALF OF THE

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

SEPTEMBER 7, 2017

Respectfully submitted,



Karol H. Krohn, Atty. No. 5566-82  
Deputy Consumer Counselor

**TESTIMONY OF OUCC WITNESS JAMES T. PARKS**  
**CAUSE NO. 44954**  
**WESTERN HANCOCK UTILITIES, INC.**

**I. INTRODUCTION**

1   **Q:   Please state your name and business address.**

2   A:   My name is James T. Parks, P.E., and my business address is 115 W. Washington Street, Suite  
3       1500 South, Indianapolis, IN 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 a Utility  
6       Analyst II in the Water/Wastewater Division. My qualifications and experience are described  
7       in Appendix A.

8   **Q:   What are the duties and responsibilities of your current position?**

9   A:   My duties include evaluating the condition, operation, maintenance, expansion, and  
10       replacement of water and wastewater facilities owned or operated by utilities subject to the  
11       Indiana Utility Regulatory Commission's ("Commission") jurisdiction.

12   **Q:   Have you previously testified before the Commission?**

13   A:   Yes.

14   **Q:   Please describe the review and analysis you conducted to prepare your testimony.**

15   A:   I reviewed Western Hancock Utilities, LLC ("Petitioner" or "Western Hancock") Verified  
16       Petition and the Direct Testimony and Attachments of Mr. Thomas M. Bruns, President of  
17       Aqua Indiana, Inc. and its affiliates, including Western Hancock. I reviewed information  
18       available from the Indiana Department of Environmental Management ("IDEM") about  
19       Western Hancock's wastewater treatment plant ("WWTP"). I also reviewed Western  
20       Hancock's 2015 and 2016 monthly sewage flows and pollutant loadings. Finally, I reviewed

1 I.C. § 8-1-2-89 and 170 I.A.C. § 8.5-3-1, *et seq.*

2 **Q: What is the purpose of your testimony?**

3 A: I will discuss Petitioner's request, facilities and qualifications to expand its existing CTA and  
4 assess its compliance with legal requirements applicable to sewer utility CTA expansion  
5 requests -- I.C. § 8-1-2-89 and 170 I.A.C. § 8.5-3-1. Finally, I will recommend approving  
6 Western Hancock's CTA expansion request based upon Public need and Petitioner's ability to  
7 fulfill that need.

## II. PETITIONER'S CHARACTERISTICS AND WASTEWATER FACILITIES

8 **Q: What relationship does Western Hancock Utilities, LLC ("Western Hancock") have**  
9 **with Aqua America, Inc. ("Aqua America") and Aqua Indiana, Inc. ("Aqua Indiana")?**

10 A: Western Hancock is an indirect subsidiary of Aqua America and an affiliate of Aqua Indiana  
11 another indirect subsidiary of Aqua America. Aqua America is a publicly traded water and  
12 wastewater utility holding company with operating subsidiaries located in 8 different states:  
13 Indiana, Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, and Virginia.<sup>1</sup>  
14 Aqua Indiana and Western Hancock are both investor owned Indiana utilities subject to  
15 Commission regulation.

16 Aqua Indiana operates and maintains Western Hancock's sewage collection system,  
17 lift stations, and wastewater treatment plant with two staff operators and outside contractors.  
18 Aqua Indiana provides customer service and system management to Western Hancock. It also  
19 handles administrative matters, such as billing, with four additional staff.<sup>2</sup> Western Hancock  
20 opted out of Commission jurisdiction over rates, charges, and long-term financing authority

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<sup>1</sup> <https://www.aquaamerica.com/our-states/our-states-overview.aspx>.

<sup>2</sup> Direct Testimony of Thomas M. Bruns, p. 5.

1 in 1997, but otherwise remains subject to Commission regulation as a public utility under I.C.  
2 Ch. 8-1-2.<sup>3</sup>

3 **Q: Please describe Western Hancock's current customer base.**

4 A: Western Hancock provides wastewater service to 812 residential and 72 commercial  
5 customers located in Buck Creek and Vernon Townships in northwestern Hancock County.  
6 It also serves a significant industrial discharger, Vivolac Cultures Corporation. (A township  
7 map is included as "Attachment JTP-1".)

8 **Q: What facilities are included in Western Hancock's wastewater collection system?**

9 A: The collection system is comprised of 100% separate sanitary sewers by design, with no  
10 overflow or bypass points. Petitioner reports that it owns 24.1 miles of gravity sewers and  
11 force mains and four lift stations used to convey sanitary sewage to Western Hancock's  
12 wastewater treatment plant ("WWTP").<sup>4</sup>

13 **Q: Please briefly describe Western Hancock's WWTP.**

14 A: According to its National Pollutant Discharge Elimination System ("NPDES") permit,  
15 Petitioner operates a Class II, 0.51 million gallons per day ("MGD") extended aeration  
16 WWTP discharging into Buck Creek.<sup>5</sup> The WWTP is located at 3750 North County Road  
17 450 West, Greenfield, Indiana, southeast of the Indianapolis Regional Airport (also known as  
18 the Mount Comfort Airport) and north of Interstate 70. (Attachment JTP-2 provides an aerial  
19 view of Western Hancock's WWTP.) The original 100,000 gallons per day ("gpd") package

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<sup>3</sup> Verified Petition, Cause No. 44954, p. 2.

<sup>4</sup> Direct Testimony of Thomas M. Bruns, p. 4.

<sup>5</sup> Petitioner's NPDES Permit No. IN0059013 expires on January 31, 2022. The Western Hancock WWTP includes a fine screen, oxidation ditch, chemical addition system for phosphorus, two 40-foot diameter clarifiers, ultraviolet light disinfection, an effluent flow meter, and stair-step post aeration. Waste sludge is aerobically digested, followed by sludge drying prior to hauling off-site for ultimate disposal.

1 plant was replaced in 2001-2002 with the current extended aeration plant (originally rated at  
2 0.35 MGD). In 2017, Petitioner upgraded and rerated its WWTP to treat 0.51 MGD.

3 **Q: Does Western Hancock's WWTP have available hydraulic capacity to receive additional**  
4 **wastewater?**

5 A: Yes. Testimony filed on behalf of Western Hancock indicates that the current hydraulic  
6 demand on Western Hancock's facility is 0.350 MGD, or 68% of its capacity.<sup>6</sup> Based on my  
7 review of Monthly Reports of Operation ("MROs"), Western Hancock's WWTP has adequate  
8 daily average and peak hourly hydraulic capacity to accept and treat additional sewage.  
9 However, I did not review Western Hancock's sewer collection system to determine its  
10 limitations or its available hydraulic capacities.

11 I reviewed Petitioner's January 2015 to March 2017 MROs to calculate average daily  
12 flow, peak daily flow, and average daily pollutant loadings.<sup>7</sup> The Western Hancock WWTP  
13 treated a slightly higher average daily flow of 0.38 MGD or 109% of its previous design flow  
14 and 74% of its current permitted (2017) 0.51 MGD design average flow. Petitioner's WWTP  
15 exceeded its hydraulic design capacity (prior to the 2017 WWTP upgrade) in 18 of the 24  
16 months between January 2015 and March 2017, but met its discharge limits in spite of higher  
17 flows. Table 1, below, compares Western Hancock's 2015-2017 flows and pollutant loadings  
18 to its 2017 design basis.

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<sup>6</sup> Direct Testimony of Thomas M. Bruns, page 4. Hydraulic capacity utilization was calculated as 0.350 MGD average flow divided by 0.51 MGD design (2017) average flow, for a hydraulic capacity utilization rate of 68%.

<sup>7</sup> Based on 24 months of Western Hancock WWTP data. The following MROs were missing from IDEM's on-line records: April 2015 and July and November 2016.

**Table 1 – Western Hancock Utilities, LLC Wastewater – January 2015 – March 2017 Flow and Pollutant Loads Compared to Design Basis**

Flow / Pollutant <sup>8</sup>	Design Basis		2015-17 Average	2015-17 Peak	% of 2017 Capacity
	2001	2017			
Average Flow (MGD)	0.35	0.51	0.38	NA	74%
Peak Flow (MGD)	1.0	1.63	NA	0.736	45%
cBOD <sub>5</sub> (lbs./day)	584	1,339	855	NA	64%
TSS (lbs./day)	584	1,065	536	NA.	50%
NH <sub>3</sub> -N (lbs./day)	73	128	82	NA	64%

**Q: Why did Petitioner recently upgrade its wastewater treatment plant?**

A: In response to treatment plant flows consistently above its design flows and an IDEM Sewer Ban Early Notification<sup>9</sup>, Petitioner proposed upgrading its WWTP and convinced IDEM's Construction Permits Section to rerate the treatment plant capacity for higher flows and loadings without requiring additional oxidation ditches or final clarifiers.

The IDEM Construction permit issued to Western Hancock allowed the utility to upgrade and rerate the existing treatment plant from a Class II, 0.35 MGD facility to a Class II, 0.51 MGD facility.<sup>10</sup> The design peak hourly flow was raised from 1.0 MGD to 1.63 MGD. (Attachment JTP-4 contains the upgraded WWTP Design Summary.) Petitioner reported to IDEM that it would complete the WWTP upgrade on April 15, 2017.<sup>11</sup>

<sup>8</sup> The acronym "cBOD<sub>5</sub>" stands for the 5-day carbonaceous Biochemical Oxygen Demand, a measure of dissolved oxygen depletion by biological organisms in water in which the contribution from nitrogenous bacteria has been suppressed. "TSS" stands for Total Suspended Solids and "NH<sub>3</sub>-N" stands for ammonia nitrogen.

<sup>9</sup> See Attachment JTP-3 for correspondence on the Sewer Ban Early Warning received on July 22, 2015.

<sup>10</sup> Construction Permit No. 21791, dated May 5, 2016. The WWTP project replaced pumps and upgraded oxidation ditch components, the ultraviolet light disinfection system, and sludge drying, and installed chemical addition phosphorus removal equipment even though IDEM did not impose a phosphorus limit. IDEM requires only phosphorus monitoring.

<sup>11</sup> Western Hancock Utilities WWTP, Notification of Expansion, Construction Permit 21791, dated March 8, 2017.

1 **Q: Is there enough available organic treatment capacity at the Western Hancock WWTP**  
2 **to serve additional customers?**

3 A: Yes, based on current conditions. Organic treatment capacity refers to how much pollutant  
4 load a WWTP is designed to remove. Petitioner did not state in its Verified Petition that it  
5 had enough available hydraulic and organic capacity to accept additional wastewater from the  
6 expanded CTA area. However, Thomas Bruns, in his Direct Testimony, testified that Western  
7 Hancock's current treatment plant has sufficient capacity. He also anticipates that growth  
8 within the expanded CTA over the next few years will necessitate expansion of its treatment  
9 facilities. My review of the 2015 through 2017 flow and pollutant data shows that the WWTP  
10 currently has available flow and organic treatment capacity. Table 1 (above) summarized the  
11 pollutant loadings showing that the WWTP is currently operating at 64% of its cBOD<sub>5</sub> design,  
12 50% of its TSS design, and 64% of its ammonia-nitrogen design load.

### **III. COMPLIANCE ASSESSMENT**

#### **A. Compliance with Indiana Code Requirements**

13 **Q: What Indiana Code requirements apply to Petitioner's request to expand its**  
14 **current sewer utility CTA?**

15 A: Indiana Code § 8-1-2-89 sets forth requirements for granting sewer utility CTAs for rural  
16 service areas. Western Hancock is a sewage disposal company under LC. § 8-1-2-89(a)(2).  
17 Before the Commission can grant a sewer utility's CTA or CTA expansion request, LC. § 8-  
18 1-2-89(e) requires the applicant to prove the following:

19 (1) Lawful power and authority to apply for said certificate and to operate said  
20 proposed service;

21 (2) Financial ability to install, commence, and maintain said proposed service;  
22 and

23 (3) Public convenience and necessity require the rendering of the proposed

1 service in the proposed rural area by this particular sewage disposal company.

2 If an applicant for certificated territory proves it meets the requirements in subsections IC 8-  
3 1-2-89(e) (1), (2), and (3), then the certificate of territorial authority "shall be granted to the  
4 applicant, subject to such terms, restrictions, limitations, and conditions, including but not  
5 limited to a reasonable time in which to commence operations, as the commission shall  
6 determine to be necessary and desirable in the public interest."

7 **Q: Does Petitioner have the legal authority to request an expansion of its existing CTA?**

8 A: Yes. Petitioner is a for-profit corporation created for the purpose of providing sewer utility  
9 service in portions of Hancock County. The Verified Petition indicates that Petitioner  
10 currently holds sewer utility CTAs initially transferred to it pursuant to the Commission's  
11 Order in Cause No. 40147 (1995). Petitioner indicated that these include CTAs previously  
12 granted by the Commission in Cause No. 39681 (1993) to Buck Creek Utilities, Inc., and in  
13 Cause No. 40376 (1996) to Western Hancock. Petitioner's current CTA encompasses 8,860  
14 acres of the 23,053 total acres in Buck Creek Township in Hancock County. The Proposed  
15 CTA Area, including the three expansion areas contiguous to the current CTA, will total  
16 approximately 14,100 acres.<sup>12</sup> The majority of the expansion will be in Buck Creek  
17 Township, but will also include acreage in Vernon Township.

18 **Q: Has Petitioner supported its contention that it has the financial ability to install,**  
19 **commence, and maintain the proposed sewer utility service?**

20 A: Yes. The Verified Petition asserts, that Western Hancock has the financial ability to provide  
21 the proposed sewer utility service. Petitioner provided Aqua America's 2016 Annual Report  
22 to support that financial claim. The OUCC does not contest Mr. Bruns' assertion that

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<sup>12</sup> Verified Petition, Cause No. 44954, p. 2.



Petitioner has the financial ability to provide sewer utility service in the proposed CTA expansion area. Petitioner has been operating its facility for over 20 years, it funded the WWTP replacement in 2001-2002, and funded the WWTP upgrade in 2017, Petitioner has also maintain its existing infrastructure, including sewer lines, manholes and lift stations.

**Q: Does public convenience and necessity require Petitioner to render sewer utility service in the expanded CTA service areas?**

A: Yes.

**B. Compliance with Indiana Administrative Code Requirements**

**Q: Has Petitioner complied with all applicable Indiana Administrative Code requirements for sewer CTA expansions, as found in 170 I.A.C. § 8.5-3-1, *et seq.* -- specifically, Subsection (2), Parts (A) through (H)?**

A: No. However, the OUCC recognizes that some of the requirements are not applicable under the facts of this case. The Indiana Administrative Code requirements are listed below in ***bold italics***, followed by a discussion of evidence Petitioner offered to demonstrate compliance with each requirement.

**Subsection (2)(A):**

***A legal description of the area to be served.***

A legal description of the proposed expansion area is found in “Exhibit I” in the Direct Testimony of Thomas M. Bruns. “Exhibit N” provides the legal description for the resulting CTA areas. Therefore, this requirement has been satisfied.

**Subsection (2)(B):**

***A letter of approval from the:***

***(i) Indiana Department of Environmental Management; or***

***(ii) State Department of Health.***

Petitioner did not submit approval letters from either of the above agencies to support its CTA expansion request. Since Petitioner has sufficient treatment capacity, it is not proposing to extend its collection system or expand its treatment facilities at this time. Therefore, no IDEM or ISDH approval letters are required at this time.

**Subsection (2)(C):**

***Documents to support approvals that have been obtained from the Indiana Department of Natural Resources ("DNR"), if necessary.***

Petitioner did not provide documentation of an approval from DNR. However, a DNR permit will only be necessary if future construction will take place in a floodway or within a mile of a freshwater lake of ten (10) acres or more. Since no additional construction is planned at this time, no DNR permit is needed at this time.

**Subsection (2)(D):**

***Plans and specifications of treatment plant and sanitary sewers.***

Western Hancock did not submit plans and specifications for its WWTP with its Verified Petition. However, since Petitioner recently upgraded its WWTP and does not expect additional plant expansion will be needed in the near future, this requirement is not applicable.

**Subsection (2)(E):**

***Area maps as outlined in the instructions of section 2 of this rule.***

Petitioner included a base map in its Exhibit H adequately depicting its existing CTA and a map in Exhibit M showing the existing CTA and the three proposed expansion areas. However, labeling of roads, streams, township lines, *etc.*, is limited by the 1-inch per mile mapping scale in the Commission's administrative rules. Therefore, the OUCC recommends that the Commission find that Petitioner has substantially complied with this mapping

1 requirement.

2 **Subsection (2)(F):**

3 ***A letter of acknowledgement from the owner-operator of any sanitary***  
4 ***system within five (5) miles of the company's system that he or she is familiar***  
5 ***with the company's interest to apply for a CTA, which should be submitted***  
6 ***together with the signed receipts, as well as any other correspondence from the***  
7 ***owner-operator relating to the proposal.***

8 Western Hancock's evidence included copies of certified letters that it mailed to all other  
9 wastewater utilities and municipalities located within five (5) miles of the proposed CTA  
10 expansion areas to notify them of the initiation of this proceeding and the relief requested.<sup>13</sup>

11 Petitioner included signed receipts for the certified letters but did not receive any written  
12 letters of acknowledgement to submit along with the signed certified mail delivery receipts.

13 Petitioner sent letters to the following entities by certified mail, return receipt requested:

- 14 1. Hancock County Regional Water & Sewer District;
- 15 2. Hancock Rural Telephone Corporation d/b/a NineStar Connect;
- 16 3. CWA Authority, Inc.;
- 17 4. Town of Fortville;
- 18 5. City of Greenfield;
- 19 6. City of Lawrence;
- 20 7. Town of McCordsville; and
- 21 8. Town of Cumberland.

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<sup>13</sup> See Attachment J, Direct Testimony of Thomas M. Bruns.

Petitioner sent notice to NineStar Connect since the requested CTA expansion area reflects, in part, a boundary agreement entered into between Western Hancock and NineStar Connect, which was part of a settlement approved by the Commission in its August 24, 2016 Order in Cause No. 44776. The OUCC considers confirmed service by certified mail (as evidenced by the signed return receipts confirming document delivery, copies of which were included in its case-in-chief) sufficient to establish compliance with this requirement. If Western Hancock had received separate acknowledgement letters from any of the above entities, it would have included copies of such correspondence in its case-in-chief; but no separate acknowledgement letters were received.

1        **Subsection (2)(G):**

2                ***A statement of cost of the construction of the sewage disposal plant, including***  
3                ***and separately as to the following:***

4                ***(i) The treatment plant;***

5                ***(ii) The collection system; and***

6                ***(iii) The pumping plant.***

7        Petitioner did not indicate whether it has plans to construct additional treatment plant facilities  
8        in the near term. However, based on my review of the WWTP capacity, it appears the  
9        proposed CTA expansion areas will require additional investment when new development  
10       begins. Additional facilities Western Hancock will need to serve those areas include:  
11       collection sewers, force mains, pumping facilities, wastewater treatment facilities, and sludge  
12       processing and storage facilities.

1           **Subsection (2) (H):**

2           *As deemed appropriate by the administrative law judge, a*  
3           *personal guarantee and personal financial statement as described in subdivision*  
4           *(1)(D).*

5           Western Hancock is an indirect subsidiary of Aqua America. Petitioner provided copies of  
6           Aqua America's 2016 Annual Report to support its claim of financial capability to provide  
7           sewer utility service in the CTA expansion areas. Based on that evidence, the OUCC  
8           recommends that a personal guarantee or personal financial statement is not necessary in this  
9           case.

**IV. RECOMMENDATIONS**

10   **Q:   What Commission action does the OUCC recommend?**

11   A:   Petitioner's CTA request should be approved. The OUCC recommends the Commission  
12       find that Western Hancock has the legal authority and financial ability to serve the  
13       proposed area and that public convenience and necessity require the rendering of such  
14       service by Western Hancock.

15   **Q:   Does this conclude your testimony?**

16   A:   Yes.

**Appendix A**

1   **Q:   Please describe your educational background and experience.**

2           A:    In 1980 I graduated from Purdue University, where I received a Bachelor of  
3           Science degree in Civil Engineering, having specialized in Environmental Engineering. I then  
4           worked with the Peace Corps for two years in Honduras as a municipal engineer and as a  
5           Project Engineer on self-help rural water supply and sanitation projects funded by the U.S.  
6           Agency for International Development (U.S. AID). In 1984 I earned a Master of Science  
7           degree in Civil Engineering and Environmental Engineering from Purdue University. I have  
8           been a Registered Professional Engineer in the State of Indiana since 1986. I accepted an  
9           engineering position with Purdue University in 1984, and was assigned to work as a process  
10          engineer with the Indianapolis Department of Public Works ("DPW") at the City's Advanced  
11          Wastewater Treatment Plants. I left Purdue and subsequently worked for engineering  
12          consulting firms, first as a Project Engineer for Process Engineering Group of Indianapolis  
13          and then as a Project Manager for the consulting firm HNTB in Indianapolis. In 1999, I  
14          returned to the Indianapolis DPW as a project engineer working on planning projects,  
15          permitting, compliance monitoring, wastewater treatment plant upgrades, and combined  
16          sewer overflow control projects.

17   **Q:   Have you previously testified before the Indiana Utility Regulatory Commission?**

18   A:    Yes.

**Appendix B - List of Attachments**

Attachment JTP-1	Township Map
Attachment JTP-2	Western Hancock WWTP Aerial Photos
Attachment JTP-3	Sewer Ban Early Warning Correspondence
Attachment JTP-4	Western Hancock WWTP Design Summary (2007 WWTP Upgrade Project)

**Cause No. 44954**  
**Attachment JTP-1**  
**Page 1 of 1**







**Figure 1** – Aerial photo showing the WHU WWTP location SE of the Mount Comfort Airport.



**Figure 2** – Aerial photo showing a close-up view of the WHU WWTP.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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Michael R. Pence

*Governor*

Thomas W. Easterly

*Commissioner*

Via Email to: [tmbruns@aquaamerica.com](mailto:tmbruns@aquaamerica.com)  
Mr. Thomas Bruns, President  
Western Hancock Utilities  
5750 Castle Creek Pkwy N. Dr, Ste. 314  
Indianapolis, IN 46250

July 22, 2015

Dear Mr. Bruns:

Re: Sewer Ban Early Warning  
Western Hancock Utilities  
NPDES IN0059013  
Hancock County

This letter serves as notice that pursuant to administrative rule 327 Indiana Administrative Code (IAC) 4-1-3, a Sewer Ban Early Warning notice is being given to Western Hancock Utilities. Rule 327 IAC 4-1-3 states that when a wastewater treatment plant has reached or is approaching 90% of its hydraulic or organic design capacity, the Commissioner (or the Commissioner's delegate) shall notify it that the imposition of a Sewer Connection Ban may be necessary.

The Office of Water Quality has evaluated Western Hancock's discharge records for the past three years and finds that a chronic hydraulic overload condition exists. This determination is based on a review of the reported effluent flow for the annual periods of 2012, 2013, and 2014 which shows that the annual average rate of discharge for these years was 97%, 110% and 107% respectively, based on the design flow of 0.35 mgd. Additionally, there were 2 bypass/overflow events reported during 2012, which represent wastewater flows not included in the above totals.

We view the early warning notification process as a service to local government officials. The early warning notification is intended to alert the owners and operators of wastewater treatment systems to potential problems, and initiate a process for evaluation of existing conditions, plan for future solutions, and arrange for funding in case capital improvements are required.

One impact of the early warning notification is that if additional connections to the Western Hancock Utilities' wastewater collection and treatment system are requested that would require a construction permit, they will be subject to close scrutiny by this department. The approval of any future connections would have to be evaluated for the possibility of significant additional load to the wastewater treatment plant or contribution to bypassing or the discharge of insufficiently treated sewage.



*A State that Works*

Furthermore, the rule which governs the overload condition of wastewater treatment facilities also contains a provision for the imposition of a ban on future wastewater connections. A sewer connection ban may be imposed if the excessive hydraulic and/or organic loading to the wastewater treatment plant continues, or the addition of wastewater from new sources is likely to result in the bypassing or the discharge of insufficiently treated sewage. An excerpt from 327 IAC 4 is included for your reference.

Within 30 days of receipt of this letter, a written detailed response describing a plan for resolving this hydraulic loading issue must be submitted to this office. Failure to respond with an adequate plan may result in the escalation to a Sewer Connection Ban pursuant to 327 IAC 4-1-4. Please direct your written response to Kim Rohr at:

Indiana Department of Environmental Management  
Office of Water Quality; Mail Code 65-42  
100 N. Senate Avenue  
Indianapolis, IN 46204-2251.

If you have any questions, please do not hesitate to contact Kim Rohr at 317-719-1666 or KRohr@idem.IN.gov.

Sincerely,

A handwritten signature in black ink, reading "Bridget S. Murphy". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Bridget S. Murphy, Chief  
Wastewater Inspection Section  
Compliance Branch  
Office of Water Quality

Attachment

The following is an excerpt from 327 IAC 4, which applies to this correspondence:

**327 IAC 4-1-1 Purpose**

This article is promulgated in order to prevent the excessive hydraulic or organic, or both, overloading of POTWs or semipublic facilities resulting in the subsequent discharge or bypassing of insufficiently treated wastewater due to:

- (1) new sewer connections to; or
  - (2) poor operation and maintenance of;
- the facilities.

**327 IAC 4-1-3 Early warning system**

Whenever, in the determination of the commissioner, a semipublic facility or POTW has reached or is approaching ninety percent (90%) of its hydraulic or organic design capacity, the commissioner shall notify the semipublic facility or POTW that it may be necessary, because of such condition, to impose a sewer connection ban if action is not taken by the semipublic facility or POTW to accommodate additional flow or loading. The notification shall be:

- (1) by certified mail, return receipt requested; and
  - (2) directed to the:
    - (A) principal executive officer;
    - (B) ranking elected official; or
    - (C) authorized agent;
- of the semipublic facility or POTW.

Failure of the commissioner to provide the notification to the semipublic facility or POTW shall not preclude the imposition of a sewer connection ban as authorized by this article.

**327 IAC 4-1-4 Imposition of sewer connection bans**

- (a) The commissioner may impose a ban on further sewer connections to the semipublic facility or POTW whenever, in the determination of the commissioner:
  - (1) hydraulic or organic overloading of a semipublic facility or POTW exists or is impending and the introduction into the semipublic facility or POTW of additional wastewater from new or existing sources is likely to result in the discharge or bypassing of insufficiently treated wastewater; or
  - (2) poor operation and maintenance practices have, or are likely to, result in the discharge or bypassing of insufficiently treated wastewater.
- (b) The sewer connection ban shall prohibit the connection or introduction of additional wastewater into the semipublic facility or POTW, except as otherwise provided under this article.

**327 IAC 4-1-5 Notification of imposition of sewer connection ban**

- (a) Whenever the commissioner has determined to impose a ban on further sewer connections to a POTW, the commissioner shall notify the principal executive officer, the ranking elected official, or the authorized agent or representative of the POTW of such determination by certified mail, return receipt requested.
- (b) Whenever the commissioner has determined to impose a ban on further sewer connections to a semipublic facility, the commissioner shall notify the owner, chief executive officer, or authorized agent or representative of the semipublic facility of such determination by certified mail, return receipt requested.

**327 IAC 4-1-6 Grounds and procedures for obtaining waivers of sewer connection bans**

- (a) Requests for connections from new or existing sources to a semipublic facility or POTW where a sewer connection ban is in effect may be approved if it is determined by the commissioner that any of the following conditions exist:
  - (1) The:
    - (A) connection will eliminate an existing health hazard; and
    - (B) resulting public health benefit is considered to outweigh the adverse impact of any reduction in the effluent quality

from the semipublic facility or POTW.

- (2) A semipublic facility or POTW expansion project:
  - (A) is under construction; and
  - (B) will be completed in such time as to accommodate the new connections.
- (3) An equivalent amount of infiltration or wastewater is removed from the system, thus assuring that the additional wastewater will receive treatment.
- (4) The commissioner is assured that additional water pollution treatment/control facilities, such as chemical feed equipment, will be provided such that the effluent from the semipublic facility or POTW will not deteriorate beyond its present quality.
- (5) Other assurances are provided that the additional wastewater to be discharged into the semipublic facility or POTW shall receive adequate treatment.

(b) Requests by POTWs for the waiver of a sewer connection ban for new or existing sources should be submitted by the principal executive officer or ranking elected official of the POTW to the commissioner. Requests by semipublic facilities for the waiver of a sewer connection ban for new or existing sources should be submitted by the owner, chief executive officer, or authorized agent or representative of the semipublic facility to the commissioner. The request for waiver of a sewer ban should contain, at a minimum, the projected:

- (1) flow and pollutant loadings from the proposed connection or connections; and
- (2) impact upon the semipublic facility or POTW.

#### **327 IAC 4-1-7 Grounds for termination of sewer connection ban**

A sewer connection ban may be terminated by the commissioner when either of the following exist:

- (1) A demonstrated wastewater treatment facility improvement to meet applicable NPDES permit limitations has been completed.
- (2) It is demonstrated to the satisfaction of the commissioner that an existing hydraulic/organic overloaded condition has been or will be discontinued for a continuous period of twelve (12) months from the date additional connections will be made.

#### **327 IAC 4-1-8 Exclusions from sewer connection bans**

The following shall be excluded from the requirements of sewer connection bans:

- (1) Single-family dwellings erected on vacant lots served by an existing sanitary sewer.
- (2) Projects that possess a valid construction permit issued under 327 IAC 3-2 prior to the imposition of a sewer connection ban.





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Michael R. Pence

*Governor*

Carol S. Comer

*Commissioner*

October 11, 2016

Via Email To: [tmbruns@aquaamerica.com](mailto:tmbruns@aquaamerica.com)

Mr. Thomas Bruns, President

Western Hancock Utilities

5750 Castle Creek Pkwy N. Dr. Ste. 314

Indianapolis, Indiana 46250

Dear Mr. Bruns:

Re: Status Reminder  
Sewer Ban Early Warning  
Western Hancock Utilities  
NPDES IN0059013  
Hancock County

This letter serves as a reminder that pursuant to administrative rule 327 Indiana Administrative Code (IAC) 4-1-3, a Sewer Ban Early Warning notice was given to Western Hancock Utilities on July 22, 2015. Rule 327 IAC 4-1-3 states that when a wastewater treatment plant has reached or is approaching 90% of its hydraulic or organic design capacity, the Commissioner (or the Commissioner's delegate) shall notify it that the imposition of a Sewer Connection Ban may be necessary.

The Office of Water Quality has evaluated the Western Hancock Utilities' discharge records for the past three years and finds that the chronic hydraulic overload condition that existed when the Sewer Ban Early Warning was issued still exists. This determination is based on a review of the reported effluent flow for the annual periods of 2013, 2014 and 2015 which shows that the annual average rate of discharge for these years was 110%, 107% and 107% respectively, based on the design flow of 0.350 MGD.

We view the early warning notification process as a service to local government officials. The early warning notification is intended to alert the owners and operators of wastewater treatment systems to potential problems, and initiate a process for evaluation of existing conditions, plan for future solutions, and arranging for funding in case capital improvements are required.

One impact of the early warning notification is that if additional connections to the wastewater collection and treatment system are requested that would require a construction permit, they will be subject to close scrutiny by this department. The approval of any future connections would have to be evaluated for the possibility of



*A State that Works*

significant additional load to the wastewater treatment plant or contribution to bypassing or the discharge of insufficiently treated sewage.

Furthermore, the rule which governs the overload condition of wastewater treatment facilities also contains a provision for the imposition of a ban on future wastewater connections. A sewer connection ban may be imposed if the excessive hydraulic and/or organic loading to the wastewater treatment plant continues, or the addition of wastewater from new sources is likely to result in the bypassing or the discharge of insufficiently treated sewage. Although a sewer connection ban is not being issued at this time, your flow records indicate that your community could qualify for such at this time. An excerpt from 327 IAC 4 is included for your reference.

Within 30 days of receipt of this letter, we are requesting that a written detailed response describing a plan for resolving this hydraulic loading issue be submitted to this office. Failure to respond with an adequate plan may result in the escalation to a Sewer Connection Ban pursuant to 327 IAC 4-1-4. Please direct your written response to Kim Rohr at:

Indiana Department of Environmental Management  
Office of Water Quality; Mail Code 65-42  
100 N. Senate Avenue  
Indianapolis, IN 46204-2251.

If you have any questions, please do not hesitate to contact Kim Rohr 317-719-1666 or KRohr@idem.IN.gov.

Sincerely,

A handwritten signature in black ink that reads "Bridget S. Murphy". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Bridget S. Murphy, Chief  
Wastewater Inspections Section  
Compliance Branch  
Office of Water Quality

Attachment

The following is an excerpt from 327 IAC 4, which applies to this correspondence:

**327 IAC 4-1-1 Purpose**

This article is promulgated in order to prevent the excessive hydraulic or organic, or both, overloading of POTWs or semipublic facilities resulting in the subsequent discharge or bypassing of insufficiently treated wastewater due to:

- (1) new sewer connections to; or
  - (2) poor operation and maintenance of;
- the facilities.

**327 IAC 4-1-3 Early warning system**

Whenever, in the determination of the commissioner, a semipublic facility or POTW has reached or is approaching ninety percent (90%) of its hydraulic or organic design capacity, the commissioner shall notify the semipublic facility or POTW that it may be necessary, because of such condition, to impose a sewer connection ban if action is not taken by the semipublic facility or POTW to accommodate additional flow or loading. The notification shall be:

- (1) by certified mail, return receipt requested; and
- (2) directed to the:
  - (A) principal executive officer;
  - (B) ranking elected official; or
  - (C) authorized agent;of the semipublic facility or POTW.

Failure of the commissioner to provide the notification to the semipublic facility or POTW shall not preclude the imposition of a sewer connection ban as authorized by this article.

**327 IAC 4-1-4 Imposition of sewer connection bans**

- (a) The commissioner may impose a ban on further sewer connections to the semipublic facility or POTW whenever, in the determination of the commissioner:
  - (1) hydraulic or organic overloading of a semipublic facility or POTW exists or is impending and the introduction into the semipublic facility or POTW of additional wastewater from new or existing sources is likely to result in the discharge or bypassing of insufficiently treated wastewater; or
  - (2) poor operation and maintenance practices have, or are likely to, result in the discharge or bypassing of insufficiently treated wastewater.
- (b) The sewer connection ban shall prohibit the connection or introduction of additional wastewater into the semipublic facility or POTW, except as otherwise provided under this article.

**327 IAC 4-1-5 Notification of imposition of sewer connection ban**

- (a) Whenever the commissioner has determined to impose a ban on further sewer connections to a POTW, the commissioner shall notify the principal executive officer, the ranking elected official, or the authorized agent or representative of the POTW of such determination by certified mail, return receipt requested.
- (b) Whenever the commissioner has determined to impose a ban on further sewer connections to a semipublic facility, the commissioner shall notify the owner, chief executive officer, or authorized agent or representative of the semipublic facility of such determination by certified mail, return receipt requested.

**327 IAC 4-1-6 Grounds and procedures for obtaining waivers of sewer connection bans**

- (a) Requests for connections from new or existing sources to a semipublic facility or POTW where a sewer connection ban is in effect may be approved if it is determined by the commissioner that any of the following conditions exist:
  - (1) The:
    - (A) connection will eliminate an existing health hazard; and
    - (B) resulting public health benefit is considered to outweigh the adverse impact of any reduction in the effluent quality



from the semipublic facility or POTW.

- (2) A semipublic facility or POTW expansion project:
  - (A) is under construction; and
  - (B) will be completed in such time as to accommodate the new connections.
- (3) An equivalent amount of infiltration or wastewater is removed from the system, thus assuring that the additional wastewater will receive treatment.
- (4) The commissioner is assured that additional water pollution treatment/control facilities, such as chemical feed equipment, will be provided such that the effluent from the semipublic facility or POTW will not deteriorate beyond its present quality.
- (5) Other assurances are provided that the additional wastewater to be discharged into the semipublic facility or POTW shall receive adequate treatment.

(b) Requests by POTWs for the waiver of a sewer connection ban for new or existing sources should be submitted by the principal executive officer or ranking elected official of the POTW to the commissioner. Requests by semipublic facilities for the waiver of a sewer connection ban for new or existing sources should be submitted by the owner, chief executive officer, or authorized agent or representative of the semipublic facility to the commissioner. The request for waiver of a sewer ban should contain, at a minimum, the projected:

- (1) flow and pollutant loadings from the proposed connection or connections; and
- (2) impact upon the semipublic facility or POTW.

#### **327 IAC 4-1-7 Grounds for termination of sewer connection ban**

A sewer connection ban may be terminated by the commissioner when either of the following exist:

- (1) A demonstrated wastewater treatment facility improvement to meet applicable NPDES permit limitations has been completed.
- (2) It is demonstrated to the satisfaction of the commissioner that an existing hydraulic/organic overloaded condition has been or will be discontinued for a continuous period of twelve (12) months from the date additional connections will be made.

#### **327 IAC 4-1-8 Exclusions from sewer connection bans**

The following shall be excluded from the requirements of sewer connection bans:

- (1) Single-family dwellings erected on vacant lots served by an existing sanitary sewer.
- (2) Projects that possess a valid construction permit issued under 327 IAC 3-2 prior to the imposition of a sewer connection ban.

bcc: Don Worley, OWQ Facilities Construction  
Andy Schmidt, Inspector  
Kim Rohr, Sewer Ban Coordinator  
VFC



October 28, 2016

Transmitted via email to: KRohr@idem.IN.gov

Kim Rohr  
Indiana Department of Environmental Management  
Office of Water Quality; Mail Code 65-42  
100 N. Senate Avenue  
Indianapolis, IN 46204-2251

RE: Status Reminder  
Sewer Ban Early Warning  
Western Hancock Utilities  
NPDES IN0059013  
Hancock County

Dear Ms. Rohr:

I am pleased to respond to your letter dated October 11, 2016 regarding Aqua's Western Hancock Utilities system in Hancock County, Indiana. We have currently begun construction to increase the hydraulic design flow of the plant from the current 0.350 MGD to 0.510 MGD. Indiana Department of Environmental Management (IDEM) issued a construction permit approval No. 21791 on May 5<sup>th</sup>, 2016 for said expansion project. The following is a list of items, with dates, detailing the schedule of events for the wastewater treatment plant expansion:

1. May 2016 – IDEM construction permit issued
2. July 2016 – Bids received by Aqua Indiana for construction of expansion.
3. August 2016 – Project awarded to Kokosing Industrial.
4. September 2016 – Notice to proceed and start of construction for the expansion.
5. March 2017 – Construction scheduled to be substantially complete and the new 0.510 MGD design flow rating in effect.

If you have any questions or need any further information, please feel free to contact me by phone at 317-716-6026 or by email at [kftansy@aquaaamerica.com](mailto:kftansy@aquaaamerica.com).

Sincerely,

A handwritten signature in cursive script that reads "Kieran Tansy".

Kieran Tansy  
Area Manager

cc: Thomas M. Bruns, President, Aqua Indiana  
Jim Shields, PE – Aqua Indiana State Engineer



IN0059013  
Hancock Co

March 8, 2017

Indiana Department of Environmental Management  
Office of Water Quality – Mail Code 65-42  
Compliance Data Section  
100 N. Senate Avenue  
Indianapolis, Indiana 46204-2251

RE: Western Hancock Utilities WWTP, Notification of Expansion, Construction Approval No. 21791.

To Whom It May Concern:

As detailed in the IDEM Construction Permit referenced above, the ongoing expansion of the wastewater treatment plant from 0.350 MGD to 0.510 MGD is nearly complete. As required in the NPDES Permit No. IN0059013, the expected facility construction completion date is April 15, 2017.

If you have any questions or need any further information, please feel free to contact me by email at [KFTansy@aquaamerica.com](mailto:KFTansy@aquaamerica.com) or by phone at (317) 716-6026.

Sincerely,

A handwritten signature in black ink that reads "Kieran Tansy".

Kieran Tansy  
Area Manager

cc: Tom Bruns, President, Aqua Indiana, Inc.

2017 MAR -9 A 10:37

OFFICE OF  
WATER QUALITY

Wastewater Treatment Facility  
Design Summary

I. GENERAL

1. Applicant: Aqua Indiana, Inc.
2. Project Name and Location: Western Hancock Utilities WWTP Expansion
3. Project Number: PS-1518
4. Engineer (Consultant): Whitaker Engineering
5. NPDES Permit Number: IN0059013
  - A. Date of Final Permit Issuance: September 1, 2011
  - B. Expiration Date: January 31, 2017
6. Remarks:
  - A. Description of Present Situation: Aqua Indiana, Inc. currently operates a Class II, 0.35 MGD treatment plant consisting of a two-ring oxidation ditch, two circular secondary clarifiers, an ultraviolet (UV) disinfection system, and cascade post-aeration. The treatment plant has an effluent flow meter. Waste sludge is stored in an aerobic digester tank and sludge drying beds are used to dewater solids prior to disposal in a landfill.
  - B. Description of Proposed Facilities: The proposed project consists of an upgrade/expansion of the existing treatment plant to an average design flow of 0.51 MGD. The proposed project will include:
    - Construction of approximately 115 feet of 6-inch PVC RAS discharge piping, 740 feet of 8-inch PVC drying bed sludge draining piping (to influent pump station), and 40 feet of 12-inch influent station discharge force main (to screening unit).
    - Replacement of the existing influent pump station pumps with two (2) submersible pumps that will each have a capacity of 1,145 GPM at approximately 65 feet of total dynamic head (TDH).
    - The existing oxidation ditch will be upgraded to include new motorized flow control slide gate operator, new level sensor, and new motorized valve operator control.
    - The four (4) existing orbital ring aeration rotor shafts will be upgraded with a total of 24 new aeration discs (6 for each shaft) and one (1) temporary shaft will be left as a spare for parts replacement.
    - Replacement of the existing return sludge pumps with two (2) submersible pumps that will each have the capacity of 531 GPM at approximately 37 feet of total dynamic head (TDH).
    - The existing UV disinfection system will be upgraded with channel modifications and the installation of one (1) new UV disinfection module with a total capacity of 1.75 MGD.

- Construction of a serpentine UV weir with an overall length of 504 inches.
  - The existing garage will be upgraded into a phosphorous removal chemical building and two (2) 2,500 gallon double-walled storage tanks, two (2) 1.52 – 53.26 GPH peristaltic pumps, and one (1) combination safety shower eyewash unit will be installed..
  - The existing sludge drying beds will be upgraded with geotextile dewatering bags, a polymer mixing unit, and drainage nets.
7. Estimated Project Cost: \$1,200,000  
A. Source of Funding: private

## II. DESIGN DATA

1. Current Population: 5,408
2. Design P.E.: 7,886 (0.17 lb BOD/PE)
3. Average Design Flow: 0.51 MGD
  - A. Domestic: 0.20 MGD
  - B. Industrial/Commercial: 0.25 MGD
  - C. Infiltration/Inflow: 0.06 MGD
4. Peak Design Flow: 1.63 MGD
5. Maximum Plant Flow Capacity: 1.63 MGD
6. Design Waste Strength
  - A. CBOD: 315 mg/L (1,339 lb/day)
  - B. TSS: 250 mg/L (1,065 lb/day)
  - C. NH<sub>3</sub>-N: 30 mg/L (128 lb/day)
  - D. P: 6 mg/L (26 lb/day)
7. NPDES Permit Limitation on Effluent Quality:
  - A. CBOD: 15 mg/L summer, 25 mg/L winter (monthly average)
  - B. TSS: 18 mg/L summer, 30 mg/L winter (monthly average)
  - C. NH<sub>3</sub>-N: 1.4 mg/L summer, 1.9 mg/L winter (monthly average)
  - D. P: 1.0 mg/L summer and winter (monthly average)
  - E. E. Coli: 235 count/100 ml (daily max), 125 count/100 ml (monthly average)
  - F. Chlorine Residual: n/a (UV disinfection)
  - G. pH: 6.0 – 9.0 s.u.
  - H. D.O. (daily minimum): 6.0 mg/L summer, 5.0 mg/L winter
8. Receiving Stream:
  - A. Name: Buck Creek
  - B. Tributary to: Sugar Creek
  - C. Stream Uses: Aquatic, partial body contact, agricultural
  - D. 7-day, 1-in-10 year low flow: 0 cfs

### III. TREATMENT UNITS

#### Plant Site Lift Station (Existing, Upgrades)

1. Location: existing wet well, pumps will be replaced
2. Type of pump: non-clog submersible
3. Number of pumps: two (2)
4. Constant or variable speed: constant
5. Capacity of pumps: 1,145 gpm at 65 ft TDH, each
6. RPM: 1,145 RPM
7. Volume of the wet well: 1,765 gal
8. Detention time in the wet well: 7.21 min
9. A plug valve and a check valve in the discharge line: yes
10. A gate valve on suction line: n/a
11. Ventilation: yes, vent
12. Standby power: yes, generator
13. Alarm: yes
14. Breakwater tank: no
15. Bypass or overflow: no

#### Flow Meters (Existing)

1. Type: ultrasonic, v-notch, open channel
2. Location: downstream of UV channel
3. Indicating, recording, and totalizing: yes

#### Screens (Existing)

1. Type: Heliclean plus spiral screening unit/washer
2. Number and capacity: one (1) 1,800 gpm (2.592 MGD) with bar screen bypass
3. Method of cleaning: agitation wash cycle
4. Disposal of screenings: landfill

#### Oxidation Ditch (Existing, Upgrades)

1. Number and size of units: one (1) with two concentric rings. Inner ring volume 21,679 ft<sup>3</sup> (162,159 gal) and outer ring volume 41,002 ft<sup>3</sup> (306,695 gal).
2. Detention time (hrs): 22.1
3. Organic loading (lb BOD /1000 cf): 23.0
4. Type and efficiency of aeration equipment (lb O<sub>2</sub> /HP-hr): four (4) rotary shafts running at 55 rpm with 18 discs each will be upgraded to carry 24 discs each. Disc submergence varies between 9.5-17 inches via electrically actuated gate with level sensor. Efficiency is 3.01 lb O<sub>2</sub>/BHP-hr @ 17-inch submergence. Extra shaft with 18 discs will be left for parts replacement after upgrades are complete.
5. Oxygen required: 95 lbs/hr
6. Oxygen provided: 150 lbs/hr

7. Flow velocity in ditch: 1.5 to 3.0 ft/s
8. Number and capacity of return sludge pump: two (2) non-clog centrifugal pumps powered by 30 HP, 1750 rpm motor. Capacity of each pump is 531 gpm at 37 ft TDH.
9. Method of return sludge rate control: telescoping valve equipped with v-notched weir box
10. Return sludge rate as % of design flow: 150%
11. Provisions for return sludge metering: existing electromagnetic flow meter
12. Location of return sludge discharge: oxidation ditch
13. Facilities to isolate units: yes
14. Facilities for flow split control: yes

#### Secondary Clarifiers (Existing)

1. Type of clarifiers: circular, unitube sludge collector
2. Number and size of units: two(2) 40-ft diameter clarifiers with 12-ft SWD for a total of 30,159 ft<sup>3</sup> (225,591 gal)
3. Surface settling rate (gpd/sf):
  - a. At the design flow: 203 gpd/ft<sup>2</sup>
  - b. at peak design flow: 649 gpd/ft<sup>2</sup> @ 1.63 MGD
4. Detention time (hrs): 10.6 (design flow) and 3.3 (peak flow)
5. Type of sludge removal mechanism: mechanical header tube with suction sweep
6. Weir overflow rate: 6,486 gpd/ft
7. Disposal of scum: a rotating scum baffle pushes scum to a trough connected to piping, which is pumped to sludge holding via grinder pump
8. Facilities for unit isolation: yes
9. Facilities for flow split control: yes

#### Post-aeration (Existing)

1. Type of aeration: cascade aeration using concrete steps
2. Number of units: one (1)
3. Size of units: 16 ft long x 6 ft wide with 15 risers at 6-inches high
4. Aeration provided: 4.0 mg/L minimum
5. Expected effluent D.O.: 6.0 mg/L minimum

#### Phosphorus Removal Facilities (Proposed)

1. Type of chemical to be used: ferric chloride
2. Location of chemical injection: manhole 4, between oxidation ditch and clarifiers
3. Number and size of chemical feed pumps: two (2) pumps capable of pumping between 0.001 and 15.85 gal/hr
4. Size of chemical storage tank: two (2) double-walled 2,500 gal tanks
5. Capacity of spill storage space: double-walled tanks
6. Chemical dosage: 100 ppm of 37 - 43% ferric chloride
7. Daily chemical consumption expected: 50 gal/day
8. Rapid mix tank: mixing will occur in manhole 4



9. Slow mixing equipment: mixing will occur in manhole 4

#### UV Disinfection (Existing, Upgrades)

1. Type: open channel, gravity flow, low pressure high intensity ultraviolet lamps  
(TrojanUV200 Plus Module, Reduction Baffle, & Level Control)
2. Location: between clarifier effluent and cascade aeration
3. Size of channel: 10.5 ft long x 16 in wide x 28 in high
4. Contact time: 4.43 sec
5. Dosage: 36.66 mJ/cm<sup>2</sup>
6. Bypass: none
7. Safety equipment: yes
8. Cleaning equipment: yes, automatic wiping system
9. Intensity monitoring: yes, sensor

#### Aerobic Digesters (Existing)

1. Number and size of units: one (1) 45-ft diameter tank with 18 ft SWD (total volume of 214,027 gal)
2. Detention Time: 60 days
3. Organic loading: 315 lb/day
4. Air supply: 30 HP aspirating aerator providing 58 lb O<sub>2</sub>/hr
5. Decanting method: telescoping valve

#### Sludge Drying Beds (Existing, Upgrades)

1. Number and size of drying bed: four (4) 65 ft long x 20 ft wide beds
2. Filter area per capita: n/a (geobags are used for dewatering)
3. Under-drain system: yes, perforated pipe
4. Discharge location of filtrate: influent lift station
5. Accessibility of dry sludge removal equipment: yes
6. Type of polymer: cationic flocculent
7. Polymer dose: 150 - 300ppm
6. Percent Solids: varies but greater than 10% expected

#### Sludge Disposal

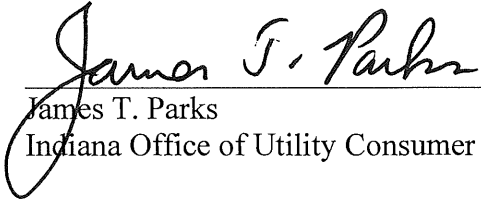
1. Ultimate disposal method of sludge: landfill
2. Expected solids content of sludge (by the principal method of disposal): 10 - 20%
3. Location of disposal site: Southside landfill
4. Ownership of the disposal site: Southside landfill
5. Availability of sludge transport equipment: Bestway of Indiana

V. MISCELLANEOUS

- A. Laboratory equipment: Contract lab
- B. Safety equipment: contract operations
- C. Plant site fence: yes
- D. Handrail for the tanks: yes
- E. Units, unit operation, and plant bypasses: n/a
- F. Flood elevation (10, 25, or 100 year flood): 847.7 (100-year)
- G. Consistency with EPA Reliability Technical Bulletin: n/a
- H. Provisions to maintain the same degree of treatment during construction: Yes
- I. Standby power equipment: portable generator
- J. Site inspection: n/a
- K. Statement in the specifications as to the protection against any adverse environmental effect (e.g., dust, noise, soil erosion) during construction: n/a
- L. Hoists for removing heavy equipment: n/a
- M. Adequate sampling facilities: yes, automatic samplers
- N. Hydraulic Gradient: yes

**AFFIRMATION**

I affirm, under the penalties for perjury, that the foregoing representations are true.

  
James T. Parks  
Indiana Office of Utility Consumer Counselor

September 7, 2017  
Date

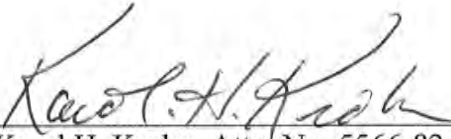
Cause No. 44954  
Western Hancock Utilities, LLC d/b/a Aqua Indiana, Inc.

**CERTIFICATE OF SERVICE**

This is to certify that a copy of the foregoing *OUCC Testimony of James T. Parks: Public's Exhibit No. 1* has been served upon the following counsel of record in the captioned proceeding by electronic service on September 7, 2017.

Philip B. McKiernan  
Mark R. Alson  
ICE MILLER LLP  
One American Square  
Suite 2900  
Indianapolis, IN 46282-0200  
[philip.mckiernan@icemiller.com](mailto:philip.mckiernan@icemiller.com)  
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James A.L. Buddenbaum  
PARR RICHEY OBREMSKEY FRANDSEN  
& PATTERSON LLP  
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Indianapolis, IN 46204  
[jbuddenbaum@parrlaw.com](mailto:jbuddenbaum@parrlaw.com)

  
Karol H. Krohn, Atty. No. 5566-82  
Deputy Consumer Counselor

**INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR**  
115 West Washington Street  
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Indianapolis, IN 46204  
[infomgt@oucc.in.gov](mailto:infomgt@oucc.in.gov)  
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