

**STATE OF INDIANA**  
**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**PUBLIC NOTICE NO. 20220412 – IN0022497 – D**  
**DATE OF NOTICE: APRIL 12, 2022**  
**DATE RESPONSE DUE: MAY 12, 2022**

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The Office of Water Quality proposes the following NPDES DRAFT PERMIT:

**MAJOR - MODIFICATION**

**CARMEL (city) WWTP**, Permit No. IN0022497, HAMILTON COUNTY, 9609 Hazel Dell Parkway, Carmel, IN. This major municipal modification incorporates the changes made to the plant in accordance with Construction Approval No. L-0569. The City of Carmel WWTP will increase from 12 MGD to 14 MGD. Permit Manager: Gabrielle Ghreichi, 317/234-1191, [gghreich@idem.in.gov](mailto:gghreich@idem.in.gov). Posted online at <https://www.in.gov/idem/public-notices/>.

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**PROCEDURES TO FILE A RESPONSE**

Draft can be viewed or copied (10¢ per page) at IDEM/OWQ NPDES PS, 100 North Senate Avenue, (Rm 1203) Indianapolis, IN, 46204 (east end elevators) from 9 – 4, Mon - Fri, (except state holidays). A copy of the Draft Permit is on file at the local County Health Department. Please tell others you think would be interested in this matter. For your rights & responsibilities see these sites: Public Notices: <https://www.in.gov/idem/public-notices/>; Citizen Guide: <https://www.in.gov/idem/resources/citizens-guide-to-idem/>. Please tell others whom you think would be interested in this matter.

**Response Comments:** The proposed decision to issue a permit is tentative. Interested persons are invited to submit written comments on the Draft permit. All comments must be postmarked no later than the Response Date noted to be considered in the decision to issue a Final permit. Deliver or mail all requests or comments to the attention of the Permit Writer at the above address, (mail code 65-42 PS).

**To Request a Public Hearing:**

Any person may request a Public Hearing. A written request must be submitted to the above address on or before the Response Date noted. The written request shall include: the name and address of the person making the request, the interest of the person making the request, persons represented by the person making the request, the reason for the request and the issues proposed for consideration at the Hearing. IDEM will determine whether to hold a Public Hearing based on the comments and the rationale for the request. Public Notice of such a Hearing will be published in at least one newspaper in the geographical area of the discharge and sent to anyone submitting written comments and/or making such request and whose name is on the mailing list at least 30 days prior to the Hearing.



# 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)

**Eric J. Holcomb**  
*Governor*

**Brian C. Rockensuess**  
*Commissioner*

April 12, 2022

## VIA ELECTRONIC MAIL

The Honorable James Brainard, Mayor  
City of Carmel  
One Civic Square  
Carmel, Indiana 46032

Dear Mayor Brainard:

Re: Draft Modification of NPDES Permit  
No. IN0022497 for the City of Carmel  
Wastewater Treatment Plant  
Hamilton County

Your request for permit modification, submitted January 18, 2022, has been reviewed and processed in accordance with rules adopted under 327 IAC 5. Enclosed is the draft modification of NPDES Permit No. IN0022497 which applies to the discharge from the City of Carmel Wastewater Treatment Plant (WWTP). The enclosed Pages 1 through 11 of 42 are intended to replace the corresponding pages in the facility's current permit.

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at <https://www.in.gov/idem/public-notices/>. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at <https://www.in.gov/idem/resources/citizens-guide-to-idem/>. A 30-day comment period is available in order to solicit input from interested parties, including the general public.

Please review this document carefully and become familiar with the proposed terms and conditions. Comments concerning the draft permit should be submitted in accordance with the procedure outlined in the enclosed public notice form. If you have any questions concerning this modification, please contact Gabby Ghreichi at 317/234-1191 or at [gghreich@idem.IN.gov](mailto:gghreich@idem.IN.gov).

Sincerely,

Leigh Voss, Chief  
Municipal NPDES Permits Section  
Office of Water Quality

Enclosures

cc: Tara Washington, Plant Manager  
John Duffy, Director of Utilities, City of Carmel  
Mike Hendricks, Assistant Utility Director  
Philip Teague, P.E.

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
AMENDED AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "Clean Water Act") or (CWA), and IDEM's authority under IC 13-5, the Indiana Department of Environmental Management (IDEM) is issuing this permit to the

**CITY OF CARMEL**

hereinafter referred to as "the permittee." The permittee owns and/or operates the **City of Carmel Wastewater Treatment Plant**, a major municipal wastewater treatment plant located at 9609 Hazel Dell Parkway, Carmel, Indiana, Hamilton County. The permittee is hereby authorized to discharge from the outfalls identified in Part I of this permit to receiving waters named the West Fork of the White River in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in the permit. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

The permit, as issued on August 16, 2018 is hereby amended as contained herein. The amended provisions shall become effective on \_\_\_\_\_. All terms and conditions of the permit not modified at this time remain in effect. Further, any existing condition or term affected by the modifications will remain in effect until the modified provisions become effective.

This permit and authorization to discharge, as amended, shall expire at midnight, November 30, 2023. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as are required by the Indiana Department of Environmental Management no later than 180 days prior to the date of expiration.

Issued on \_\_\_\_\_ for the Indiana Department of Environmental Management.

\_\_\_\_\_  
Jerry Dittmer, Chief  
Permits Branch  
Office of Water Quality

## TREATMENT FACILITY DESCRIPTION

The permittee received a Construction Permit on July 22, 2019 (Approval No. L-0569) to facilitate the plant's upgrade from a Class IV 12.0 MGD activated sludge treatment facility to a Class IV 14.0 MGD treatment facility with a peak design flow of 36.0 MGD, as well as the overhaul and replacement of the permittee's ultraviolet disinfection system. In addition, the construction permit covered the addition of Enhanced Biological Phosphorus Removal (EPBR) by using Anaerobic/Oxic (A/O) process. The permittee also received another Construction Permit on April 15, 2020 (Approval No. L-0569), in order to install phosphorus removal equipment via chemical addition.

Therefore, the permittee currently operates a Class IV, 14 MGD conventional activated sludge type treatment facility consisting of an influent flow meter, two (2) step screens, two (2) grit removal chambers, eight (8) primary clarifiers consisting of two (2) North primaries and six (6) South primaries, twelve (12) aeration tanks that have been modified to carry out Enhanced Biological Phosphorus Removal (EPBR) via anaerobic and oxic zones within the aeration tanks, six (6) secondary clarifiers, phosphorus removal via chemical addition, ultraviolet light disinfection, and an effluent flow meter. Waste-activated sludge and primary sludge pass through two (2) gravity belt-thickeners, a mixing tank, and a bio-pasteurization system. Then, the sludge is pumped to either of the two (2) primary anaerobic digesters, followed by two (2) secondary anaerobic digesters. After digestion, two (2) centrifuges are used for de-watering. Final sludge is stored in an open storage building or in a solar-drying building. Final sludge is distributed to local farmers as a Class A biosolid, in accordance with the permittee's Biosolids Marketing & Distribution Permit (INLA000730). If the final sludge only meets the Class B biosolids criteria, the final sludge is land applied under the permittee's Biosolids Land Application Permit (INLA000216).

The collection system is comprised of 100% separate sanitary sewers by design with one (1) Sanitary Sewer Overflow (SSO) point, identified and prohibited in Attachment A of this permit. The City of Carmel Wastewater Treatment Plant serves the following areas: The City of Carmel, portions of the Clay Township Regional Waste District, and portions of the Town of Westfield.

### PART I

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee shall take samples and measurements at a location representative of each discharge to determine whether the effluent limitations have been met. Refer to Part I.B of this permit for additional monitoring and reporting requirements.

1. Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 001, which is located at Latitude: 39° 55' 45" N, Longitude: 86 04' 35" W. The discharge is subject to the following requirements:

TABLE 1

Parameter	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly Average	Weekly Average	Units	Monthly Average	Weekly Average	Units	Measurement Frequency	Sample Type
Flow [1]	Report	----	MGD	----	----	----	Daily	24-Hr. Total
CBOD <sub>5</sub>								
Summer [2]	1,900	2,800	lbs/day	16	24	mg/l	Daily	24-Hr. Comp.
Winter [3]	2,900	4,700	lbs/day	25	40	mg/l	Daily	24-Hr. Comp.
TSS								
Summer [2]	2,300	3,500	lbs/day	20	30	mg/l	Daily	24-Hr. Comp.
Winter [3]	3,500	5,300	lbs/day	30	45	mg/l	Daily	24-Hr. Comp.
Ammonia-nitrogen								
Summer [2]	180	260	lbs/day	1.5	2.25	mg/l	Daily	24-Hr. Comp.
Winter [3]	350	530	lbs/day	3.0	4.5	mg/l	Daily	24-Hr. Comp.
Nitrogen, Total (as N) [4]	Report	----	lbs/day	Report	----	mg/l	Monthly	24-Hr. Comp.
Phosphorus	Report	----	lbs/day	1.0	----	mg/l	Daily	24-Hr. Comp.

TABLE 2

Parameter	Quality or Concentration				Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
pH [5]	6.0	----	9.0	s.u.	Daily	Grab
Dissolved Oxygen [6]						
Summer [2]	5.0	----	----	mg/l	Daily	4 Grabs/24-Hrs.
Winter [3]	4.0	----	----	mg/l	Daily	4 Grabs/24-Hrs.
<i>E.coli</i> [7]	----	125 [8]	235 [9]	cfu/100 ml	Daily	Grab

[1] Effluent flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once every twelve months.

[2] Summer limitations apply from May 1 through November 30 of each year.

[3] Winter limitations apply from December 1 through April 30 of each year.

[4] Total Nitrogen shall be determined by testing Total Kjeldahl Nitrogen (TKN) and Nitrate + Nitrite and reporting the sum of the TKN and Nitrate + Nitrite results (reported as N). Nitrate + Nitrite can be analyzed together or separately. Monitoring for Total Nitrogen is required in the effluent only.

The following EPA methods are recommended for use in the analysis of TKN and Nitrate + Nitrite. Alternative approved 40 CFR 136 methods may be utilized.

<u>Parameter</u>	<u>Method</u>
TKN	350.1, 351.1, 351.2
Nitrate	300.0, 300.1, 352.1
Nitrite	300.1, 353.2
Nitrate + Nitrite	300.0, 300.1, 353.2

- [5] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Report of Operation forms.
- [6] The daily minimum concentration of dissolved oxygen in the effluent shall be reported as the arithmetic mean determined by summation of the four (4) daily grab sample results divided by the number of daily grab samples. These samples are to be collected over equal time intervals.
- [7] The effluent shall be disinfected on a continuous basis such that violations of the applicable bacteriological limitations (*E. coli*) do not occur from April 1 through October 31, annually.

The *Escherichia coli* (*E. coli*) limitations apply from April 1 through October 31 annually.

- [8] The monthly average *E. coli* value shall be calculated as a geometric mean. Per 327 IAC 5-10-6, the concentration of *E. coli* shall not exceed one hundred twenty-five (125) cfu or mpn per 100 milliliters as a geometric mean of the effluent samples taken in a calendar month. No samples may be excluded when calculating the monthly geometric mean.
- [9] If less than ten samples are taken and analyzed for *E. coli* in a calendar month, no samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. However, when ten (10) or more samples are taken and analyzed for *E. coli* in a calendar month, not more than ten percent (10%) of those samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. When calculating ten percent, the result must not be rounded up. In reporting for compliance purposes on the Discharge Monitoring Report (DMR) form, the permittee shall record the highest non-excluded value for the daily maximum.

## 2. Minimum Narrative Limitations

At all times the discharge from any and all point sources specified within this permit shall not cause receiving waters:

- a. including waters within the mixing zone, to contain substances, materials, floating debris, oil, scum attributable to municipal, industrial, agricultural, and other land use practices, or other discharges that do any of the following:
  - (1) will settle to form putrescent or otherwise objectionable deposits;
  - (2) are in amounts sufficient to be unsightly or deleterious;
  - (3) produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
  - (4) are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
  - (5) are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.
- b. outside the mixing zone, to contain substances in concentrations that on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants.

## 2. Data on Plant Operation

The raw influent and the wastewater from intermediate unit treatment processes, as well as the final effluent shall be sampled and analyzed for the pollutants and operational parameters specified by the applicable Monthly Report of Operation Form, as appropriate, in accordance with 327 IAC 5-2-13. Except where the permit specifically states otherwise, the sample frequency for the raw influent and intermediate unit treatment process shall be at a minimum the same frequency as that for the final effluent. The measurement frequencies specified in each of the tables in Part I.A. are the minimum frequencies required by this permit.

For publicly owned treatment works, the 30-day average percent removal for Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>) and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR Part 133.102, as incorporated by reference in 327 IAC 5-2-1.5. The permittee must monitor the influent and effluent CBOD<sub>5</sub> and TSS at least once per month and calculate the percent removal to ensure compliance with the required 85 percent removal. This information must be maintained on site and provided to this Office's staff upon request.

## 3. Reporting per Monitoring Period

The permittee shall submit accurate monitoring reports to the Indiana Department of Environmental Management containing results obtained during each monitoring period and



shall be submitted no later than the 28th day of the month following each completed monitoring period. Each monitoring period report shall be submitted no less than annually and no more than monthly, as per parameter measurement frequency listed. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report (DMR) and the Monthly Report of Operation (MRO). All reports shall be submitted electronically by using the NetDMR application, upon registration, receipt of the NetDMR Subscriber Agreement, and IDEM approval of the proposed NetDMR Signatory. Access the NetDMR website (for initial registration and DMR/MMR submittal) via CDX at: <https://cdx.epa.gov/>. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit.

A calendar week will begin on Sunday and end on Saturday. Partial weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur in the following month in order to calculate a consecutive seven-day average. This value will be reported as a weekly average or seven-day average on the MRO for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

#### 4. Definitions

##### a. Calculation of Averages

Pursuant to 327 IAC 5-2-11(a)(5), the calculation of the average of discharge data shall be determined as follows: For all parameters except fecal coliform and *E. coli*, calculations that require averaging of sample analyses or measurements of daily discharges shall use an arithmetic mean unless otherwise specified in this permit. For fecal coliform, the monthly average discharge and weekly average discharge, as concentrations, shall be calculated as a geometric mean. For *E. coli*, the monthly average discharge, as a concentration, shall be calculated as a geometric mean.

##### b. Terms

- (1) "Monthly Average" -The monthly average discharge means the total mass or flow-weighted concentration of all daily discharges during a calendar month on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar month. The monthly average discharge limitation is the highest allowable average monthly discharge for any calendar month.
- (2) "Weekly Average" - The weekly average discharge means the total mass or flow weighted concentration of all daily discharges during any calendar week for which daily discharges are sampled or measured, divided by the number of daily discharges

sampled and/or measured during such calendar week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calendar week.

- (3) "Daily Maximum" - The daily maximum discharge limitation is the maximum allowable daily discharge for any calendar day. The "daily discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that represents the calendar day for purposes of sampling.
- (4) "24-hour Composite" - A 24-hour composite sample consists of at least four (4) individual flow-proportioned samples of wastewater, taken by the grab sample method over equal time intervals during the period of operator attendance or by an automatic sampler, and which are combined prior to analysis. A flow proportioned composite sample shall be obtained by:
  - (a) recording the discharge flow rate at the time each individual sample is taken,
  - (b) adding together the discharge flow rates recorded from each individual sampling time to formulate the "total flow value,"
  - (c) dividing the discharge flow rate of each individual sampling time by the total flow value to determine its percentage of the total flow value, and
  - (d) multiplying the volume of the total composite sample by each individual sample's percentage to determine the volume of that individual sample which will be included in the total composite sample.

Alternatively, a 24-hour composite sample may be obtained by an automatic sampler on an equal time interval basis over a twenty-four hour period provided that a minimum of 24 samples are taken and combined prior to analysis. The samples do not need to be flow-proportioned if the permittee collects samples in this manner.

- (5) CBOD<sub>5</sub>: Five-day Carbonaceous Biochemical Oxygen Demand
- (6) TSS: Total Suspended Solids
- (7) *E. coli*: *Escherichia coli* bacteria
- (8) The "Regional Administrator" is defined as the Region V Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.

- (9) The “Commissioner” is defined as the Commissioner of the Indiana Department of Environmental Management, located at the following address: 100 North Senate Avenue, Indianapolis, Indiana 46204-2251.
- (10) Limit of Detection or LOD is defined as a measurement of the concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix. The LOD is equivalent to the Method Detection Level or MDL.
- (11) Limit of Quantitation or LOQ is defined as a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration above the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant. This term is also called the limit of quantification or quantification level.
- (12) Method Detection Level or MDL is defined as the minimum concentration of an analyte (substance) that can be measured and reported with a ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) as determined by the procedure set forth in 40 CFR Part 136, Appendix B. The method detection level or MDL is equivalent to the LOD.

#### 5. Test Procedures

The analytical and sampling methods used shall conform to the version of 40 CFR 136 incorporated by reference in 327 IAC 5. Different but equivalent methods are allowable if they receive the prior written approval of the Commissioner and the U.S. Environmental Protection Agency. When more than one test procedure is approved for the purposes of the NPDES program under 40 CFR 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 122.21(e)(3) and 122.44(i)(1)(iv).

#### 6. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record and maintain records of all monitoring information on activities under this permit, including the following information:

- a. The exact place, date, and time of sampling or measurements;
- b. The person(s) who performed the sampling or measurements;
- c. The dates and times the analyses were performed;

- d. The person(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of all required analyses and measurements.

7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monthly Discharge Monitoring Report and on the Monthly Report of Operation form. Such increased frequency shall also be indicated on these forms. Any such additional monitoring data which indicates a violation of a permit limitation shall be followed up by the permittee, whenever feasible, with a monitoring sample obtained and analyzed pursuant to approved analytical methods. The results of the follow-up sample shall be reported to the Commissioner in the Monthly Discharge Monitoring Report.

8. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. The three-year period shall be extended:

- a. automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or regarding promulgated effluent guidelines applicable to the permittee; or
- b. as requested by the Regional Administrator or the Indiana Department of Environmental Management.

C. REOPENING CLAUSES

In addition to the reopening clause provisions cited at 327 IAC 5-2-16, the following reopening clauses are incorporated into this permit:

- 1. This permit may be modified or, alternately, revoked and reissued after public notice and opportunity for hearing to incorporate effluent limitations reflecting the results of a wasteload allocation if the Department of Environmental Management determines that such effluent limitations are needed to assure that State Water Quality Standards are met in the receiving stream.

2. This permit may be modified due to a change in sludge disposal standards pursuant to Section 405(d) of the Clean Water Act, if the standards when promulgated contain different conditions, are otherwise more stringent, or control pollutants not addressed by this permit.
3. This permit may be modified, or, alternately, revoked and reissued, to comply with any applicable effluent limitation or standard issued or approved under section 301(b)(2)(C), (D) and (E), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:
  - a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - b. controls any pollutant not limited in the permit.
4. This permit may be modified, or alternately, revoked and reissued after public notice and opportunity for hearing to include Whole Effluent Toxicity (WET) limitations or to include limitations for specific toxicants if the results of the WET testing and/or the Toxicity Reduction Evaluation (TRE) study indicate that such limitations are necessary.
5. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate monitoring requirements and effluent limitations for chloride, cadmium, total chromium, copper, lead, nickel, silver, zinc and/or total cyanide if the Department of Environmental Management determines that such monitoring requirements and effluent limitations are needed to assure that State Water Quality standards are met in the receiving streams.

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**National Pollutant Discharge Elimination System  
Fact Sheet for the City of Carmel Wastewater Treatment  
Plant**

**Draft: March 28, 2022  
Final: TBD**

**Indiana Department of Environmental Management**

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

<b>Permittee:</b>	City of Carmel The Honorable James Brainard, Mayor One Civic Square Carmel, Indiana 46032 <a href="mailto:jbrainard@carmel.in.gov">jbrainard@carmel.in.gov</a> ; 317/571-2401
<b>Existing Permit Information:</b>	Permit Number: IN0022497 Expiration Date: November 30, 2023
<b>Facility Contact:</b>	Tara Washington, Plant Manager <a href="mailto:twashington@carmel.in.gov">twashington@carmel.in.gov</a> ; 317/571-2634 X1630
<b>Facility Location:</b>	9609 Hazel Dell Parkway Carmel, Indiana 46280 Hamilton County
<b>Receiving Stream:</b>	West Fork of the White River
<b>GLI/Non-GLI:</b>	Non-GLI
<b>Proposed Permit Action:</b>	Modification
<b>Date Application Received:</b>	January 18, 2022
<b>Facility Category</b>	NPDES Major Municipal
<b>Permit Writer:</b>	Gabrielle Ghreichi, Senior Environmental Manager <a href="mailto:gghreich@idem.in.gov">gghreich@idem.in.gov</a> ; 317/234-1191

Outfall Location

Latitude: 39° 55' 45" N

Longitude: 86° 04' 35" W

**Background**

This is the modification of the NPDES permit for the City of Carmel Wastewater Treatment Plant (WWTP). The facility's current permit was effective on December 1, 2018 and has an expiration date of November 30, 2023. A request for permit modification was received from the permittee on January 18, 2022. The permittee requests a permit modification to incorporate the changes made to the plant in accordance with Construction Permit Number L-0569, to accommodate growth in their service area. The permittee states that the City has constructed two (2) aeration tanks and one (1) final clarifier as part of the project. In addition, the completion of this project has allowed the City of Carmel WWTP to expand their average design capacity from 12.0 MGD to 14.0 MGD.

As a result of this upgrade, this facility currently operates a Class IV, 14 MGD conventional activated sludge type treatment facility consisting of an influent flow meter, two (2) step screens, two (2) grit removal chambers, eight (8) primary clarifiers consisting of two (2) North primaries and six (6) South primaries, twelve (12) aeration tanks that have been modified to carry out Enhanced Biological Phosphorus Removal (EPBR) via anaerobic and oxic zones within the aeration tanks, six (6) secondary clarifiers, phosphorus removal via chemical addition, ultraviolet light disinfection, and an effluent flow meter. Waste-activated sludge and primary sludge pass through two (2) gravity belt-thickeners, a mixing tank, and a bio-pasteurization system. Then, the sludge is pumped to either of the two (2) primary anaerobic digesters, followed by two (2) secondary anaerobic digesters. After digestion, two (2) centrifuges are used for de-watering. Final sludge is stored in an open storage building or in a solar-drying building. Final sludge is distributed to local farmers as a Class A biosolid, in accordance with the permittee's Biosolids Marketing & Distribution Permit (INLA000730). If the final sludge only meets the Class B biosolids criteria, the final sludge is land applied under the permittee's Biosolids Land Application Permit (INLA000216).

**Modification**

The following changes have been made for the modification of the NPDES permit:

Page 1 of 42

This page has been modified to reflect the modification effective date for the permit.

Pages 2 of 42

This page has been modified to update the treatment facility description in accordance with Construction Permit Approval No. L-0569, as well as to update Tables 1 and 2 of Part I.A of the permit to reflect loading limits consistent with an average design flow of 14.0 MGD (as compared to 12.0 MGD in the previous permit). The permit limits within this permit modification are in accordance with the Preliminary Effluent Limitations (PEL) letter sent to the permittee on June 12, 2019. This page has also been modified to include a monthly Total



Nitrogen (TN) monitoring requirement. This requirement is in accordance with IDEM's current TN policy that applies to all major facilities (with an average design flow of 1.0 MGD or greater).

Pages 3 through 11 of 42 These pages have been modified to include minor updates to the footnotes that accompany Tables 1 and 2 of Part I.A. of the permit. These pages have also been modified to accommodate spacing and page number changes necessary for this permit modification.

### **Expiration Date**

The expiration date of the permit has not changed. The permit, as modified, will expire at midnight on November 30, 2023.

### **Permit Processing/Public Comment**

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit modification document online at <https://www.in.gov/idem/public-notices/>. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at <https://www.in.gov/idem/resources/citizens-guide-to-idem/>. A 30-day comment period is available to solicit input from interested parties, including the public.