APPLICATION FOR WASTEWATER TREATMENT PLANT CONSTRUCTION PERMIT PER 327 IAC 3

STATE FORM 53160 (R2 / 9-08)
Approved by State Board of Accounts, 2007

Indiana Department of Environmental Management
Office of Water Quality – Mail Code 65-42
Facilities Construction Section
100 North Senate Avenue, room N1255
Indianapolis, IN 46204-2251

INSTRUCTIONS:

1. *This form must be filled out completely.*
2. *Additional pages (attachments following this form) are part of this application form and must be filled out completely.*
3. *Submission of plans, flow charts and/or schematic drawings are part of the application.*
4. *Submit the application form, additional pages, plans and specifications to the above address.*
5. *If you have any questions regarding this application, call IDEM's Office of Water Quality at (317) 232-8670.*

APPLICANT		APPLICANT'S ENGINEER	
Name		Name	
Company Name		Company Name	
Address		Address	
City		City	
State	ZIP code	State	ZIP code
Telephone number (*including area code*)		Telephone number (*including area code*)	

OFFICIAL EXHIBITS

IURC PUBLIC'S EXHIBIT NO. (X-2)
5-15-16 DATE REPORTER

NAME AND LOCATION OF PROPOSED FACILTY	ATTACHMENT CHECKLIST
Name	A. Wastewater treatment plant design summary form: ☐ Yes
Location (*Referenced to two existing streets)*	B. Plans and specifications: ☐ Yes
Location	C. The appropriate fee (if applicable, no fees for state or federal projects): ☐ Yes
Location	D. Identification of Potentially Affected Persons (*see note below*): ☐Yes
City	E. Mailing Labels for Potentially Affected Persons: ☐Yes
County	

Note Regarding item (D) above:
Fully identify all persons, by name and address, who may be potentially affected by the issuance of this permit, such as adjoining landowners, persons with a propriety interest, and/or persons who have complained or submitted comments about your facility. ***Under IC 4-21.5-3-4, IDEM is required to notify potentially affected persons of its permit decision.***

PERMIT APPLICATION FOR CONSTRUCTION, EXPANSION, OR MODIFICATION OF (*Check all that apply*)	FUNDING
A. Municipal wastewater treatment facility: ☐Yes	SRF Funding: ☐Yes ☐No
B. Semipublic wastewater treatment facility: ☐Yes	
C. New facility: ☐Yes	
D. Expansion or modification of existing facility: ☐Yes	

CERTIFICATION AND SIGNATURE

Application is hereby made for a permit to authorize the activities described herein. I certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete and accurate.

Printed name of person signing	Title
Signature of Applicant	Date application signed (*month, day, year*)

Please refer to IC 13-30-10 for penalties of submission of false information

Dear Applicant:

To complete your construction application, you must submit **all** of the necessary items. If your application materials are incomplete, you will be sent a deficiency notice, and your application will be retained for 60 days. If the information is not received within the 60 day period your application will be denied due to incompleteness. You can get a copy of this application package on the Internet at: http://www.in.gov/idem/4875.htm or http://www.in.gov/idem/5157.htm#waterforms. Please complete the following steps (only one copy of the requested documents needs to be submitted):

- Complete all the information on the wastewater design summary and certify it with a professional engineer's stamp. The general information, Part I, and design data, Part II, should be completely filled out and also other areas that pertain. Only one copy of the design summary needs to be submitted.

- Submit NPDES limits verification for projects that increase the capacity at the wastewater treatment facility. (This information can be obtained from the NPDES permitting section at 317/232-8760.)

- Enclose the proper processing fee (see attached fee schedule).

- Sign and date the application form and fill it out completely. Municipal projects must be signed by a city or town official. Others, such as private wastewater treatment plant projects can be signed by the owner or a representative. Only one copy of this form needs to be submitted.

- Submit one set of complete plans. Every page must be stamped and signed by a professional engineer.

- List all affected parties. This list should include: officials of affected counties, cities or towns; adjacent property owners; and all other potentially affected parties, their names and mailing addresses. A complete set of mailing labels with the mailing code 65-42FC listed above each name on each label is required.

- Please be advised that if your project will disturb one (1) or more acres of land area, coverage under 327 IAC 15-5 (Rule 5) is required. Rule 5 is the General Permit for Storm Water Runoff Associated with Construction Activity. You can review the Rule 5 web site for information at: http://www.in.gov/idem/4902.html or contact Permits Coordinator at 317/233-1864 for more information.

Please send construction applications to:

Indiana Department of Environmental Management
Office of Water Quality- Mail Code 65-42
100 North Senate Avenue, Rm N1255
Indianapolis, IN 46204-2251
Attention: Don Worley
Telephone number: (317) 232-5579

Wastewater Construction Permit Fees		
A. The applicants listed below must remit with each application a fee of fifty dollars (*$50). These applications must be signed by an official of the entity (*check all that apply*).		
☐	County, Municipality, or Township which is defined as a unit under IC 36-1-2-23	
☐	A Nonprofit Organization	
☐	A Conservancy District	
☐	A School Corporation that operates a sewage treatment facility	
☐	A Regional Water or Sewage District	
*Only pay $50 for a new wastewater treatment plant or expansion of an existing facility.		
B. All other applications will pay the following revised fees per project type:		
New Wastewater Treatment Plant (Except industrial)		
☐	A. Up to 500,000 gallons per day	$1,250.00
☐	B. Greater than 500,000 per day	$2,500.00
New Industrial Wastewater Treatment Plant (Including pretreatment)		
☐	A. Up to 500,000 per day for:	
☐	1. Biological or chemical treatment	$1,250.00
☐	2. Physical Treatment	$250.00
☐	B. Greater than 500,000 gallons per day:	
☐	1. Biological or chemical	$2,500.00
☐	2. Physical Treatment	$250.00
Wastewater Treatment Plant Expansion:		
☐	A. Up to fifty percent (50%) design capacity:	
☐	1. Greater than 500,000 per day	$2,500.00
☐	2. Up to 500,000 per day	$625.00
☐	B. Greater than fifty percent (50%) design capacity	
☐	1. Greater than 500,000 gallons per day	$2,500.00
☐	2. Up to 500,000 gallons per day	$1,250.00
Checks should be made payable to the **Indiana Department of Environmental Management**. Fees shall not be refundable once staff review and processing of the Permit Application has commenced.		

Wastewater Treatment Plant Design Summary

1. General

A. Applicant name:

B. Project Name:

C. Location:

D. Engineer (consultant):

E. NPDES permit number:

1. Date of final permit issuance *(month, day, year)*:

2. Expiration date *(month, day, year)*:

F. Remarks

1. Description of present situation:

2. Description of proposed facility(s):

3. Inspection during construction to be provided by:

G. Estimated project cost

1. Source of funding (Revenue bond, state grant, SRF, etc.):

2. Total cost:

H. Certification seal and signature of engineer and date:

	Printed name of engineer:
	Signature of engineer:
	Date signed *(month, day, year)*:

2. Design Data

A. Current population:

B. Design year and population:

C. Design population and equivalent P.E.:

D. Design flow:

1. Domestic:

2. Industrial/commercial:

3. infiltration/inflow:

E. Average design peak flow:

F. Maximum plant flow capacity:

G. Design waste strength

1. CBOD:

2. TSS:

3. NH_3-N:

4. P:

5. Other:

2. Design Data *(continued)*
H. NPDES permit limitation on effluent quality
1. CBOD:
2. TSS:
3. NH_3-N:
4. P:
5. E-coli:
6. Chlorine Residual:
7. pH:
8. D.O.:
I. Receiving stream
1. Name:
2. Tributary to:
3. Stream uses:
4. 7-day, 1-in-10 year low flow:
3. Treatment units *(Fill out the ones that apply and if needed create a new entry that follows the format.)*
A. Plant site lift station
1. Location:
2. Type of pump:
3. Number of pumps:
4. Constant or variable speed:
5. Capacity of pumps:
6. RPM and TDH:
7. Volume of the wet well:
8. Detention time in the wet well:
9. A gate valve and a check valve in the discharge line:
10. A gate valve on suction line:
11. Ventilation:
12. Standby power:
13. Alarm:
14. Breakwater tank:
15. Bypass overflow:
B. Flow equalization
1. Number and size of units:
2. Method of flow diversion to unit:
3. Air and mixing provided:
4. Method and control of flow return:
5. Description of unit operation:
6. Lagoon sealing:
7. Method of sludge removal:
C. Flow meters
1. Type:
2. Location:
3. Indicating, recording and totalizing:
D. Grit chamber
1. Type of grit chamber:
2. Number of units:
3. Size of unit:
4. Method of velocity (aeration) control:
5. Velocity (aeration) in the chamber:
6. Drain provided:
7. Flow restrictions:
8. Facilities to isolate:

3. Treatment units *(continued)*
E. Comminutors
1. Type:
2. Location:
3. Maximum capacity:
4. By-pass (overflow) bar screen:
F. Screens
1. Type:
2. Number and capacity:
3. Bar spacing and slope:
4. Method of cleaning:
5. Disposal of screenings:
G. Primary settling
1. Type of clarifier:
2. Number and size of units:
3. Surface settling rate (gpd/sf)
a. At the design flow:
b. At the influent pumping rate:
c. At the equalized flow rate:
4. Detention time (hrs):
5. Type of sludge removal mechanism
6. Weir overflow rate:
7. Disposition of scum:
8. Location of overflow weir:
9. Facilities to isolate:
H. Activated sludge
1. Type of activated sludge process:
2. Number and size of units:
3. Detention time (hrs):
4. Organic loading (lb BOD/1000 cf):
5. Type of aeration equipment:
6. Type and size of blowers:
7. Air required (itemize, dfm):
8. Provisions of speed adjustment:
9. Air provided:
10. Ventilation in the blower room:
11. Number and capacity of return sludge pump:
12. Method of return sludge rate control:
13. Return sludge rate as % of design flow:
14. Provisions for return rate metering:
15. Location of return sludge discharge:
16. Facilities to isolate units:
17. Facilities for flow split control:
I. Oxidation ditch
1. Number and size of units:
2. detention time (hrs):
3. Organic loading (lb BOD/1,000 cf):
4. Type and efficiency of aeration equipment (lb 0/HP-hr):
5. Oxygen required:
6. Oxygen provided:
7. Flow velocity in ditch:
8. Number and capacity of return sludge pump:
9. Method of return sludge rate control:

3. Treatment units *(continued)*
10. Return sludge rate as % of design flow:
11. Provisions for return sludge metering:
12. Location of return sludge discharge:
13. Facilities to isolate units:
14. Facilities for flow split control:
J. Trickling filters
1. Number and size of units:
2. Type of media:
3. Hydraulic loading (gpm/cf):
4. Organic loading (lb BOD/1,000 cf):
5. Recirculation:
6. Ventilation:
K. Rotating biological contactor
1. Size and number of units:
2. Type of media:
3. Detention time (min.):
4. Organic loading (lb BOD/1,000 sf):
5. Hydraulic loading (gpd/sf):
6. Method of shaft drive:
7. Supplemental air:
8. Facilities to isolate:
9. Facilities for flow split control:
L. Sequential batch reactors
1. Type of activated sludge process:
2. Number and size of units:
3. Detention time (hours):
a. Low water level:
b. High water level:
c. Total cycle:
4. Organic Loading (lb BOD/1,000 cf)
a. At low water level:
b. At high water level:
5. Type of aeration equipment:
6. Type and size of blowers:
7. Air required (itemize, cfm):
8. Provisions of speed adjustment:
9. Air provided:
10. Ventilation in the blower room:
11. Number and capacity of waste sludge pump:
12. Decanter rated at average flow (GPM):
Decanter rated at peak flow (GPM):
13. Facilities to isolate units:
14. Facilities for flow split control:
M. Lagoons
1. Type of lagoons:
2. Number and size of lagoons:
3. Organic loading:
4. Type of aeration equipment (if applicable):
5. Type and size of air blowers (if applicable):
6. Air required (if applicable):
7. Air provided (if applicable):
8. Controlled discharge facilities:
9. Maximum water level:
3. Treatment units *(continued)*

10. Freeboard:
11. Soil boring data and permeability date:
12. Slope of embankment and top width:
13. Fence:
14. Detention time:
15. Stream gage:
16. Lagoon seal:
17. Facilities for multi-level lagoon discharge:
18. Scum control:
N. Secondary clarifier
1. Type of clarifiers:
2. Number and size of units:
3. Surface settling rate (gpd/sf):
a. at the design flow:
b. at the influent pumping rate:
c. at the equalized flow rate:
4. Detention time (hrs):
5. Type of sludge removal mechanism:
6. Weir overflow rate:
7. Disposal of scum:
8. Facilities for unit isolation:
9. Facilities for flow split control:
O. Constructed wetland
1. Design flow:
2. Type of wetland:
3. Type of solids removal/pretreatment:
4. Number and size of cells:
5. Number of zones per cell:
6. Surface area of each zone:
7. Organic loading:
8. Liner:
9. Detention time:
10. Type of media:
11. Media depth:
12. Media void rate:
13. Operating capacity:
14. Length/width ratio:
15. Type of plants:
16. Expected % of BOD and NH3-N removal:
17. Recirculation:
18. Dosing tank information:
a. Dimensions:
b. Capacity:
c. Pumps:
P. Rapid sand filtration
1. Number and size of filters:
2. Filtration rate:
a. at peak flow rate:
b. at average flow rate:
3. Type, depth, and gram size of filter media:
4. Backwash rate:
5. Air scour:
6. Capability to chlorinate ahead of the filter:
7. Backwash pumps (number and capacity):
3. Treatment units *(continued)*

8. Method of rate control:
9. source of capacity of backwash water:
10. Holding capacity or dirty water tank:
11. Facilities for unit isolation:

Q. Micro-strainers

1. Number and size of strainers:
2. Screen material:
3. Filtration rate:
4. Backwash rate:
5. Number and capacity of backwash pumps:
6. Facilities for unit isolation:
7. Slime control provisions:

R. Two-day lagoon

1. Number and size of lagoon cells:
2. Detention time (days):
3. Type of chemical:
4. Location of chemical injection:
5. Number and size of chemical storage tank:
6. Rate adjustment capabilities:
7. Capacity of chemical storage tank:
8. Capacity of spill storage tank:
9. Expected daily use of chemical (dosage and solution):
10. Lagoon seal:
11. Parallel or series operation:
12. Sludge removal facilities:
13. Method of draining:
14. Multi-level discharge:
15. Scum control:

S. Post-aeration

1. Type of aeration:
2. Number of units:
3. Size of units:
4. Aeration provided:
5. Expected effluent DO:

T. Nitrification system

1. Type of nitrification system:
2. Ammonia loading:
3. Additional oxygen demand:
4. Air supply system:
5. Hydraulic detention time:
6. Mean cell residence time (days):

U. Phosphorus removal facilities

1. Type of chemical to be used:
2. Location of chemical injection:
3. Number and size of chemical feed pumps:
4. Size of chemical; storage tank:
5. Capacity of spill storage space:
6. Chemical dosage:
7. Daily chemical consumption expected:
8. Rapid mix tank:
9. Slow mixing equipment:
10. Other facilities – describe:

3. Treatment units *(continued)*

V. Disinfection
1. Type of disinfectant used:
2. Size of contact tank:
3. Contact time:
4. Type of disinfectant feeders:
5. Capacity of the feeders:
6. Disinfectant dosage:
7. Scum control baffle:
8. Source of the disinfectant feed water:
9. Breakwater tank for the feed water:
10. Bypass:
11. Drain for tank:
12. Ventilation in chlorine room:
13. Safety equipment:

W. De-chlorination
1. Chemical used:
2. Type of feeders:
3. Capacity of feeders:
4. Dosage:
5. Type of diffuser:
6. Diffuser location:
7. Equipment location:
8. Ventilation provided:
9. Safety equipment:

X. UV disinfection
1. Type:
2. Location:
3. Size of channel:
4. Contact time:
5. Dosage:
6. Bypass:
7. Safety equipment:
8. Cleaning equipment:
9. Intensity Monitoring:

Y. Sludge thickening
1. Number and size of thickeners:
2. Type of sludge thickeners:
3. Hydraulic loading:
4. Solids loading:
5. Provisions to chlorinate:

Z. Anaerobic digesters
1. Number and size of units:
2. Total volume:
3. Organic loading:
4. Hydraulic detention time:
5. Volume per capita:
6. Type of mixing:
7. Heating: ☐ internal or ☐ external

AA. Aerobic digesters
1. Number and size of units:
2. Detention time:
3. Organic loading:
4. Air supply:
5. Decanting method:

3. Treatment units *(continued)*
BB. Wet-oxidation
1. Number of units:
2. Type of heat treatment:
3. Temperature and pressure to be used:
4. Capacity of the unit:
5. Daily sludge production for heat treatment:
CC. Sludge drying beds
1. Number and size of drying beds:
2. Filter area per capita:
3. Under-drain system:
4. Discharge location of filtrate:
5. Accessibility of dry sludge removal equipment:
DD. Mechanical dewatering
1. Type of dewatering units:
2. Number and size of dewatering units:
3. Capacity of dewatering units:
4. Daily solids production for dewatering:
5. Type of chemicals to be used:
EE. Sludge disposal
1. Ultimate disposal method of sludge:
2. Expected solids content of sludge (by the principal method of disposal):
3. Location of disposal site:
4. Ownership of the disposal site:
5. Availability of sludge transport equipment:
4. Sewer Collection System
A. Lift Stations
1. Location:
2. Type of pump:
3. Number of pumps:
4. Constant or variable speed:
5. Capacity of pumps:
6. RPM and TDH:
7. Volume of the wet well:
8. Detention time in the wet well:
9. A gate valve and a check valve in the discharge line:
10. A gate valve on the suction line:
11. Ventilation:
12. Standby power:
13. Alarm:
14. Breakwater tanks:
15. Bypass or overflow:
16. Type of force main:
17. Diameter and length of force main:
B. Sewer
1. Type of sewer material:
2. Diameter and length of sewer (indicate length for each size):
3. Stream, highway, and railroad crossing:
4. Separation of combined sewer or new sewer:
5. Number of manholes:
6. Water main protection:

4. Sewer Collection System *(continued)*
C. Individual grinder pumps
1. Location:
2. Number of pumps:
3. Capacity of pumps:
4. RPM and TDH:
5. Volume of the wet well:
6. A gate valve and a check valve in the discharge line:
7. Ventilation:
8. Alarm:
5. Miscellaneous
A. Laboratory equipment:
B. Safety equipment:
C. Plant site fence:
D. Handrail for the tanks:
E. Units, unit operation, and plant bypasses:
F. Flood elevation (10, 25, or 100 year flood):
G. Provisions to maintain the same degree of treatment during construction:
H. Standby power:
I. Site inspection:
J. Statement in the specifications as to the protection against any adverse environmental effect
(e.g., dust, noise, soil erosion) during construction:
K. Hoists for removing heavy equipment:
L. Adequate sampling facilities:
M. Hydraulic gradient:
N. Septage receiving facilities
1. Screening:
2. Location of discharge:

IDENTIFICATION OF POTENTIALLY AFFECTED PERSONS

Please list any and all persons whom you have reason to believe have a substantial or proprietary interest in this matter, or could otherwise be considered to be potentially affected under law. Failure to notify a person who is later determined to be potentially affected could result in voiding our decision on procedural grounds. To ensure conformance with Administrative Orders and Procedures Act (AOPA) and to avoid reversal of a decision, please list all such parties. The letter on the opposite side of this form will further explain the requirements under the AOPA. Attach additional names and addresses on a separate sheet of paper, as needed.

Name	
Address (*number and street*)	
City	
State	ZIP

Name	
Address (*number and street*)	
City	
State	ZIP

Name	
Address (*number and street*)	
City	
State	ZIP

Name	
Address (*number and street*)	
City	
State	ZIP

Name	
Address (*number and street*)	
City	
State	ZIP

Name	
Address (*number and street*)	
City	
State	ZIP

Name	
Address (*number and street*)	
City	
State	ZIP

Name	
Address (*number and street*)	
City	
State	ZIP

CERTIFICATION

I certify that to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.5-3-4.

Proposed facility name	Printed Name
City	Signature
County	Date (*month, day, year*) / /

IDENTIFICATION OF POTENTIALLY AFFECTED PERSONS *(CONTINUED)*

To: Applicant

Subject: Identification of Potentially Affected Persons

The Administrative Orders and Procedures Act (AOPA), IC 4-21.5-3-4, requires that the Indiana Department of Environmental Management (IDEM) give notice of its decision on your application to the following persons:

- Each person to whom the decision is specifically directed,
- Each person to whom a law requires notice be given.

IC 13-15-3-1 requires IDEM to provide notice of receipt of a permit application to the following:

1. **The county executive of a county affected by a permit application,**
2. **The executive of a city affected by a permit application,**
3. **The executive of a town council of a town affected by a permit application.**

Under IC 13-15-3-1 (b) IDEM is requesting information necessary to provide such notice to the appropriate officials.

Attention:

Since June 17, 1999, mailing labels are required to be submitted with your project. Having these labels with your application is helpful to you as well as our office. These mailing labels need to have the names and addresses of the affected parties along with our mailing code (which is 65-42FC) listed above each affected party listing.

For Example: 65-42FC
JOHN DEERE
111 CIRCLE DR
YOUR CITY IN 44444