



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
NANCY A. MALOLEY, Commissioner

105 South Meridian Street  
P.O. Box 6015  
Indianapolis 46206-6015  
Telephone 317-232-8603

January 27, 1989

VIA CERTIFIED MAIL P 446 477 474

Mrs. Josephine Rightsell, President  
Town Board of Trustees  
Town Hall  
Carbon, Indiana 47837

Re: 327 IAC Article 3 Construction Permit  
Application  
Plans and Specifications for  
The Carbon Wastewater Facilities  
EPA Project No. C180855 01

Dear Mrs. Rightsell:

The application, plans and specifications, and supporting documents for the above-referenced project have been reviewed and processed in accordance with rules adopted under 327 IAC Article 3. Enclosed is the Construction Permit (Approval No. G-0091), which applies to the construction of the above-referenced proposed water pollution treatment/control facility to be located at Carbon, Indiana.

Please review the enclosed permit carefully and become familiar with its terms and conditions. In addition, it is imperative that the applicant, consulting architect/engineer (A/E), inspector, and contractor are aware of these terms, conditions, and reporting and testing requirements. You will note that Attachment 1 to the permit must be signed and returned.

It should be noted that any person affected or aggrieved by the agency's decision in authorizing the construction of the above-referenced facility may, within eighteen (18) days from date of mailing, appeal by filing a request with the Commissioner of the Indiana Department of Environmental Management for an adjudicatory hearing in accordance with IC 4-21.5-3-7 and IC 13-7-10-2.5. The procedure for appeal is outlined in more detail in Part III of the enclosed construction permit. Pursuant to IC 4-21.5-3-5(d), the appointed Administrative Law Judge will provide parties who request review with notice of pre-hearing conferences, preliminary hearings, hearings, stays or orders disposing of all proceedings. Non-parties may receive such notices without intervening in the proceeding by providing the agency with a written request which describes the subject of the notice requested with reasonable particularity, and is delivered to the agency at least seven (7) days prior to the date that notice is given.

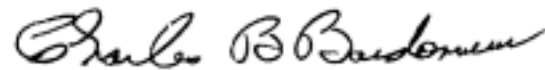
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This approval applies to the technical and operational acceptability of the submitted plans and does not imply that the entire project is eligible for federal funding or that funds are available.

Plans and specifications were prepared by Beam Longest and Neff, certified by Mr. Michael R. Cline, and submitted for review on June 8, 1988, with additional information submitted on October 31, 1988, November 23, 1988, and December 12, 1988.

Any questions concerning this permit may be addressed to Mr. Stanley Rigney of our staff, at AC 317/232-8642.

Sincerely,



Charles B. Bardonner  
Assistant Commissioner  
Office of Water Management

SRR/dj

Project No. E-0110

Enclosures

cc: Clay County Health Department  
Thomas Bramscher, U.S. EPA, Region V (w/enclosures)  
COE (w/enclosures)  
Department of Commerce  
Beam, Longest and Neff  
DNR  
State Highway Commission  
Virginia Aker  
Casey Archer  
Gilbert Archer  
Gilbert Archie, Jr.  
Thomas Archer  
Emma Bandy  
Alan Hugh Banks  
Baptist Church  
Brent Barr  
Mary Baskin  
Clara Bell  
Robert Bell  
Bell-Rodgers Rentals  
Tom Black  
Betty Brush  
Robert Bryan  
Edward Butler  
Andrea Caddell  
Carbon Masonic Lodge  
Carbon Town Hall  
Rosalie Carmichael

cc: William Carter  
Ronnie Chadwell  
Kermit Chastain  
Marcella Cornwell  
John Crague  
Loretta Craque  
Harold Davis  
Rhena Dellacca  
Dale Dickey  
Kyle Dickinson  
Burthel Dickison  
Irma Downen  
Steve Downing  
Anna Egloff  
John Egloff  
James Elrod  
Troy Fields  
Kevin Fisher  
Glenn Floyd  
Albert Foxworthy  
Charles Gabbard  
Evelyn Goshen  
Joseph Greene  
Earl Griffin, Jr.  
Larry Grigsby  
Charles Hamilton  
Mark Harbin  
Billy Harper  
Becky Hayes  
Elmo Hoke  
Jeff Hoke  
Don Howard  
Mitchell Jackson  
Charles Jeffries  
Roy Jones  
Lucinda Kaylor  
Ronald Keen  
Charles Keyt  
Stanley Knox  
Tony Lalen  
Clyde Lancaster  
Gilbert Lanham, Jr.  
Darrin Lark  
David Lark  
Willis Lashbrook  
Loretta Lawson  
Tena Lutes  
Elmer Martin  
Helen Martin  
Richard Martin  
Ted Martin  
Kenneth McCall  
David McFaddin

cc: Methodist Church  
Luther Metz  
Kenneth Montgomery  
Thomas Mullenix  
Howard Myers  
Nazarene Church  
Nazarene Fellowship Hall  
Nazarene Parsonage  
Chuck Neese  
Gladys Patrick  
Mary Patrick  
Paul's Place  
John Petty  
Carl Phegley  
Samuel Phegley  
Betty Philabaum  
Ish Phipps  
Pike Lumber  
Larry Pittman  
Wayne Pittsinbarger  
William Poet  
Harley Porter  
Dixie Raab  
Chris Rebege  
Rose Reynolds  
Thomas Reynolds  
Dan Riddell  
Josephine Rightsell  
Lorene Robinson  
Ralph Rogers  
Ron Rossok  
Robert Runyon  
Robert Salitros  
Lewis Sanders  
Ronald Schrader  
Joseph Short  
Edgar Stevens  
Walter Strain  
James Stultz  
Jeana Stultz  
John H. Summers  
James Targett  
Barbara Taylor  
Aretha Thomas  
Joseph Thomas  
John H. Thompson  
Maurice L. Thompson  
Cynthia Treash  
Vanburen Twp. Fire Dept  
Robert Vandeventer  
Margaret Webster  
Robert Webster  
Loris J. Wiley

Mrs. Josephine Rightsell  
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cc: Jack Wiley  
Walter Williams  
Mark Withers  
Michael Woodall  
John Yocom  
John Zickafoose

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
AUTHORIZATION FOR CONSTRUCTION OF  
WATER POLLUTION TREATMENT/CONTROL FACILITY  
UNDER 327 IAC ARTICLE 3

DECISION OF APPROVAL

Town of Carbon, in accordance with the provisions of IC 13-7-10 and 327 IAC Article 3 is authorized, only upon the effective date of this permit, to construct the water pollution treatment/control facility located at the Town of Carbon. The permittee is required to comply with requirements set forth in Parts I, II, and III hereof.

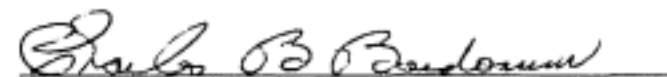
NOTICE OF EFFECTIVE DATE  
CONSTRUCTION PROHIBITED UNTIL EFFECTIVE DATE OF PERMIT

Pursuant to IC 13-7-10-2.5(b), IC 4-21.5-3-5(f), and IC 4-21.5-3-5(h), this permit shall become effective on February 14, 1989. Commencement of construction is prohibited until the effective date of the permit. If a petition for review and a petition for stay of effectiveness are filed before the effective date of the permit, any part of the permit within the scope of the petition for stay is stayed an additional fifteen (15) days from the effective date of this permit. The portions of the permit for which a petition for stay has been filed will take effect at the expiration of the additional fifteen (15) day period, unless or until an Administrative Law Judge stays the permit in whole or in part.

NOTICE OF EXPIRATION DATE

This permit and the authorization to construct this water pollution treatment/control facility shall expire at midnight December 31, 1989. In order to receive authorization to construct beyond the date of expiration, the permittee shall submit such information and forms as are required by the Indiana Department of Environmental Management at least sixty (60) days prior to the expiration date.

Signed this 27th day of January, 1989, for the Indiana Department of Environmental Management.

  
Charles B. Bardonner  
Assistant Commissioner  
Office of Water Management

WATER POLLUTION TREATMENT/CONTROL FACILITY DESCRIPTION

It is proposed to install approximately 11,100 linear feet of 4-inch PVC sewer and approximately 2,500 linear feet of 6-inch PVC sewer in the unsewered community of Carbon. This sewer will convey septic tank effluent from a 90 gpm lift station in approximately 4,000 feet of 4-inch PVC force main to a three cell hydrographically discharged lagoon into Ebenezer Creek.

Inspection during construction will be provided by Beam, Longest and Neff.

CONDITIONS AND LIMITATIONS TO THE AUTHORIZATION FOR  
CONSTRUCTION OF WATER POLLUTION TREATMENT/CONTROL FACILITY

During the period beginning on the effective date of this permit and extending until the expiration date, the permittee is authorized to construct the above described water pollution treatment/control facility. Such construction shall conform to all provisions of State Rule 327 IAC Article 3 and the following specific provisions:

PART I

SPECIFIC CONDITIONS AND LIMITATIONS TO THE CONSTRUCTION PERMIT

Unless specific authorization is otherwise provided under the permit, the permittee shall comply with the following conditions:

1. Additional treatment facilities shall be installed if the proposed facilities prove to be inadequate or cannot meet applicable federal or state standards.
2. All local permits, including zoning, shall be obtained before construction is begun on this project.
3. Roof drains, foundation drains, and other clean water connections to the sanitary sewer shall be prohibited by enforcement of legally adopted rules regulating the use of sanitary sewers.
4. As-built plans shall be submitted to this office pursuant to 327 IAC 3-3-1.
5. After construction, this agency shall be given advance notice of the date of start-up of the facilities.
6. If pollution or nuisance conditions are created, immediate corrective action will be taken by the permittee.
7. After construction and before start up of the sewage treatment facilities, the Commissioner shall be notified of the date of start up and the name of the properly certified operator in responsible charge.

8. Technical supervision, by a certified operator, shall be provided for operation and control of the wastewater treatment facilities and that monthly reports of operation shall be submitted to the Department of Environmental Management.
9. The name of the certified operator (Class II) in responsible charge shall be submitted to this office, and the operator must file monthly monitoring reports with this office in accordance with 327 IAC 5-2-15.
10. Controlled discharge shall be provided for the proposed lagoon in order to maintain an adequate dilution in the receiving stream to maintain water quality standards. A schedule and provisions for such controlled discharge shall be submitted to the Department of Environmental Management.
11. The Town of Carbon must submit an application for a National Pollutant Discharge Elimination System permit at least 180 days in advance of any discharge.
12. Analysis of the necessary wastewater parameters be provided, either by in-house laboratory equipment or by contract with an outside laboratory.
13. Plans for the outfall structure shall be submitted to the Department of Natural Resources for consideration of approval prior to the start of construction.
14. Additional treatment facilities will be installed if the proposed facilities fail to provide adequate control or if necessary for compliance with more stringent Federal or State pretreatment standards or requirements promulgated subsequent to the date of this approval.
15. Plans and specifications for the construction along and across the state highways must be submitted to the State Highway Commission for consideration of approval prior to construction.
16. Plans for sewer construction under streams shall be submitted to the Department of Natural Resources for consideration of approval prior to the start of construction.
17. An audio-visual alarm shall be installed for the proposed lift station.
18. Sewer to water main separation distances must comply with Section 29 of the Recommended Standards for Sewage Works, 1978 Revised Edition.
19. The infiltration/exfiltration for the subject sewer system shall not exceed 200 gallons per inch of diameter per mile of sewer in a 24-hour period.
20. The results of the infiltration/exfiltration test and/or force main leakage test on the completed sewer must be submitted to this office within three months of completion of construction.

21. Air relief valves shall be installed at high points in the force main.
22. A drop pipe must be provided for all sewers entering a manhole at an elevation of 24 inches or more above the manhole invert.
23. All force main must be tested (two hour minimum) at 150% of design working pressure for leakage. Leakage (gallons per hour) shall be less than  $((\# \text{ of joints}) (d \text{ in inches}) (\text{psi})^2) / 3700$ . Test procedures from the appropriate AWWA specifications for pressure pipe may be used as an alternate.
24. Deflection tests must be performed on all flexible\* pipe after the final backfill has been in place at least 30 days. No pipe shall exceed a vertical deflection of 5%. Deflection test results shall be submitted with the infiltration/exfiltration test results. (\*The following are considered nonflexible pipes: vitrified clay pipe, concrete pipe, ductile iron pipe, cast iron pipe, asbestos cement pipe.)

Failure to submit test results within the allotted time period or failure to meet guidelines as set forth in the above conditions could be subject to enforcement proceedings as provided by 327 IAC 3-5-3.

This construction permit shall be considered void if Attachment 1 to this letter is not signed by the permittee on the space provided affirming that all conditions are expressly agreed to and will be complied with fully, and returned to the undersigned by certified mail within 30 days of the date of this letter.

PART II

GENERAL CONDITIONS

1. No significant or material changes in the scope of the plans or construction of this project shall be made unless the following provisions are met:
  - a. Request for permit modification is made 60 days in advance of the proposed significant or material changes in the scope of the plans or construction;
  - b. Submit a detailed statement of such proposed changes;
  - c. Submit revised plans and specifications including a revised design summary; and
  - d. Obtain a revised construction permit from this agency.
2. This permit may be modified, suspended, or revoked for cause including, but not limited to the following:
  - a. Violation of any term or conditions of this permit;
  - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - c. Failure to identify persons or parties who may be potentially affected by the issuance of this permit.
3. Nothing herein shall be construed as guaranteeing that the proposed water pollution treatment/control facility shall meet standards, limitations or requirements of this or any other agency of state or federal government, as this agency has no direct control over the actual construction and/or operation of the proposed project.

PART III

APPEALS PROCEDURE

Anyone wishing to challenge this agency's decision for authorizing the construction of this facility may do so, provided that a petition for administrative review is filed as required by IC 4-21.5-3-7. The petition must be submitted to the Commissioner of the Indiana Department of Environmental Management within eighteen (18) days of the date of mailing of this permit notification. The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by this decision, or otherwise entitled to review by law. Additionally, IC 13-7-10-2.5 requires that your petition include:

1. The name and address of the person making the request;
2. The interest of the person making the request;
3. Identification of any persons represented by the person making the request;
4. The reasons, with particularity, for the request;
5. The issues, with particularity, proposed for consideration at the hearing; and
6. Identification of the permit terms and conditions which, in the judgement of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing permits of the type granted or denied by the Assistant Commissioner's action.

Attachment 9-B

CHECKLIST FOR PL 95-217 CONSTRUCTION PROJECT  
DESIGN SUMMARY AND BIDDING DOCUMENT

I. GENERAL

1. Grantee: Town of Carbon
2. Project Name and Location: Carbon Wastewater Treatment Plant and Collection System
3. Grant Project Number: C180855 01
4. Engineer (Consultant): Beam, Longest and Neff, Inc.
5. NPDES Permit Number: IN 0039829
  - \*A. Date of Final Permit Issuance: July 15, 1987
  - \*B. Expiration Date: July 15, 1992
6. Remarks:
  - A. Description of Present Situation: Currently, the Town of Carbon is an unsewered community with approximately 135 users. Treatment occurs on-site in individual septic tanks. Because of the soil conditions the effluent from the septic tanks has become a nuisance and a public health risk. Since the Town of Carbon would not be able to meet its NPDES permit limits, they were able to obtain a federal grant to correct the situation.
  - B. Description of Proposed Facilities: It is proposed to install approximately 11,100 linear feet of 4-inch PVC sewer and approximately 2,500 linear feet of 6-inch PVC sewer to convey septic tank effluent for the approximately 135 users to a 3-cell hydrograph discharged lagoon ultimately into Ebenezer Creek.
  - C. Proposed facility consistent with selected alternative of facilities plan or FNSI. (Major pieces of equipment, buildings, motor vehicles, treatment processes, or capacities, not identified in the selected alternative of the facilities plan must be approved by amendment to the facility plan). Yes
  - D. Estimated cost of project exceed facility plan cost by 10%? If yes, detailed justification needed. Yes
  - E. Date and Grant Step Number of Latest Grant Award: September 29, 1987; Step 4

7. Estimated Project Cost:
  - A. Total Cost: \$1,700,000
  - B. Eligible Cost: \$1,438,000
  - C. Federal Request: \$1,078,000
  - D. State Request: \$288,000

## II. DESIGN DATA

1. Current (1980 Census) Population: 307
2. Design Year and Population: Year 2010; 330 population
3. Design P.E.: 250
4. Design Flow: 25,160
  - A. Domestic: 21,400 GPD
  - B. Infiltration/Inflow: 3,760 GPD
6. Average Design Peak Flow: 63,000 GPD
7. Maximum Plant Flow Capacity: 129,600 GPD
8. Design Waste Strength
  - A. TBOD<sub>5</sub>: 200 mg/l
  - B. TSS: 80 mg/l
  - C. NH<sub>3</sub>-N: 35 mg/l
9. NPDES Permit Limitation on Effluent Quality:
  - A. TBOD<sub>5</sub>: 25 mg/l
  - B. SS: 70 mg/l
10. Receiving Stream:
  - A. Name: Ebenezer Creek
  - B. Tributary to: North Branch of Otter Creek
  - C. Stream Uses: Partial Body
  - D. 7-day, 1-in-10 year low flow: 0 cfs

### III. TREATMENT UNITS

#### Flow Meters

1. Type: Magnetic
2. Location: Lagoon effluent line
3. Indicating, recording and totalizing: Yes

#### Lagoons

1. Type of lagoons: Hydrograph Control Release
2. Number and size of lagoons: 3 cells; Primary - 300' x 100'; (906,015 gallons) Secondary - 299' x 146' (1,573,667 gallons); Hydrograph 270' x 210' (2,738,039 gallons).
3. Organic loading: 25 lbs/acre (cells 1 and 2)
4. Controlled discharge facilities: Mechanical Float Discharge
5. Maximum water level: 8 feet deep
6. Freeboard: 3 feet
7. Soil boring data and permeability data: Provided
8. Slope of embankment and top width: 3:1 slope, 8 foot top width
9. Fence: 6 foot high chain link fence
10. Detention time: 99 days
11. Stream gage: Scale built on weir
12. Lagoon seal: Bentonite
13. Facilities for multi-level lagoon discharge: Yes
14. Scum control: Yes

### IV. SEWER COLLECTION SYSTEM

#### Lift Stations

1. Location: South Central part of town, off old SR 59
2. Type of pump: Submersible
3. Number of pumps: Two (2)
4. Constant or variable speed: Constant speed

5. Capacity of pumps: 90 gpm
6. RPM and TDH: 1750 RPM, 40' TDH
- \*7. Volume of the wet well: 423 gallon working volume
- \*8. Detention time in the wet well: 6.7 minutes
- \*9. A gate valve and a check valve in the discharge line: Yes
- \*10. A gate valve on suction line: Yes
- \*11. Ventilation: Yes
12. Standby power: Yes, portable pump
13. Alarm: Yes
14. Bypass or overflow: No
15. Type of force main: PVC
16. Diameter and length of force main: 4,400 feet of 4-inch

#### Sewer

1. Type of sewer material: PVC
2. Diameter and length of sewer (indicate length for each size): 4" diameter - 11,100 feet  
6" diameter - 2,500 feet
3. Stream, highway, and railroad crossing: 1 Railroad crossing
4. Separation of combined sewer or new sewer: New sanitary sewer only
5. Number of manholes: 26
6. Water main protection: Yes, per Ten-State Standards

#### V. MISCELLANEOUS

- A. Laboratory equipment: Contracted out.
- B. Safety equipment: Yes
- C. Plant site fence: Yes
- D. Handrail for the tanks: N/A
- E. Units, unit operation, and plant bypasses: Lagoons can individually be bypassed

- F. Flood elevation (10, 25, or 100 year flood): 100 year
- G. Consistency with EPA Reliability Technical Bulletin: Yes
- H. Provisions to maintain the same degree of treatment during construction: N/A
- I. Standby power equipment: Portable pump
- J. Site inspection: Yes
- K. Statement in the specifications as to the protection against any adverse environmental effect (e.g., dust, noise, soil erosion) during construction: Yes
- L. Hoists for removing heavy equipment: Yes
- M. Adequate sampling facilities: Yes
- N. Hydraulic Gradient: Yes
- O. Septage receiving facilities
  - 1. Screening: N/A
  - 2. Location of discharge: N/A
- P. Structural work proposed on buildings (including rehab): N/A