

## Instructions for Application for Construction/Operation Permit for Treatment Works Schedule D

This application form is primarily intended for the applications for Permits or Authorizations to Construct or Permits to Operate treatment works for municipalities, sanitary districts, commercial or other establishments with domestic type wastes.

All blanks must be completed. When the question is not applicable to your project, write "Not Applicable," or "N.A."

Schedule items which are self-explanatory are omitted in these instructions.

- 1.1 The name of the project must be the same as that indicated in WPC-PS-1.
  - 1.2.2 Give the location of the discharge point to the nearest quarter section including section, township, range and principal meridian.
  - 1.2.3 Give the location of the discharge point in degrees, minutes and seconds by interpolation from a quadrangle map.
  - 1.2.4 Name of U.S. Geological Survey quadrangle map used in making above determination.
2. The approximate construction schedule for the project is requested to allow the scheduling of surveillance personnel to begin visits to the waste treatment facility site.
  - 2.1 This is essentially design year of the treatment works.
3. A schematic wastewater flow diagram must be submitted. It should generally conform to the following description: A line drawing of the flow through the process units. Average and maximum flow rates should be shown. Specific treatment processes are to be indicated.

A location map is also required. The map should generally conform to the following; (A) show the location of each discharge structure including any and all outfall devices and dispersion devices. (B) Show the distance and direction to the nearest residence. The usual meridian arrow showing North as well as the map scale must be shown. On all maps of rivers, the direction of the current is to be indicated by an arrow. Preferably this location map should be done on a copy of the U.S. Geological Survey Quadrangle Map for the area involved.

Plans and specifications prepared by a Registered Professional Engineer must be submitted for all proposed construction.

### Plans of sewage treatment works:

#### Location Plan

A plan shall be submitted, showing the sewage treatment works in relation to the remainder of the system. Sufficient topographic features shall be included to indicate its location with relation to streams and the point of discharge of treated effluent.

#### General Layout

Layouts of the proposed sewage treatment works shall be submitted, showing:

- a. Topography of the site.
- b. Size and location of treatment works structure.
- c. Schematic flow diagram showing the flow through various treatment works units.
- d. Piping, including any arrangements made for by-passing individual units. Materials handled and direction of flow through pipes shall be shown.
- e. Hydraulic profiles showing the flow of sewage, supernatant liquor and sludge.
- f. Test borings and ground water elevations.

#### Detailed Plans

Detailed plans shall show the following:

- a. Location, dimensions and elevations of all existing and proposed treatment works facilities.
- b. Elevations of high and low water level of the body of water to which the treatment works effluent is to be discharged.
- c. Type, size, pertinent features, and specified capacity of all pumps, blowers, motors and other mechanical devices at the design condition.
- d. Minimum, average and maximum hydraulic flow in profile.
- e. Adequate description of any features not otherwise covered by specification or engineer's report.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF WATER POLLUTION CONTROL  
PERMIT SECTION  
Springfield, Illinois 62706

**SCHEDULE D TREATMENT WORKS**

1. NAME AND LOCATION:

1.1 Name of project \_\_\_\_\_

1.2 Plant location

1.2.1 Is the treatment work site within the corporate limits of a municipality? YES NO

1.2.2 \_\_\_\_\_  
Quarter Section Section Township Range P.M.

1.2.3 Latitude \_\_\_\_\_ E \_\_\_\_\_ ' \_\_\_\_\_ "North

Longitude \_\_\_\_\_ E \_\_\_\_\_ ' \_\_\_\_\_ "West

1.2.4 Name of USGS Quadrangle Map (7.5 or 15 Minutes) \_\_\_\_\_

1.2.5 State distance to nearest residence \_\_\_\_\_

2. APPROXIMATE TIME SCHEDULE: Start of Construction \_\_\_\_\_; Date of Completion \_\_\_\_\_; Date operation begins \_\_\_\_\_

2.1 100% Design Load to be reached by year \_\_\_\_\_

3. MAPS AND DRAWINGS: Attach schematic flow diagram and submit plans and specifications.

4. RECEIVING STREAM: Name \_\_\_\_\_;  
tributary to \_\_\_\_\_; tributary to \_\_\_\_\_

5. Is the treatment works subject to flooding? YES NO . If yes, what is the maximum flood elevation record (in reference to the treatment works datum) and what provisions have been made to eliminate the flooding hazard?

\_\_\_\_\_

6. DESIGN LOADINGS:

6.1 Design Population Equivalent (one population equivalent is 100 gallons of sewage per day, containing 0.17 pounds of BOD<sub>5</sub> and 0.20 pounds of suspended solids) \_\_\_\_\_ P.E.

6.2 Design Average Flow Rate \_\_\_\_\_ MGD Design Maximum Flow Rate \_\_\_\_\_ MGD.

6.3 Pounds of BOD Per Day \_\_\_\_\_ lbs/day Pounds of Suspended Solids Per Day \_\_\_\_\_ lbs/day.

6.4 Minimum 7-day, 10-year low flow \_\_\_\_\_ CFS \_\_\_\_\_ MGD.

Minimum 7-day, 10-year low flow obtained from \_\_\_\_\_

6.5 Proposed Dilution Ratio \_\_\_\_\_; \_\_\_\_\_

7. DESIGN INFLUENT AND EFFLUENT:

7.1 Can the existing effluent quality be maintained during construction? YES NO If no, please explain

\_\_\_\_\_

