

ORDINANCE NO. 57

AN ORDINANCE OF THE TOWNSHIP OF HAYCOCK, BUCKS COUNTY, PENNSYLVANIA, ESTABLISHING STANDARDS FOR THE CONSTRUCTION AND OPERATION OF ON-SITE SEWAGE TREATMENT PROCESS FOLLOWED BY SPRAY IRRIGATION.

The Board of Supervisors of the Township of Haycock, Bucks County, Pennsylvania does hereby adopt by Ordinance the following standards and procedures:

**SECTION 100 - INTENT**

The intent of this Ordinance is to:

- a) Promote the general health, welfare and safety of the community and the environment within which it resides.
- b) Encourage the utilization of appropriate construction practices to treat domestic sewage and return the treated wastewater to the ground for recharge of the ground water system.
- c) Minimize danger to public health by encouraging appropriate operation of sewage treatment systems involving a biological treatment process followed by spray irrigation.
- d) Specify minimum system sizes, flow rates, wastewater storage capacity and operational design features that shall be used in the design and construction of sewage treatment systems involving a biological treatment process followed by spray irrigation.

**SECTION 101 - SUPPLEMENTAL STANDARDS**

This Ordinance, by reference, hereby incorporates the most recently published standards pertaining to design, construction, maintenance and operation of on-site sewage treatment systems involving biological treatment processes followed by spray irrigation of the:

- a) Pennsylvania Department of Environmental Resources.
- b) Bucks County Department of Health
- c) National Sanitation Foundation

**SECTION 102 - INTERPRETATION OF ORDINANCE AND STANDARDS BY TOWNSHIP ENGINEER**

If a reference standard allows for more than one option, the option listed in this Ordinance shall govern the design and construction of an on-site sewage treatment system involving a biological treatment process followed by spray irrigation.

All standards referenced are to be the latest revision thereof.

Interpretation of this Ordinance and standards as well as the choice of available option in the referenced standards shall be done by the Township Engineer.

**SECTION 103 - APPEAL OF TOWNSHIP ENGINEER'S INTERPRETATION**

Should a dispute arise concerning the interpretation of the above standards as they relate to each other or to the minimum standards specified in this Ordinance, an initial determination shall be made by the Township Engineer. Any party aggrieved by this decision may appeal to the Haycock Township Board of Supervisors. The burden of proof shall be on the appellant.

**SECTION 200 - DEFINITIONS**

Soil descriptions are those commonly used by the USDA Soil Conservation Service.

Water conservation fixtures shall include spray tops, faucet aerators, flow control devices, flow-reducing showerheads, dual-type flush devices, low water use pressure toilets and other similar state of the art devices for reducing the use of water for domestic purposes.

**SECTION 300 - SEWAGE TREATMENT SYSTEM**

**300.1 - TYPE OF SYSTEM**

The type of on-site sewage treatment system to be designed, constructed and operated in accordance with this Ordinance consists of a biological treatment process followed by spray irrigation.

### 300.2 - SITE REQUIREMENTS

A site being considered for biological treatment of domestic wastewater followed by spray irrigation shall be capable of:

- a) providing a spray area meeting the requirements of this Ordinance.
- b) providing a fenced-in buffer area around the spray area meeting the requirements of this Ordinance.
- c) having the following minimum distances to the buffer area fence of:
  1. 100 feet from public/private rights-of-way. In the case of public streets, the minimum distance shall be measured from the ultimate right-of-way line.
  2. 125 feet from property lines of adjacent properties and properties on the opposite sides of public rights-of-way.
  3. 100 feet from on-site occupied buildings.
  4. 250 feet from established off-site occupied buildings.
  5. 100 feet from all streams, water courses and ponds.
  6. 100 feet from drilled wells.
  7. 250 feet from hand dug wells.
  8. 100 feet from on-site high use areas such as swimming pools and patios.
  9. 250 feet from established off-site high use areas such as playgrounds, swimming pools and patios.

### 300.3 - SPRAY AREA REQUIREMENTS

An area to be considered as a spray area and to meet the requirements of this Ordinance shall:

- a) not contain severely or moderately eroded phases of shallow/well-drained soils.
- b) not contain severely eroded phases of moderately well-drained soils.
- c) not contain poorly drained soils.
- d) not contain floodplain soils.
- e) not be located in wetlands.
- f) not have slopes exceeding eight percent (8%) in open grassed areas.
- g) not have slopes exceeding eight percent (8%) in wooded areas.
- h) not have slopes exceeding four percent (4%) if the soil is determined to be "somewhat poorly drained soil".
- i) not experience a seasonally high groundwater table of 1 foot or less.
- j) not be located in areas where potential groundwater contamination may occur.

**300.4 - SEWAGE TREATMENT PLANT**

A biological process sewage treatment plant in order to meet the requirements of this Ordinance shall:

- a) provide minimum secondary treatment (30 mg/L BOD5 and Suspended Solids) such as that provided by an NSF Standards No. 40 Class I (less than 1500 gpd) approved treatment unit and NSF Criteria C-9 approved treatment unit greater than 1500 gpd.
- b) provide disinfection of a treated sewage, either by chlorination or other equivalent approved processes.
- c) be constructed so that entry of surface water into the treatment unit is avoided.

## SECTION 400 - SEWAGE TREATMENT SYSTEM DESIGN PARAMETERS

### 400.1 - SEWAGE TREATMENT PLANT

The sewage treatment plant shall be designed for an average wastewater influent flow of 100 gallons per residence capita per day or 400 gallons per day, whichever is the greater gallonage per day. In addition, the applicant must demonstrate that the proposed unit has been designed to accommodate additional loading.

### 400.2 - TREATED WASTEWATER STORAGE FACILITY

A treated wastewater storage facility consisting of tanks, shall be included in the design of the sewage treatment system to store treated wastewater when spraying of the treated wastewater for a period of time is not permitted. Open tanks or ponds for wastewater storage are prohibited. The storage facility shall be sized to contain the larger quantity of treated wastewater as determined on the following basis:

- a) 100 gallons per day for 30 days.
- b) Projected wastewater generated per day times 30 days.

### 400.3 - SPRAY IRRIGATION AREA

The spray irrigation area shall be designed:

- a) for spray application rates of:
  1. 0.2 inches/week on deep, somewhat poorly drained soils.
  2. 0.4 inches/week on shallow (depth of 15 to 20 inches) well drained soils.
  3. 0.4 inches/week on deep, moderately well drained soils.
  4. 0.4 inches/week on moderately deep, well drained soils.
  5. 0.4 inches/week on moderately deep, moderately well drained soils.
  6. 0.5 inches/week on deep, well drained soils.

- b) for spray application rates of 2 times the design influent rate of the sewage treatment plant.
- c) to be completely covered by spray pattern of the irrigation system nozzles.
- d) to use low trajectory nozzles and "coarse" spray to minimize misting/aerosol drift.
- e) such that a different segment of the area can be sprayed each day of the week and that each segment will be "rested" at least 6 days between spray applications to that segment.
- (f) to have a mowable vegetative cover.

**400.4 - BUFFER AREA**

The buffer area surrounding the spray irrigation area shall:

- a) be a minimum of 25 feet in width.
- b) be planted with Evergreens for a minimum of 2 staggered rows, at 6 foot intervals, to act as a visual break and a wind break. Plantings shall have a minimum height of 4 feet at time of installation.
- c) be planted with a mowable vegetative cover.
- d) contain the treated wastewater storage facility.
- e) include an uphill berm which will direct upland drainage away from the spray irrigation area. The height of the berm shall be determined by the Township Engineer.
- f) include a downhill berm to retain drainage from the spray irrigation area and to redirect drainage to the storage facility.
- g) be enclosed with a 4-foot high chain link fence and a lockable access gate to protect the health and safety of the neighboring property owners, unless waived in the discretion of the Township. Fencing, when required, shall be of the type and height recommended by the Township Engineer.

- h) be posted with signs on each straight run of fencing stating that the enclosed area is a spray irrigation wastewater disposal area.
- i) be provided with a driveway for Township access to the spray irrigation system.

#### 400. 5 - ADDITIONAL DESIGN FEATURES

Each sewage treatment system consisting of a biological treatment process followed by spray irrigation shall have the following items incorporated into the design:

- a) a wind velocity interlock that will prevent a spray application to take place at wind velocities greater than 8 miles per hour.
- b) a shut-off accessible to the Township to be operated by the Township only if the system is not operating properly or being maintained properly.
- c) water conservation fixtures throughout the domestic water system of the residence.
- d) a chlorine residual monitoring system or a chlorine residual test kit for monitoring the chlorine residual of the treated secondary effluent.
- e) an audible siren or buzzer that will alert the owner of the sewage treatment system that the chlorine minimum requirements are not being met.
- f) a monitoring well located downhill of the buffer area.

#### SECTION 500 - OPERATION AND MAINTENANCE

A sewage treatment system consisting of a biological treatment process followed by spray irrigation shall be operated and maintained in accordance with the requirements of this Ordinance and the requirements of both the Pennsylvania Department of Environmental Resources and the Bucks County Department of Health.

This Ordinance requires that:

- a) all spray applications be made between the hours of 9 p. m. and 6 a. m.

- b) spray applications be made on soils when the soil temperature is above 32° Fahrenheit.
- c) all spray applications be made during periods of low wind velocity.
- d) all operation and maintenance listed in the operation and maintenance manual be performed at regularly scheduled intervals.
- e) the secondary effluent be monitored and tested for chlorine residual on a periodic basis to insure safe maintenance and operation.
- f) the monitoring well shall be monitored for ground-water pollution at intervals of not more than six (6) months. Monitoring costs shall be borne by the owner of the system.
- g) the vegetative cover on the spray irrigation area and the buffer area be mowed and harvested to maintain a height of not greater than four (4) inches.
- h) monthly operation and maintenance reports shall be kept by the owner and shall be available for inspection by the Township at reasonable times.
- i) Tank Removal and Disposal - All removal and/or disposal of the system shall be in compliance with the written agreement and shall require notice to Haycock Township Administrative Office no less than fifteen (15) days prior to the start of removal and/or disposal.

**SECTION 600 - APPLICATIONS AND SUBMISSIONS**

Applications to construct and operate an on-site sewage treatment system consisting of a biological treatment process followed by spray irrigation in Haycock Township shall be submitted to Haycock Township as well as to other governmental agencies having jurisdiction over the construction and operation of this type of sewage treatment system.

Written applications to Haycock Township to construct and operate the sewage treatment system shall be accompanied by:

- a) Planning Modules to revise Haycock Township's Act 537 Sewage Facilities Plan.

- b) Logs and analysis of soil(s) within the proposed spray area.
- c) a site review and analysis report.
- d) a large scale detailed site plan, extending 500 feet beyond the proposed spray irrigation area showing existing and proposed 2 foot contours, wooded areas, buildings, wells, streams, on-lot sewage systems, plantings, grading, fences and other topographic features necessary to evaluate the proposed system.
- e) easement to Haycock Township for purpose of inspection.
- f) system design calculations and reports, including details of monitoring well and spray irrigation equipment.
- g) an operation and maintenance manual for the system.
- h) application fee.

Written applications to Haycock Township for an annual operating permit shall be accompanied by:

- a) a copy of the previous year's operational data, logs, monitoring and test results.
- b) application fee as provided by resolution of the Board of Supervisors.

If the owner of the sewage treatment system has contracted a service person, or company, to operate and maintain the system, a copy of the service contract shall accompany the application for an operating permit.

**SECTION 700 - PERMITS, FEES AND REQUIREMENTS OF SYSTEM MAINTENANCE AGREEMENT**

**700.1 - PERMITS**

A permit to operate a sewage treatment system complying with the requirements of this Ordinance will be issued to the owner of the system system at such time as the owner of the sewage treatment system has satisfied Haycock Township that:

- a) the system complies with requirements of the Pennsylvania Department of Environmental Resources.
- b) the system complies with requirements of the Bucks County Department of Health.
- c) the system complies with this Ordinance.
- d) the system operation will comply with this Ordinance, and that the owner has executed an Agreement with the Township providing for an Escrow fund to insure the proper operation and maintenance of the system.
- e) all required fees, applications, contracts, reports and manuals have been submitted to Haycock Township.

The initial permit will be valid until June of the calendar year following the date of issuance.

Applications for subsequent annual operating permits shall be made by the owner to Haycock Township in April of each year.

The Haycock Township Board of Supervisors may revoke an operation permit if the system is not being operated and maintained in accordance with this Ordinance.

#### **700.2 - FEES**

Fees for application and operating permit shall be established by Resolution.

#### **700.3 - SYSTEM MAINTENANCE AGREEMENT**

The owner of the sewage treatment system shall enter into an agreement with the Township, in form acceptable to the Township, as to the maintenance and inspection schedule of said system, and further delineating certain guarantee of the performance of the required obligations of owner by the deposit of funds in escrow in an amount determined by Township. Said Agreement shall be recorded with the Bucks County Recorder of Deeds, and shall be binding upon any successor or assign of owner.

#### **700.4 - INSURANCE**

Owner shall maintain policies of liability insurance in full force and effect during the time the sewage treatment system is used or intended for use expressly naming as insured

the Owner, the Township, the Township Board of Supervisors individually while acting on Township business, the Township Engineer and all Township personnel from liability for personal injury and property damage claims, and owner further agrees to have the aforesaid named as an additional named insured in each of the policies and shall provide general liability coverage, in an amount and in a manner satisfactory to the Township.

**SECTION 800 - FINES AND PENALTIES, SEVERABILITY, REPEALER AND EFFECTIVE DATE**

**800.1 - FINES AND PENALTIES**

- a) For any and every violation of the provisions of this Ordinance:
1. The owner, general agent, contractor of the system where such a violation has been committed or shall exist;
  2. The owner, general agent, contractor, lessee, or tenant of any property containing an on-site spray irrigation system in which part such violations have been committed or shall exist; and
  3. The general agent, architect, builder, contractor, or any other person who knowingly commits, takes part, or assists in any such violation or who maintains or has agreed to maintain the on-site spray irrigation system for which such violation shall exist shall be liable upon conviction thereof to a fine or penalty of three hundred dollars (\$300.00) which shall be paid to the general fund of the Township. In default of payment, such person shall be committed to the Bucks County prison and confined for a period not to exceed sixty (60) days. Each day the violation continues shall constitute a separate and distinct violation and a separate and distinct penalty shall be assessed therefore.
- b) Such fines and penalties may be collected by summary proceedings brought in the name of the municipality before a District Justice.

800.2 - SEVERABILITY

If any provision, sentence, clause, section or part of this Ordinance, or the application of any provision hereof, is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts of this Ordinance. It is hereby declared as the intent of the Township that this Ordinance would have been enacted had such unconstitutional, illegal or invalid provision, sentence, clause, section or part hereof not been included.

800.3 - REPEALER

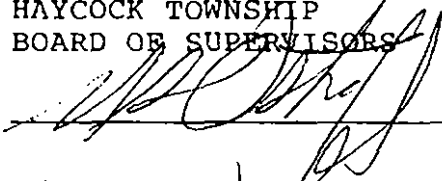
All Ordinances or parts of Ordinances in conflict or inconsistent herewith, be and the same are hereby repealed absolutely.

800.4 - EFFECTIVE DATE

This Ordinance is hereby declared to be urgent for the preservation of the peace, health and comfort of the people of the Township and shall take effect and be enforced five (5) days after it is enacted by the Board of Supervisors of the Township.

SO ORDAINED AND ENACTED into Ordinance this *18<sup>th</sup>*  
day of *January*, A. D. 1987.

HAYCOCK TOWNSHIP  
BOARD OF SUPERVISORS

  
\_\_\_\_\_  
*James M. Babb*  
\_\_\_\_\_  
*Chris W. Winter*  
\_\_\_\_\_

ATTEST:

*Nancy M. Godin*  
\_\_\_\_\_  
Township Secretary