WASHINGTON TOWNSHIP

ORDINANCE NO. 150

AN ORDINANCE DEFINING AND REGULATING INDIVIDUAL SEWAGE DISPOSAL SYSTEMS; REQUIRING MINIMUM STANDARDS GOVERNING THE DESIGN, CONSTRUCTION, AND INSTALLATION OF SEPTIC TANK SOIL ABSORPTION SYSTEMS; AND AUTHORIZING THE ISSUANCE OF PERMITS, AND PROVIDING FOR PENALTIES FOR VIOLATIONS.

BE IT ENACTED AND ORDAINED by the Supervisors of Washington Township, Northampton County, Pennsylvania, and it is hereby enacted and ordained by the authority of the same and pursuant to the authority granted by the Act of the Legislature approved by the same, May 1, 1933, P.L. 103, as amended, as follows:

SECTION 1: Definitions

1.1 For the purposes of this Ordinance, the following words and phrases shall have the meanings ascribed to them in this section unless the context clearly indicates otherwise.

1.1.1 Sanitary Officer - shall mean the legally designated authority of the Township of Washington or his authorized representative.

1.1.2 Individual sewage disposal system - shall mean a sewage disposal system, other than a public or community system, which receives either human excreta or liquid waste, or both, from one or more premises. Included within the scope of this definition are treatment tanks and such other types as may be prescribed in regulations.

1.1.3 Permit - shall mean a written permit issued by the Sanitary Officer, permitting the construction of an individual sewage disposal system under this Ordinance.

1.1.4 Person - shall mean any institution, public or private corporation, individual, partnership, or other entity.

1.1.5 Treatment Tank - shall mean a water tight tank designed to retain sewage solids long enough for satisfactory bacterial decomposition of the solids to take place and includes septic tanks and aeration type tanks.

1.1.5.1 Septic tank - shall mean a water tight receptacle which receives sewage or industrial waste and is designed and constructed to provide for

sludge storage, sludge decomposition, and separate solids from the liquid through a period of detention before allowing the liquid to be discharged.

1.1.5.2 Aerobic Sewage Treatment Tank - shall mean any unit incorporating, as a part of the treatment process, a means of introducing air into the sewage held in a storage tank or tanks so as to provide aerobic biochemical stabilization during a detention period.

1.1.6 Disposal Field - shall mean an area in which open joint or perforated piping is laid in covered trenches or excavations for the purpose of distributing the liquid from the treatment tank into the soil.

1.1.7 Industrial Wastes - shall mean liquid wastes resulting from the processes employed in industrial and commercial establishments.

1.1.8 Building Sewer - shall mean the piping carrying the liquid wastes from the building to the treatment tank.

1.1.9 Waters of the Township - shall be construed to include any and all streams, creeks, rivulets, lakes, dammed water, ponds, springs, and all other bodies of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Township.

1.1.10 Community Sewerage System - shall mean any system whether publicly or privately owned, for the collection and disposal of sewage or industrial wastes of a liquid nature, or both, including various devices for the treatment of such sewage or industrial wastes serving three or more individual lots.

SECTION II: Requirements for Individual Sewage Disposal Systems

The following standards shall apply for the installation, alteration, repair or extension of individual sewage disposal systems in the Township of Washington.

ARTICLE I - General

A. All liquid wastes including kitchen and laundry wastes shall be discharged to a treatment tank. No raw sewage, septic tank effluent, or seepage from a soil absorption system shall be discharged to the surface of the ground, or ground surface water, nor shall it be discharged,

except as hereinafter provided, into any rock formation, the structure of which is not conducive to purification of water by filtration.

B. No installations of individual sewage disposal systems shall be made in low areas or areas which may be subject to flooding.

C. No bulldozers, trucks, or other heavy machinery shall be driven over the system after installation.

D. Sub-surface disposal systems shall not be located in areas which may be paved or subject to use as playgrounds, parking lots or other usage, which will cause abnormal compaction of the soil.

ARTICLE II - Minimum Isolation Distances and Sewer Construction

A. No buried or concealed portion of the building sewer, or building drain or branch thereof serving any premise shall be located less than the minimum distances as shown in Table I and II. Where conditions warrant, greater isolation distances may be required.

TABLE I

Sewer and Septic Tank Minimum Distances

Property Line	10 Feet
Occupied Buildings	10 Feet
Buried Water Pipe Under Pressure	10 Feet
Individual Water Supply	50 Feet
Buried Water Pipe Under Suction	50 Feet

TABLE II

Sub-surface Disposal System Minimum Distances

Buried Water Pipe Under Suction	100 Feet
Individual Water Supply	100 Feet
Streams, Lakes, or other surface water	50 Feet
Occupied Buildings	10 Feet
Property Lines	10 Feet
Buried Water Pipe Under Pressure	10 Feet

B. The portions of any buried sewer more than fifty (50) feet from a well or buried suction line shall be of adequate size and constructed of cast iron, vitrified clay, cement-asbestos or bituminized fiber pipe. Any building drain or building sewer shall be not less than four (4) inches in diameter. If the average daily flow exceeds 1,000 gallons per day, building sewers shall be at least six (6) inches in diameter.

C. Bell and spigot of vitrified clay pipe shall be prepared to form a concentric opening uniform in width around the pipe of which

the opening shall be filled with an acceptable sewer joint compound. Cement joints shall be painted on the outside and left smooth on the inside by drawing a swab or scraper through the joint. The line shall have a grade of not less than 1/8 inch per foot. The ten (10) feet of sewer immediately preceding the septic tank shall slope not more than 1/4 inch per foot. No 90 degree ells shall be permitted, and where the direction of the sewer is changed in excess of 45 degrees accessible cleanouts shall be provided. Cleanouts shall be provided at the junction of the building drain and building sewer and each change in direction of the building sewer. Cleanouts shall be provided at intervals not to exceed 50 feet on lines of four (4) inch diameter, or 100 feet in larger pipes.

D. All building sewers shall be constructed with water tight joints and shall be of sufficient strength to withstand imposed loads when: (1) located within 50 feet of an individual water supply; (2) within 5 feet of any basement foundation or, (3) located under driveways with less than three feet earth cover.

ARTICLE III - Septic Tank and Aerobic Treatment Tanks

A. No septic tank shall be located to provide less than the minimum distances as stated in Table I.

B. The liquid capacity of a septic tank serving a dwelling, shall be based on the number of bedrooms proposed for the dwelling, as listed in the following Table III.

TABLE III

Minimum Capacities for Septic Tanks

(Provides for use of Garbage-Grinders, Automatic Washers, and other Household Appliances)

No. of Bedrooms	Minimum Tank Capacity
3 or less	900 Gallons
4*	1000 Gallons

* For each additional bedroom add 100 gallons.

The liquid capacity of a septic tank shall provide a sewage detention period of not less than twenty-four (24) hours in the tank. Sewage flow shall be computed according to types of establishment and water use. With sewage flows greater than one thousand five hundred (1,500) gallons per day, the liquid tank capacity shall equal one thousand one hundred twenty-five (1,125) gallons plus seventy-five (75) per cent of the daily anticipated sewage flow.

C. The liquid depth of any septic tank or compartment thereof shall be not less than thirty (30) inches nor greater than five (5) feet.

D. No tank or compartment thereof shall have an inside horizontal dimension less than thirty-six (36) inches.

E. Inlet and outlet connections of the tank and of each compartment thereof shall be submerged by means of vented tees or baffles.

F. The space in the tank between the liquid surface and the top of the tank shall be not less than twenty (20) per cent of the total required liquid capacity, except that in horizontal cylindrical tanks this space shall be not less than fifteen (15) per cent of the total required liquid capacity.

G. The inlet baffle or submerged pipe shall extend below liquid level at least six (6) inches. In no case shall this penetration be greater than that allowed for the outlet device. The inlet baffle must extend at least one (1) inch above the crown of the inlet sewer.

H. The outlet baffles or submerged pipe and the baffles or submerged pipes between compartments shall extend below the liquid surface a distance equal to forty (40) per cent of the liquid depth. The penetration of the outlet baffles or submerged pipes of a horizontal cylindrical tank shall be thirty-five (35) per cent of the total liquid depth.

I. There shall be at least one (1) inch between the underside of the top of the tank and the highest point of the inlet and outlet devices and partitions to provide ventilation of the system through the main building stack.

J. The inlet invert shall be a minimum of three (3) inches above the level of the outlet invert.

K. The tank shall be water tight, constructed of sound and durable material and not subject to excessive corrosion or decay. Precast concrete tanks shall have a minimum wall thickness of 2-1/2 inches and be adequately reinforced. Precast slabs used as covers shall have a thickness of at least 3 inches and be adequately reinforced. Steel tanks shall meet United States Department of Commerce Standards 177-51.

L. Access to each compartment of the tank for inspection and sludge removal shall be provided by a manhole of at least twenty (20) inch dimension with a removable cover. Manhole extensions shall terminate at least 12 inches below the surface or be air tight.

M. If the tank has more than one compartment, the first compartment shall have at least the same capacity of the second and shall not exceed twice the capacity of the second. Tanks or compartments shall be connected in series and shall not exceed four (4) in number in any one installation.

N. A minimum 6 inch extension cleanout with sealed cover shall be

installed to grade from inlet tee or baffle access.

O. Aerobic sewage treatment systems have not been accepted for general usage and shall be installed only on an experimental basis. Permits for installation will not be written without prior written approval from the Pennsylvania Department of Health.

ARTICLE IV - Subsurface Disposal Field

A. The disposal field shall be located in an unobstructed and unshaded area.

B. Effluent from the septic tank shall be discharged to the absorption field through a water tight line of at least four (4) inch diameter with a grade of at least 1/4 inch per foot. Serial distribution of effluent may be required where the grade of the ground surface exceeds six (6) inches in any direction within the area utilized for the absorption field. For Serial Distribution - see paragraph "G" below.

C. When a distribution box is used, it shall have a removable cover and insure equal distribution of effluent to tile field lateral lines. At least two (2) lateral lines shall lead from the box.

1. Each tile field laterial line shall be connected separately to the distribution box and shall not be sub-divided.

2. The inverts of all outlets shall be at the same elevation and the inlet invert shall be at least one (1) inch above the outlet inverts.

3. The outlet inverts shall be at least four (4) inches above the bottom of the distribution box for the purpose of securing equal distribution of the septic tank effluent to each tile lateral.

4. In the event that septic tank effluent is discharged to the distribution box by pump or syphon, a baffle shall be installed in the distribution box. The baffle shall be secured to the bottom of the box and shall extend vertically to a point at level with the crown of the inlet pipe. The plane surface of the baffle shall be perpendicular to the inlet.

D. Minimum seepage area of the disposal field shall be determined by a stabilized percolation rate. The soil shall have an acceptable percolation rate, without interference from ground water or imperious strata below the level of the absorption system.

The following conditions shall be met:

1. The maximum elevation of the ground water table shall be at least four (4) feet below the bottom of the excavation for the disposal system. Rock formations or other imperious strata shall be at a depth greater than four (4) feet below the bottom of the excavation.

2. The percolation time shall be within the range of those indicated in the following table.

TABLE IV

Absorption Area Requirements for Private Residences

(Provides for Garbage-Grinder and Automatic-sequence Washing Machines)

Percolation rate (Time required for water to fall one (1) inch, in minutes.)	Required absorption area, in square feet per bedroom standard trench and seepage pits.
15 or less	175
16 - 30	250
31 - 45	300
46 - 60	330

1. In every case, sufficient area shall be provided for at least three (3) bedrooms.

2. Absorption area for seepage pits is computed as effective sidewall area beneath the inlet.

3. Absorption area for standard trenches is computed as trench-bottom area.

4. Soils are unsuitable for seepage pits if the percolation rate is thirty (30) minutes or more and are unsuitable for any subsurface leaching system if the percolation rate is sixty (60) minutes or more.

TABLE V

Absorption Area Requirements for Other Establishments

Percolation rate (Time in minutes for water to fall one (1) inch.)	Square foot per GPD Maximum rate of sewage application for standard trenches and seepage pits.
15 or less	1.20
16 - 30	1.75
31 - 45	2.00
46 - 60	2.65

1. These figures do include effluents from septic tanks that receive wastes from garbage-grinders and automatic washing machines.

2. Absorption area for standard trench is computed as trench-bottom area.

3. Absorption area for seepage pits is computed as effective sidewall area beneath the inlet.

E. Construction of disposal trenches.

1. Trenches in a disposal field shall be constructed in accordance with the following standards:

a. Minimum number of lines per field - two (2).

b. Maximum length of individual lines - One hundred (100) feet.

c. Minimum bottom width of trench - twelve (12) inches.

d. Maximum bottom width of trench - thirty-six (36) inches.

e. Minimum depth of trench bottom - twenty-four (24) inches.

f. Maximum depth of trench bottom - thirty-six (36) inches.

g. Grade of trench - zero (0) to four (4) inches per one hundred (100) feet.

h. Uniform grade of tile lines two (2) to four (4) inches per one hundred (100) feet.

i. Minimum aggregate material under tile - six (6) inches.

j. Minimum aggregate material over tile - two (2) inches.

k. The trenches shall follow approximately the ground surface contours so that variations in trench depth will be minimized.

l. There shall be at least six (6) feet of undisturbed earth between septic tank and the nearest trench.

m. Minimum depth of earth cover over gravel fill in all trenches - twelve (12) inches.

TABLE VI

Distances between Trenches

Trench bottom width, inches	Minimum distance between centerline of trenches, feet
12 to 18	6.5
18 to 24	7.0
24 to 30	7.5
30 to 36	8.0

2. Pipe used for the line between the distribution box and tile laterals to the point when the laterals are separated, shall be a watertight line of at least four (4) inches in diameter with a grade of at least 1/4 inch per foot. Pipes used under driveways or other areas subject to heavy loads shall be bell and spigot cast iron with leaded caulked joints or equal.

3. Field tile used in the disposal field shall be four (4) inch agricultural drain tile twelve (12) inches in length and shall be laid with 1/4 inch open joints. Alternate materials may be used if equivalent performance is indicated.

a. All open joints shall be protected on top by strips of asphalt treated building paper or by other acceptable means.

b. All bends used in the disposal field shall have tight joints at each end of the bend and shall be made with elbows, tees, or Y's.

4. Aggregate materials shall be clean crushed stone, gravel, or similar insoluable, durable, and acceptable material 1/2 to 2-1/2 inches in size. The filter materials shall completely encase the tile.

5. The top of the aggregate material shall be covered with

untreated building paper or a two (2) inch layer of hay or straw to pervent settling of backfill material into the filter material.

6. The trench above the aggregate material shall be hand filled and hand tamped with four (4) to six (6) inches of earth before completing backfill.

F. Seepage pits.

1. Seepage pits shall be used for disposal of septic tank effluent only when the installation of tile disposal trenches is unfavorable due to poor soil absorption in top soil mantle, ground water level, or topography, and will not reduce the safety of surrounding water supplies. The pit excavation shall terminate at least four (4) feet above the highest known or calculated water table. The seepage pit shall not terminate in soils or bedrock which will not filter the liquid prior to reaching underground waters. Permits for the installation of a seepage pit shall not be written without the prior written approval of the Pennsylvania Department of Health.

2. The location of seepage pits, shall be not less than the stated minimum distances from the following:

a. Any water supply well or buried water suction pipe - one hundred (100) feet.

b. Occupied buildings - twenty (20) feet.

c. Property lines and buried pipe distributing water under pressure - ten (10) feet.

d. Other seepage pits - three (3) times the diameter of the largest pit (edge to edge).

3. Effective absorption area of a seepage pit is the vertical-wall area (based on dug diameter) below the inlet.

a. Required seepage area shall be determined by the percolation test made at the bottom of seepage pits. The weighed average of the results shall be computed to obtain a design figure. Percolation rates shall be 30 minutes or less per inch. No allowance shall be made for impervious strata or bottom area.

b. All pits shall have a diameter of at least four (4) feet.

4. Construction of all seepage pits shall conform to the following requirements:

a. To prevent cave-in, the pit shall be lined with brick,

stone, or block at least four (4) inches thick, laid in a radial arch to support the pit walls.

b. The brick, stone or block shall be laid watertight above the inlet and with open joints below the inlet to provide adequate passage of liquids.

c. A minimum annular space of six (6) inches between the lining and excavation wall shall be filled with crushed rock or gravel 1/2 to 2-1/2 inches in size.

d. The top of the seepage pit shall be constructed to be capable of supporting the over-burden of earth and any reasonable load to which it is subjected. Access to the pit shall be provided by means of a manhole or inspection hole equipped with a watertight cover. The seepage pit may terminate in a conventional manhole top, frame and cover. The top of the seepage pit shall be not less than twelve (12) inches below the ground surface. There shall be provided an inspection pipe of six (6) to eight (8) inches in diameter extending through the cover to a point above the pit at ground level. The top of the inspection pipe shall be provided with a removable watertight cap.

G. Serial Distribution.

1. General - When serial distribution is used the conditions outlined in Article IV shall apply with the following exceptions and additions:

2. Construction-

a. All laterals and trenches shall be interconnected to form a continuous system.

b. The bottom of each trench and its tile line shall have a relatively level grade.

c. Trench connecting or relief lines shall be at least four inch tight joint sewer pipe with direct connection to the tile line in adjacent trenches or to a drop box arrangement.

d. The trench for the relief pipe shall be dug no deeper than the top of the gravel. The relief line shall rest on undisturbed earth and backfill shall be tamped.

e. Relief lines connecting individual trenches shall be located as far from each other as practicable to prevent short circuiting.

f. The invert of the overflow pipe in the first relief line

shall be at least four inches lower than the invert of the septic tank.

SECTION III: Permits

3.1 It shall be unlawful for any person to construct, alter, or extend individual sewage disposal systems within the Township of Washington unless he holds a valid permit issued by the Sanitary Officer in the name of such person for the specific construction, alteration, or extension proposed. The permit issued by the Sanitary Officer is in addition to the building permit required and shall be obtained prior to construction, alteration, and extension of the residence or facility to be served.

3.2 All applications for permits shall be made to the Sanitary Officer, who shall issue a permit upon compliance by the by the applicant with provisions of this ordinance and any regulations adopted hereunder. Permits shall be issued or denied by the Sanitary Officer in writing within seven (7) days after receiving a completed application for permit.

3.3 The Sanitary Officer may refuse to grant a permit for the construction of an individual sewage disposal system. A denial of a permit by the Sanitary Officer shall be for any one or more of the following reasons which shall be incorporated into the written denial:

3.3.1 Failure of the proposed design to meet the requirements of the ordinance.

3.3.2 Soil or geological conditions are such as to preclude safe and proper operation of the desired installation.

3.3.3 Public sewers are accessible into which the sewage or other wastes can be feasibly and legally discharged.

3.3.4 The proposed system will not adequately protect the public health.

3.4 Applications for permits shall be in writing, shall be signed by the applicant, and shall include the following:

3.4.1 Name and address of the applicant.

3.4.2 Description of the property on which construction, alteration, or extension is proposed.

3.4.3 Detailed information showing the absorptive qualities, depth and type of soil involved, and the high water level of the groundwater table.

3.4.4 Number and location of private and public water

supplies within 100 feet of the proposed system.

3.4.5 Location of and distance to any sewer within one (1) mile.

3.4.6 Such further information as may be required by the Sanitary Officer to substantiate that the proposed construction, alteration, or extension complies with regulations promulgated by the Sanitary Officer.

3.4.7 A fee accompanying said application, specified thereon as set and established by the Board of Supervisors of Washington Township, to cover costs involved herewith.

3.5 A complete plan for the purpose of obtaining a permit to be issued by the Sanitary Officer shall include:

3.5.1 The number, location, and size of all sewage disposal facilities to be constructed, altered, or extended.

3.5.2 The location of water supplies, water supply piping, existing sewage disposal facilities, buildings or dwellings, and adjacent lot lines.

3.5.3 Plans of the proposed sewage disposal facilities to be constructed, altered, or extended.

3.6 Any person whose application for a permit under this ordinance has been denied may request and shall be granted a hearing on the matter before the Sanitary Officer within 15 days after receipt of the request.

SECTION IV: Inspections

4.1 The Sanitary Officer is hereby authorized and directed to make such inspections as are necessary to determine satisfactory compliance with this ordinance and regulations promulgated hereunder.

4.2 No part of any installation shall be covered until it is inspected and given final written approval by the Sanitary Officer. The applicant shall notify the Sanitary Officer when the installation is completed and ready for inspection. Applicant may cover the installation upon receipt of written approval from the Sanitary Officer. The Sanitary Officer may inspect and make tests at any time either before, during, or after construction and may by order require an installation to be uncovered at expense of applicant which has been covered contrary to the foregoing provisions. Applicant may cover the installation, in the absence of written approval, at the expiration of forty-eight (48) hours, excepting Sundays and holidays, from receipt by the Sanitary Officer of written notice to inspect.

4.3 It shall be the duty of the owner or occupant of a property

to give the Sanitary Officer free access to the property at reasonable times for the purpose of making such inspections as are necessary to determine compliance with the requirements of this ordinance and regulations promulgated hereunder.

SECTION V: Penalties

5.1 Any person who violates any provision of this ordinance, or any provision of any regulation adopted by the political subdivision pursuant to authority granted by this ordinance, shall upon conviction, be punished by a fine of not less than One Hundred ($100) Dollars and costs nor more than Three Hundred Dollars ($300) and costs, or by imprisonment for not more than thirty (30) days; and each day's failure to comply shall constitute a separate violation.

SECTION VI: Conflict of Ordinances, Effect on Partial Invalidity

6.1 In any case where a provision of this ordinance is found to be in conflict with a provision of any zoning, building, fire, safety, or health ordinance or code of this Township of Washington existing on the effective date of this ordinance, the provision which, establishes the higher standard for the promotion and protection of the health and safety of the people shall prevail. In any case where a provision of this ordinance is found to be in conflict with a provision of any other ordinance or code of the Township of Washington existing on the effective date of this ordinance which establishes a lower standard for the promotion and protection of the health and safety of the people, the provisions of this ordinance shall be deemed to prevail, and such other ordinance or codes are hereby declared to be repealed to the extent that they may be found in conflict with this ordinance.

6.2. If any section, subsection, paragraph, sentence, clause, or phrase of this ordinance should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this ordinance, which shall remain in full force and effect; and, to this end, the provisions of this ordinance are hereby declared to be severable.

SECTION VII: Effective Date.

7.1 This ordinance shall become effective five (5) days after the enactment hereof.

ORDAINED AND ENACTED into an Ordinance this 14the day of Sept. 1967.

Earle R. Jennings
Chairman

ATTEST:

Gloria L. Clark
Secretary

Board of Supervisors of Washington