

ORDINANCE 2017-20

**ORDINANCE OF THE TOWNSHIP OF CHATHAM, COUNTY OF MORRIS,
REPEALING CHAPTER XXX, ARTICLE 6, SECTION 30-64.3A OF THE
REVISED GENERAL ORDINANCES OF THE TOWNSHIP OF CHATHAM
TITLED "GREAT SWAMP WATERSHED OVERLAY DISTRICT
STORMWATER MANAGEMENT ORDINANCE" AND REPLACING WITH A
NEW CHAPTER XXX, ARTICLE 7, SECTION 30-83 TITLED WATERSHED
PROTECTION**

BE IT ORDAINED by the Township Committee of the Township of Chatham, County of Morris, State of New Jersey, as follows:

1. **SECTION 1.** Chapter XXX, Article 6, Section 30-64.3A of the Revised General Ordinances of the Township of Chatham titled "Great Swamp Watershed Overlay District Stormwater Management Ordinance" is hereby repealed

2. **SECTION 2.** New Chapter XXX, Article 7, Section 30-83 shall be as follows:

Article 7 Watershed Protection

30-83.1 DEFINITIONS

"API" means the American Petroleum Institute, 1220 L Street, NW, Washington, DC, 20005-4070, <http://www.api.org/>.

"ASME" means the American Society of Mechanical Engineers, 3 Park Avenue, New York, NY, 10016-5990, <http://www.asme.org/>.

"ASTM" means the American Society of Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA, 19428-2951, <http://www.astm.org/>.

"BMP" means Best Management Practice.

"CFR" means the Code of Federal Regulations.

"Cleanup activities" means actions to clean up or remove or attempt to clean up or remove a discharge of a hazardous substance or the source thereof, or to chemically neutralize the discharge, or measures to prevent or mitigate any damages to the public health, safety or welfare, including, but not limited to, public and private property, shorelines, beaches, surface waters, water columns and bottom sediments, soils and other affected property, including wildlife and other natural resources.

"Cleanup and removal costs" means all costs associated with cleanup and removal activities incurred by the State, its political subdivisions or their agents or any person with written approval of the Township of Chatham, New Jersey.

"Containment" or "containment activities" means actions to limit or prevent the spread of a leak or discharge.

"Diligent inquiry" means:

1. Conducting a diligent search of all documents which are reasonably likely to contain information related to a possible discharge, which documents are in such person's possession, custody or control, or in the possession, custody or control of any other person from whom the person conducting the search has legal right to obtain such documents; and
2. Making reasonable inquiries of persons who may have knowledge or documents relevant to a discharge.

"Discharge" means any intentional or unintentional action or omission, unless pursuant to and in compliance with the conditions of a valid and effective Federal or State permit, resulting in the releasing, spilling, pumping, pouring, emitting, emptying or dumping of a hazardous substance into the waters or onto the lands of the State, or into waters outside the jurisdiction of the State when damage may result to the lands, waters or natural resources within the jurisdiction of the State. This term does not include "leak".

"Discharge monitoring device" means any equipment or instrumentation that is used to detect discharges of hazardous substances.

"Double-walled piping" means piping which consists of one pipe fixed inside another, with an annular space between.

"Hazardous substances" shall be defined as follows:

- (a) Petroleum and petroleum products and all substances listed in Appendix A of NJAC 7:1E, incorporated herein by reference, shall be considered hazardous substances, except that sewage and sewage sludge shall not be considered as hazardous substances.
- (b) The following shall not be considered hazardous substances:
 1. Metals, in either their pure elemental form or alloyed, in solid pieces with at least one-dimensional measurement equal to or exceeding 100 micrometers (0.004 inches) or chemically bonded to an inert substrate; and
 2. Any flammable substance or inert gas listed in Appendix A of NJAC 7:1E and which is designated by an asterisk including, and not limited to, natural gas and propane.

"Environmentally sensitive areas" shall be defined as follows:

1. Surface waters, including, without limitation the following: rivers, streams, creeks, ponds, lakes and reservoirs as defined in NJAC 7:7-12.1(b); canals as defined in NJAC 7:7-9.8(a); estuaries, as defined in 33 U.S.C. 1330(k); and bays, including without limitation open bays, semi-enclosed bays and back bays, as defined in NJAC 7:7-12.1(b);
2. Any water resource, as defined at NJAC 7:19-1.3, which is utilized by a public water system, nonpublic water system, or water system, as defined at NJAC 7:10-1.3;
3. Wetlands and wetland transition areas, including without limitation the following: freshwater wetlands and transition areas, as defined at NJAC 7:7A-1.4; wetlands, as defined in NJAC 7:7-9.27(a); and wetland buffers and transition areas, as defined in NJAC 7:7-9.28(a);
4. Critical wildlife habitat, as defined in NJAC 7:7-9.37(a);
5. Prime fishing areas, as defined in NJAC 7:7-9.4(a);
6. Finfish migratory pathways, as defined in NJAC 7:7-9.5(a);
7. Submerged vegetation habitat, as defined in NJAC 7:7-9.6(a);
8. Forest areas, including prime forestland and unique forestland;
9. Habitat for Federal and State endangered or threatened plant and animal species, as defined in NJAC 7:7-9.36(a);
10. Federal and State wilderness areas, including areas included within the Natural Areas System, as designated in NJAC 7:5A-1.13, or the State Register of Natural Areas pursuant to the Natural Areas System Act, N.J.S.A. 13:1B-15.12a et seq. and 15.4 et seq., and NJAC 7:5A-1.4, and preserved land held by the New Jersey Natural Lands Trust pursuant to the New Jersey Natural Lands Trust Act, N.J.S.A. 13:1B-15.119 et seq.; and
11. Wild and scenic river corridors, as defined in NJAC 7:7-9.44(a).

"Impermeable" means utilizing a layer of natural or man-made material of sufficient thickness, density, and composition so as to have a maximum permeability for the hazardous substance being contained of 10⁻⁷ centimeters per second at the maximum anticipated hydrostatic pressure.

"Integrity testing" means a method of testing structures as established in NJAC 7:1E-2.16.

"Internal inspection" means an examination of the interior of an aboveground storage tank appropriate to the type and size of the tank and in accordance with NJAC 7:1E-2.16.

"Leak" or "leakage" means any escape of a hazardous substance from the ordinary containers employed in the normal course of storage, transfer, processing or use into a secondary containment or diversion system or onto a surface from which it is cleaned up and removed prior to its escape into the waters or onto the lands of the State.

"Major leak" means an accident required to be reported pursuant to 49 CFR 195.50.

"NJAC" means New Jersey Administrative Code.

"NJDEP" means New Jersey Department of Environmental Protection

“Out-of-service” means any container, pipe, or equipment from which all liquid and sludge has been removed, all connecting lines and piping have been disconnected and blanked off, all valves (except for ventilation valves) have been closed and locked, and on which conspicuous signs have been posted that state that it is out of service and note the date of removal from service.

"Petroleum" or "petroleum products" means any liquid that is essentially a complex mixture, whether natural or synthetic, of hydrocarbons of different types with small amounts of other substances, such as compounds of oxygen, sulfur or nitrogen, or metallic compounds, or any of the useful liquid products obtained from such a liquid by various refining processes, such as fractional distillation, cracking, catalytic reforming, alkylation and polymerization. This term shall include, but not be limited to, gasoline, kerosene, fuel oil, synthetic oil, oil sludge, oil refuse, oil mixed with other wastes, crude oils, and hazardous substances which are to be used in the refining or blending of crude petroleum or petroleum stock in this State.

“Repair” means any work necessary to maintain or restore a storage tank or other equipment to a condition suitable for safe operation, other than that necessary for ordinary, day-to-day maintenance to keep up the functional integrity of the storage tank or other equipment.

"Secondary containment or diversion system" means any structures, devices, or combinations thereof supplementary to the ordinary containers employed in the normal course of storage, transfer, processing, or use, designed and operated to prevent leaks of hazardous substances from becoming discharges.

“Soil permeability testing” means a quantitative measurement of the ease with which a liquid move through soil, such as ASTM D5856.

"Storage tank" means any tank or reservoir which is a container for hazardous substances and which is primarily used for bulk storage.

"Township” means a duly authorized representative of the municipality or local board of health, including, but not limited to, a member of the police, fire, or public works, public health officer, Township Engineer, zoning officer, director of emergency management, or environmental compliance officer.

"Transmission pipeline" means new pipe and any equipment, facility, rights-of-way, or building used or intended for use in the transportation of a petroleum or hazardous substance by a pipeline.

"Underground storage tank" means any tank defined as such in NJAC 7:14B.

“Watershed” means a geographic area containing all the lands from which water, sediments, and dissolved materials drain to a particular receiving surface water body or to a particular point along a receiving surface water body.

30-83.2 PROTECTION OF GREAT SWAMP WATERSHED OVERLAY DISTRICT

A. Applicability

The provisions of this subsection shall be applicable to all property within the Great Swamp Watershed Overlay District. The limit of the District is illustrated on the municipal official zoning map.

B. Stormwater Management

a. General.

1. **Applicability.** The provisions of this subsection shall be applicable to all property within the Great Swamp Watershed Overlay District, as that district is established by the map annexed hereto, which involve disturbances of five thousand (5,000) square feet or more.

b. Design Standards.

1. Stormwater Control System shall comply with the design standards set forth in Municipal Code 30-64.3. To the extent that any requirements or controls herein are more stringent than the requirements or controls for the Township as set forth in Municipal Code 30-64.3, as may be amended from time to time, the requirements and controls herein shall control.
2. If infiltration on site for the design storm is not practicable (for example based on soil permeability constraints, topography or groundwater level considerations), an

applicant shall provide off-site mitigation subject to the approval of the Planning Board/Zoning Board prior to project commencement. Options for mitigation are as follows:

- a) Funding specific projects recommended in watershed based stormwater management plans.
 - b) Funding stormwater related studies or regional stormwater management plans approved by the Township Committee in an amount equivalent to a construction cost estimate of a suitable infiltration system sized for the proposed development submitted and prepared by the applicant's professional engineer and approved by the Township Engineer and local approving authority. This requirement shall be applied equally to all applications for development and redevelopment within the Great Swamp Watershed portion of Chatham Township.
3. No Net Increase in Stormwater Pollutant Loads.
- a) Stormwater control system shall be designed to the extent practicable so that there is no calculated or anticipated increase from predevelopment to post-development conditions in conventional pollutant loads (such as total suspended solids, nitrogen and phosphates.) to the receiving watercourse due to stormwater runoff. Compliance with this provision shall be attained when it is demonstrated that the project's Stormwater Management Plan ("Plan") has considered current BMP's (e.g., those presented in the DEP BMP Manual) for applicability to the project in order to achieve the goal of no net increase in stormwater pollutant loads. The applicant must provide economic or other justification where implementation of the Plan is not predicted to achieve compliance with the goal of no net increase in stormwater pollutant loads.
 - b) Nonstructural stormwater management practices shall be utilized prior to the use of structural management measures, unless it is demonstrated that these practices are not feasible from an engineering, environmental or economic perspective on a particular site. Nonstructural measures include elements of site design to protect water quality (e.g. vegetated buffers adjacent to watercourses), limitations on use of impervious surfaces, limitations on site disturbance, limitations on tree removal, use of native vegetation, and requirement of appropriate fertilizer and pesticide use.
- c. Maintenance Standards.
1. General. In developing a Stormwater Management Plan, an applicant shall give preference to facilities and practices which minimize the need for long term maintenance programs. Maintenance requirements shall be included as part of all Stormwater Management Plans and comply with Municipal Code 30-64.3. Specific maintenance tasks and schedules shall be provided for each type of stormwater management facility used on the site. A project's maintenance plan shall be designed in consideration of the guidance in the "Stormwater Management Facilities Maintenance Manual" ("Maintenance Plan") authored by the New Jersey Department of Environmental Protection, or the most recent revision thereto.
 2. Monitoring. If deemed necessary by the Township Engineer, the maintenance plan shall provide for a program of water quality monitoring and reporting to measure the effectiveness of the Stormwater Management Plan in achieving, to the extent practicable, the goal of no net increase. The Plan shall include a provision for review and revision, in the event monitoring demonstrates that implementation of the Plan has not achieved the results originally anticipated. Responsibility for compliance with this provision shall remain with the property owner, unless the property owner enter into an agreement with the Township to ensure long term compliance.
 3. Maintenance Responsibility. The Maintenance Plan shall provide a long term maintenance program for all facilities and practices which are proposed to achieve compliance, to the extent practicable, with the goal of no net increase. Where appropriate, the Maintenance Plan shall be recorded upon the deed of record for the property. Responsibility for maintenance of the stormwater management facilities shall remain with the property owner, unless the property owner enters

into an agreement with the Township to ensure the proper operation and maintenance of the facilities.

C. Hazardous Substances

- a. The installation of new above and underground storage tanks for the storage of petroleum and hazardous substances is prohibited in the Great Swamp Watershed Overlay District. Existing service stations and municipal facilities are exempt from this requirement provided that the storage tanks and piping are installed and maintained in accordance with current State and Federal laws and regulations.

An aboveground heating oil tank for on-site consumption is permitted provided it does not exceed 350 gallons for residential uses and 2,000 gallons for non-residential uses. Existing above and underground storage tanks are exempt until such time they are decommissioned.

- b. The installation of above and underground piping, including transmission pipelines, for the transport of petroleum or hazardous substances is prohibited in the Great Swamp Watershed Overlay District. Pipes holding less than 50 gallons are exempt from the Township Code.
- c. Containers of petroleum and hazardous substances with a capacity of less than 60 gallons are exempt from the Township Code.

30-83.3 PROTECTION OF UPPER PASSAIC RIVER WATERSHED OVERLAY DISTRICT

A. Applicability

The provisions of this subsection shall be applicable to all property within the Upper Passaic River Watershed Overlay District. The limit of the District is illustrated on the municipal zoning map.

B. Stormwater Management

Stormwater management for major projects shall comply with the design standards of Section 30-64.3 of the Township Code. Linear projects are not exempt from these design standards.

C. Hazardous Substances

- a. The installation of new above and underground storage tanks for the storage of petroleum or hazardous substances is prohibited in the Upper Passaic River Watershed, except for aboveground heating oil tanks for on-site consumption of less than 350 gallons for residential purposes and 2,000 gallons for non-residential uses. Existing above and underground storage tanks are exempt until such time they are decommissioned.
- b. The installation of above and underground piping, excluding transmission pipelines, for the transport of petroleum or hazardous substances is prohibited in the Upper Passaic River Watershed. Pipes holding less than 50 gallons are exempt from the Township Code.
- c. The installation of transmission pipelines containing petroleum or hazardous substances are conditionally permitted in the Upper Passaic River Watershed provided they comply with the provisions of the Township Code.
- d. Containers of petroleum and hazardous substances with a capacity of less than 60 gallons are exempt from the Township Code.

D. Conditional use of Transmission Pipelines

- 1. Setback: transmission pipelines must have a 100-ft. setback from all habitable structures.
- 2. Hazardous substances, including petroleum products, stored, or transported near a Flood Hazard Area as delineated and defined by the Federal Emergency Management Agency or NJDEP shall be adequately protected so as to prevent the product from being discharged into a surface water body.
- 3. Installation of transmission pipelines shall comply with the following requirements:

- a) All transmission pipeline shall be sufficiently marked by lettering, color banding or color coding to enable transmission pipeline personnel to identify any substance being leaked or discharged.
 - b) All pipelines shall have a product-sensitive leak detection device and shall be double walled or have secondary containment. All portions or areas of associated transmission pipelines in which the substances are routinely refined, produced, stored, held, handled, processed, or transferred shall be designed so that any leak will be prevented from becoming a discharge. The minimum volume of secondary containment shall be the maximum volumetric flow rate multiplied by the maximum amount of time between the detection of a leak and the shutdown of the pipe. Secondary containment systems shall not be used as backup storage systems nor for any other purpose that would impair their capacity to contain leaks.
 - c) All transmission pipelines must demonstrate through detailed geotechnical and groundwater modeling that discharges from secondary containment will not impact critical land uses, habitable structures, or environmentally sensitive areas within a forty-eight (48) hour period.
 - d) All transition pipelines shall be subject to integrity testing prior to being placed into service and every five (5) years in accordance with the following:
 - 1. Transmission pipelines operated at atmospheric pressure shall follow API 653 and the schedule and series of tests and inspections established in that standard, except that similar service and risk based inspection scheduling contained in API 653 are not permitted.
 - 2. Transmission pipelines operated under pressure shall follow API 510 or ASME Section VIII and the schedule and series of tests and inspections established in the applicable standard. If no protocols for integrity testing outlined in this section are applicable for a given application, the owner or operator shall propose an acceptable protocol to the Township for approval. If a tank or transmission pipeline fails to meet the applicable standards as to structural integrity or where a condition has been determined to exist for which there is no standard but which, in the opinion of the person performing the tests or inspection as set forth in the report, constitutes a condition which will threaten structural integrity, the tank or transmission pipeline shall be emptied and remain empty until it is repaired or replaced. Conditions threatening structural integrity may include, but are not limited to, wall thinning, leaks, or extensive corrosion, pitting, or cracking.
 - e) If a section of buried pipe is exposed for any reason, the owner or operator shall ensure that it is carefully examined for deterioration, and if found to be deteriorated, shall be repaired or replaced.
 - f) Out-of-service pipes shall be capped or blank-flanged and marked as to origin, or physically removed.
 - g) Pipe supports shall be designed to minimize abrasion and corrosion and allow for expansion and contraction.
4. An application for a conditional use of a transmission pipelines must meet the following requirements:
- a) The business name(s), address and telephone number of the owner or operator of the transmission pipeline;
 - b) The name or designation of the transmission pipeline, and the name, title, and telephone number of a contact person for the transmission pipeline;
 - c) The name and business address of the owner or operator's registered agent;
 - d) A description of the transmission pipeline substances, including maximum quantities of each substance stored at any one time, which are stored, held, handled, transferred or transported.;
 - e) The transfer capacity and the average daily throughput, on an annual basis, of the transmission pipeline.

- f) Accurate maps showing the location of each of the owner or operator's transmission pipeline, storage areas, or other structures in or on which substances are stored or handled.
 - g) An inventory of all types of pipe used for the transmission of substances.
 - h) Engineering plans and reports demonstrating compliance with the technical requirements of this chapter.
 - i) Preparation of a Discharge Prevention Plan
 - j) Preparation of a Discharge Cleanup Plan
5. All transmission pipelines shall conform to 49 CFR 195, "Transportation of Hazardous Liquids by Transmission Pipeline," and any future supplements and amendments thereto. If any of these standards are less stringent than the requirements specified herein, the local municipal standards shall govern the installation.
6. Mapping Requirements:
- a) General site plans shall:
 - 1. Accurately reflect the proposed transmission pipeline, including the property lines, easements, delineating and identifying, by labeling or other means, transmission pipeline storage tanks, small container storage areas, process buildings and any other structures.
 - 2. Be drawn to a maximum scale of one-inch equals 50 feet, such that it is sufficient to delineate all items to be mapped and is appropriate for the size of the transmission pipeline. If labels or other items on the general site plan are illegible, the scale should be changed or inserts should be used; and
 - 3. Be certified by both a land surveyor and a professional engineer licensed in the State of New Jersey.
 - b) Drainage and land use maps, shall include the land area within 1,000 feet of the transmission pipeline's boundary and shall:
 - 1. Employ current basemaps at a scale equal to or larger than one inch equals 100 feet, and appropriate for the size of the transmission pipeline;
 - 2. Show the transmission pipeline boundary;
 - 3. Delineate and label the following categories of land use:
 - i. Residential;
 - ii. Educational institutions;
 - iii. Health institutions;
 - iv. Commercial and services;
 - v. Industrial;
 - vi. Transportation, communication, and utilities;
 - vii. Industrial and commercial complexes;
 - viii. Other urban lands not specified above;
 - ix. Recreational land and parks;
 - x. Streams and canals;
 - xi. Lakes and reservoirs;
 - xii. Wetlands;
 - xiii. Agricultural land;
 - xiv. Flood hazard areas;
 - xv. Brushland and shrubland; and
 - 4. Locate and label all arterial and collector sewers, storm sewers, catchment or containment systems or basins, diversion systems, watercourses, and all public utilities.
 - c) General site plans and drainage and land use maps, in addition to (a) and (b) above, maps shall meet:

1. Be prepared in a digital environment that is compatible with the Township's Geographic Information System. Compatible digital formats include AutoCAD, Arc View, and Arc GIS;
 2. Be projected in New Jersey State Plane feet (North American Datum 1983); and
 3. Contain a legend block stating the name and affiliation of the preparer of the map, the name and location of the transmission pipeline, the scale or scales employed, the sources of the data used, and the date of preparation of the map.
- d) Topographical maps showing environmentally sensitive areas, shall:
1. Employ current basemaps at a scale equal to or larger than one-inch equals 100 feet;
 2. Clearly show the location of the transmission pipeline;
 3. Not be so crowded as to obscure the clarity of the mapped information;
 4. Accurately transfer mapped data from other sources to the basemaps;
 5. Contain a legend block stating the name and affiliation of the preparer of the map, the name of the transmission pipeline, the scale or scales employed, the sources of the data used, and the date of preparation;
 6. Cover that area in which the transmission pipeline is located which is downgradient or topographically lower than the highest land point within the transmission pipeline and which could be affected by a discharge assuming a direct discharge from primary piping (i.e, no secondary or other provisions are preceded);
 7. Extend to the maximum area of potential impact, the loss of secondary containment and other provisions, the dispersiveness of the substance, temperature extremes, average rainfall and stream flows, prevailing winds, and potential threat to the environment. This area shall be fifteen (15) miles from the transmission pipeline boundary or to the municipal boundary, downgradient along the path a discharge would follow, including all flood prone areas around any surface water or wetland features; and
 8. Delineate and label the environmentally sensitive areas;
- e) All maps shall be submitted in digital and paper copy form. The digital and one paper copy shall accompany the initial plan submission for approval.
- f) As-built information, including, without limitation, as-built drawings, a copy of GIS shapefiles of the transmission pipeline and its related appurtenances and transmission pipeline within the Township, and any additional requested information about the transmission pipeline shall be filed 90 days before the date the transmission pipeline is proposed to become operational. Updated as-built information, including, without limitation, as-built drawings, a copy of GIS shapefiles of the transmission pipeline and its related appurtenances and transmission pipeline within the Township, and any additional information requested by the Township about the pipeline shall be filed within 60 days after the transmission pipeline has become operational.
- g) The transmission pipeline owner and operator shall give notice 48 hours prior to the proposed start date of construction of the transmission pipeline to all affected residents, businesses and to the Township and Police Township. Private property owners and business owners shall have access to their properties at all times during transmission pipeline construction.
- h) The transmission pipeline owner shall post adequate escrow for the Township Engineer to inspect the installation of the transmission pipeline. A initial escrow deposit shall be 5% of the construction cost within the Township.
- i) Sixty (60) days prior to the first date of operation of the transmission pipeline, the transmission pipeline owner and transmission pipeline operator shall meet with the Township representative and submit an Emergency Preparedness Plan ("EMP") for any and all emergencies that may result in an accidental leak or failure incident regarding the transmission pipeline and its related appurtenances and transmission pipeline. The EMP shall cover the requirements stated in 49 CFR 195.402 and 195.403 and shall identify a responsible local emergency

response official and a direct twenty-four (24) hour emergency phone number. No transmission pipeline shall become operational, nor shall any substance be introduced into the transmission pipeline prior to the transmission pipeline owner and transmission pipeline operator receiving the prior written approval of the EMP by the Township.

- j) No transmission pipeline owner or operator shall operate any transmission pipeline without first obtaining insurance policies covering general liability, environmental incidents and contamination, and property damage in an aggregate amount to be determined by the Township based upon reasonable estimates of potential liability and property damage that would result from a leak, spill, or other failure of the transmission pipeline. Prior to the first operation of the transmission pipeline and every year in which the transmission pipeline is in operation thereafter, the owner or operator shall submit insurance coverage certificates and endorsements to the Township adding the Township as an additional named insured on the insurance policies, demonstrating that the required policies and levels of insurance have been obtained.
- k) Prior to the first operation of the transmission pipeline, the owner and operator shall both agree in writing to indemnify and hold harmless Township, as well as its officers, officials, supervisors, employees, agents, contractors, and assigns, from any and all liability relating to or arising from the transmission pipeline, including, but not limited to, any failure, leak, spill, contamination, cleanup, remediation, property damage, and personal injury from and related to such transmission pipeline. The indemnification and hold harmless agreement shall include a provision for the payment of Township's reasonable attorneys' fees and litigation costs.
- l) Any easements or rights-of-way obtained by the transmission pipeline owner or operator for the shall be recorded by the transmission pipeline owner or pipeline operator in the office of the County Clerk.
- m) The transmission pipeline owner or Operator shall install and maintain markers to identify the location of the pipeline in accordance with all applicable federal and state requirements.
- n) In the event of a leak, spill, or failure occurring, the transmission pipeline owner and operator shall notify the Township and all property owners within 1000 feet of the affected transmission pipeline area within one-hour of discovery of the leak, spill or failure. The transmission pipeline owner and operator shall cooperate with Township officials and make every effort to respond as soon as possible to protect the public's health, safety, and welfare. All leak or spill remediation plans shall be made in consultation with the Township, and no remediation may be deemed complete without final approval thereof by the Township. In the event that the transmission pipeline is shut down due to a leak, spill, or failure, the transmission pipeline owner and operator shall not restart the transmission pipeline without the written approval by the Township.

7. Discharge Prevention Plan

- a) The owner or operator of a transmission pipeline shall:
 - 1. Prepare a Discharge Prevention Plan demonstrating compliance with these standards; and
 - 2. Appoint a contact who shall be responsible for insuring compliance with the EMP. The contact shall be responsible for submission of all plans and reports.
- b) The plan shall contain the following general information:
 - 1. The name, telephone number and locations including street and mailing address, county, municipality, and tax lot and block number;
 - 2. The name(s), telephone number(s) and business address(es) of the owner or operator of the transmission pipeline;
 - 3. The name, title, telephone number, and business address of the contact;
 - 4. The name and business address of the owner's or operator's registered agent, if applicable;

5. A brief description of the transmission pipeline;
 6. A general site plan;
 7. A drainage and land use map;
 8. Topographical maps;
 9. The anticipated date on which the transmission pipeline will become operational;
 10. A description of all secondary containment including, but not limited to, their capacity and materials of construction;
 11. A description of any flood hazard areas and any measures implemented to protect hazardous substances from flood waters and washout;
 12. A description of all visual inspection and monitoring procedures;
 13. An outline of the housekeeping and maintenance program;
 14. A description of the personnel training program, including types of training given, time periods required for various phases of training, and training procedures, and procedures for instructing of contractors;
 15. A description of the physical security measures;
 16. A current index of all standard operating procedures; and
 17. A description of the recordkeeping system.
8. Discharge Cleanup Plan
- a) The owner or operator shall appoint a response coordinator.
 - b) The owner or operator shall prepare and implement a Discharge Cleanup Plan (“DCP”) DCR plan containing, at a minimum, the following information, in the following order or indexed to this order:
 1. The name, title and 24-hour business telephone number of the transmission pipeline's response coordinator or other person authorized to hire contractors and release funds for discharge response, containment, cleanup and removal. A response coordinator or alternate shall be available at all times;
 2. The chain of command for an emergency response action;
 3. Notification procedures;
 4. Provisions for an annual simulated emergency response drill to determine the currency and adequacy of, and personnel familiarity with, the emergency response action plan and the DCP. This drill shall be critiqued in writing and that critique retained pursuant to the recordkeeping requirements. The drill shall be based on different scenarios from year to year in order to address all anticipated emergency response scenarios at the facility and cannot be of the same type, such as a table top drill, in consecutive years. When possible, this annual drill may be combined with other required emergency response drills;
 5. A list of types and minimum quantities of containment and removal equipment and materials to which the pipeline has access through ownership, contract or others means, including, but not limited to, vehicles, vessels, pumps, skimmers, booms, chemicals, and communications devices, and indicating if access is through ownership, contract or other means. The transmission pipeline shall have available to it, by ownership or by arrangement with a discharge cleanup organization, adequate equipment to clean up any discharge that may occur at the facility. A copy of all current contracts or agreements between the owner or operator and a discharge cleanup organization for emergency response service shall be maintained, as appropriate, and shall be available to the Township for review upon request;
 6. A list of the trained personnel who are available to operate such equipment and a brief description of their qualifications, and whether personnel are employed at the facility or by a discharge cleanup organization. Each major facility shall have available to it, by ownership or by arrangement with a discharge cleanup organization, adequate personnel to clean up any discharge that may occur at the transmission pipeline. In lieu of supplying a list of names, the owner or operator may supply a list of job titles of

employees who will be assigned to operate containment and removal equipment, and a statement of the minimum qualifications that will be required of each employee so assigned;

7. On-site response measures, including response to leaks, and the types and sizes of discharges that facility personnel will respond to;
8. Off-site response measures, including:
 - i. Identification of and protection and mitigation measures for off-site residential, environmentally sensitive, or other areas prioritized based on use, seasonal sensitivity, or other relevant factors.
 - ii. Provisions for an environmental assessment of the impact of any discharge.

9. Visual Inspections and Monitoring

- a) All equipment and portions of the major facility in service using hazardous substances, as well as all cleanup and removal equipment and supplies, shall be visually inspected in accordance with standard operating procedures. Visual inspections shall be performed at a minimum according to the following schedule:
 1. Prior to each marine transfer for adequacy, deterioration, leaks or discharges, all transfer area lighting and all aboveground transfer valves, pumps, flanges, flexible hoses and connections, unless they are not readily accessible, that are to be used in the transfer;
 2. Once daily for integrity and leaks, all secondary containment systems and diversion systems for aboveground storage tanks which are not impermeable;
 3. Once daily or prior to each use, whichever is less frequent, for integrity, deterioration and leaks, loading or unloading areas, including flexible hoses;
 4. Once weekly for integrity and leaks, process areas;
 5. Once monthly for integrity and leaks, all other storage areas and secondary containment or diversion systems, and all aboveground pipes; and
 6. Once quarterly:
 - i. For integrity and leaks, all other aboveground valves, pumps, flanges, connections and equipment;
 - ii. For integrity, all security fences and locks; and
 - iii. For adequacy and location, all cleanup and removal equipment and supplies.
- b) Records shall be kept for all visual inspections. These records shall document the date, person performing the inspection, any problems found, including if no problems were found, and the subsequent correction of such problems.

Cleanup of all leaks or discharges of hazardous substances shall begin promptly upon detection. Loose quantities of hazardous substances shall not be allowed to persist on grounds, floors, walls or equipment, or any other places within the transmission pipeline.

- c) The transmission pipeline operator or owner shall keep on hand, in convenient locations, adequate quantities of sorbent materials, chemical neutralizing agents or other materials as needed, sufficient to contain and clean up those small leaks or discharges that transmission pipeline personnel will respond to, as described in the DCP.
- d) The transmission pipeline operator or owner shall maintain an adequate supply of protective safety equipment, such as chemically resistant coveralls, boots, or respiratory protection, in convenient locations for use by any personnel who are required to clean up leaked or discharged hazardous substances. Where protective safety equipment is required by any regulation of the Federal Occupational Safety and Health Administration, compliance with such regulation shall be deemed to fulfill this requirement.

- e) Secondary containment or diversion systems shall be maintained in good repair, free of accumulated debris, and free of cracks through which hazardous substances could be discharged.

10. Employee Training

- a) Owners or operators of transmission pipelines shall implement an appropriate program for training their employees involved in the handling of petroleum and hazardous substances and shall maintain a written description of the program.
- b) The training program shall include, at the minimum, the following;
 - 1. A written job description which includes the duties and responsibilities relating to hazardous substances for each position, and training necessary to qualify for the position;
 - 2. Specified time periods of in-house training for each position covering orientation, specific substances training and on-the-job training, and periodic refresher training; and
 - 3. Procedures to determine whether an employee has demonstrated the ability to carry out the duties and responsibilities of a specific position.
- c) The training which all employees involved in the handling of substances will receive shall include:
 - 1. General orientation and initial training of new employees before assignment to transmission pipeline operations, which shall include instruction on the general site rules and practices, and safety procedures;
 - 2. Job-specific training for new or newly assigned employees involved with petroleum and hazardous substances, consisting of classroom and/or on-the-job training, as appropriate, which covers:
 - i. Standard operating procedures, including a detailed review of the hazardous substance material safety data sheets, the safe handling practices for the substance, the hazards of the operation involving the substance, and the application of standard operating procedures to actual conditions;
 - ii. Safety, equipment, and procedures used in the cleanup and removal of a specific hazardous substance;
 - iii. Procedures regarding fires, leaks and discharges; and
 - iv. Equipment familiarization;
 - 3. Training on updated or new standard operating procedures; and
 - 4. Refresher training at least once a year which shall present an overview and updated information, and which can be combined with such training required under any other State or Federal requirement.
- d) The training program shall specify the qualification required for the personnel responsible for training employees working with petroleum and hazardous substances.
- e) Documentation of all training, including final qualifying activities, shall be kept on-file for each employee and shall include identification of all personnel trained, subjects covered and training dates.
- f) Owners or operators shall have procedures to insure that all employees utilized by outside contractors have received site-specific information covering emergency and safety procedures.

11. Security

- a) Facilities associated with transmission pipelines shall be adequately illuminated so that personnel can detect intruders, leaks, or discharges. Lighting intensities shall not exceed Township Code within residential areas.
- b) Transmission pipelines shall have security sufficient to prevent unauthorized persons from gaining access to hazardous substances.

12. Standard Operating Procedures

- a) The owner or operator of transmission pipelines shall have written standard operating procedures for all operations involving petroleum and hazardous

substances. They shall be in English in a manner understandable by employees of the major facility and shall also be written in the language of fluency of employees utilizing those Standard Operating Procedures (SOPs) not fluent in English.

- b) A copy of the standard operating procedures shall be readily available to employees.
- c) A copy of material safety data sheets or fact sheets for each substance used or stored at the transmission pipeline shall be readily available to employees.
- d) The SOPs shall include, at a minimum, the following:
 - 1. A description of the operation;
 - 2. Procedures for visual inspection of equipment;
 - 3. Procedures and conditions for normal operation;
 - 4. A description of leak monitoring equipment and alarms; and
 - 5. A description of leak or discharge conditions which could occur from the operation, including the control and mitigation procedures to be followed to reduce the impact of the leak or discharge conditions.
- e) As appropriate for the operation being described, the following items, in addition to those in above, shall be included in the SOPs:
 - 1. Simplified process flow sheets, showing flows, temperatures, and pressures;
 - 2. A description of the most frequent abnormal conditions, including the control and mitigating procedures to be followed to return to normal conditions;
 - 3. Pre-startup procedures;
 - 4. Startup procedures including conditions to be maintained during startup;
 - 5. Shutdown procedures including provisions for normal and emergency shutdown and details on the condition of equipment to be maintained after shutdown;
 - 6. Procedures to perform and inspect maintenance work; and
 - 7. Log sheets and checklists.
- f) A generic SOP may be written when more than one piece of equipment designed to perform the same function is located at the transmission pipeline. Such a generic SOP must cover all substances utilized with all the equipment and must delineate any special conditions associated with a specific piece of equipment or hazardous substance.
- g) Modifications to the SOPs shall be incorporated into the standard operating procedures prior to their implementation.
- h) A current index of the SOPs, including title(s), identification number(s) and latest date(s) of issue shall be maintained and readily available.

13. Recordkeeping

- a) The owner or operator of a transmission pipeline shall maintain records of employee training, drills for discharge prevention, inspections of cleanup and removal equipment, and transmission pipeline inventories for a period of three years.
- b) The owner or operator of a transmission pipeline shall maintain records of inspection and repair for ten (10) years or the lifetime of the equipment, device, or structure, whichever is shorter, for:
 - 1. All equipment, and detection or monitoring, prevention or safety devices related to discharge prevention and response; and
 - 2. All structures other than aboveground storage tanks.
- c) For aboveground storage tanks, the owner or operator shall maintain records of integrity testing, inspection, and repair for the lifetime of the tank.
- d) All records shall be available for inspection upon the request of the appropriate local agencies.

14. Notification of malfunctions in discharge detection systems

- a) The owner or operator of a transmission pipeline shall immediately notify the NJDEP and the Township of any malfunction of a discharge detection or other discharge monitoring, prevention or safety system or device. In the event that this number is inoperable, any owner or operator shall immediately notify the New Jersey State Police.
- b) Notification received by the NJDEP and Township pursuant to (a) within 15 minutes of the time that the owner or operator knew, or reasonably should have known, of the occurrence of a malfunction shall be considered immediate. It shall be presumed that notification received by the NJDEP and the Township more than 15 minutes after the owner or operator knew, or reasonably should have known, of the malfunction is not immediate.
- c) Within two hours of the initial notification, the owner or operator shall notify the NJDEP and the Township that one of the following situations exists:
 1. The malfunction has been repaired;
 2. An alternate discharge detection system has been activated for the equipment utilizing the malfunctioning system; or
 3. The equipment protected by the discharge detection system has been taken out of service.

30-83.4 ABOVEGROUND STORAGE TANKS

- a) Permitted aboveground storage tanks shall meet the following standards:
 1. Aboveground storage tank installations shall be provided with secondary containment equal to 110% of the volume in the primary tank.
 2. The base underlying the storage tank shall be made of or surfaced with a material impermeable to passage or chemical attack by the stored substance under the conditions of storage prevailing within the tank. Existing storage tanks shall be exempt from this requirement until such time as they may require substantial reconstruction or replacement, or the bottom is being replaced, unless the Township orders a storage tank removed from service because of the likelihood of a discharge. Before such a tank is returned to service, it must meet this requirement.
 3. Pipes leading to and from aboveground storage tanks which enter the tank below the liquid level shall be equipped with valves that can be remotely activated or are readily accessible in the event of a leak or discharge, and which are sufficiently close to the tank that they can prevent the contents of the tank from escaping outside the secondary containment area in the event of a pipe failure outside the containment area. Such pipes shall not penetrate or pass through any walls, dikes or berms used as secondary containment, unless the impermeability or integrity of the secondary containment is not impaired.
- b) Tanks shall be attended at all times during the filling procedure.
- c) Storage tank overflow lines, or vent lines on storage tanks without overflow lines, where they exist, shall be protected by secondary containment, or directed into other tanks, or other appropriate holding areas.
- d) If a storage tank is served by internal heating coils, such coils, the pipes leading to and from them, and the appurtenances to which they connect, must be designed so that any leakage passing from the tank into the heating coil system will be captured and contained in a secondary containment or wastewater treatment system.
- e) All non-residential aboveground storage tank shall have a high liquid level audible or visual alarm set to activate at a predetermined level and designed to alert personnel directly responsible for the filling operation of high liquid level conditions, and one of the following:
 1. A high-high liquid level pump cutoff device, with a level detector separate from the high liquid level detector, designed to stop flow at a predetermined level;
 2. Direct communication between tank gauge and pumping station, such as direct line of sight, or telephone or radio communication; or

- 3. Fast response systems for determining liquid levels, which result in rapid shutdown of pumping.
- f) Mobile or portable storage tanks shall be positioned or located so as to be protected by secondary containment or diversion structures.
- g) Totes and drums shall be stored on or within secondary containment or diversion systems.

3. **SECTION 3.** Notwithstanding that any one provision of this ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, all remaining provisions of the Ordinance shall continue to be of full force and effect.

4. **SECTION 4.** This Ordinance shall take effect immediately upon (1) adoption; (2) publication in accordance with the laws of the State of New Jersey; and (3) filing of the final form of adopted Ordinance by the Clerk with the Morris County Planning Board pursuant to N.J.S.A. 40:55D-16.

Introduced: November 8, 2017

TOWNSHIP OF CHATHAM, COUNTY OF MORRIS, STATE OF NEW JERSEY

Adopted:

Attest:

BY: _____

Curt Ritter, Mayor

Gregory J. LaConte, Clerk