ARTICLE X

PETROLEUM BULK STORAGE

10.1.0 - Declaration of Policy

It is hereby declared to be the health policy of the Rockland Health District to regulate petroleum storage facilities in order to protect the public health, welfare and the lands and waters of the County of Rockland.

10.2.0 - Definitions

The following is a list of terms and definitions which will be used in this Article:

10.2.1 **Aboveground Tank**

The term **"aboveground tank"** means any stationary tank which is not entirely covered with earth or other material, or any tank which can be inspected in a subterranean vault.

10.2.2 **API**

The term **"API"** means American Petroleum Institute.

10.2.3 **Carrier**

The term **"carrier"** means a person who transports and transfers petroleum from one pipe or tank to another.

10.2.4 **Cathodic Protection**

The term **"cathodic protection"** means corrosion protection for an underground metal tank or pipe by causing a continuous electric current to flow from one or more electrodes or a sacrificial anode to the protected structure.

10.2.5 **Combined Storage Capacity**

The term **"combined storage capacity"** means the sum of the design storage capacity of each tank at a facility which has not been permanently closed.

10.2.6 **Corrosion Resistant**

The term **"corrosion resistant"** when referring to an underground tank means any tank which meets standards for new underground tanks specified in Section 10.22.0 of this Article. When referring to a pipe, it is specified in Section 10.34.0 of this Article.

10.2.7 **Discharge**

The term **"discharge"** means any intentional or unintentional action or omission resulting in the releasing, spilling, leaking, pumping, pouring, emitting, emptying or dumping of petroleum into the waters of the County or onto lands from which it might flow or drain into said waters, except discharges pursuant to and in compliance with the conditions of a valid County, State or Federal permit.

10.2.8 **Existing Facility**

The term **"existing facility"** means a facility which has been constructed and is capable of being operated as of the effective date of this Article.

10.2.9 **Facility or Storage Facility**

The term **"facility"** or **"storage facility"** means one or more stationary or non-stationary tanks, including any associated intra-facility pipelines, fixtures, or other equipment, which have a combined storage capacity of over eleven hundred (1100) gallons of petroleum at the same site. A facility may include aboveground tanks, underground tanks, non-stationary tanks or any combination of the above. Pipelines which enter or leave the site are not part of the facility.

10.2.10 **Leak Monitoring Systems**

The term **"leak monitoring systems"** means a leak detection system as required in Sections 10.24.0 and 10.29.0 and Subsection 10.34.8.5 of this Article.

10.2.11 **Lining**

The term **"lining"** means a coating of a non-corrodible material resistant to the product stored and bonded firmly to the interior surface of the tank.

10.2.12 **NACE**

The term **"NACE"** means National Association Corrosion Engineers.

10.2.13 **New Facility**

The term **"new facility"** means a facility which is not an existing facility.

10.2.14 **NFPA**

The term **"NFPA"** means National Fire Prevention Association.

10.2.15 **Non-stationary Tank**

The term **"non-stationary tank"** means any tank or container which in practice and design is mobile including tanks on wheels, trolleys, skids, pallets or rollers, and vessels such as a 55-gallon drum.

10.2.16 **NYCRR**

The term **"NYCRR"** means official compilation of Codes, Rules and Regulations of the State of New York.

10.2.17 **Oil Production Facility**

The term **"oil production facility"** means all wells, flowlines, separation equipment, storage facilities, gathering lines and auxiliary non-transportation related equipment used for the storage and handling of unrefined petroleum.

10.2.18 **Operator**

The term **"operator"** means any person who leases, operates, controls or supervises a facility.

10.2.19 **Out-of-service**

The term **"out-of-service"** means a facility or portion thereof no longer in use. Facilities or tanks, which are used for seasonal storage, for surcharge storage, or for standby storage, are not considered out-of-service.

10.2.20 **Owner**

The term **"owner"** means any person who has legal or equitable title to a facility.

10.2.21 **Permanently Closed**

The term **"permanently closed"** means an out-of-service storage tank or facility, which has been closed in a manner prescribed by Subsection 10.20.2 of this Article.

10.2.22 **Petroleum**

The term **"petroleum"** means any petroleum-based oil of any kind which is liquid at 20^{O}C under atmospheric pressure and has been refined, re-refined, or otherwise processed for the purpose of being burned as a fuel to produce heat or usable energy, or which is suitable for use as a motor fuel or lubricant in the operation or maintenance of an engine. Waste oil is considered petroleum for purposes of this Article.

10.2.23 **Reconditioned**

The term **"reconditioned"** means any tank which is rehabilitated by installing an interior liner or which is permanently repaired in a manner prescribed by Sections 10.25.0 and 10.32.0 of this Article.

10.2.24 **Secondary Containment**

The term **"secondary containment"** means containment which prevents any materials spilled or leaked from reaching the land or water outside the containment area before cleanup occurs.

10.2.25 **Spill or Spillage**

The term **"spill" or "spillage"** means any escape of petroleum from the ordinary containers employed in the normal course of storage, transfer, processing or use.

10.2.26 **Stationary Tank**

The term **"stationary tank"** means all underground tanks or any aboveground tank which is non-mobile. Examples of stationary aboveground tanks include tanks which may rest on the ground or may be fixed or permanently in place on foundations, racks, cradles, or stilts.

10.2.27 **Storage Facility**

The term **"storage facility"**, (see "Facility").

10.2.28 **Substantially Modified Facility**

The term **"substantially modified facility"** is any existing facility which has been modified in one or more of the following ways:

10.2.28.1 One or more new stationary tanks has been added.

10.2.28.2 An existing stationary tank has been replaced, reconditioned, temporarily or permanently closed or updated.

10.2.28.3 A leaking storage tank has been replaced, repaired or permanently closed.

10.2.28.4 Installation of a non-stationary tank storage area.

10.2.28.5 The replacement or installation of piping systems does substantially modify a facility.

10.2.28.6 The substitution of one product for another product in a stationary or non-stationary tank does substantially modify a facility.

10.2.28.7 The repair, replacement or installation of other equipment does not substantially modify a facility.

10.2.29 **Tightness Test**

The term **"tightness test"** means a test which is performed in a manner consistent with the criteria set forth in Subsection 10.17.1.6 of this Article.

10.2.30 **ULC**

The term **"ULC"** means Underwriters Laboratory Corporation.

10.2.31 **Underground Tank**

The term **"underground tank"** means any tank completely covered with earth or other material. Tanks in subterranean vaults accessible for inspections are considered aboveground tanks for the purpose of this Article.

10.2.32 **Unprotected Tank**

The term **"unprotected tank"** means any underground tank, which does not meet standards specified in Section 10.21.0 of this Article. Examples of unprotected tanks include, but are not limited to bare steel tanks; steel tanks which have been rehabilitated with an interior lining; steel tanks with exterior coatings of paint, asphaltum or other similar material; steel tanks which have been retrofitted with cathodic protection; and permeable concrete encased bare steel tanks.

10.2.33 **Waters or Waters of the County**

The term **"waters" or "waters of the County"** shall be construed to include lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, within the territorial limits of the County of Rockland and all other bodies of surface or underground waters, natural or artificial, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the County or within its jurisdiction.

10.2.34 **Working Capacity**

The term **"working capacity"** means total capacity of the tank less an allowance for expansion and freeboard.

10.3.0 - Applicability

This Article applies to all aboveground and underground petroleum storage facilities with a combined storage capacity over eleven hundred (1100) gallons except the following:

10.3.1 Oil production facilities.

10.3.2 Facilities regulated under the Federal Natural Gas Act.

10.3.3 Facilities licensed under Article 12 of the New York State Navigation Law.

10.4.0 - Severability

If any provisions of this Article or its application to any person or circumstance is held to be invalid, the remainder of this Article and the application of that provision to other persons or circumstances will not be affected.

10.5.0 - Access to Records and Facilities

10.5.1 Upon reasonable notice, the owner or operator must allow any designated officer or employee of this Department, or the New York State Department of Environmental Conservation, at all reasonable times to review and to copy any books, papers, documents and records relating to recordkeeping requirements and compliance with this Article.

10.5.2 Any designated officer or employee of this Department, or the New York State Department of Environmental Conservation, may at reasonable times and upon reasonable notice, enter and inspect any premises which stores or which is reasonably believed to store any petroleum products, for compliance with the provisions of this Article.

10.6.0 - Enforcement

Any person who violates any of the provisions of this Article, or any order issued by the Commissioner, shall be liable for the civil, administrative and criminal penalties set forth in Sections 309 and 348 of the New York State Public Health Law.

10.7.0 - Powers of the Commissioner

10.7.1 The Commissioner may make, or cause to be made, any investigation or study which, in his opinion, is necessary for enforcing this Article or controlling or reducing the contamination or pollution or potential contamination or potential pollution within the Rockland County Health District.

10.7.2 The Commissioner may order the owner, operator, or any person in possession of any land, structure, or equipment to take whatever action is necessary in the opinion of the Commissioner to bring the land, structure, or equipment into compliance with the provisions of this Code. This includes but is not limited to, the ordering of tank testing and/or the emptying of a facility when leakage is suspected or when continued operation of the facility would present a hazard or potential hazard to the general public, fire fighting personnel, property, plant or animal life, groundwater quality, surface water quality or which interferes with the healthful enjoyment of life and property throughout such areas of the Rockland County Health District as may be affected thereby.

10.7.3 The Commissioner may set additional standards for the storage and handling of petroleum products which are necessary to carry out the purpose of this Article.

10.8.0 - Variances

The Commissioner may, upon written application from any person subject to this Article, grant a variance from one or more specific provisions from Section 10.20.0 through 10.35.0 inclusive of this Article. In granting a variance, the Department may impose specific conditions necessary to assure that the variance will have no significant adverse impact on the environment or public health. An application for a variance must:

10.8.1 Identify the specific section or sections from which a variance is sought.

10.8.2 Provide the Department with evidence including data, plans, specifications and test results that show the new or alternative designs, practices or methods to protect the environment in a manner equal to or greater than the requirements of this Article.

10.9.0 - Fees

The Commissioner shall establish a schedule of fees for permits, certifications, reviews and training to recover any direct cost associated with implementing, administering or enforcing the provisions of this Article.

10.10.0 - Prohibitions

It shall be unlawful for any person to discharge petroleum products or material contaminated with petroleum in the Rockland County Health District unless such discharge is specifically in accordance with a permit issued by New York State, the Federal government or other agency acceptable to the Commissioner.

10.11.0 - Indemnification/Disclaimer of Liability

10.11.1 The permittee shall indemnify, hold harmless and defend the Department against any claim, cause of action, disability, loss, liability, damage, cost or expense, howsoever arising, which occurs by reason of an unlawful discharge in connection with permittee's operations under this permit, except as arises from the Department's sole willful act or sole active negligence.

10.11.2 The degree of protection required by this Article is considered reasonable for regulatory purposes. The standards set forth herein are minimal standards and this Article does not imply that compliance will ensure that there will be no unlawful discharge of petroleum products. This Article shall not create liability on the part of the Department, any officer or employee thereof for any damages that result from reliance on this Article or any administrative decision lawfully made thereunder. All persons handling, storing, using, processing, and disposing of petroleum products within the County shall be and are advised to determine to their own satisfaction the level of protection in addition to that required by this Article necessary or desirable to ensure that there is no unlawful discharge of petroleum products.

10.12.0 - Referenced Materials

Citations used in this Article refer to the publications as amended, listed below. These publications are available for copying and inspection at the offices of the Rockland County Department of Health, Building D, Sanatorium Road, Pomona, New York 10970.

10.12.1 **"NFPA No. 30"** means National Fire Protection Association, Flammable and Combustible Liquids Code, No. 30, July 5, 1984, NFPA, Batterymarch Park, Quincy, Massachusetts, 02269. Pages 30-14, 30-15, 30-17, 30-20, 30-21.

10.12.2 **"NFPA No. 30A"** means National Fire Protection Association, Automotive and Marine Service Station Code, No. 30A, July 5, 1984, NFPA, Batterymarch Park, Quincy, Massachusetts, 02269. Pages 30A-7 and 30A-8.

10.12.3 **"UL No. 58"** means Underwriters Laboratories, Standard for Steel Underground Tanks for Flammable and Combustible Liquids, No. 58, April 10, 1981, Underwriters' Laboratories, 333 Pfingston Road, Northbrook, Illinois, 60062.

10.12.4 **"UL No. 142"** means Underwriters Laboratories, Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids, No. 142, January 16, 1985, Underwriters' Laboratories, 333 Pfingston Road, Northbrook, Illinois, 60062.

10.12.5 **"UL No. 1316"** means Underwriters Laboratories, Standard for Glass-Fiber Reinforced Plastic Underground Tanks for Petroleum Products, No. 1316, July 1, 1983, Underwriters' Laboratories, 333 Pfingston Road, Northbrook, Illinois, 60062.

10.12.6 **"ULC-S603"** means Underwriters Laboratories of Canada, No. ULC-S603-M 1981 Standard for Steel Underground Tanks for Flammable and Combustible Liquids, 1981, Underwriters' Laboratories of Canada, 7 Crouse Road, Scarborough, Ontario, Canada M1R3A9.

10.12.7 **"ULC-S603.1"** means Underwriters Laboratories of Canada, No. ULC-S603.1-M l981 Standard for Galvanic Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids, 1982, Underwriters' Laboratories of Canada, 7 Crouse Road, Scarborough, Ontario, Canada M1R3A9.

10.12.8 **"CAN4-S60l-M84"** means Underwriters Laboratories of Canada, No. CAN4-S601-M84 Standard for Shop Fabricated Steel Aboveground Horizontal Tanks for Flammable and Combustible Liquids, l984, Underwriters' Laboratories of Canada, 7 Crouse Road, Scarborough, Ontario, Canada M1R3A9.

10.12.9 **"CAN4-S630-M84"** means Underwriters Laboratories of Canada, No. CAN4-S630-M84 Standard for Shop Fabricated Steel Aboveground Vertical Tanks for Flammable and Combustible Liquids, 1984, Underwriters' Laboratories of Canada, 7 Crouse Road, Scarborough, Ontario, Canada M1R3A9.

10.12.10 **"ULC No.CAN 4-S6l5-M83"** means Underwriters Laboratories of Canada, No. CAN4-S615-M83 Standard for Reinforced Plastic Underground Tanks for Petroleum Products, 1983, Underwriters' Laboratories of Canada, 7 Crouse Road, Scarborough, Ontario, Canada M1R3A9.

10.12.11 **"API Standard No. 620"** means American Petroleum Institute, Standard No. 620, Recommended Rules for Design and Construction of Large, Welded, Low Pressure Storage Tanks, April l985, American Petroleum Institute, 1220 L. St., N.W., Washington, D. C., 20005.

10.12.12 **"API Standard No. 650"** means American Petroleum Institute, Standard No. 650, Welded Steel Tanks for Oil Storage, February l984, American Petroleum Institute, 1220 L. St., N.W., Washington, D. C., 20005.

10.12.13 **"API Standard No. 1632"** means American Petroleum Institute, Publication No. 1632, Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems, February l983, American Petroleum Institute, 1220 L. St., N.W., Washington, D. C., 20005.

10.12.14 **"Steel Tank Institute Standard No. sti-P_3"** means Specifications for sti-P_3 System for Corrosion Protection of Underground Steel Storage Tanks, July 1983, Steel Tank Institute, 666 Dundee Road, Suite 705, Northbrook, Illinois, 60062.

10.12.15 **"NACE Standard RP-0l-69"** means National Association of Corrosion Engineers, Recommended Practice Control of External Corrosion on Underground or Submerged Metallic Piping Systems, RP-l-69, (January 1983 Revision) National Association of Corrosion Engineers, Box 218340, Houston, Texas, 77218.

10.12.16 **"NFPA 30"** means National Fire Protection Association, Flammable and Combustible Liquids Code, No. 30, July 5, l984, NFPA, Batterymarch Park, Quincy, Massachusetts, 02269. Pages 30-17, 30-18, 30-20 and 30-21.

10.13.0 - Registration of Facilities

10.13.1 Existing Facilities

10.13.1.1 The owner of any petroleum storage facility having a capacity of over eleven hundred (1100) gallons must register the facility with the Department. This shall include any out-of-services facility, which has not been permanently closed.

10.13.1.2* Registration must be renewed every three (3) years from the date of the last valid registration until the Department receives written notice that the facility has been permanently closed or that ownership of the facility has been transferred.

*Amended 12/27/01

10.13.2 Transfer of Ownership

If ownership of the facility changes, the new owner must re-register the facility with the Department within fifteen (15) days of ownership transfer.

10.13.3 **New Facilities**

The owner must register any new facility with the Department before it is placed in service.

10.13.4 **Substantially Modified Facilities**

Within fifteen (15) days of and at least 48 hours prior to substantially modifying a facility, the owner must notify the Department of such modification on forms supplied by the Department. This includes the substitution of one product for another product in a stationary or non-stationary tank.

10.13.5 **Registration Certificate**

10.13.5.1 Upon submittal of a complete registration application and payment of the registration fee, the Department shall issue a validated registration certificate. The operator must conspicuously display a registration certificate which is current and valid on the premises of the facility at all times.

10.13.5.2 A registration certificate shall not be transferred from one location to another, from one storage facility to another, or from one person to another.

10.13.6 **Application Forms**

10.13.6.1 Facilities must be registered on application forms provided by the Department unless an alternative means of registration is approved by the Department. Forms are available from the Health Department offices at 50 Sanatorium Road, Pomona, New York 10970.

10.13.6.2 An application submitted by a corporation must be signed by a principal executive officer of at least the level of vice-president or a duly authorized representative who is responsible for the operation of the facility. An application submitted by a partnership or a sole proprietorship must be signed by a general partner or proprietor. An application submitted by a municipal, state or other public facility must be signed by either a principal executive officer, ranking elected official or other duly authorized employee.

10.13.6.3 **Registration Fee**

The owner must submit with each application for registration or registration renewal, a fee in accordance with a schedule established by the Commissioner.

A fee will be required for notifications of substantial modification as required in Sub-section 10.13.4.

10.13.6.4 The owner must submit with each application for registration or registration renewal a site plan that clearly reveals the location of

all tanks, piping and other associated equipment. The plan must be submitted on an 8" x 11" plain paper and include:

10.13.6.4.1 Property lines.

10.13.6.4.2 All buildings.

10.13.6.4.3 Adjacent streets and their names.

10.13.6.4.4 Storage tank identified by corresponding registration number.

10.13.6.4.5 Storm drains and cesspools.

10.13.6.4.6 Location of non-stationary tank and container storage areas.

10.13.6.4.7 Date.

10.14.0 - Bulk Storage in Flood Plains

Any facility located in a flood plain as defined in 6 NYCRR Part 500, must be safeguarded against buoyancy and lateral movement by flood waters in accordance with operating standards set forth in NFPA No. 30, Section 2-5.6, and in accordance with State and local flood plain regulations. If such safeguards include ballasting of tanks with water during flood warning periods, tank valves and other openings must be closed and secured in a locked position in advance of the flood. Ballast water removed from the tank after the flood must not be discharged to the waters of the County if the discharge would contravene the standards of 6 NYCRR Parts 701, 702 or 703.

10.15.0 - Overfill Prevention and Secondary Containment Systems

10.15.1 **Responsibility for Transfer**

The operator, when on the premises or when in control of a petroleum transfer, shall be responsible for transfer activities. If the Operator is not on the premises or not in control of a petroleum transfer, the carrier will be responsible for transfer activities. The operator or carrier must employ practices for preventing transfer spills and accidental discharges. Prior to the transfer, the operator or carrier must determine that the receiving tank has available capacity to receive the volume of petroleum to be transferred. The operator or carrier must monitor every aspect of the delivery and must take immediate action to stop the flow of petroleum when the working capacity of the tank has been reached or should an equipment failure or emergency occur.

10.15.2 **Secondary Containment for Fillports**

All fillports must be equipped with a containment device, or “spill catch basin” that returns overfill into the tank.

10.15.3 **Color Coding of Fillports**

10.15.3.1 The owner or operator must permanently mark all fillports to identify the product inside the tank. Waste oil ports should be identified as such. Markings must be consistent with the color and symbol code of the American Petroleum Institute, which follows.

10.15.3.2 The colors to be used are:

High gasoline	Red
Middle gasoline	Blue
Lower gasoline	White
Higher unleaded gasoline	Red with white cross
Middle unleaded gasoline	Blue with white cross
Lower unleaded gasoline	White with black cross
Vapor recovery	Orange
Diesel	Yellow
#l fuel oil	Purple with yellow bar
#2 fuel oil	Green
Kerosene	Brown

10.15.3.3 The symbols to be used are:

10.15.3.3.1 A circle for gasoline products and vapor recovery lines;

10.15.3.3.2 Hexagon for other distillates; and

10.15.3.3.3 A border must be painted around fuel products containing extenders such as alcohol. The border will be black around a white symbol and white around all other colors.

10.15.3.4 Monitoring wells must be permanently marked and identified as a "**monitoring well**".

10.15.4 **Requirements for Valves, Gauges and Secondary Containment Systems**

The owner must install the following:

10.15.4.1 **Shutoff Valves for Remote Pumping Units at Motor Fuel Dispensers**

All dispensers of motor fuel under pressure from a remote pumping system must be equipped with a shear valve (impact valve) which is located in the supply line at the inlet of the dispenser. This valve must be designed to close automatically in the event that the dispenser is accidentally dislodged from the inlet pipe. A valve meeting the standards set forth in NFPA No. 30A, Section 4-3.6 (See 10.12.0) meets the requirements of this Subsection.

10.15.4.2 **Shutoff Valves for Gravity Fed Motor Fuel Dispensers**

All tanks which cause a gravity head on a dispenser of motor fuels must be equipped with a device such as a solenoid valve which is positioned adjacent to and downstream from the operating valve required in Subsection 10.15.4.5. The valve must be installed and adjusted so that liquid cannot flow by gravity from the tank in case of piping or dispenser hose failure. A valve meeting the standards set forth in NFPA No. 30A, Section 2-1.7 (See 10.12.0) meets the requirements of this Section**.**

10.15.4.3 **Gauges for Aboveground Storage Tanks**

10.15.4.3.1 All aboveground petroleum tanks must be equipped with a gauge which accurately shows the level of product in the tank. The gauge must be accessible to the carrier and be installed so it can be conveniently read.

10.15.4.3.2 The design capacity, working capacity and identification number of the tank must be clearly marked on the tank and at the gauge.

10.15.4.3.3 A high level warning alarm, a high level liquid pump cutoff controller or equivalent device may be used in lieu of the gauge required above.

10.15.4.4 **Check Valve for Pump Filled Tanks**

All fill pipes leading to a pump filled petroleum tank must be equipped with a properly functioning check valve or equivalent device which provides automatic protection against backflow. A check valve is required only when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.

10.15.4.5 **Operating Valves for Gravity Drained Tanks**

Each tank connection through which petroleum can normally flow must be equipped with an operating valve to control the flow. A valve which meets the standards set forth in NFPA No. 30, Section 2-2.7.1 (See 10.12.0) meets the requirements of this Subsection.

10.15.4.6 **Secondary Containment System for Aboveground Tanks**

10.15.4.6.1 A secondary containment system must be installed around any aboveground petroleum storage tank which:

10.15.4.6.1.1 Could reasonably be expected to discharge petroleum to the waters of the County or

10.15.4.6.1.2 Which has a capacity of ten thousand (10,000) gallons or more.

10.15.4.6.2 The secondary containment system must be constructed so that spills of petroleum and chemical components of petroleum will not permeate, drain, infiltrate or otherwise escape to the groundwaters or surface waters before cleanup occurs. The secondary containment system may consist of a combination of dikes, liners, pads, ponds, impoundments, curbs, ditches, sumps, receiving tanks or other equipment capable of containing the product stored. Construction of diking and the storage capacity of the diked area must be in accordance with NFPA No. 30, Section 2.2.3.3 (See 10.12.0).

10.15.4.6.3 If soil is used for the secondary containment system, it must be of such character that any soil will be readily recoverable and will result in a minimal amount of soil contamination.

10.15.4.6.4 Stormwater which collects within the secondary containment system must be controlled by a manually operated pump or siphon, or a gravity drain pipe which has two manually controlled dike valves, one on each side of the dike. All pumps, siphons and valves must be properly maintained and kept in good condition. If gravity drain pipes are used, all dike valves must be locked in a closed position except when the operator is in the process of draining clean water from the diked area.

10.15.4.6.5 Stormwater or any other discharge at a facility must be uncontaminated and free of sheen prior to discharge. Stormwater, which is contaminated, must be treated to reduce petroleum concentration to 15 parts per million or less and to remove any visible sheen prior to discharge. Additional requirements may be imposed under 6 NYCRR Parts 751-758 for protection of the County's waters.

10.15.5. **Maintenance of Spill Prevention Equipment**

The owner or operator must keep all gauges, valves and other equipment for spill prevention in good working order.

10.16.0 - Inventory Monitoring for Underground Storage Facilities

10.16.1 Inventory Tank Records

10.16.1.1 The operator of an underground storage tank must keep daily inventory records for the purpose of detecting leaks. Records must be kept for each tank (or battery of tanks if they are interconnected) and shall include measurements of bottom water levels, sales, use, deliveries, inventory on hand and losses or gains. Records must be reconciled regularly, and must account for all variables, which could affect an apparent loss or gain and must be in accordance with generally accepted practices.

10.16.1.2 If the tank is unmetered or if the tank contains petroleum for consumptive use on the premises where stored, the operator may detect inventory leakage in an alternative method to Subsection 10.16.1.1 above. This may include an annual standpipe analysis or other method acceptable to the Department.

10.16.2 Exceptions

No inventory monitoring is required:

10.16.2.1 for an underground tank storing No. 5 or No. 6 fuel oil; or

10.16.2.2 Where the operator can demonstrate to the satisfaction of the Department that it is technically impossible to perform inventory monitoring for the purpose of leak detection.

10.16.3 Maintenance of Inventory Records

10.16.3.1 Inventory monitoring records must be maintained and made available for Department inspection for a period of not less than five (5) years. Current records (the last 90 days) must be maintained by the operator at the facility.

10.16.3.2 Failure to maintain and reconcile such records constitutes cause for Department-ordered tests and/or the installation of monitoring wells.

10.16.4 Reporting of Inventory Losses

If inventory monitoring required in Subsection 10.16.1 shows an inventory loss; a recurring accumulation of water in the bottom of the tank during any ten-day period; apparent product losses or gains exceed three-quarters (3/4) of one (1) percent of the tank volume; or apparent losses or gains exceed seven and one-half (7.5) gallons per one thousand (1000) gallons delivered, the operator must initiate an investigation into the possible causes. If, within forty-eight (48) hours, the causes cannot be explained by inaccurate recordkeeping, temperature variation or other factors not related to leakage, the operator must notify this Department and must take the tank out of service in accordance with Subsection 10.20.1 until such

time that inspection and/or tightness tests are performed, the cause is determined and necessary repairs or replacements are made.

10.17.0 - Underground Storage Facilities Testing and Monitoring

10.17.1 **Periodic Tightness Testing**

10.17.1.1 **Testing Schedule**

10.17.1.1.1 The owner of any underground petroleum storage tank and connecting piping system must have the tank and pipes periodically tested for tightness as shown in Table l, below:

TABLE 1
Testing Schedule Underground Tanks

Category A	Unprotected tank	Initial test when the tank is ten (l0) years old. Retest every five (5) years, thereafter, until reaching the age of twenty-five years. Upon reaching 25 years of age, tanks must be tested yearly.
Category B	Corrosion resistant tank	Initial test when the tank is fifteen (l5) years old. Retest every five (5) years thereafter until permanently closed.
Category C	Corrosion resistant tank and pipe which have a monitoring system or a new tank and pipe installed in conformance with Sections 10.21.0 through 10.26.0 inclusive, and 10.34.0 of this Article.	Monitoring in accordance with and Subsections 10.17.2 and 10.17.3. No periodic testing is required.

10.17.1.1.2 Any tank and piping system which is of unknown age or which documentation of tank system age is not acceptable to the Commissioner, must be tested on a yearly schedule.

10.17.1.1.3 If for any reason, testing or inspection is not performed as required in this Section, the tank and piping system must be replaced in accordance with Sections 10.21.0 through 10.26.0 inclusive, and 10.34.0 of this Article or taken out-of-service pursuant to the requirements of Section 10.20.0.

10.17.1.2 **Exception**

No periodic tightness test is required:

10.17.1.2.1 On a tank and piping system storing No. 5 or No. 6 fuel oil;

10.17.1.2.2 On a tank and piping system which has a capacity of eleven hundred (1100) gallons or less unless the Department determines that the tank or piping system could reasonably be expected to leak petroleum to the waters of the County;

10.17.1.2.3 On a tank and piping system which are corrosion resistant from the time of installation, and have a leak monitoring system;

10.17.1.2.4 On tanks and piping systems installed in conformance with the standards for new construction as set forth in Sections 10.21.0 through 10.26.0, inclusive, and 10.34.0 of this Article;

10.17.1.2.5 Where the size of the tank exceeds 50,000 gallons or where it is technically impossible to perform a meaningful tightness test. In this case, an alternative test or inspection which is acceptable to the Department must be conducted.

10.17.1.3 **Qualifications of Test Technicians**

All tightness tests must be performed by a technician who has an understanding of variables which affect the test, is trained in the performance of the test, meets the qualifications and adheres to procedures as set forth by the Department, and who is approved by this Department to test in Rockland County.

10.17.1.4 **Test Reports**

10.17.1.4.1 A test report must be sent by the owner or technician to the Department no later than 30 days after performance of the test, except any test or inspection which shows the facility is leaking must be reported by any person with knowledge of such leak to this Department and the New York State Department of Environmental Conservation within two (2) hours of the discovery of such leak. Notification to the State must be made by calling the telephone Hotline 1-800-457-7362. Notification to this Department must also be made by calling 845-364-2000.

10.17.1.4.2 All test reports must be in a form satisfactory to the Department and must include the following information:

10.17.1.4.2.1 Facility registration number.

10.17.1.4.2.2 Identification number used on the application form required in Sub-section 10.13.5 of this Article for tank and piping system tested.

10.17.1.4.2.3 Date of test.

10.17.1.4.2.4 Results of test.

10.17.1.4.2.5 Test method.

10.17.1.4.2.6 Address of technician.

10.17.1.4.2.7 Signature of technician

10.17.1.4.3 A copy of the test report(s) must be maintained by the owner of the facility for at least five (5) years.

10.17.1.5 **Repair, Replacement and Closure of Leaking Systems**

Any part of the storage facility, which is not tight, must be promptly emptied. A program must be immediately initiated by the operator or owner to locate the cause of the loss and clean up any residue in accordance with Subsection 10.19.3 of this Article.

10.17.1.6 **Criteria for Tightness Test**

A tightness test is a test acceptable to the Department, which will determine if a tank and its piping system are tight or not tight. The test must be capable of detecting a tank or piping leak as small as five hundredths (0.05) of a gallon in one hour accounting for variables such as vapor pockets, thermal expansion of product, temperature stratification, groundwater level, evaporation, pressure, and end deflection.

10.17.2 **Monitoring of Corrosion Resistant Tanks and Pipes**

10.17.2.1 The owner or operator of any corrosion resistant underground tank or pipe which is exempt from tightness testing under Subsection 10.17.1, must monitor all cathodic protection and leak detection systems.

10.17.2.2 The adequacy of a cathodic protection system must be monitored at least annually. If at any time the system fails to provide the necessary electrical current to prevent corrosion, the cathodic protection system must be restored within thirty (30) days. Any tank or pipe with a non-working cathodic

protection system will be considered unprotected and must be tested for tightness within one (1) year and retested every five (5) years thereafter until the tank system reaches 25 years of age, upon which time the tank system must be tested yearly until the tank system is permanently closed.

10.17.3 **Inspection of Leak Monitoring Systems**

The owner or operator must monitor for traces of petroleum at least once per week. All monitoring systems must be inspected monthly. Monitoring systems must be kept in proper working order. If at any time the monitoring system fails to function effectively, it must be repaired within thirty (30) days. Any tank or piping system with a non-working monitoring system must be tested for tightness within one (1) year and retested every five (5) years thereafter until the tank system reaches 25 years of age, upon which time the tank system must be tested yearly until the tank system is permanently closed.

10.17.4 **Monitoring Records**

Monitoring records for cathodic protection and leak detection systems must be maintained on the premises for a period of at least one (1) year.

10.18.0 - Aboveground Storage Tank Facilities - Inspections

10.18.1 **Monthly Inspections**

The owner or operator of an aboveground storage facility must inspect the facility at least monthly. This must include:

10.18.1.1 Inspecting exterior surfaces of tanks, pipes, valves and other equipment for leaks and maintenance deficiencies.

10.18.1.2 Identifying cracks, areas of wear, corrosion and thinning, poor maintenance and operating practices, excessive settlement of structures, separation or swelling of tank insulation, malfunctioning equipment and structural and foundation weaknesses.

10.18.1.3 Inspecting and monitoring all leak detection systems, cathodic protection monitoring equipment, or other monitoring or warning systems which may be in place at the facility.

10.18.2 **Ten Year Inspections**

10.18.2.l **Schedule**

10.18.2.1.1 In addition to monthly inspections required above, the owner or operator must perform a detailed inspection as described in Subsection 10.18.2.3 below, of any aboveground tank with a capacity of ten thousand (10,000) gallons or more, or which

could reasonably be expected to discharge petroleum to the waters of the County.

10.18.2.1.2 Reinspection of all tanks is required no later than ten (10) years from the date of the previous inspection.

10.18.2.2 **Exemptions**

Ten-year inspections are not required for:

10.18.2.2.1 Tanks, which are entirely aboveground, such as tanks on racks, cradles or stilts.

10.18.2.2.2 Tanks storing No. 5 or No. 6 fuel oil.

10.18.2.2.3 Tanks installed in conformance with the standards for new construction set forth in Section 10.27.0 through 10.33.0 inclusive, of this Article.

10.18.2.3 **Requirements for Ten-Year Inspections**

A ten (10) year inspection must consist of a tightness test of the tank and connecting underground pipes or an inspection, which consists of the following:

10.18.2.3.1 Cleaning the tank and difficult to reach areas within the tank in accordance with generally accepted practices.

10.18.2.3.2 Removal, transportation and disposal of sludge in a manner consistent with all applicable County, State and Federal laws.

10.18.2.3.3 Inspecting the tank shell for soundness and testing all welds and seams on the tank bottom for porosity and tightness. The test must be consistent with generally accepted industry testing and inspection practices. This may include one or a combination of the following: A tightness test, and air pressure, hydrostatic or vacuum test, a penetrant dye test, a non-destructive test to detect thinning of the tank or hammering to detect weak areas.

10.18.2.3.4 Visual inspection of the internal surfaces of the tank and difficult to reach areas for corrosion or failure.

10.18.2.3.5 Inspection of internal coatings for any signs of failure of the coating system such as cracks, bubbles, blisters, peeling, curling, or separation.

10.18.2.3.6 A tightness test of any connecting underground pipes.

10.18.3 **Inspection Reports**

10.18.3.l Reports for each monthly inspection and ten-year inspection must be maintained and made available to the Department upon request for a period of at least ten (l0) years.

10.18.3.2 The reports must include the following information:

10.18.3.2.1 Facility registration number.

10.18.3.2.2 Identification number for tank inspected.

10.18.3.2.3 Date of inspection.

10.18.3.2.4 Results of inspection including a report on the need for repair.

10.18.3.2.5 Certification by the inspector that the inspection has been performed in a manner consistent with requirements of Section 10.18.0.

10.18.3.2.6 Address of inspector.

10.18.3.2.7 Signature of inspector.

10.18.4 **Repair of Equipment Deficiencies**

If an inspection reveals a leak, a tank or equipment deficiency, a deficiency in monitoring equipment, excessive thinning of the tank shell which would indicate structural weakness when the tank is filled with petroleum, or any other deficiency which could result in failure of the facility to function properly or store and contain the product in storage, remedial measures must be promptly taken to eliminate the leak or deficiency, and clean up any residue in accordance with Subsection 10.19.3.

10.18.5 **Uninspected Facilities**

If any portion of a facility is not inspected as required, the uninspected portion of the facility must be taken out-of-service pursuant to the requirements of Section 10.20.0.

10.19.0 - Additional Testing, Spill Notification and Clean-Up Requirements

10.19.1 **Additional Testing and Inspection Requirements**

When a leak of petroleum is suspected or appears probable, or where tests or inspections have not been performed, or where accurate inventory records are not kept and reconciled as required in Section 10.16.0, the Commissioner may order the owner or operator to inspect and to test the

tanks or equipment for tightness and structural soundness and/or take whatever action is necessary in the opinion of the Commissioner to bring the facility into compliance with the provisions of this code.

10.19.2 **Reporting of Spills and Discharges**

Any person with knowledge of a spill, leak or discharge of petroleum must report the incident to this Department and the New York State Department of Environmental Conservation within two (2) hours of discovery. The results of any inventory record, test or inspection which shows a facility is leaking must be reported to this Department and the New York State Department of Environmental Conservation within two (2) hours of the discovery. Notification to the State must be made by calling the telephone Hotline l-800-457-7362. Notification to this Department must also be made by calling 845-364-2000. Notification to this Department shall not be deemed compliance to any reporting and requirement of any other Federal, State or local law.

10.19.3 **Remedial Action**

The facility owner shall be responsible to immediately institute and expediently complete all actions necessary to remedy the effects of any discharge. A comprehensive report must be submitted to this Department within two (2) weeks of the discharge indicating the cause of the discharge and detailing remedial action undertaken. Addition status reports in addition to a final report will be required as deemed necessary by the Commissioner.

10.20.0 - Closure of Out-Of-Service Stationary Tanks

10.20.1 **Closure of Tanks Temporarily Out-of-service**

10.20.1.1 Storage tanks or facilities which are temporarily out-of-service for thirty (30) or more days must be closed as follows:

10.20.1.1.1 All products must be removed from the tank and piping system to the lowest drawoff point. Any waste product removed from the tank must be disposed of in accordance with all applicable State and Federal requirements. Tanks must be protected from flotation in accordance with good engineering practices.

10.20.1.1.2 All manways must be locked or bolted securely and fill lines, gauge openings or pump lines must be capped or plugged to prevent unauthorized use or tampering.

10.20.1.2 Storage tanks or facilities which are temporarily out-of-service are subject to all requirements of this Article including, but not limited to, periodic tightness testing, inspection, registration and reporting requirements.

10.20.2 **Closure of Tanks Permanently Out-of-service**

10.20.2.1 Any tank or facility which is permanently out-of-service must comply with the following:

10.20.2.1.1 Liquid and sludge must be removed from the tank and connecting lines. Any waste products removed must be disposed of in accordance with all applicable State and Federal requirements.

10.20.2.1.2 The tank must be rendered free of petroleum vapors. Provisions must be made for natural breathing of the tank to ensure that the tank remains vapor free.

10.20.2.1.3 All connecting lines must be disconnected and removed or securely capped or plugged. Manways must be securely fastened in place.

10.20.2.1.4 Aboveground tanks must be stenciled with the date of permanent closure.

10.20.2.1.5 Underground tank(s) and piping must be removed from the ground unless the system was tested tight l80 days or less prior to the closure date, in which case, tank(s) may be filled to capacity with a solid inert material such as sand or concrete.

10.20.2.1.6 Aboveground tanks must be protected from flotation in accordance with good engineering practice.

10.20.2.2 Storage tanks or facilities, which have not been closed pursuant to Subsection 10.20.2.1 above, are subject to all requirements of this Article including, but not limited to, periodic tightness testing, inspection, registration and reporting requirements.

10.20.3 **Reporting of Out-of-service Tanks**

The owner of a tank or facility which is to be permanently closed must notify the Department within thirty (30) days prior to permanent closure of the tank or facility pursuant to the requirements of Subsection 10.13.4 of this Article.

10.20.4 **Used Tanks**

10.20.4.1 Tanks which are removed and do not meet the standards for new tanks set forth in Sections 10.22.0 or 10.28.0 cannot be reinstalled for the purpose of petroleum storage.

10.20.4.2 If a tank meets the standards for new tanks, it may be reinstalled for petroleum storage if after thorough cleaning

and inspection, internally and externally, it is found to be structurally sound and free of pin holes, cracks, structural damage or excessive corrosion or wear. Such tanks must be reinstalled and tested in accordance with requirements of this Article.

10.20.4.3 If a tank is to be disposed of as junk, it must be retested for petroleum vapors, rendered vapor free if necessary, and punched with holes to make it unfit for storage of liquids.

10.20.5 **Financial Assurances**

Forms of surety or financial assurances may be required by the Department to ensure proper closure of facilities. The amount of such financial assurances will be set by the Department. Any requirement of financial assurances must be accompanied by a finding by the Department of the public interest and shall set forth the reasons for requiring such financial assurances.

10.21.0 -- Requirements for New and Substantially Modified Petroleum Storage Facilities

10.21.1 **Construction and Modification Permits**

No person shall construct, install or substantially modify a petroleum storage facility with a combined storage capacity of over eleven hundred (1100) gallons until a permit issued by the Commissioner has been obtained.

10.21.2 **Handling and Storage**

A new facility or a tank must employ all practices and equipment for handling and storage of petroleum required in Sections 10.14.0 through 10.20.0 inclusive, before the new facility or tank is placed in service.

10.21.3 **Applicability**

10.21.3.1 All new petroleum facilities or any addition, repair or replacement to an existing facility must be constructed, designed and installed in accordance with Sections 10.22.0 through 10.34.0 inclusive, and Subsection 10.35.3.

10.21.3.2 This applies to all aboveground and underground facilities with a combined capacity of over eleven hundred (1100) gallons.

10.22.0 - Minimum Standards for New Underground Petroleum Storage Tanks

10.22.1 **Label Requirements**

10.22.1.1 All new underground tanks used in New York State must bear a permanent stencil, label or plate which contains the following information:

10.22.1.1.1 Manufacturer's statement that, "This tank conforms with 6 NYCRR Part 614".

10.22.1.1.2 The standard of design by which the tank was manufactured.

10.22.1.1.3 The petroleum products and percentages of volume of petroleum additives which may be stored permanently and compatibly within the tank or reference to a list available from the manufacturer which identifies products compatible with all tank materials.

10.22.1.1.4 The year in which the tank was manufactured.

10.22.1.1.5 A unique identification number.

10.22.1.1.6 The dimensions, design and working capacity and model number of tank.

10.22.1.1.7 The name of manufacturer.

10.22.1.2 A second label which shows all of the information required above and which also shows the date of installation must be conspicuously displayed and permanently affixed to the fillport. It must be readily visible to the carrier and may be imbedded in concrete, welded to the fillport, or otherwise permanently affixed.

10.22.2 **Wear Plates**

All tanks must have a ten (10) gauge or thicker steel wear plate under each tank opening. Each plate must cover an area of at least one hundred and forty-four (144) square inches and must be installed in a manner which avoids crevice corrosion.

10.22.3 **Factory Testing of New Tanks**

All new tanks, their welds, seams and connecting fittings must be factory tested for tightness using standard engineering practices. All tanks sold for use in New York State must be guaranteed by the manufacturer to be tight.

10.22.4 **Fiberglass Reinforced Plastic Tanks**

10.22.4.1 All fiberglass reinforced plastic underground petroleum storage tanks must be designed and manufactured in accordance with one of the following standards:

10.22.4.1.1 UL No. l3l6; or

10.22.4.1.2 ULC No. CAN4-S615-M83. (See Subsection 10.12.10)

10.22.4.2 Fiberglass reinforced plastic tanks must be of sufficient structural strength to withstand normal handling and underground use and must be chemically compatible with petroleum products, product additives and corrosive soils. Materials must be of sufficient density and strength to form a hard impermeable shell which will not crack, wick, wear, soften or separate under normal service conditions.

10.22.5 **Cathodically Protected Steel Tanks**

10.22.5.1 Cathodically protected steel tanks used for underground storage of petroleum must meet or exceed one of the following design and manufacturing standards:

10.22.5.1.1 ULC-S603; or

10.22.5.1.2 UL No. 58. (See Subsection 10.l2.10)

10.22.5.2 In addition to the design and manufacturing standard in Section 10.22.5.1 above, such steel tanks must be cathodically protected with sacrificial anodes or an impressed current system which is designed, fabricated and installed in accordance with one of the following standards:

10.22.5.2.1 API Publication No. 1632;

10.22.5.2.2 ULC-S603.1; or

10.22.5.2.3 Steel Tank Institute Standard No. sti-P_3; or

10.22.5.2.4 NACE Standard RP-0l-69. (See 10.12.0)

10.22.5.3 The cathodic protection system must be designed to provide a minimum of thirty (30) years of protection.

10.22.5.4 A qualified engineer or corrosion specialist must supervise the installation of the cathodic protection system where this is necessary to assure that the system has been installed as designed.

10.22.5.5 Each cathodic protection system must have a monitor which enables the owner or operator to check on the adequacy of cathodic protection.

10.22.5.6 Tanks which are protected by sacrificial anodes must be electronically insulated from the piping system with di-electric fittings, bushings, washers, sleeves or gaskets which are chemically stable when exposed to petroleum, petroleum additives, or corrosive soils.

10.22.5.7 In addition to the above, tanks must be factory coated with coal tar based epoxy or other coating which will provide equivalent protection and corrosion resistance. The coating must have a minimum finished thickness of ten (10) mils (0.01 inches) on the shell and fifteen (15) mils (0.015 inches) on the head. The coating must be electrically tested for short circuits or coating faults. Defects and any inadequacies in the coating must be repaired. The application of the coating must be in strict accordance with the instructions of the supplier of the coating material.

10.22.6 **Steel Tanks Clad With Fiberglass Reinforced Plastic**

10.22.6.1 Underground petroleum storage tanks constructed of steel clad with fiberglass reinforced plastic must meet or exceed one of the following design and manufacturing standards:

10.22.6.1.1 ULC-S603; or,

10.22.6.1.2 UL No. 58 (See 10.12.0)

10.22.6.2 Tanks must be electrically insulated from the piping system with di-electric fittings, bushings, washers, sleeves or gaskets which are chemically stable when exposed to petroleum, petroleum additives, or corrosive soils.

10.22.6.3 Tanks must have an exterior fiberglass reinforced plastic shell bound firmly to the steel. This must consist of a base coat of resin five (5) to eight (8) mils (0.005 to 0.008 inches) in thickness overlayed by two layers of resin with fiberglass reinforcement with a thickness of at least eighty-five (85) mils (0.085 inches) after rolling. A final coat of resin must be applied to a thickness of ten (10) to fifteen (15) mils (0.01 to 0.015 inches). The thickness of the completed coating must be a minimum of one hundred (100) mils (0.1 inches) after curing. The coating's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the coating and a permanent bond between coating and steel is maintained. The coating must be of sufficient density and strength to form a hard impermeable shell which will not crack, wick, wear, soften or separate and which must be capable of containing the product under normal service conditions in the event the steel wall is perforated. The coating must be non-corrodible under adverse underground electrolytic conditions and must be chemically compatible with petroleum products and product additives.

10.22.6.4 The coating must be factory inspected for air pockets, cracks, blisters, pinholes and electrically tested at ten thousand (10,000) volts for coating short circuits or coating faults. Any defects must be repaired. The coating must be factory checked with a Barcol Hardness Tester or equivalent to assure compliance with the manufacturer's minimum specified hardness standard for cured resin.

10.22.7 **Double-walled Tanks**

10.22.7.1 Any of the tanks allowed in Subsections 10.22.4, 10.22.5 and 10.22.6 may be fabricated in double-walled construction in accordance with acceptable engineering practices.

10.22.7.2 A double-walled tank which is designed and manufactured in accordance with all of the following standards also satisfies the requirements for secondary containment and leak monitoring set forth in Sections 10.23.0 and 10.24.0.

10.22.7.2.1 The interstitial space of the double-walled tank must be monitored for tightness.

10.22.7.2.2 Outer jackets made of steel must have a minimum thickness of ten (l0) gauge and be coated as prescribed in Sub-sections 10.22.5 or 10.22.6.

10.22.7.2.3 There are no penetrations of any kind through the jacket to the tank except top entry manholes and fittings required for filling the tank, venting the tank, or monitoring the interstitial space.

10.22.7.2.4 The outer jacket must cover at least the bottom 80% of the tank.

10.22.7.2.5 The jacket must be designed to contain an inert gas or liquid at a pressure greater than the maximum internal pressure or be able to contain a vacuum for a period of one (1) month.

10.23.0 - Minimum Standards for Secondary Containment for Underground Storage Tanks

10.23.1 **General Requirements**

All new underground petroleum storage tanks must have a secondary containment system which collects and contains a leak. This must consist of one of the following:

10.23.1.1 A double-walled tank;

10.23.1.2 A vault;

10.23.1.3 Cut-off walls; or

10.23.1.4 An impervious underlayment.

10.23.2 **Standards for Secondary Containment**

10.23.2.1 **Double-walled Tanks**

If the secondary containment system consists of a double-walled tank, the tank must be constructed in accordance with Subsection 10.22.7 and must have a monitoring system in accordance with Sub-section 10.24.2.

10.23.2.2 **Vaults**

If a vault is used for secondary containment, the vault must be water tight, impervious to leakage of petroleum and able to withstand chemical deterioration and structural stresses from internal and external causes. The vault must be a continuous structure with a chemical resistant water stop used at any joint. There must be no drain connections or other entries through the vault except that there may be top entry manholes and other top openings for filling and emptying the tank, venting and for monitoring and pumping of petroleum which may leak into the vault. The tank or tanks within the vault must be encased or bedded in a manner consistent with acceptable engineering practices.

10.23.2.3 **Cut-off Walls**

10.23.2.3.1 Cut-off walls may be used where groundwater levels are above the bottom of the tank excavation.

10.23.2.3.2 A cut-off wall must consist of an impermeable barrier which has a permeability rate to water equal to or less than 1×10^{-6} cm/sec. It must not deteriorate in an underground environment and in the presence of petroleum.

10.23.2.3.3 A cut-off wall must extend around the perimeter of the excavation and to an elevation below the lowest groundwater level.

10.23.2.3.4 If a synthetic membrane is used for a cut-off wall, any seams, punctures or tears in the membrane must be repaired and made leak tight prior to backfilling. No penetrations of the cutoff wall are allowed.

10.23.2.3.5 Impervious native soil may serve as a cut-off wall when the impervious soil is continuous and is of sufficient depth, thickness and extent to contain a

leak. The soil must have a permeability rate to water equal to or less than 1 x 10^{-6} cm/sec.

10.23.2.3.6 Anchoring or weighting to resist buoyancy forces is required where groundwater or floods may affect the tank.

10.23.2.4 **Impervious Underlayment**

10.23.2.4.1 An impervious underlayment may be used under a tank at sites where groundwater levels are below the bottom of the excavation and where soils are well drained. This underlayment must have a permeability rate to water equal to or less than 1 x 10^{-6} cm/sec and must not deteriorate in an underground environment and in the presence of petroleum. The underlayment may consist of impervious native soils, an impervious concrete pad, synthetic membrane or any equivalent material. If a synthetic membrane is used, any seams, punctures or tears must be repaired prior to backfilling.

10.23.2.4.2 The underlayment must extend at least one (1) foot beyond the sides and ends of the tank and must have a slope to the sump of at least l/4 inch per foot. An observation well as required in Subsection 10.24.4 must be positioned in the sump and extend to the surface of the excavation for the purpose of sampling for leakage and pumping out water or product which may accumulate.

10.23.2.4.3 Surface waters must be drained from the site using good engineering practices. This may include capping the site with asphalt, concrete or other impervious cover which is sloped to drainways leading away from the storage tanks.

10.24.0 - Monitoring of New Underground Storage Tanks

10.24.1 **General Requirement**

All new tanks must have one of the following leak monitoring systems:

10.24.1.1 A double-walled tank with monitoring of the interstitial (annular) space;

10.24.1.2 An in-tank monitoring system; or

10.24.1.3 An observation well or wells, if approved by the Department according to 10.24.4.

10.24.2 **Monitoring of Double-walled Tanks**

If a double-walled tank is used, the interstitial space must be monitored for tightness using pressure monitoring, vacuum monitoring, electronic monitoring, manual sampling once per week or an equivalent method.

10.24.3 **In-tank Monitoring Systems**

If an in-tank monitoring system is used, it must consist of in-tank equipment which provides continuous monitoring of any leakage from the tank of two-tenths (0.2) of a gallon per hour or larger.

10.24.4 **Observation Wells**

10.24.4.1 If an observation (monitoring) well or series of wells are used, they must consist of slotted or screened wells at least four (4) inches in diameter. The well must be installed down-gradient in the groundwater or at a sump within the secondary containment system and to an elevation at least twenty-four (24) inches below the bottom of the tank. The well must be installed within the backfill surrounding the tank. At least one well is required at each facility. The well must be monitored for traces of petroleum at least once per week as required in Subsection 10.17.3 of this title.

10.24.4.2 An observation well may be used as a vapor or odor well if the site is uncontaminated. If the well becomes contaminated with petroleum, it must either be purged free of odors or monitored for petroleum contamination through another method capable of detecting one-sixty-fourth (1/64) of an inch of petroleum floating on the water surface or other method acceptable to the Department.

10.24.4.3 Wells must be protected from damage if located in a traffic area.

10.24.4.4 Wells must be sealed or capped so as to preclude liquid from entering the well from the surface and clearly marked as monitoring wells to prevent accidental delivery of product.

10.25.0 - Minimum Standards for Reconditioning an Underground Steel Tank

10.25.1 **Tightness Testing Schedules**

A reconditioned underground steel tank and it's associated piping must be tightness tested in accordance with Table I of Section 10.17.0. The original installation date of the tank and piping will determine the due date for required testing.

10.25.2 **Manufacturer's Guarantee**

An underground steel tank may be reconditioned by installing an interior coating (lining) under the direction of the lining manufacturer or a certified

representative. The manufacturer or representative must guarantee to the owner in writing that the coating will not fail, crack, separate or deteriorate and the tank will not leak the product specified in storage for a period of ten (10) years. A copy of the guarantee must be kept by the owner for the life of the tank.

10.25.3 **Structural Requirements**

10.25.3.1 A steel tank may be lined with a coating only if it meets the following structural conditions:

10.25.3.1.1 It has a design shell thickness of seven (7) gauge or more:

10.25.3.1.2 The tank has a minimum metal thickness of one-eighth (1/8) inch at holes after reaming;

10.25.3.1.3 The tank has no open seam or split;

10.25.3.1.4 The tank has less than ten (10) holes with none larger than 1/2 inch in diameter; and

10.25.3.1.5 The tank meets all standards for structural soundness of the lining manufacturer.

10.25.3.2 A tank which fails to meet all of the requirements of Subsection 10.25.3.1 above must be permanently closed.

10.25.3.3 To determine adherence to the requirements of Sub-section 10.25.3.1 above, the entire interior surface of the tank must be tapped with a ballpeen hammer for soundness or inspected using other equivalent or superior non-destructive methods. Weak areas, holes and seams must be ballpeen hammered (before and after sandblasting) to obtain structurally sound edges. Holes and seams must be reamed until the edges of the opening are a minimum of one-eighth (1/8) inch thick.

10.25.4 **Preparation of Tank Interior**

10.25.4.1 **Cleaning of Tank Prior to Repair**

Prior to repair, a tank must be cleaned in accordance with generally accepted practices. Wash water must not be discharged to the lands or waters of the State if the discharge would contravene the standards of Parts 701, 702 or 703 of New York Code of Rules and Regulations.

10.25.4.2 **Sludge Removal**

Sludge accumulation on the bottom of the tank must be removed, transported and disposed of in a manner consistent with all State and Federal requirements for solid waste disposal.

10.25.4.3 **Sandblasting of Internal Surfaces**

The entire internal tank surface must be sandblasted completely free of scale, rust and foreign matter. Following sandblasting, the entire surface must be brushed and vacuumed such that the surface when viewed without magnification is free of all moisture and foreign matter.

10.25.4.4 **Plugging of Perforations**

All perforations must be tightly plugged with boiler plugs or screws made of non-corrodible plastic. Boiler plugs or screws must be covered with a laminate of resin and fiberglass cloth which overlaps all sides of the plug with a minimum of six (6) inches and has a minimum area of one-hundred and forty-four (144) square inches.

10.25.5 **Installation of Striker Plates**

Prior to applying the coating material, a ten (10) gauge steel plate which covers a minimum of one-hundred and forty-four (144) square inches must be installed and centered under the fill tube and gauging tube. The plate must be bonded to the interior surface of the tank.

10.25.6 **Coating (lining) Specifications**

10.25.6.1 Any non-corrodible epoxy based resins, isophthalic polyester-based resins or equivalent coating may be used for reconditioning a steel tank if the coating is of sufficient thickness, density and strength to form a hard impermeable shell which will not leak, crack, wear, soften or separate from the interior surface of the tank.

10.25.6.2 The coating when applied to properly prepared steel as required in Subsection 10.25.4.3 must maintain a permanent bond to the tank.

10.25.6.3 The coating's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the coating.

10.25.6.4 The coating must be chemically compatible with petroleum products and product additives.

10.25.7 **Application of Coating**

10.25.7.1 The coating must be applied and cured in strict accordance with manufacturer's specifications.

10.25.7.2 The coating must be applied as soon as possible but not later than eight (8) hours after sandblasting and cleaning of the internal surface. Visible rust, moisture or foreign material must not be present.

10.25.8 **Inspection of Coatings**

The coating must be checked for air pockets and blisters and electrically tested for pinholes. The coating thickness must be checked with an Elcometer Thickness Gauge or equivalent and the hardness checked with a Barcol Hardness Tester or equivalent to assure compliance with manufacturer's specifications. Any defects must be repaired.

10.25.9 **Tank Closings after Reconditioning**

10.25.9.1 If the tank has a manway, the manway cover gasket must be replaced with a new one before resealing.

10.25.9.2 If the tank does not have a manway and an opening has been cut, the tank must have a manway properly welded in place prior to beginning work or the tank must be sealed as follows:

10.25.9.2.1 A one-fourth (1/4) inch thick steel cover plate, rolled to the contour of the tank exterior must be made to overlap the hole at least two (2) inches on each side (e.g., should measure at least 26" x 26" if the opening was cut 22" x 22").

10.25.9.2.2 The cover must be used as a template to locate three-quarter (3/4) inch diameter holes on five (5) inch centers, one (1) inch from the edge of the cover.

10.25.9.2.3 The cover plate must be sandblasted and both sides and the entire inside surface of the plate must be covered with coating material to act as a gasket.

10.25.9.2.4 Before the coating on the cover cures, the cover must be fastened to the tank using one-half (l/2) inch minimum diameter bolts. The bolt shafts are to be placed through the holes from the inside of the tank and held in place by spring clips, then fastened with lock washers and nuts which have been dipped in a seam sealer.

10.25.9.2.5 After being bolted to the tank, the cover plate and surrounding tank surface must be properly sandblasted, coated with coating material and allowed to cure before backfilling the hole.

10.25.10 **Tank Tightness Testing**

Following closure of the tank and before backfilling, the relined tank must be given a tightness test and a test report must be sent to the Department.

10.26.0 - Installation of Underground Facilities

10.26.1 Installation Plans

10.26.1.1 Plans must be prepared and signed by a registered Professional Engineer or Architect licensed to practice in the State of New York.

10.26.1.2 Plans must include a statement indicating that the design complies with the standards for new and substantially modified facilities of Article 10 of the Rockland County Sanitary Code.

10.26.2 Application of New York State Uniform Fire Prevention and Building Code

Underground tanks must be installed in a manner consistent with the following sections of the New York State Uniform fire Prevention and Building Code and the NFPA No. 30:

10.26.2.1 New York State Uniform Prevention and Building Code, l0 NYCRR Sections 1002.2 and 1002.5; and

10.26.2.2 NFPA No. 30, Sections 2-3.1, 2-3.2, 2-5.6.1, 2-5.6.3, 2-5.6.4, 2-5.6.5 and 2-7 (See 10.12.0).

10.26.3 Manufacturer's Instructions

In addition to the above requirements, all tanks must be installed in strict accordance with manufacturer's instructions. This includes repair of any damage to the tank coatings prior to backfilling.

10.26.4 Testing of New Tanks

Before being placed in service, all new tanks must be tested for tightness in accordance with Section 10.17.1.6.

10.26.5 Notification of Code Enforcement Official

10.26.5.1 Any person installing a new storage facility or substantially modifying a facility must apply to the authority responsible for enforcement of the Uniform Fire Prevention and Building Code for any building permit required by such authority prior to commencement of installation.

10.26.5.2 In addition, any person installing a new storage facility or substantially modifying a facility must give at least twenty-four (24) hours to this Department and to the local building or fire code enforcement official prior to commencement of excavation, testing for tightness and backfilling. The building or fire code enforcement official shall also be given a copy of the permanent facility registration certificate as issued by the Department under Section 10.13.0 of this Article. If a permanent certificate has not been issued, a copy of the

temporary certificate shall be supplied to the enforcement official in its place.

10.26.6 **Final Approval**

Final approval of plans will be issued upon satisfactory receipt of as-built site plans and a statement from both the engineer and the installer indicating that the system has been installed in compliance with the standards for new and substantially modified facilities of Article 10 of the Rockland County Sanitary Code.

10.27.0 - Requirements for New Aboveground Tanks

10.27.1 **Design and Construction Standards**

10.27.1.1 New aboveground petroleum storage tanks must be constructed of steel and meet or exceed one of the following design and manufacturing standards:

10.27.1.1.1 UL No. 142;

10.27.1.1.2 UL No. 58;

10.27.1.1.3 API Standard No. 650;

10.27.1.1.4 API Standard No. 620;

10.27.1.1.5 CAN4-S60l-M84; or

10.27.1.1.6 CAN4-S630-M84. (See 10.12.0)

10.27.1.2 Any aboveground petroleum storage tank which does not comply with the above requirements such as a riveted or bolted steel tank, a tank constructed of wood, concrete, aluminum or fiberglass reinforced plastic, may not be installed.

10.27.2 **Cathodic Protection for Tank Bottoms**

10.27.2.1 Bottoms of new tanks which rest on or in the ground must be cathodically protected with sacrificial anodes or an impressed current system which is designed, fabricated and installed in accordance with recognized engineering practices.

10.27.2.2 The cathodic protection system must be designed to provide a minimum of thirty (30) years of protection.

10.27.2.3 A qualified engineer or corrosion specialist must supervise the installation of the cathodic protection system where this is necessary to assure that the system has been installed as designed.

10.27.2.4 Each cathodic protection system must have a monitor which enables the owner or operator to check on the adequacy of cathodic protection.

10.27.3 **Painting of Exterior Tank Surfaces**

The exterior surfaces of all new aboveground storage tanks must be protected by a primer coat, a bond coat and two or more final coats of paint or have an equivalent surface coating system designed to prevent corrosion and deterioration.

10.28.0 - Impermeable Barriers for Aboveground Tanks

Any new stationary tank which is designed to rest on the ground must be constructed with a double bottom or underlain by an impervious barrier such as a concrete pad or a cutoff barrier. If a barrier is used, it must have a permeability rate to water equal to or less than 1×10^{-6} cm/sec and must not deteriorate in an underground environment or in the presence of petroleum.

10.29.0 - Monitoring Systems for New Aboveground Tanks

All new aboveground tanks must have equipment for monitoring between the tank bottom and the impermeable barrier required in Section 10.28.0 above. This includes, but is not limited to, perforated gravity collection pipes or channels in a concrete foundation pad which may be monitored for the presence of petroleum visually, electronically or by other satisfactory methods. Observation wells or other systems which monitor the soil or groundwater beneath the impermeable barrier do not satisfy the leak detection requirements of this Section.

10.30.0 - Secondary Containment for New Aboveground Tanks

10.30.1 **General**

A secondary containment system must be installed around any aboveground petroleum storage tank which has the capacity of 1100 gallons or more, or any tank which because of its location may pose a threat to the waters of the County.

10.30.2 **Design**

The secondary containment must be designed and constructed so that spills of petroleum and chemical components of petroleum will not permeate, drain, infiltrate, or otherwise escape to the ground waters or surface waters before clean-up occurs. The secondary containment system may consist of a combination of dikes, levels, pads, sounds, impoundments, curbs, ditches, sumps and receiving tanks or other equipment capable of containing the product stored. Construction of diking and the storage capacity of the diking area must be in accordance with NFPA No. 30, Section 2-2.3.3 (See 10.12.0).

10.31.0 - Other Minimum Requirements for New Aboveground Petroleum Storage Tank Facilities

Additional equipment required in Subsection 10.15.4.1 through 10.15.4.5 inclusive, must be installed on all new installations.

10.32.0 - Repairing and Reconditioning of Aboveground Storage Tanks

10.32.1 **Permanent Repairs**

10.32.1.1 All repairs must be permanent in nature and equal to or better than the standards of original construction. Such repairs must consist of:

10.32.1.1.1 Steel welds or steel patches which are welded in place in accordance with accepted practices; or

10.32.1.1.2 Practices set forth for reconditioning of underground tanks, as described in Section 10.25.0.

10.32.1.2 All welds associated with the repair of a tank must be inspected and tested for tightness before the tank is returned to service.

10.32.1.3 Linings, coatings, grouts and other sealing materials which are chemically compatible with the petroleum product being stored may be used in conjunction with a permanent steel tank repair as outlined above, but by themselves are not acceptable permanent repairs.

10.32.2 **Cleaning of Tank Prior to Repair**

10.32.2.1 Prior to repair, a tank must be cleaned in accordance with generally accepted practices. Wash water must not be discharged to the waters of the state if the discharge would contravene the standards of 6 New York State Code of Rules and Regulations, Parts 701, 702 or 703.

10.32.2.2 Sludge which has accumulated on the bottom of the tank must be removed, transported and disposed of in a manner consistent with all applicable State land Federal requirements for solid waste disposal.

10.32.3 **Coating (Lining) Specifications**

10.32.3.1 Any non-corrodible epoxy-based resins, isophthalic polyester-based resins or equivalent coating which is bonded firmly to the interior surfaces may be used as a coating to protect a tank from future corrosion.

10.32.3.2 The coating must be applied as soon as possible, but not later than eight (8) hours after sandblasting and cleaning of the internal surface. Visible rust, moisture or foreign matter must not be present.

10.32.3.3 The coating must be of sufficient thickness, density and strength to form a hard impermeable shell which will not crack, soften or separate from the interior surface of the tank. The coating when applied to properly prepared steel must maintain a permanent bond to the tank.

10.32.3.4 The coating's coefficient of thermal expansion must be compatible with steel so that stress due to temperature changes will not be detrimental to the soundness of the coating.

10.32.3.5 The coating must be chemically compatible with petroleum products and product additives.

10.32.3.6 The coating material must be applied and cured in strict accord with manufacturer's specifications.

10.32.3.7 Coatings used to protect the bottom of a tank must extend up the side of the tank a minimum of eighteen (l8) inches.

10.32.4 **Inspection of Coating**

The coating must be checked for blisters, air pockets and electrically tested for pinholes. The coating thickness must be checked with an Elcometer Thickness Gauge or equivalent and the hardness checked with a Barcol Hardness Tester or equivalent to assure compliance with manufacturer's specifications. Any defects must be repaired.

10.32.5 **Manufacturer's Guarantee**

The interior coating must be installed under the direction of the lining manufacturer or a certified representative. The manufacturer or representative must guarantee to the owner in writing that the coating will not leak the product specified in storage and the lining will not deteriorate in any way for a period of ten (10) years. A copy of the guarantee must be kept by the owner for the life of the tank.

10.33.0 - Installations of Aboveground Facilities

10.33.1 **Installation Plans**

10.33.1.1 Plans must be prepared and signed by a registered Professional Engineer or Architect licensed to practice in the State of New York.

10.33.1.2 Plans must include a statement indicating that the design complies with the standards for new and substantially modified facilities of Article 10 of the Rockland County Sanitary Code.

10.33.2 **Application of New York State Uniform Fire Prevention and Building Code**

Aboveground tanks and appurtenances must be installed in a manner consistent with the following sections of the New York State Uniform Fire Prevention and Building Code and NFPA No. 30:

10.33.2.1 New York State Uniform Fire Prevention and Building Code, 10 NYCRR, Sections 1002 and 1171.2; and

10.33.2.2 NFPA No. 30, Sections 2-5.1, 2-5.2, 2-5.3, 2-5.4 and 2-5.5 (See 10.12.0).

10.33.3 **Foundation Design**

New aboveground tanks must be supported on a well drained stable foundation which prevents movement, rolling or settling of the tank and is designed to minimize corrosion of the tank bottom.

10.33.4 **Avoiding Traffic Hazards**

New aboveground tanks, pipes and distribution equipment must not be located along highway curves or otherwise exposed to traffic hazards.

10.33.5 **Testing of New Tanks**

Before being placed in service, all new tanks must be tested for tightness and inspected in accordance with requirements outlined in API Standard 650 (See 10.12.0). If a pneumatic test is used, all fittings, welds and joints must be coated with a soap solution and inspected for air leaks.

10.33.6 **Notification of Code Enforcement Official**

10.33.6.1 Any person installing an aboveground tank must apply to the authority responsible for enforcement of the Uniform Fire Prevention and Building Code for any building permit required by such authority prior to commencement of installation.

10.33.6.2 In addition, any person installing an aboveground tank must give at least twenty-four (24) hour notice to this Department and the local building or fire code enforcement official prior to commencement of installation. The local code enforcement official must also be given a copy of the permanent facility registration certificate as issued by the Department pursuant to Section 10.13.0 of this Article. If a permanent certificate has not been issued, a copy of the temporary certificate shall be supplied to the enforcement officer in its place.

10.33.7 **Final Approval**

Final approval of the plans will be issued upon receipt of statement from both the engineer and the installer indicating that the system has been installed in compliance with the standards for new and substantially modified facilities of Article 10 of the Rockland County Sanitary Code.

10.34.0 - Requirements for New Underground Piping Systems

10.34.1 **Installation Plans**

10.34.1.1 Plans must be prepared and signed by a registered Professional Engineer or Architect licensed to practice in the State of New York.

10.34.1.2 Plans must include a statement indicating that the design complies with the standards for new and substantially modified facilities of Article 10 of the Rockland County Sanitary Code.

10.34.1.3 Final approval of the plans will be issued upon receipt of statement from both the engineer and the installer indicating that the system has been installed in compliance with the standards of new and substantially modified facilities of Article 10 of the Rockland County Sanitary Code.

10.34.2 **General Requirement**

All new underground piping systems including fittings and connections must be made of steel or iron which is cathodically protected, fiberglass reinforced plastic or other equivalent non-corrodible material.

10.34.3 **Cathodic Protection for Steel/Iron Pipe**

All piping systems are made of steel or iron, they must meet all of the following requirements for cathodic protection:

10.34.3.1 The cathodic protection system must be designed, fabricated and installed in accordance with recognized standards and engineering practices.

10.34.3.2 Cathodic protection system must provide a minimum of thirty (30) years of protection in highly corrosive soils.

10.34.3.3 Cathodic protection must be provided by the use of one or a combination of the following:

10.34.3.3.1 Galvanic coatings,

10.34.3.3.2 Sacrificial anodes, or

10.34.3.3.3 Impressed current.

10.34.3.4 Where sacrificial anodes or impressed current systems are used, monitors to check on the adequacy of the system must be installed and kept in proper working condition. If at any time the monitor shows that the electrical current necessary to prevent corrosion is not being maintained, the system must be restored or the piping system will be considered unprotected and must be tested for tightness in accordance with Subsection 10.17.1 of this Article.

10.34.3.5 Except where cathodic protection is provided by impressed current, underground piping systems must have di-electric bushings, washers, sleeves or gaskets installed at the end to electrically isolate the piping system from the tank and the dispenser. These di-electric connectors must be chemically compatible when exposed to petroleum, petroleum additives and corrosive soils.

10.34.4 **Fiberglass Reinforced Plastic Pipes**

If fiberglass reinforced plastic pipes are used, the materials, joints and joint adhesives must be chemically compatible with petroleum, petroleum additives and soil environments.

10.34.5 **Fabrication and Material Standards**

Pipes, fittings and adhesives must be designed, fabricated, and factory tested in accordance with generally accepted structural, material and performance standards for pressurized underground piping systems.

10.34.6 **Access Ports**

All new underground piping systems must be designed, constructed and installed with access ports to permit tightness testing without the need for extensive excavation.

10.34.7 **Installation**

10.34.7.1 All underground piping systems must be installed in accordance with recognized engineering practices. All joints must be liquid and airtight.

10.34.7.2 All piping systems must be tested for tightness before being covered, enclosed or placed in use.

10.34.8 **Other System Requirements**

10.34.8.1 Addition equipment as required in Subsection 10.15.2 through 10.15.4 inclusive, must be installed on all new installations. Overfill prevention equipment must be used on all new underground storage tank fill systems.

10.34.8.2 Systems with a float vent valve must be installed with an extractable tee and may only be used on tanks that are limited to gravity fill.

10.34.8.3 Any new underground piping systems employing a remote pumping system for dispensing motor fuel must be equipped with a leak detector (leak monitoring system) capable of detecting pressure loss or product loss on the discharge side of the pump. A remote pump is any pump separated from the dispenser and which has the discharge line(s) operating under pressure.

10.34.8.4 New underground piping systems employing a suction pump must not be equipped with more than one check valve.

10.34.8.5 Each installation shall provide approved means of monitoring the system for leakage.

10.34.8.6 New underground piping must be tightness tested prior to being placed into service.

10.35.0 - Non-Stationary Tanks and Containers

10.35.1 **Storage**

10.35.1.1 All non-stationary tanks and containers used for the storage of petroleum products, whether indoors or outdoors, shall be stored in a way that will prevent the release of any of the contents of the containers to the surface waters, groundwaters, surface of the ground or below ground of the Rockland County Health District.

10.35.1.2 Non-stationary tanks and containers of petroleum products shall at all times be stored on an impervious, chemical resistant surface compatible with the material being stored.

10.35.1.3 Non-stationary tanks and containers shall be stored in a secure manner, protected from vandalism, unauthorized access and damage by traffic, machinery, or falling objects.

10.35.1.4 Non-stationary tanks and containers stored outdoors shall be protected against freezing, rusting and other weather related damage.

10.35.1.5 Non-stationary tanks and containers shall be stored in a roofed facility with an impervious floor approved by the Commissioner or on an approved diked impervious storage pad provided with adequate means of collecting and removing any accumulated stormwater. Provisions must be made for contaminated water to be disposed of in an approved manner.

10.35.1.6 Indoor storage shall be in an area with an impervious floor and no floor drains, unless it can be demonstrated that no direct discharge will occur.

10.35.1.7 Non-stationary tanks and containers above twenty-five (25) gallons in size shall contain a placard or marking that identifies the contents. The identifying lettering shall be in accordance with regulations and standards adopted by or acceptable to the Commissioner.

10.35.2 **Handling**

10.35.2.1 Non-stationary tanks and containers shall be filled, emptied, transported and otherwise handled in a manner which will

prevent the release of the surface waters, groundwaters, surface of the ground or below ground of the Rockland County Health District of any toxic and hazardous materials.

10.35.2.2 Drums shall not be stacked more than three (3) high and only on their ends unless approved storage racks are provided.

10.35.2.3 Any area with stored containers and non-stationary tanks must be inspected on a daily basis by the owner and operator or his representative. Any indication of leakage or damage must be reported within two (2) hours and action taken to correct the problem.

10.35.2.4 Inventory records of stored materials shall be kept at all times and shall be available for inspection by the Commissioner. Records shall clearly indicate deliveries, consumption, sale, or final disposal and amount of all products. These records shall be kept for five (5) years.

10.35.3 **New Installations**

10.35.3.1 New non-stationary tanks and container areas shall be installed in a manner which will prevent the release into the surface waters, groundwaters, surface of the ground or below ground of Rockland County of any petroleum products.

10.35.3.2 Installation shall be in accordance with plans submitted to and approved by the Commissioner.

10.36.0 – Effective Date

The effective date of this Article is November 18, 1987.