

COUNTY OF SUFFOLK



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PRIVATE WATER SYSTEMS STANDARDS

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Suffolk County Department Of Health Services

Standards for Private Water Systems

§406.4-1 Applicability

The regulations contained herein are issued in accordance with Suffolk County Sanitary Code, Article 4 - Water Supply, §406.4. This section requires that private water systems conform to standards issued by the Suffolk County Department of Health Services (herein after referred to as the department), as well as to minimum New York State requirements contained in 10NYCRR Appendix 5-B titled *Rural Water Supply* for items not covered by the department's standards.

A private water system is defined in Article 4 as any system to provide drinking water other than that secured from a public water system (community or non-community). Private water systems consist of wells, piping, tanks, water treatment devices and appurtenances intended to supply drinking water to facilities such as: single family residences, multiple residences of fewer than five units, and non-residential (commercial and industrial) establishments serving an average of fewer than 25 persons daily. These regulations do not apply to community and non-community public water systems, which are regulated under Part 5 of the New York State Sanitary Code.

The Standards for Private Water Systems, §406.4-1 through §406.4-9, contained herein apply to all new well installations and the replacement of existing private water systems, as defined in Article 4. Procedures described in §406.4-10 through §406.4.18 apply only to private water systems proposed to serve new construction.

Where a replacement private water system cannot conform to these regulations due to physical or financial constraints, the well driller and property owner must complete and sign a Non-compliance Notification Form (available from the department) specifying which provision(s) of these standards have not been met. Said form must be submitted to the department within 60 days of the well's completion.

§406.4-2 Well Yield

Private water system wells serving single family residences must be capable of providing a continuous yield of at least 5 gallons per minute, measured at the outlet of the storage tank. An additional yield of 5 gallons per minute must be provided for each additional dwelling unit, e.g., 20 gpm for a four-unit residence. Private water systems serving non-residential establishments must be capable of providing a continuous yield of at least five gallons per minute, measured at the outlet of the storage tank, plus any additional yield required for irrigation or processing purposes.

§406.4-3 Well Location

In order to protect the sanitary and chemical quality of private wells from potential

contamination sources, and to facilitate access, minimum horizontal separation distances between wells and the closest portion of the items listed in **TABLE 1** must be maintained:

TABLE 1 - SEPARATION REQUIREMENTS

foundations	10 feet (see NOTE 1)
leaching pools (on & off-site)	150 feet (see NOTE 2)
property lines	1 foot
septic tanks	75 feet
sewer lines & septic system main lines	50 feet
storm drains, catch basins, sumps, recharge basins & drainage ditches	50 feet
washing machine dry wells	100 feet

NOTE 1 - All private water system wells must be located outside of buildings at least five feet beyond any roof overhang and ten feet from foundation walls. NYSDEC regulations on termiticide applications prohibit treatment where wells are less than 10 feet from foundation walls, and restrict treatment where wells are located 10 to 25 feet away. Therefore, a distance of 25 feet between wells and foundation walls is recommended, although not strictly required.

NOTE 2 - Single-family residential lots which are exempt from the minimum lot size requirements contained in Article 6, §760-609 of the Suffolk County Sanitary Code, and single-family lots indicated on realty subdivision or development maps approved by the department prior to March 1, 1988 require that a minimum horizontal separation of 100 feet be provided between the well and the closest edge of all leaching pools. Where such separations are physically impossible to attain, connection to public water will be required if available within 250 feet of any property line (see §406.4 - 11 ACCESS TO PUBLIC WATER). If public water is not available, a well may be installed with less than 100 feet separation between well and leaching pool without a variance from the department provided that:

1. The maximum attainable horizontal separation is maintained, with a minimum separation of at least 65 feet, and
2. The depth of the well screen below the water table is increased according to the schedule contained in **TABLE 2**. For example: if the well can be located only 70 feet horizontally from the nearest leaching pool, and the depth to groundwater is less than 100 feet, then the top of the well screen must be installed a minimum of 130 feet below the water table.

§406.4-4 Well Depth

The total minimum well depth required is 50 feet. The top of the well screen must be

installed at least 40 feet below the water table. For individual lots where the saltwater interface is encountered less than 40 feet below the water table, the well screen may be installed at a shallower depth (without a variance from the department) provided that:

1. the top of the well screen is at least 10 feet below the water table, and
2. the horizontal separation between the well and all leaching pools is at least 150 feet.

§406.4-5 Casings, Screens, Drop Pipes & Well Seals

All wells must be installed vertically. The applicant must receive prior approval from the department before proceeding if a vertical well is not possible.

TABLE 2 - SEPARATION DISTANCE & WELL DEPTH

Depth of water table below grade	Maximum attainable horizontal separation	Required well screen depth below water table
< 100 feet	100'	40'
	90'	70'
	80'	100'
	70'	130'
	65'	145'
100 to 200 feet	100'	40'
	90'	60'
	80'	80'
	70'	100'
	65'	110'
> 200 feet	100'	40'
	90'	50'
	80'	60'
	70'	70'
	65'	75'

Casings must be made of standard weight stainless, black or galvanized steel, or plastic meeting standards of the National Sanitation Foundation (NSF) and the American Society for Testing and Materials (ASTM).

Well screens must be constructed of non-corrosive materials; stainless steel is preferred. Screens must be securely attached to the casing. The use of lead packers is

prohibited. Screens must be a minimum of 3 feet in length. Two inch I.D. wells greater than 150 feet in total depth must utilize screens that are a minimum 5 feet in length.

Drop pipes must be constructed of stainless or galvanized steel or high-density plastic (rated at 100 psi and approved by the NSF for potable water supplies). Plastic drop pipes used for submersible pumps must be fitted with torque arrestors. Minimum inside diameters for drop pipes are:

1. 1.25 inches - suction lines for suction-lift and jet pump systems;
2. 1.0 inch - pressure lines for jet pump systems; and
3. 1.0 inch - drop pipes for submersible pumps.

Pitless adapters or units certified by the NSF or Water Systems Council must be used on all wells except suction-lift systems. Tamper-resistant water tight sanitary well seals or caps, conforming to Water Systems Council Standard - PAS - 2, must be used at the tops of casings or pitless units. Wells must be finished a minimum of 1 foot above grade and 2 feet above any possible flood level.

§406.4-6 Well Laterals

Lateral lines between the well and dwelling or structure must have a minimum I.D. of 0.75 inches, be firmly attached to the well casings, and meet the following requirements:

1. Depth - to protect against freezing, laterals must be installed a minimum of 54 inches below final grade.
2. Materials - laterals must be constructed of type "K" copper, or high density plastic clearly labeled as ASTM rated for 100 psi and NSF approved for potable water use.
3. Separation - laterals must be located a minimum of 10 feet horizontally from any sewer line, septic system main line, leaching pool, or dry well.

§406.4-7 Pumping Equipment & Storage Tanks

Any commercially available water pump suitable for the type of well installed is acceptable, with the following limitations:

1. Straight centrifugal suction pumps may be used only where the depth to the static water level in the well is 20 feet or less.
2. Regenerative turbine suction pumps may be used only where the depth to the static water level in the well is 25 feet or less.

3. Jet pumps may be used only where the depth to the static water level in the well is 60 feet or less (and the casing is 100 feet or less).

Permanent pumping equipment may be installed only after the well has been developed and silt-free water has been obtained. Pumps must be equipped with a pressure switch that is set to operate at a minimum pressure of 20 psi with a 20 psi differential. Pumping equipment must be located in an area that is dry, protected against surface drainage and freezing, and conveniently accessible for maintenance and repair. Installation of pumping equipment in pits is prohibited.

Storage tanks must have a minimum of 82 gallons capacity or equivalent. In addition, they must meet the following standards:

1. Materials - must be non-corrosive, or the water contact surface non-metallic.
2. Pressure gauge - must be installed at the pump or tank.
3. Air volume control valve - must be provided on tanks not containing diaphragms.
4. Shut-off valve - must be installed on the outflow side of the tank.
5. Drainage valve - must be installed on the tank side of the shut-off valve to allow complete drainage of the tank, and to provide sampling access.

§406.4-8 Disinfection

All accessible water supply appurtenances must be thoroughly disinfected with a strong chlorine solution made by mixing three quarts of household bleach with ten gallons of water. Disinfection is accomplished as follows:

1. Pour the chlorine solution into the well
2. Connect piping and operate pump until a chlorine odor is observed at all taps.
3. Disconnect the well piping and add another ten gallons of chlorine solution.
4. Reconnect the piping and run the pump for ten seconds.
5. Allow the well to stand idle for a minimum of six hours (24 hours if possible).
6. Pump to waste until the system is free of all chlorine odors and tastes.

§406.4-9 Treatment

If the department determines that water treatment is necessary, the equipment

installed must be capable of producing water meeting all applicable drinking water Maximum Contaminant Levels (MCL's) and guidelines during maximum water flow. Whole-house treatment is required for: iron (Fe), manganese (Mn), chlorides, volatile organic compounds (VOC's), and aldicarb residues. Nitrate treatment may be provided to a single tap, and must be capable of producing a minimum of ten gallons per day of treated water. **TABLE 3** lists the water treatment methods accepted by the department for specific water quality problems. The department may approve other types of water treatment equipment on a case-by-case basis, if proof of operational efficiency acceptable to the department is provided.

TABLE 3 - WATER TREATMENT

WATER QUALITY PROBLEM	TREATMENT
Fe = 0.3 - 0.99 mg/l	1, 2, 3, 4
Mn = 0.3 - 0.99 mg/l	1, 2, 3
Fe + Mn = 0.3 - 0.99 mg/l	1, 2, 3
Fe = 1.0 - 5.0 mg/l	2, 3, 4
Mn = 1.0 - 5.0 mg/l	2, 3
Fe + Mn = 1.0 - 5.0 mg/l	2, 3
nitrate = 10 - 20 mg/l	5, 6
chloride > 250 mg/l	6
VOC's or aldicarb exceeding standards	7

TYPES OF TREATMENT

1. polyphosphate feeder
2. ion exchange (water softener)
3. potassium permanganate/filtration
4. oxidation/filtration
5. distillation
6. reverse osmosis
7. granular activated carbon*

*GAC treatment must comply with Appendix 75-B of Part 75, Title 10 of the New York State Health Department Administrative Rules and Regulations (available from the department).

PROCEDURES FOR NEW CONSTRUCTION

§406.4-10 Introduction

No person may construct a private water system to serve new construction without first having applied for and received an approval from the department. An approval to construct will be granted only where the department has made a determination that no public water supply is available (see §406.4-11 ACCESS TO PUBLIC WATER).

Applicants are required to follow the procedures specified in the appropriate department bulletin for single-family residential construction, or other than single-family residential construction. The applicant's plan must indicate the location of all cesspools, septic tanks, washing machine drywells, sewer lines, storm drains, catch basins, drainage ditches, sumps, and recharge basins on site and within 150 feet of the applicant's property lines.

The department will review the applicant's proposed well location as indicated on the survey submitted. Modification of the well location may be required by the department prior to issuing an approval to construct. A test well may be required for any individual lot where the quantity or quality of the water may be questionable (see §406.4-12(d)).

Departmental approval to construct will be indicated on copies of the preliminary survey, which may then be submitted as part of the application for a building permit to the local municipal building department.

After the well and lateral have been installed and prior to backfilling, the applicant must notify the department to inspect the installation. If the department elects not to perform an inspection, the excavation may be backfilled. Backfilling is prohibited without the prior consent of the department. The department reserves the right to inspect the system at any time prior to final approval.

§406.4-11 Access To Public Water (Community Water Supply)

All applications to install or use a private water system must include evidence satisfactory to the department that a community water system is not available. Connection to a community water system is required if the system has sufficient capacity to serve the applicant, and if any of the following apply:

1. Single-family residence, where water mains exist within 150 feet of the applicant's property line.
2. Single-family residence for which minimum well separation or depth requirements cannot be met, or untreated well water quality is unsatisfactory and water mains exist within 250 feet of the applicant's property line.
3. Multi-family residence where water mains exist within 250 feet of the applicant's property line.

4. Realty subdivision or development where water mains exist within a distance equivalent to 150 feet multiplied by the number of proposed lots, from the applicant's property line.
5. Commercial or industrial buildings where water mains exist within 500 feet of the applicant's property line. For proposed structures larger than 5,000 gross square feet, connection is required within a distance equivalent to the proposed gross square footage divided by ten, e.g., within 600 feet of a proposed 6,000 square foot building.
6. Commercial or industrial subdivision or development where water mains exist within a distance equivalent to the maximum buildable square footage allowed divided by ten, when measured to the closest property line.

If connection to a community water system becomes feasible (due to water main extensions or improved system capacity) prior to or during construction of a project previously approved by the department for a private water system, then the approval for the private water system is voided, and the applicant must file a revised plan with the department.

§406.4-12(a) General Requirements For Test Wells

A test well may be required in order to determine the suitability of the use of individual private water systems, where the department has determined that a public water supply is not available or accessible (see §406.4-11 *Access To Public Water*). A test well or wells is required for any application for a realty subdivision or development, and may be required for individual lots. In order to determine the depth at which the best water quality is available, applicants may perform exploratory drilling by installing test wells at various depths and pre-test water quality, prior to requesting analyses by the department.

Test wells shall be located on the subject parcel. Water quality tests from nearby or adjacent parcels are not acceptable as proof of local water quality. An existing well on the parcel can be utilized as a test well, if the well can be documented to meet department standards. An untreated or unfiltered sample tap must be available for testing.

Test wells shall be constructed in accordance with all department standards, if their eventual use for potable water supply is anticipated.

In order to protect the sanitary and chemical quality of the proposed water source, and to provide a reasonable margin of safety in the event of future water quality degradation, test wells shall meet the following minimum standards:

1. The top of each well screen must be installed a minimum of 40 feet below the

water table.

2. The minimum total depth of each well must be at least 50 feet.

Prior to sampling by the department, the well driller shall provide the department with a signed certification containing well log data, including the depth of the well, elevation of the water table, screened interval, and other pertinent information required by the department.

Test wells shall be pumped for one hour at ten gallons per minute immediately prior to sampling, unless otherwise specified by the department. The applicant or their agent must contact the department to arrange an appointment for the testing.

Test wells shall not be adulterated with water from another source, treated with chemicals, or chlorinated prior to sampling by the department.

All water sampling and analyses will be performed by the department, provided proper application to the department has been made and testing fees have been paid. Analytical results will be deemed valid for one year from the date of sampling. If final approvals are not obtained within one year or if approvals have expired, new analyses of all test wells may be required.

§406.4-12(b) Specific Test Well Requirements For Realty Subdivisions

For realty subdivision applications (5 lots or more), the department will specify the test well locations. One test well is required per 10 acres or 10 subdivision lots, with a minimum of 2 test wells for any subdivision. Test wells shall be installed in conformance with the general requirements included in §406.4-12(a).

Water analyses for inorganic chemical content, volatile organic compounds, and pesticides must comply with the guidelines and Maximum Contaminant Levels (MCL's) contained in Part 5 of the New York State Sanitary Code, except as listed below.

- i. The arithmetic mean nitrate concentration of all wells tested (on the same day) at their final screen setting shall not exceed 6.0 milligrams per liter (mg/l), and no well may exceed the nitrate MCL, and
- ii. the chloride concentration shall not exceed 100 mg/l in any well, and
- iii. the combined iron and manganese concentration shall not exceed 1.0 mg/l in any well.

If water quality fails to meet the standards itemized above, then the use of private wells will not be approved. The Alternatives 1 through 6 listed in Table 4 are available to the applicant to proceed with the proposed realty subdivision.

Table 4. Alternatives When Test Well Water Quality Is Unsatisfactory

- (1) Extend public water to serve all proposed lots, or
- (2) Construct an on-site community water system meeting all applicable New York State and Suffolk County standards, or
- (3) Reconfigure the subdivision so that all lots are greater than 5.0 acres. No additional test wells are required for subdivision approval. Lots must be covenanted against further subdivision, unless water service from a community supply is provided, or
- (4) Deepen those test well(s) that exceed the department's water quality standards according to options A, B, or C listed below.

OPTION A. Deepen the test well(s) from the upper glacial into the Magothy aquifer, and repeat the complete water analysis.

OPTION B. Deepen the test well(s) through an aquiclude or confining clay layer which would impede the vertical flow of contaminants, and repeat the complete water analysis. Well logs or other information satisfactory to the department must be submitted which verify the presence of an aquiclude.

OPTION C. Deepen the test well(s) a minimum of 40 feet to a deeper segment within the same aquifer where contaminants may not be present, and repeat the complete water analysis.

Test wells deepened by utilizing Options A, B, or C listed above shall meet the water quality standards listed above in this §406.4-12(b), including (i)-(iii), or

(5) install a test well on each proposed lot in conformance with the requirements contained in §406.4-12(a). Water quality parameters must comply with the guidelines and Maximum Contaminant Levels (MCL's) contained in Part 5 of the New York State Sanitary Code, except the combined iron and manganese concentration which shall not exceed 1.0 mg/l, on individual building lots (see §406.4-12(d)). If water quality exceeds these standards on any proposed individual lot(s), that lot will not be approved as a building lot and shall be so noted on the subdivision map. A covenant satisfactory to the department will be required for any unbuildable lots. If future testing by the department shows acceptable water quality, or if public water becomes available, the lot may be approved for development. Individual lot test wells may be deepened utilizing the requirements of Options A, B, or C listed in Alternative (4).

(6) in shoreline areas, where all proposed lots are greater than 2.0 acres and where fresh water is not available at greater depths, install a test well on each lot in conformance with the requirements contained in §406.4-12(a), except that the top of each well screen shall be installed a minimum of 20 feet below the water table. Water

quality parameters must comply with the guidelines and Maximum Contaminant Levels (MCL's) contained in Part 5 of the New York State Sanitary Code, except the combined iron and manganese concentration which shall not exceed 1.0 mg/l, as individual building lots (see §406.4-12(d)). If water quality exceeds these standards on any proposed individual lot(s), that lot will not be approved as a building lot and shall be so noted on the subdivision map. If future testing by the department shows acceptable water quality, or if public water becomes available, the lot may be approved for development. Covenants, satisfactory to the department, prohibiting any future subdivision of the property are required for all lots.

When increasing the depth of test wells due to unsatisfactory water quality, Options A-C outlined in Alternative (4) must be strictly followed. The finding of unsatisfactory water quality in a test well is deemed as having demonstrated that the aquifer segment is contaminated and is unsuitable as a drinking water source. Pulling the well back or marginally deepening it within the same aquifer segment (less than a 40-foot change in screen setting) is not permitted.

Realty developments and subdivisions approved on the basis of deepened wells shall have special covenant requirements, and be so noted on the final map. Individual lot approvals from said map will require wells of similar minimum depths, unless additional test well(s) demonstrate satisfactory water quality.

§406.4-12(C) Specific Test Well Requirements For Developments

Test well requirements for developments (2 to 4 lots) may allow the applicant an additional alternative other than those outlined for realty subdivisions. Test wells shall be installed in accordance with the general requirements contained in §406.4-12(a).

A minimum of one initial test well shall be installed on the property. In general, where one or more smaller lots are proposed to be divided from a much larger parcel, the well must be installed on one of the proposed small lots. The applicant is responsible to ensure the proper location of any test wells to be used as a future source of potable supply.

Water analyses for inorganic chemical content, volatile organic compounds and pesticides must comply with NYS MCL's and guidelines, except as noted in requirements (i) through (iii) specified in §406.4-12(b).

If water quality is unsatisfactory as shown by the department's analyses, then the use of private wells will not be approved. Alternatives (1), (3), (4), (5) and (6) as listed in TABLE 4 are available to the applicant. In the event that these Alternatives do not provide acceptable water quality, OR due to the department's knowledge of water quality conditions prevalent in the area, the department may allow the applicant the use of private wells with an approved water treatment device, provided all parcels are covenanted prohibiting any future subdivision of the property, unless water service from

a community water supply is provided (see §406.4-9 TREATMENT and §406.4-15 COVENANTS).

§406.4 - 12(d) Specific Test Well Requirements For Individual Lots

Test well requirements for individual building lots in single and separate ownership allow the applicant alternatives other than those outlined for realty subdivisions and developments. Test wells shall be installed in accordance with the general requirements contained in §406.4 - 12(a). The department must approve, and may specify, the test well location and depth. The well must be constructed in accordance with these standards if the eventual use for potable water supply is anticipated.

A test well may be required on any individual building lot. Prior to the issuance of an approval to construct for which the department has determined that public water is not accessible, and where:

1. a private well may be vulnerable to contamination or,
2. the quantity of fresh water is limited due to the proximity of salt water.

Water quality parameters must comply with the Maximum Contaminant Levels (MCL's) contained in Part 5 of the New York State Sanitary Code, except the combined iron and manganese concentration which shall not exceed 1.0 mg/l. Individual lot test wells which meet MCL's, with the exception of iron and manganese up to a combined concentration of 5.0 mg/l, may be approved provided that water treatment is installed and appropriate covenants are filed (see §406.4-9 TREATMENT and §406.4-15 COVENANTS).

If water quality parameters other than iron and manganese exceed MCL's, as shown by the department's analysis, the use of a private well will not be approved. In such cases, the following alternatives are available to the applicant of an individual lot:

1. Extend public water to the lot, or
2. Change the well depth (a minimum depth of 40 feet to the top of the well screen must be maintained) and repeat the complete water analysis, or
3. Relocate the well and repeat the complete water analysis (a minimum depth of 40 feet to the top of the well screen must be maintained).
4. In shoreline areas, where fresh water is not available at greater depths, the top of the well screen may be installed a minimum of 10 feet below the water table, provided a minimum distance of 150 feet is maintained to any leaching pool, and all other requirements of these standards are met.

In the event that these Alternatives do not provide acceptable water quality, OR due to the department's knowledge of water quality conditions prevalent in the area, the department may allow the applicant the use of a private well with an approved water treatment device, provided all other requirements of these standards are met, and the appropriate covenants are filed (see §406.4-9 TREATMENT and §406.4-15 COVENANTS).

§406.4-13 Water Quality Analysis

Water quality of all private water systems for new construction must be tested, at the applicant's expense, as a condition for receiving final approval from the department. The sampling and analysis must be performed by a New York State approved laboratory (listing available from the department).

The laboratory must certify that the samples were representative of raw water quality, not filtered or treated by any device. The sample collection point, sampler's name, pumping rate, and length of time the water was flowing must be noted on the laboratory form. An unused well at an unoccupied new construction must be pumped for a minimum of 15 minutes, but no longer than a maximum of one hour immediately prior to sampling. All other samples must be collected in accordance with New York State Department of Health Sample Collection Protocols for Potable Water or the applicable USEPA methodologies.

Any necessary well development must be performed prior to the day of sampling. Extended pumping to reduce iron concentrations or other contaminants is not permissible on the day of sampling.

Analysis of the characteristics listed in TABLE 5 is required, and the laboratory must clearly note those parameters found to exceed New York State drinking water MCL's or guidelines. The department may require the analysis of additional parameters at its discretion. For example, analysis for certain pesticides, such as aldicarb or dacthal, may be specified.

To avoid delays in receiving approvals, water sampling should be performed as soon as practical. The water system must have been disinfected and have no chlorine residual at the time of sampling. Samples for microbiological analysis must be collected when the entire water system is complete. Water system disinfection shall be required to be repeated, or system modifications made, if the microbiological analysis is unsatisfactory. Water analyses submitted for final approval must be less than one year old.

Table 5 - Water Quality Analysis

total coliform	chloroform	p-isopropyltoluene
pH	2-chlorotoluene	methylene chloride
specific conductivity	4-chlorotoluene	n-propylbenzene
nitrate	dibromomethane	styrene
free ammonia	1,2-dichlorobenzene	1,1,1,2-tetrachloroethane
chloride	1,3-dichlorobenzene	1,1,2,2-tetrachloroethane
iron	1,4-dichlorobenzene	tetrachloroethene
manganese	dichlorodifluoromethane	toluene
zinc	1,1-dichloroethane	1,2,3-trichlorobenzene
copper	1,2-dichloroethane	1,2,4-trichlorobenzene
lead	1,1-dichloroethene	1,1,1-trichloroethane
MBAS	cis 1,2-dichloroethene	1,1,2-trichloroethane
benzene	trans 1,2-dichloroethene	trichloroethene
bromobenzene	1,2-dichloropropane	trichlorofluoromethane
bromochloromethane	1,3-dichloropropane	1,2,3-trichloropropane
bromomethane	2,2-dichloropropane	1,2,4-trimethylbenzene
n-butylbenzene	1,1-dichloropropene	1,3,5-trimethylbenzene
sec-butylbenzene	cis 1,3-dichloropropene	m-xylene
tert-butylbenzene	trans 1,3 dichloropropene	o-xylene
carbon tetrachloride	ethylbenzene	p-xylene
chlorobenzene	hexachlorobutadiene	vinyl chloride
chloroethane	isopropylbenzene	methyl-tert-butyl-ether (MTBE)

Note: The department may require the analysis of additional parameters such as aldicarb or dacthal.

In cases of unsatisfactory water quality, as determined by the department, the applicant shall be required to modify the location and/or depth of the well. Retesting to confirm the original analysis is allowable, provided the sampling procedures in §406.4-13 *Water Quality Analysis* are followed. If the applicant can demonstrate to the department's satisfaction that potable water is not available on the parcel, the department may allow the installation of water treatment.

§406.4-14 Water Treatment For Individual Lots

Installation of water treatment may be allowed by the department only where it has been demonstrated that deepening or relocating the well is not feasible. The applicant must submit a plan indicating the type of treatment proposed, and the method of disposal of backwash water or other wastes. The submission must include a certification from the manufacturer or seller that:

1. The device meets all department and NYS standards.
2. The device is guaranteed to provide potable water for a period of at least one year.
3. The expected operational life of the unit, based upon the raw water analysis, must be indicated, so that the homeowner will know when filter maintenance is required.

Water treatment units may not be installed without prior approval of the department. After installation and disinfection of the device, sampling is required for total coliform and the parameter(s) to be treated or filtered, as a demonstration of efficacy. The rental or lease of water treatment equipment to comply with these standards is not permissible.

§406.4-15 Covenants

All individual private water systems approved by the department with a water treatment device other than a polyphosphate feeder, requires that the applicant file a covenant with the Suffolk County Clerk. This covenant must be satisfactory to the department and state that:

1. the quality of the untreated water supply exceeded drinking water MCL's or guidelines at the time of sampling, and
2. occupancy will not occur prior to the installation of a treatment system approved by the department.

All realty subdivisions or developments approved by the department with private wells are required to have a covenant placed upon all parcels. Installation of deep wells or water treatment requires special covenant language. A complete set of all water analyses, executed covenants, title certifications, and letters of consent of lien and mortgage holders must be submitted to the department for review by the County Attorney prior to recording. Complete instructions and model covenants may be obtained from the department. Legends regarding covenant language must appear on all realty subdivision and development maps.

§406.4-16 Certifications

The applicant must provide the department with a copy of the Long Island Well Completion Report submitted to the New York State Department of Environmental Conservation. The report must indicate: a log of the well; the static water level in the casing; the depth to the top of the well screen from the land surface; the depth of the saltwater interface (if encountered); well materials, lengths and diameters (casing, screen, and drop pipe); type and model pitless adapter; packer material, if used; pump

size and type; pump location and depth from land surface; drilling method; and well yield. The report must also attest to any other work performed, including: depth, material and diameter of the well lateral; size and type of storage tank; type, make and model of water treatment unit; and, water system disinfection. Information may be listed on the reverse of the report, or additional sheets may be attached. The report must be signed in the appropriate places by a licensed well driller and/or plumber certifying all work performed by each.

§406.4-17 Final Approval

Final approval of private water systems for new construction will be issued upon submission of all required documentation, including: as-built surveys, water quality analyses, completion reports, well driller certification, and covenants where required (see department bulletins for information). Final approvals will be indicated on copies of the final survey, which may be submitted to the municipal building department as part of their requirements to obtain a certificate of occupancy.

§406.4-18 Variances

The Suffolk County Commissioner of Health Services may, on written application, grant a variance from a specific provision of these regulations in a particular case, subject to appropriate conditions, where such variance is in harmony with the general purpose and intent of the regulations, and when such application for a variance has been considered by a review board appointed by the Commissioner. The Commissioner may impose more stringent requirements in a specific case, when necessary, to insure a satisfactory water supply.

Approval By The Commissioner Of Health

In accordance with Suffolk County Sanitary Code Article 4, sections 406 and 407, the foregoing are regulations for private water systems approved by the Suffolk County Commissioner of Health Services. These revised regulations are effective July 1, 1992.