August 31, 2000

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
GENERAL GUIDANCE MEMORANDUM # 14
GUIDELINES FOR TECHNICAL REPORTS - WHEN REQUESTING VARIANCES

AUTHORITY

The Suffolk County Sanitary Code sets forth requirements for the hearing and reporting of appeals from the determination of a Commissioner’s Deputy or application for a variance. The statutory authority for these guidelines can be found in Article 2, Section 760-220 and Article 6, Section 760-609.

PURPOSE

In certain cases a technical report is necessary for the Suffolk County Department of Health Services Board of Review to render a decision involving variances or waivers to the Department’s Code, Standards or a Deputy’s determination. This memorandum shall provide a guideline for preparing such a report.

REPORT FORMAT

The following report format is recommended:

Introduction - The report shall contain a written introduction as to the purpose of the report and why the sanitary system or water supply is not being constructed in conformance with the codes or standards.

Statement of Qualifications - The report shall be prepared by a licensed design professional or other qualified individual or firm with appropriate expertise in fields such as hydrology or public health. A statement of qualifications shall be included in the report.

Summary - The report shall contain a summary of the conclusions and key points.
**Background** - The report shall contain background information on the property involved with names and mailing addresses of any involved neighbors.

**Pertinent Facts and Conclusions** - Provide any pertinent facts, which the applicant believes, will provide justification for the variance. Include a site plan showing all proposed and existing structures with the existing and proposed ground elevation contours of the site, adjacent property, roadways and finished floor elevation of the dwelling. Indicate on the plan the separation distances between sanitary system components and the foundation, retaining walls, wells, etc. Highlight those separation distances, which do not meet standards. Include a design for the proposed water supply and/or sewage disposal system. Draw conclusions based upon the facts presented.

**Signed and Stamped Statement** - The report shall contain a signed and stamped statement by the design professional, that in his/her opinion, the proposed sewage disposal and/or water supply design is the most suitable for the building site, and they will function properly without causing any health hazard or detrimental impact on the surrounding environment.

**SEWAGE DISPOSAL SYSTEM VARIANCES**

For variances where the design of the sewage disposal system does not conform to construction standards, submit details of a design that will compensate for the contravention of the standards.

**Provide a test hole or boring with soil profile** indicating any conditions which may affect the proper functioning of the sewage disposal system (e.g., perched water, groundwater, etc.). The test hole/boring shall be installed in the area of the proposed sewage disposal system.

**If adding fill materials to the site for the sewage disposal system**, include an estimate of the number of cubic yards of fill proposed and note on the plan where the fill will be placed. Provide a cross section of the proposed system with elevations of all system components as well as final grade elevations.

**If a retaining wall is proposed**, a detailed design shall be provided (include elevations, method of waterproofing, etc.).

**If the variance is for:**

1. **Separation distance between sewage disposal system and surface waters or other facilities**, submit technical proof that indicates that there will not be an adverse impact due to the contravention of the standards. This information shall include a determination of groundwater gradient with the identification of potential sewage contaminants from the system and their anticipated impacts on the public health.

2. **Unacceptable soil conditions that impede leaching rates** (i.e., other than clean sand), provide the technical basis upon which the sanitary system is being designed (e.g., soil percolation test, soil analysis, or other).
3. Unacceptable soil conditions and/or groundwater conditions, clearly identify the method to be used to obtain a hydraulic connection to suitable soils. Indicate if de-watering or other special construction techniques will be required.

4. High groundwater conditions, show the highest expected groundwater elevation and design the sewage disposal system accordingly. Provide data on whether there may be seasonal fluctuations in groundwater elevations or if the property may be affected by tidal influences.

5. An alternative system other than conventional leaching pools, (e.g., leaching fields, plastic chambers, etc.) provide the design parameters.

6. Installation of a sewage disposal system on a site with limited land area, specify the construction technique to be used to install sanitary system components and/or retaining walls. It is the responsibility of the applicant's design professional to assure that the construction will not undermine any building/structures or disturb neighboring property, or cause drainage problems on neighboring property.

7. Installation of a sewage disposal system on a site with limited access, specify the method(s) of providing access for repair and/or maintenance.

8. Separation distance between sewage disposal system and neighboring wells, submit technical proof that there will not be an adverse public health impact on the wells due to the contravention of the standards. (Groundwater modeling is recommended when the effects on water supply wells cannot be otherwise determined.). Include specifications of all wells involved, including total well depth and depth of groundwater above the well screen. Provide groundwater quality data through the use of existing wells, test wells or other means; and identify any sewage related contaminants and their anticipated impacts on the public health.

WATER SUPPLY WELL VARIANCES

For variances where the design of the water supply system does not conform to construction standards, submit details of a design that will compensate for the contravention of the standards.

Submit technical proof that there will not be an adverse public health impact on the wells due to the contravention of the standards.

Include specifications of all wells involved, including total well depth and depth of groundwater above the well screen.

Provide groundwater quality data through the use of existing wells, test wells or other means; and identify any sewage related contaminants and their anticipated impacts on the public health.
If the variance is for:

1. **Separation distance between a proposed private well and a sewage disposal system or other facility**, provide a well driller’s certificate and water analysis for a test well in the selected well area. Show all sewage disposal systems or other potential sources of well contamination (e.g., landfills, chemical spill sites, chemical storage tanks, active farms, etc.) within 150 feet of the well by identifying and clearly marking those sources on a map or copy of the plan. An evaluation of the potential for contamination of the well by these sources shall be made. Groundwater modeling is recommended when the effects on water supply wells cannot be otherwise determined.

2. **Well depth or water quality**, provide a well driller’s certificate and water analysis for a test well in the selected well area. Show all sewage disposal systems or other potential sources of well contamination (e.g., landfills, chemical spill sites, chemical storage tanks, active farms, etc.) within 150 feet of the well by identifying and clearly marking those sources on a map or copy of the plan. An evaluation of the potential for contamination of the well by these sources shall be made. Groundwater modeling is recommended when the effects on water supply wells cannot be otherwise determined. Provide details of any proposed water treatment system or other mitigation.

Issued by: Stephen A. Costa, P.E., Chief
Office of Wastewater Management