



*Rochester Committee
for Scientific Information
Rochester, NY*

*RCSI Bulletin 160
Private Sewage Disposal in the Genesee Region*

*By: Milton Gross
April 1973*

THE ROCHESTER COMMITTEE FOR SCIENTIFIC INFORMATION
P. O. Box 5236, River Campus Station
Rochester, New York 14627

Bulletin #160
Water Pollution

April 1973

Private Sewage Disposal in the Genesee Region*
by
Milton Gross

Abstract

Septic tank disposal systems serve the majority of homes existing and annually being built in the Genesee Region. Health officials, planners and watershed inspectors have estimated that 15-50% of new and existing systems experience some kind of failure, especially during the wet seasons of the year. This bulletin summarizes the findings and recommendations of the study of private sewage disposal conducted by a task force of the Regional Health Planning Council. Specific recommendations are made to put septic tank usage under the control of appropriate county agencies so as to prevent adverse environmental effects.

Background

Federal Public Health Law 89-749 of 1966 chartered the establishment of agencies "to provide for the extension and improvement of comprehensive health planning and public health services". Implementation of this Federal law in New York State has taken the form of regional health planning agencies, including the Genesee Region Health Planning Council (GRHPC). The GRHPC encompasses ten counties (Chemung, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, and Yates) and is further divided into committees, including the Regional Environmental Health Planning Committee (REHPC). The chairman of REHPC is Dr. Paul Morrow and its staff is Mr. Nadeem Obeid; its mailing address is 311 Alexander St., Rochester, N.Y. 14604.

Private Sewage Disposal

A task force of REHPC, having Mr. Andrew I. Fuller, P.E., as chairman, was appointed by REHPC to conduct a study of private sewage disposal. A report on the findings and recommendations of this task force was prepared by Mr. Nadeem Obeid (1) and is paraphrased below.

In addition, the report provides reference material for the following topics:

1. A brief description of the Genesee Region in terms of population, climate and soil. A map is included.
2. A discussion of septic tank construction, operation, optimum location of tank, trenches, absorption area required. State and Federal sources of information are also presented.

* This bulletin summarizes a report prepared by Nadeem Obeid of the Regional Environmental Health Planning Committee of the Genesee Region Health Planning Council.

3. A description of the current state of private sewage disposal control exercised by each of the region's ten counties.
4. Clues to soil absorptive capacity
5. Recommended procedure for percolation tests
6. Suggested text for ordinances to be used as a guide in formulating local controls
7. Organization charts showing agencies comprising the Genesee Region Health Planning Council

Findings and Recommendations of the REHPC Task Force

FINDING I: A. Five counties in the region (Wayne, Ontario, Yates, Schuyler and Steuben) do not have County Health Departments. The Geneva and Hornell District Offices of the New York State Department of Health have control over the development of subdivisions (five or more homes) in these counties, built with private sewage disposal systems. The New York State Department of Environmental Conservation has control over individual systems of 1,000 gallons or more per day capacity, such as those serving commercial establishments. But no uniform county-wide regulations and enforcement exist in these five counties for the remaining majority of individual household systems, however some towns have their own regulations and enforcement procedures.

B. Complaints about failing septic systems in Wayne, Ontario, Yates, Schuyler and Steuben are mostly handled by Town Health Officers. It is felt that Town Health Officers are too busy to spend their time investigating such complaints, and the process of prosecuting the violator is cumbersome, lengthy and discouraging.

C. A major portion of soils in these counties has a poor internal permeability or a high seasonal water table. These two features interfere drastically with the proper functioning of septic systems.

D. The majority of homes around bodies of water are built on small lots, with high water table, close to the shoreline.

E. Except for a few municipalities, there are generally no regulations that require individual sewage disposal permits be obtained before building permits are issued. This produces frustration and conflict...

RECOMMENDATION I: A. In each of Wayne, Ontario, Yates, Schuyler and Steuben Counties, county-wide sewage disposal regulations be adopted. An ordinance should include the following minimum requirements:

1. No individual household sewage disposal system should be built before obtaining a sewage disposal permit from the enforcing agency.
2. Arrangements be made between the enforcing agency, and towns and villages so that no Town or Village issues a building permit for a home to be built with a septic system, before an individual sewage disposal permit is obtained from the appropriate agency, which indicates that the soil slope and lot size etc. are suitable for sewage disposal.
3. Lots should be inspected before a sewage disposal permit is issued to make sure percolation rate, soil composition, slope, water table elevation, lot size, etc. are suitable.

4. Septic tank and subsurface field should be inspected before coverage, to insure that installer followed recommended construction standards.

5. New buildings are not to be occupied until the responsible agency issues an occupancy permit which indicates that the water supply and sewage disposal systems are satisfactory.

6. Penalties and speedy prosecution of violators.

B. A county-wide agency should be appointed to enforce county private sewage disposal regulations. (A County Health Department can assume this responsibility and by law receive up to 75% reimbursement from the State.)...

FINDING II: The Towns of Hopewell, Gorham, South Bristol, and Naples in Ontario County, and the Towns of Middlesex and Italy in Yates County are part of the Canandaigua Lake Watershed District. They have a watershed inspector who uses the NYSDH approved regulations as a guide to control construction of private sewage disposal septic tank systems under Chapter II of the Public Health Law. However, these towns have no local uniform and comprehensive regulations that govern private sewage disposal.

RECOMMENDATION II: Until at least a county health department or a county environmental agency is formed, we recommend that these towns adopt a uniform and comprehensive watershed ordinance which gives the inspector authority and responsibility to review, approve and inspect individual systems.

FINDING III: Keuka Lake and Seneca Lake Watersheds have good private sewage disposal ordinances and enforcement procedures. However, the Towns of Reading, Dix, Montour, Catherine and Hector, all on Seneca Lake in Schuyler County, do not belong to a watershed district and do not have a watershed control program.

RECOMMENDATION III: Until Schuyler forms a County Health District or a County Environmental Agency, we recommend that these towns form a watershed district, adopt a uniform and comprehensive ordinance, and hire a sanitary inspector to enforce the ordinance.

FINDING IV: Livingston County has a county health department, which carries out several environmental programs. The Department derives its authority from the State Sanitary Code. It does not have a County Sanitary Code or county-wide sewage disposal regulations and enforcement.

RECOMMENDATION IV: We recommend the Livingston County Board of Health adopt a comprehensive County Sanitary Code which includes regulations that govern private sewage disposal, and expend to the Department the manpower needed to enforce the Code.

FINDING V: Monroe County has no county-wide sewage disposal ordinance which regulates private sewage disposal outside subdivisions; and the County Sanitary Code does not include provisions which give the County Health Department the authority to control private sewage disposal. Nevertheless, fourteen towns, two villages, and the City of Rochester have agreements with the Monroe County Health Department to approve plans and inspect completed installations of individual sewage disposal systems. Five towns: Brighton, Hamlin, Pittsford, Penfield and Irondequoit do their own inspections. This may cause a number of problems:

1. The town standards may differ from the County Health Department standards and this is confusing to the builders and installers.

2. Towns may not in all cases, follow the specifications for sewage disposal systems on approved subdivision plans.

3. Town standards are not usually based on criteria such as soil tests, number of bedrooms, etc.

4. When system failures occur and create nuisances, the County Health Department gets the complaints. Since the County did not inspect the original installation, they have no record of what was installed and where. This leaves the Health Department with no starting place in trying to correct the problem.

5. If an investigation of the complaint reveals that the systems were not installed according to plan, it may be the Town was remiss in approving the original installation.

6. Item 5 may create a question of liability in the case of a system failure, especially when the failure occurs shortly after occupation of a house.

RECOMMENDATION V: That the County Legislature adopt a private sewage disposal ordinance or the County Board of Health amend the County Sanitary Code making it mandatory for the County Health Department to review and approve plans and inspect and approve the completed installation of private and individual sewage disposal systems in all of the towns, villages and cities in Monroe County. We further recommend that the Health Department be assigned the necessary resources to carry out this responsibility.

FINDING VI: In many towns and villages a building permit is issued before the builder or owner obtains a sewage disposal permit from the enforcing agency. This procedure produces conflict. For example, after the house is built, the owner may find he can not get a sewage disposal permit because the land is not suitable for private sewage disposal.

RECOMMENDATION VI: Arrangements be made between the enforcing agencies and town and village building departments, so that the owner and/or builder obtains a sewage disposal permit before a building permit is issued.

FINDING VII: Each of the counties in the Region has a Soil Conservation Service of the United States Department of Agriculture. These people are experts on soil, and in some counties have prepared soil maps.

Each county also has a County Planning Board, whose responsibility includes developing land use plans. There is little cooperation and interaction between County Health Departments, County Planning Boards and the Soil Conservation Service on the issue of private sewage disposal in the counties. Furthermore, some land designated as "Residential" in these land use plans, is not suitable for on site sewage disposal.

RECOMMENDATION VII: As County Planning Boards develop land use plans, consult with the County Soil Conservation Service and the soil maps to determine whether the land they assign as residential is suitable for development with septic systems or not. If not, we recommend the land be officially designated as "residential for development with municipal sewage systems only".

We also recommend that County Health Department personnel (or in counties without County Health Departments, whoever has the responsibility for private sewage disposal) consult and cooperate with the County Planning Board and the Soil Conservation Service before subdivision approval is granted. Perhaps the three agencies could jointly develop a uniform policy on private sewage disposal in each county.

FINDING VIII: Health officials, planners and others interviewed indicated that by and large, some county attorneys do not actively prosecute violators of sewage disposal regulations.

RECOMMENDATION VIII: That the NYSDH determine whether an apparent violation of a County Sanitary Code could legally be handled by the Justice of the Peace. Only if the defendant pleads "not guilty" would the case be referred to the county attorney. This procedure should assure prompt action and reduce the work load of the county attorney.

We believe the best approach for solving environmental health problems is through the educational means and voluntary compliance. However, where prosecution is necessary to insure compliance, the hands of the enforcing agency should not be tied with lengthy and complex procedures.

FINDING IX: The specifications for private sewage disposal developed by the Federal Housing Administration (FHA) and the Public Health Service (PHS) are more stringent than those required by the NYSDH. This confuses local enforcement agencies who sometimes have to follow both guidelines.

RECOMMENDATION IX: We recommend NYSDH examine and revise its standards to make them uniform with Federal guidelines.

FINDING X: The Federal and State governments are spending billions of dollars on research and construction grants for municipal sewage disposal. No funds are expended to local governments for private sewage disposal control; and research in this area is spotty.

RECOMMENDATION X: The Federal and State Government provide funds for research and improve present methods of private sewage disposal and explore alternatives to the septic tank system. Furthermore, we recommend that NYSDH support local governments, with expertise and finances to adopt and implement uniformly coordinated sewage disposal control programs.

FINDING XI: The NYSDH has no model county sanitary code which counties with county health departments could adopt, and no model sewage disposal regulations that towns can adopt.

RECOMMENDATION XI: We recommend NYSDH play a leadership role in this issue; develop model ordinances, regulations, specifications, standards and guidelines; communicate with local enforcement agencies the latest knowledge and research about the state of the art; and develop training courses on the recognition of soils for sanitarians, public health engineers, and others involved in enforcing private sewage disposal regulations.

FINDING XII: There seems to be a lack of resource material on the recognition of soils in the Region, and their suitability for private sewage disposal.

RECOMMENDATION XII: We recommend that the Soil Conservation Service develop training manuals and seminars on the recognition of soils to be used by public health engineers, sanitarians, watershed inspectors, and others involved with private sewage disposal in the Region.

FINDING XIII: State and local private sewage disposal regulations and enforcement pertain to newly built septic systems. Nowhere in the Region (or the State) is there a maintenance, surveillance inspection of existing private systems to determine whether they are functioning properly or not.

RECOMMENDATION XIII: NYSDH examine this finding and determine what reasonable alternative courses of action exist. Is it possible to develop a bi-annual or tri-annual septic system inspection and permit program similar to the motor vehicle annual inspection system?

FINDING XIV: Some County Health Departments process applications for a permit for private system by:

- a) Designing the system
- b) Approving their own design
- c) Issuing a permit based on their design
- d) Making final inspection based on their design.

RECOMMENDATION XIV: Since a conflict of interest may be involved in designing issuing of permits, and in the case of system failure, the Health Department may be made responsible, the owner or builder shall have the ultimate responsibility for the design and installation. This does not preclude the Department from giving technical advice to the owner or builder.

FINDING XV: A family buys an individual lot of land to build a home. When they apply to the county health department or local enforcing agency for a private sewage disposal permit, they may find the lot is not suitable for private sewage disposal, and that they can not build on the lot.

RECOMMENDATION XV: Many people are not aware of all these regulations. We recommend that before county and town clerks register a residential lot with private system, advise the buyer of the local private sewage disposal regulations, or hand out a pamphlet which contains these regulations. Furthermore, banks or loan companies advise the buyer also to have the lot checked by the local health department or enforcing agency before the transaction is finalized.

Reference

- (1) "Private Sewage Disposal in the Genesee Region". Task Force on Private Sewage Disposal, Regional Environmental Health Planning Committee, Rochester, New York, September 1971.