STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

Circular Letter DEH #2001-17

TO: Directors of Health
Chief Sanitarians
Professional Engineers
Licensed Installers and Cleaners

FROM: Frank A. Schaub FAS
Supervising Sanitary Engineer

DATE: August 20, 2001 Sewage Updates

SUBJECT(S): Phase I and Phase II Certification Training Schedule
Staff Replacement
Revised Region Assignments
Approval of a New Septic Tank Outlet Filter
Revisions to Section 19-13-B97
MLSS Calculations for Unsuitable Property Repairs

PHASE I AND PHASE II TRAINING SCHEDULE

Attached is the Fall training schedules for Phase I and Phase II. These sessions are for employees of local health departments and health districts. Directors of Health must approve attendees' participation and no certificates will be issued without written confirmation of their active employment. This is consistent with Section 19-13 B103 of the Public Health Code. We encourage local health departments to provide as much field experience for their staff prior to the scheduled classes. Please post this training schedule for your staff.

STAFF REPLACEMENT

We are pleased to welcome Sean Merrigan, Sanitary Engineer II, into our section to assist us with regulation of Subsurface Sewage Disposal Systems. Sean comes to us from the Water Supply Section where he has worked for the past 5 years. For the past two months, Bob and I have been actively involved bringing Sean up to speed with respect to procedures, policies, site testing and plan review. We seek your assistance and cooperation in making his transition as smooth as possible.

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REVISED REGIONAL ASSIGNMENTS

Attached is a copy of a revised regional state map outlining areas Bob, Sean and I will be responsible for. We request you forward all items within the regions to the respective engineers to expedite the review and approval process. As you might expect, Bob and I will be assisting Sean with his projects in the short term. The re-division of the eastern two-thirds of the state is being made to facilitate easy travel into the regions by Sean who lives north of Hartford and Bob who lives in Haddam.

APPROVAL OF A NEW SEPTIC TANK OUTLET FILTER

Enclosed is a copy of a recent letter addressed to James Richards, Rizzi Plastics, LLC, concerning approval of a new septic tank outlet filter manufactured by his company. I believe the letter is complete and self-explanatory.

REVISION OF SECTION 19-13-B-97, FAMILY CAMPGROUNDS AND RECREATIONAL VEHICLE PARKS

Over the past 18 months we have been working extensively with our Code Advisory Committee and the Connecticut Campground Owner's Association to make necessary changes to B97, a regulation that has remained unchanged for more than 20 years. The Code Advisory Committee was expanded somewhat to include representatives from Department of Environmental Protection, State Parks Division, the Campground Association, our Water Supplies Section and our Recreation Section. We truly appreciate the assistance given by all the volunteers on our committee who provided necessary input for the new proposed revisions. We will soon seek additional public comment, proceed through the legislative review and approval process and hopefully get the needed changes approved in the near future. If you have any interest in revisions to campgrounds regulations, please contact your committee representatives (CEHA, CSDA, CADH) or me for a copy of the latest draft. The revised regulation will appear as Section 19a-2a-29.

MLSS Calculations for Unsuitable Property Repairs

On occasion, we come across a repair situation that just does not fit when doing MLSS calculations on the basic chart in the Technical Standards. Perhaps the lot was stripped of topsoil 30 years ago or test pit data shows only 9 inches of original soil beneath 5 feet of random fill. For repair situations, hydraulic analysis is rarely performed to determine the capacity of limited soil depths to disperse sewage flows. Yet, local regulators are required to determine a daily allowable discharge for each property and record that figure on the Permit to Discharge.

MLSS Cont'd

For simplicity sake, lets assume that only 9 inches of soil is found above compact hardpan and a shallow perc test produced a rate of 20 minutes per inch. The ground slope across the system area and below is 4.5 %. The Technical Standards chart for **H**ydraulic **F**actor clearly shows us that for a minimum of 18" above restrictive layers, the **HF** would be **42**. But we don't have 18", only 9" so how do we handle this marginal situation to reflect a more realistic quantity for listing on the Permit to Discharge?

The chart in the Technical Standards does not list a 9" soil depth. Our 9" of existing natural soil is only 50% (9"/18"= 0.50 or 50%) of the minimum chart soil depth. That means our **HF** will actually have to be larger to make up for the inadequacy in soil depth. Calculation of a more accurate Hydraulic Factor is be made by dividing the 18" **HF** by the percentage of soil depth available. In this case, we would divide **42** by 0.50 (42/0.50= 84) to get an increased **HF** of **84**.

Completing our MLSS calculations for a 3 bedroom home with a **HF** of 84, a Flow Factor of 1.5 and a Percolation Factor of 1.5, our MLSS would be 189 feet (84x1.5x1.5=189 ft). If only 100 feet of spread was available for our system spread, we would only be providing 53% (100/189= 0.529) of the required spread. The average recommended daily discharge per bedroom would then be 100 gal/bed room x 0.53 = 53 gal/bed room multiplied by 3 bedrooms = 159 gallons per day total recommended discharge. This is less than the normal average of 300 gallons per day for a repair meeting the MLSS of 189 feet. This process more accurately reflects the site limitations where less than 18" of naturally occurring soil exists on a site and advises the property owner (via the Permit to Discharge) that water conservation is necessary due to site hydraulics. The property owner has the option to have an engineer perform actual hydraulic analysis if they object to the recommended estimated flow reductions on the Permit to Discharge.

Enclosures -Phase I & Phase II Schedule/Berlin Map
Regional Map
Click and Stick Filter Letter

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STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

MEMORANDUM

August 16, 2001

TO: Directors of Health and Chief Sanitarians

FROM : Frank A. Schaub, Supervising Sanitary Engineer
On-Site Sewage Disposal Section

SUBJECT: PHASE I AND PHASE II TRAINING AND EXAMINATION SCHEDULE FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS

Training sessions for the above-captioned certification program will be held in the near future. The courses will be open ONLY to local sanitarians and other municipal officials involved in the regulations of subsurface sewage disposal. Attendance and successful completion of the examination is required for all regulatory officials pursuant to Section 19-13-B103e(b) and 19-13-B103d(e) (areas of special concern) of the Public Health Code. Attendance for previously certified individuals is not required, but they may attend for review if space permits. Please note that there will be three (3) days of training for both phases in order to cover the material thoroughly. Phase I and II training session and examination dates are listed in the table below.

Training sessions will be held from 9:00 a.m. to 3:30 p.m. with the examination scheduled for 10:00 a.m. until noon, at the Berlin Community Center, 230-250, Kensington Road. It is next to the Berlin Town Hall. The Community Center is on the right, please park in the left lot. A map is attached for your convenience.

PHASE I	PHASE II
PUBLIC HEALTH CODE TECHNICAL STANDARDS	REVIEW/APPROVAL OF ENGINEERED PLANS
Wednesday: September 5, 2001 Wednesday: September 12, 2001 Wednesday: September 19, 2001	Wednesday: October 10, 2001 Wednesday: October 17, 2001 Wednesday: October 31, 2001
Wednesday: September 26, 2001 (TEST) 10:00 a.m. to 12:00 noon	Wednesday: November 7, 2001 (TEST) 10:00 a.m. to 12:00 noon

Pre-registration will be necessary. The Director of Health or Chief Sanitarian should call my secretary Joseph Mitchell at (860) 509-7296, with the names of those planning to attend. Due to classroom restrictions, the class size must be limited to the first 25 applicants. If you have any questions, please contact our office.

We would suggest that only those sanitarians with a minimum of one-year field experience pertaining to on-site sewage disposal attend Phase II.

SM/BerlinTraining/n

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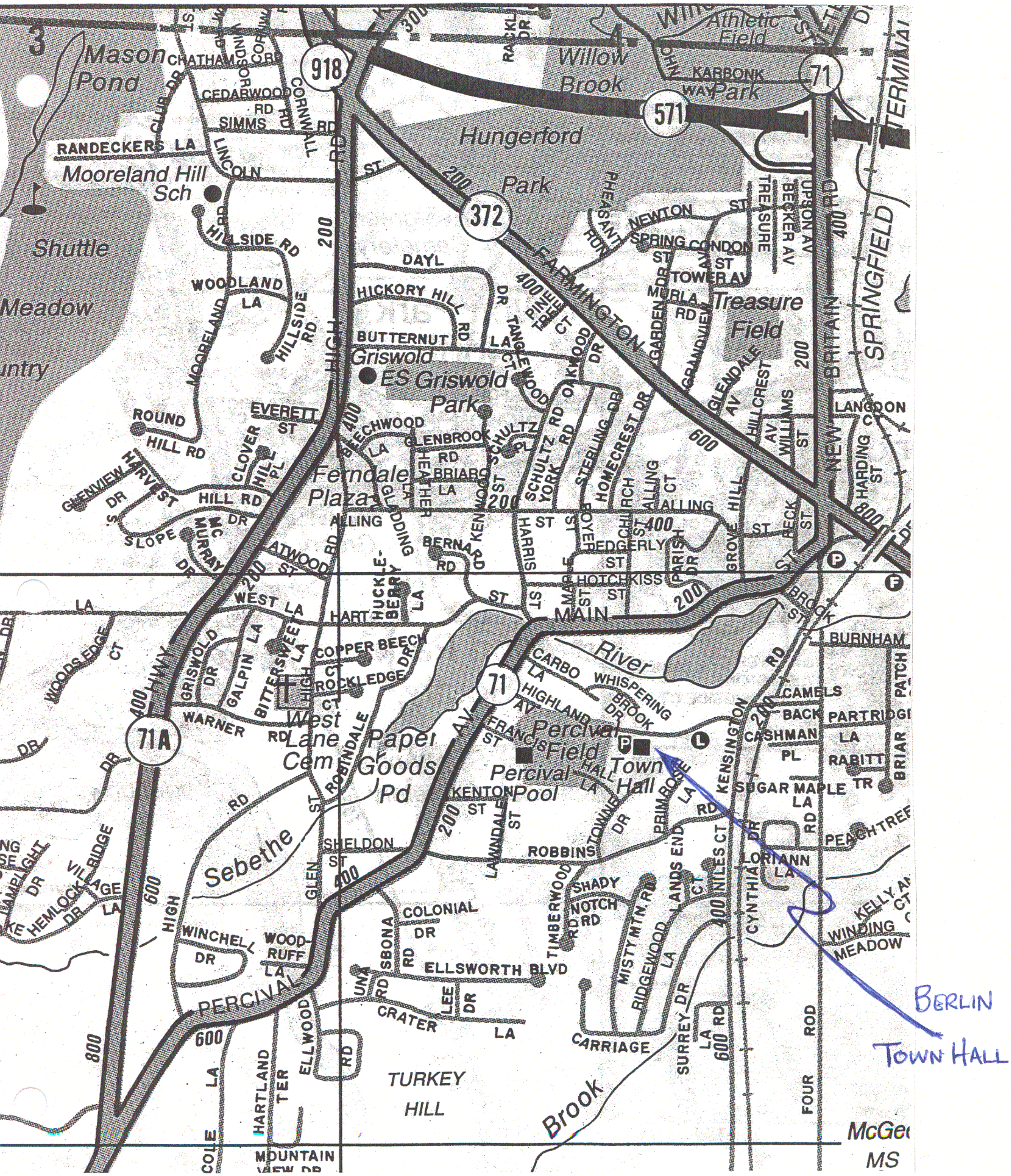
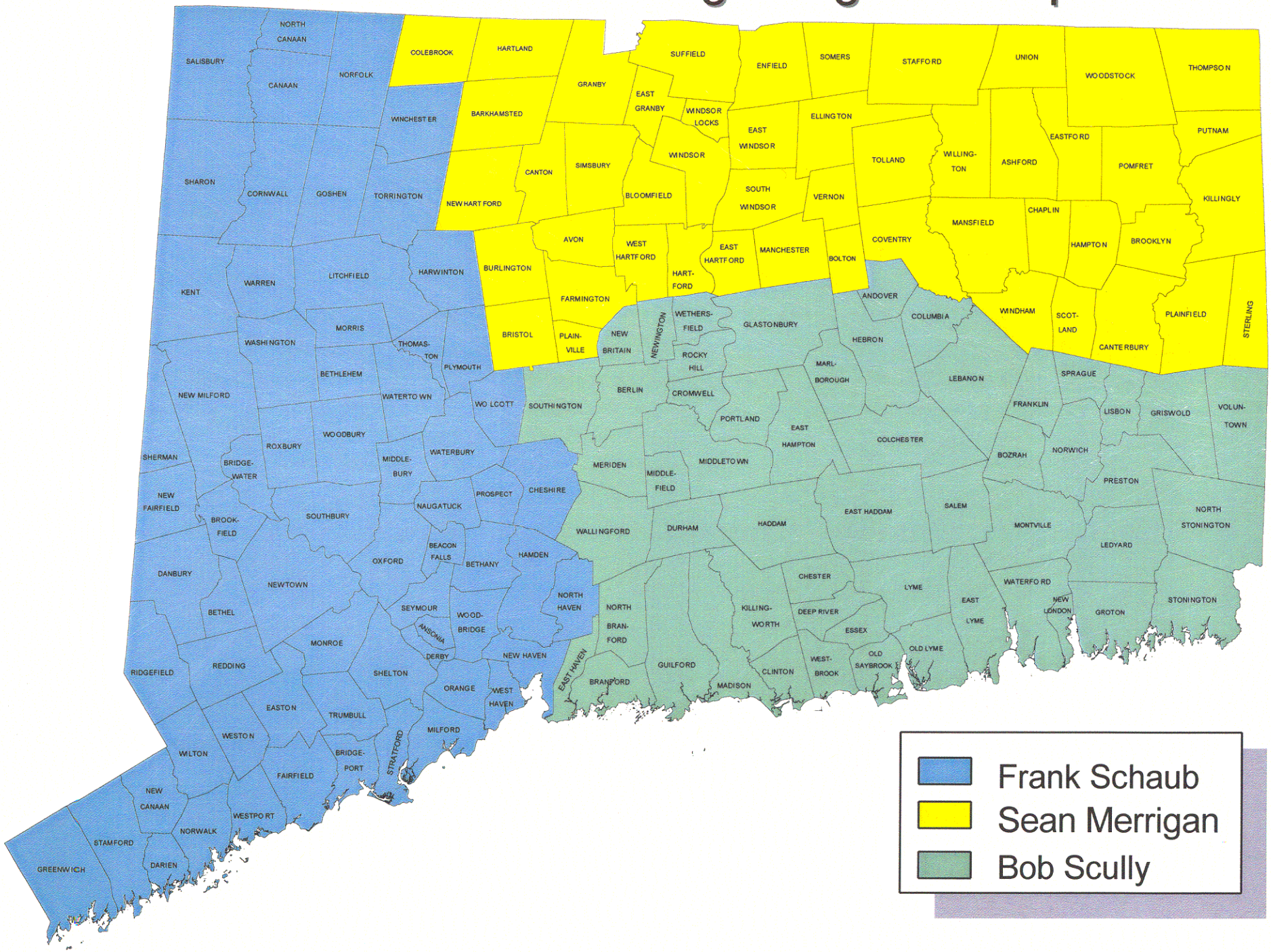

Mason Pond
Shuttle Meadow
Mooreland Hill Sch
Hungerford Park
Willow Brook
Athletic Field
Karbonk Way Park
Treasure Field
Griswold ES
Griswold Park
Ferndale Plaza
West Lane Cem
Paper Goods Pd
Percival Field
Percival Pool
Town Hall
Sebethe
River
Brook
TURKEY HILL
FARMINGTON
NEW BRITAIN RD
SPRINGFIELD
TERMINAL
HIGH RD
MAIN ST
PERCIVAL AV
HWY
918
372
571
71
71A
BERLIN TOWN HALL

Sub-Surface Sewage Regional Map



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

June 26, 2001

James Richard
Rissy Plastics, LLC
20 Woodland Drive
Canton, CT 06019-2004

RE: Approval of Model 45 Clik n' Stick Disposal Septic Tank Filter

Dear Mr. Richards:

We have received information and a sample of the new disposable septic tank outlet filter manufactured by Rissy Plastics. The plastic filter mesh element attaches to a ¾" diameter PVC pipe and is installed in a standard 4" diameter sanitary tee. The removable mesh filter element is about 3.25 inches in diameter and has a total length of 27 inches.

Under normal conditions, effluent must pass through the outside of the plastic mesh and flow upward toward the sealing ring located just below the tee outlet. Liquid then must repass through the mesh from the inside to gain access to the leaching system. In the event of filter blockage, effluent levels may overflow the top of the sanitary tee and, due to the presence of a second sealing ring on the top of the filter element, will be filtered as effluent exits the sanitary tee providing primary filtration as a result.

Although there are no performance specifications for effluent filters at this time, we would recommend you proceed to apply for NSF certification of this filter as soon as possible. While we realize the filtration mesh can easily be removed from the stationary rod, it is our belief that most licensed professionals will simply clean the filter during normal septic tank service and reinstall the entire unit. As an option, individuals may elect to replace the mesh only, installing a new mesh filter on the ¾" diameter PVC pipe or may simply replace the pipe and filter element as a single unit, servicing the filter at their home base.

We are concerned about the hazards of promoting filter changes by property owners who may unaware of the health hazards associated with septic tank effluent. While we understand there may be a few property owners who would be willing to assume these risks to either clean or replace filter elements serving their residential properties, we believe this service should best be left to professionals who are equipped to handle hazardous materials capable of spreading disease.

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Please feel free to duplicate this letter as a means of notifying your distributors and local regulators as to the acceptance of this septic tank outlet filter. If you have any information concerning the flow rating of this product, it would be beneficial to provide us and the public with that information. Please note that this approval is not endorsement of this or any other septic tank outlet filter product manufactured by you or any other company.

If you have any questions or would like to further discuss this matter, please contact our office.

Very truly yours,

Frank A. Schaub
Supervising Sanitary Engineer
Environmental Engineering Section
Division of Environmental Health

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