Department of Human Services, Bureau of Health,
Division of Health Engineering
Wastewater and Plumbing Control Program Newsletter
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Program Director's Message

I would like to comment on the following items that have generated some interest among local plumbing inspectors, contractors, and site evaluators.

1. Revised Inspection Criteria. Beginning October 1, 2002, the final system inspection has been replaced with a site preparation inspection. We understand that this inspection is more time critical than the previous one but feel it is important to insure that the system functions as designed. We are issuing a guidance document to all LPI's and voluntarily certified contractors to help with the implementation of this code change.

2. Voluntary Inspections at Property Transfer. We have developed a standard form that will be promoted as part of a State endorsed voluntary system inspection to be conducted when property is transferred from one owner to another. The inspection process will utilize the MASE Inspection Guidelines as a reference document, and will not require inspectors to submit actual inspection reports to the state or to municipalities. We will ask those attending the training proposed for next spring, to annually report the number of inspections performed.

3. February Code Changes. We do not intend to propose widespread code changes at the next hearing, but will consider any proposals deemed significant. One area that will be reviewed is Table 501.2 Design Flows for Other Facilities. There are several values that continue to raise questions, and several that may not be realistic. We intend to present future code changes with supporting justification.

I hope to meet and talk with you at the various meetings and training sessions held through the winter season. Your comments and recommendations regarding the operation of the program are always welcome.

Forms Available on CD-ROM

The Division is pleased to announce that the Wastewater and Plumbing Control Program now offers our forms and publications on a CD-ROM. All of our forms are included in generic RTF format for word processors, Adobe PDF with PC and Mac readers, and the HHE-200 Form (pages 1-3) are also in AutoCAD DWG format with a reader for PC's, both with grids and without.

All five of the Program's Rules are included in RTF format: the Subsurface Wastewater Disposal Rules, the Rules for Appointment and Administration of Local Plumbing Inspectors, the Rules for Conversion of Seasonal Dwelling Units into Year-Round Residences in the Shoreland Zone, the Rules for Site Evaluators of Subsurface Wastewater Disposal Systems, and the Minimum Lot Size Rules.

Rounding out the list, the Program's *Site Evaluation for Subsurface Wastewater Disposal in Maine* (a.k.a., Site Evaluator Manual) is included in both Word format and as an HTML document.

The CD-ROM is available for $10.00 each, and may be picked up at the Division's office in Augusta or ordered by mail. Contact Jim Jacobsen with any questions.

Rules Changes Take Effect in October

Proposed changes to the Rules for Appointment and Administration of Local Plumbing Inspectors, CMR 240; Subsurface Wastewater Disposal Rules, CMR 241; Rules for Conversion of Seasonal Dwelling Units in the Shoreland Zone, CMR 242; and Rules for Site Evaluators of Subsurface Wastewater Disposal Systems, CMR 245 were presented at a public held Tuesday, February 5, 2002 in Augusta.

The Division received several comments regarding the Subsurface Wastewater Disposal Rules and incorporated many of them. There were many changes, from minor corrections to a new chapter on drip irrigation. The changes include, but are not limited to, prohibition of use of unapproved devices and materials, first inspection is now at the site preparation stage, several expanded definitions were added, stone greater than three inches diameter in

disposal areas is prohibited, limited greywater systems were added to Chapter 10, operation and maintenance manuals are now required for engineered system applications, expansion criteria were revised for clarity, a three tier approval process was adopted for experimental systems and product registrations, and a proprietary device substitution table was added.

These rules all become effective October 1, 2002. Copies of the Rules will be distributed upon completion of printing. Contact Russ Martin with any questions.

Please note: Section 2203.2 should read that porous hose systems shall be sized in accordance with specific Division product approvals, ***not*** at one foot per gpd.

Recently Approved Products

The following products have been approved since the March 2002 newsletter. Contact Jim Jacobsen with any questions.

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Knight Treatment Systems White Knight.

The **White Knight** consists of a 12 inch diameter hexagonal plastic tube within which is a four inch diameter plastic tube filled with loose fill plastic media. A remote air pump feeds air to a proprietary diffuser beneath the cuspated plates. A biological film is generated, which adheres to the plastic media and provides treatment of water-borne contaminants. The White Knight is inserted into conventional septic tanks, and a proprietary innoculant is introduced at regular intervals. An outlet filter prevents solids carryover. This product has received Provisional Approval. This product was formerly approved under the name **Piranha**. Contact: Knight Treatment Systems, Attn.: Jay Knight, 281 Country Route 51A, Oswego, NY 13126

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Terralift and Terralift 2000.

Terralift is a pneumatic device designed to restore onsite sewage disposal systems and improve systems of less than optimal performance, by creating a fractured soil condition adjacent to the disposal area into which effluent can drain, as well as "breaking up" the disposal area's bio-mat. Terralift is acceptable for use in the State of Maine, provided that it is operated in conformance with stringent conditions relating to protection of ground and surface water supplies and the Local Plumbing Inspector is notified. Contact: Terralift Inc., Attn.: Steve McBrian, 104 E. Main Street, Stockbridge, MA 01262.

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CMS ROTORDISK Sewage Treatment System

The **CMS ROTORDISK** Sewage Treatment System consists of rotating biological disks in a self-contained primary and secondary settling tank. The number of disks varies with system capacity, which ranges from 360 gallons per day (gpd) (Model S12) to 100,000 gpd (Model L1500). This product has received General Use approval. Contact: Huron Environmental, Attn.: Timothy G. Warrow, 67 Woodland Road, Windham, ME 04062-5608

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SeptiTech Porous Drip Hose System

This system has received a revised General Use approval. The SeptiTech porous hose system size rating is approved at the equivalent of 4.4 square feet of disposal area per linear foot of hose. SeptiTech porous drip hose installations are now approved for year round use when covered with at least one foot (12 inches) of suitable cover material, extending for a width of 2.5 feet on center, and protected with at least 1.5 feet (18 inches) on center of plastic insulation board with a minimum R value of 4, adjacent to and above the hose. Contact: SeptiTech, Attn: James R. Gray, Pres., 220 Lewiston Road, Gray, Maine 04039

Site Evaluator Exam

The 2002 Site Evaluator field examination was held September 11, at Harris Farm, Buzzell Road Dayton. Four people took the written exam, and three took the field exam. The Division and the Maine Association of Site Evaluators held a review session in the afternoon. Contact Doug Coombs, SE of MASE for details at 897-4072.

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Use of Current Forms Required

Many of the Division's forms have been updated over the past several years, in particular, Page 1 of the HHE-200 Form and the First Time System and Replacement System Variance Request Forms. Each copy of the Rules, sent to every Site Evaluator and Local Plumbing Inspector, has copies of these forms. The forms are also available online or on a CD-ROM, so there is no reason to accept designs on outdated forms.

Under Section 107.2, an application for a disposal system permit shall be made on forms provided or approved by the Department. Only the current revision of a form is approved by Division (as contained in the current Rules).

After October 1, 2002 no designs or variance requests should be created using outdated forms. No permits should be issued for any designs or variance requests dated October 1, 2002 or later, which were created using outdated forms. LPI's are advised to reject such designs. This should not be confused with older designs which have not yet expired.

SEs, LPIs, & Installers Invitation

The Division invites Site Evaluators, Local Plumbing Inspectors, Installers, and other interested parties to submit questions or situation descriptions for inclusion in the newsletter. The Division will pick one or more questions for SEs, LPIs, and Installers, each, for discussion in the newsletter. Please send or e-mail your submissions to Jim Jacobsen, at the address at the end of this newsletter.

Non-Sanitary Holding Tanks

Holding tanks serving non-sanitary waste sources do not require a site evaluation or a permit. These installations include but are not limited to, floor drains and waste water normally associated with abattoirs, commercial car washes, egg washing facilities, and industrial processes. Please note that these installations do require a waste discharge license from the Maine Department of Environmental Protection, pursuant to Title 38, MRSA §413.

Policy Regarding Replacement Systems in the Shoreland Zone

The Division receives many Replacement System Variance Requests for systems located adjacent to waterbodies. Systems which would replace Licensed Overboard Discharges (OBD's) are of particular concern to the Division, in that many of these OBD's allowed development of lots that did not meet first time criteria of the Subsurface Wastewater Disposal Rules.

To accommodate replacement of OBD's and reclamation of shellfish harvest areas, the Division has historically extended replacement status for systems which would replace an OBD. The Division has now collated our review practices into a written policy on the subject of such systems, a copy of which is attached to this newsletter.

Briefly, the Division has established criteria based upon the amount of suitable soil between proposed disposal areas and the normal high water mark, as follow:

60 feet or more-may be approved locally by the LPI

59 feet to 41 feet-may be approved by the Division with no additional engineering

40 feet to 21 feet-may be approved by the Division with additional engineering requirements (advanced treatment, waste separation, etc.)

20 feet or less-the lot is unsuited for an onsite sewage disposal system, must use a holding tank or continue the OBD.

Coarser material beneath or beside disposal system

The Division has received many questions and HHE-200 forms for designs using plastic chambers which have called for stone or gravel along and under the chambers, and in several cases, between the chambers.

Pursuant to Section 804.2.4 of the Subsurface Wastewater Disposal Rules, coarser material may be placed immediately adjacent to the disposal area provided that the rest of the backfill material meets the requirements of Subsection 804.2 of the Rules

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(texture, etc.). If coarser material is used beneath the disposal field it shall be considered part of the disposal field for determining the separation between the limiting factor and the bottom of the disposal system.

In other words, the bottom of the stone or gravel under the chambers becomes the point from which the separation from the limiting factor is measured. Further, it is the Division's view that placing a layer of stone or gravel beneath the chambers creates the functional equivalent of an undersized bed. Since this practice is not allowed under the Rules nor recommended by most manufacturers, the Division does not approve this practice.

Many designers choose to place stone or gravel along the sides of chambers, particularly in trench configuration. If this is done, the designer must bear in mind that there must be soil between the chamber rows; both vertical and horizontal separation distances are measured from the edges of the stone layers; and that the spaces between the rows can not be filled entirely with stone or gravel, which would also create the functional equivalent of an undersized bed.

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