

**Accepted
Minutes from the Individual Sewage Disposal System (ISDS) Task Force
Regulatory Working Group Meeting of April 27, 2001**

The meeting was held in Conference Room 280, DEM Office of Water Resources, 235 Promenade Street and began at approximately 8:15 AM.

In attendance:

Russ Chateauneuf, George Loomis, Eugenia Marks, Veronica Masson, Connie Carey, Joe Frisella, Susan Licardi, Kendra Beaver, Scott Moorehead, Chris Turner, Monica Staaf, Alison Walsh, Tom Getz, Ernie Panciera, Deb Knauss

Review of minutes from April 10, 2001

Minutes were accepted as presented.

Joe Frisella cautioned the group that if option 6 for removal of cesspools (see indented text below) were implemented, there is risk that homeowners may not do the construction, or do it without obtaining a building permit; in either case the cesspool remains on that property.

Option 6 - Modify the system suitability determination (SSD) trigger to include any addition to the enclosed space of a structure which requires a building permit.

George Loomis re-stated his disapproval of options 2 and 3. Option 2 is impractical and costly, costing the homeowner at least \$1,500. Regarding item 3, the Septic System Checkup Handbook does not address cesspools, which are substandard and should be replaced at the earliest possible date.

Option 2 - At point of sale, inspect system and require demonstration that cesspool is not compromising public health and the environment (for example demonstrate adequate separation to groundwater, drinking water wells...)

Option 3 - At point of sale, inspect cesspool per Septic System Checkup Handbook; require upgrade of cesspools which do not pass the inspection.

Alison reported that 57 of the 350 towns in Massachusetts require removal of cesspools.

Update on Mini amendment

Russ informed the group that the mini-amendment was filed Friday, April 20 and that it would go into effect May 10, the same day the emergency amendment will expire. No update was available on the perspective or intention of the RIBA Board of Directors concerning the mini-amendment.

Expansion of Critical Resource Areas Requiring De-nitrification Systems

Russ reported on a meeting, during which DEM Water Quality staff discussed the Desbonnet, Lee report (1996), the MANAGE model and work which has been conducted in Buzzards Bay, Massachusetts to evaluate nitrogen sensitivity of coastal embayments. The Desbonnet, Lee study used the ratio of surface area of a water body to its inlet width, to evaluate sensitivity to nutrient inputs as a function of flushing. This is not a scientifically sound analysis of sensitivity upon which to base policy, as it does not account for depth of inlet, an important variable affecting flushing time. DEM staff reported that although there is work underway to establish nitrogen criterion for lakes, the process is complex and not near completion.

George provided information on the method employed by Block Island to develop a risk-based approach to requiring advanced treatment ISDS. Treatment zones were developed, based on depth to watertable, soil type, proximity to wetlands and hydric soils. If an ISDS is proposed in an area which is not sensitive to pathogens or nutrients, a conventional system may be installed. The treatment standards applied are those required by DEM for approval of a technology for nitrogen

reduction (at least 50% reduction in total nitrogen and 19 mg /l or less nitrogen concentration) and 1000 counts per 100 ml fecal coliform. Repairs in nitrogen-removal zones are required to install a nitrogen reduction system.

In RI, the salt ponds and Narrow River had area-wide management plans conducted, involving build-out scenarios and associated estimated nitrogen loadings. Risk was evaluated based on existing development. High-risk areas could be considered for control of nitrogen inputs. This is the approach which was adopted by CRMC.

The group agreed to the following strategy as a possible process to pursue a risk-based approach for expanding the critical resource.

- Evaluate physical characteristics (soil type, slope, etc.).
- Identify waterbodies which may be appropriate for inclusion
- Evaluate loadings to each of the waterbodies, perhaps using the MANAGE model, considering site-specific conditions, for example tidal range.
- Develop policy based on the outcome of this analysis

Issues requiring further attention:

- Should the denitrification requirement include repairs?
- Sources of funding for study
 - Impact grant? (program still available?)
 - 319, if applied as a BMP if a water body is on 303(d) list
 - SRF
 - 607
 - Sea Grant
 - Betterments
- Alison Walsh will research further federal sources of funding for the project.

Effort required to execute this strategy (time, personnel and cost) must be evaluated. Russ stated that when information is available concerning the resources required, an effort could be made to incorporate the project in the work plan.

Phosphorous

It was reported by DEM Water Quality staff that there is a water quality criterion for lakes of 25 ppm (mg/l) and that there is a lot of data available on phosphorous. There are waterbodies in RI that are on the 303(d) list of impaired waters due exceedence of the phosphorous criterion. Performance standards could potentially be required, based on proximity to these water bodies, for example, require shallow narrow drainfields (with pre-treatment).

Parking Lot

It was requested that we return to discussion about phosphorous at some time in the future.

Next Meeting

The Meeting will be held in Conference Room 280, DEM Office of Water Resources, 235 Promenade Street.

- Wednesday, May 9, 2001 8 AM to 10:00 AM
- Tuesday, May 22, 2001 8 AM to 10:00 AM