

Jewel Mullen, M.D., M.P.H., M.P.A. Commissioner



Dannel P. Malloy Governor Nancy Wyman Lt. Governor

## **Environmental Health Section**

## EHS Circular Letter # 2012-39

Date: July 10, 2012

To: Local Directors of Health

Registered Sanitarians Professional Engineers

From: Robert W. Scully, PE

Supervising Sanitary Engineer

**Environmental Engineering Program** 

RE: 2012 Wet Season Monitoring & Near Maximum Groundwater Period

The purpose of this circular letter is to designate the time period from October 1, 2011 through January 31, 2012 a near maximum groundwater level period, and to advise local health department staff and professional engineers on analyzing groundwater monitoring data collected during the 2012 wet season (February 1<sup>st</sup> through May 31<sup>st</sup>).

Public Health Code (PHC) regulations governing subsurface sewage disposal systems stipulate that whenever the maximum groundwater level is in doubt, a local director of health may require an investigation of maximum groundwater levels during the time period from February 1<sup>st</sup> to May 31<sup>st</sup>, or at other such times that groundwater is near its maximum level as determined by this Department. "Maximum groundwater level" is defined in PHC regulations as the level to which groundwater rises for a month or longer during the wettest season of the year. In Connecticut, groundwater typically reaches maximum levels during the wet season. PHC regulations do not include provisions for cancelling or voiding a wet season due to below normal groundwater levels. It is recommended that data collected during a wet season that experiences below normal groundwater levels be reviewed with the understanding that the data may not accurately depict the typical maximum groundwater level on a site.

This Department monitors the United States Geological Service (USGS) website that provides information on groundwater data (<u>USGS GW Data</u>) collected from multiple wells throughout Connecticut. A review of the data showed that groundwater levels were above normal at the beginning of the 2012 wet season. However, groundwater levels throughout Connecticut quickly declined due to below normal precipitation, minimal snow melt, and mild temperatures during the first half of the wet



season. Even with close to normal amounts of precipitation in the months of May and June, groundwater levels have remained below their normal maximum levels. This Department has not extended the 2012 wet season beyond May 31<sup>st</sup>.

The USGS data indicates that groundwater levels in Connecticut were near maximum in the fall of 2011. Therefore, this Department has established that groundwater data collected from October 1, 2011 through January 31, 2012 can be used when determining maximum groundwater levels. This data should be looked at collectively, along with other wet season monitoring data and site investigation documentation. It is noted that groundwater data collected during the October 1, 2011 through January 31, 2012 period may more accurately depict typical maximum groundwater levels than data collected during the 2012 wet season.

When maximum groundwater levels are still in doubt on sites monitored during the 2012 wet season, the local director of health may require that additional site investigation be performed to further evaluate and identify redoximorphic soil conditions (maximum groundwater indicators). Circular Letter #2002-25 issued by this Department on June 12, 2002 provided information on groundwater monitoring during drought conditions. Please refer to this letter (Circular Letter #2002-25) for additional guidance and recommendations on groundwater monitoring in years when groundwater does not reach normal maximum levels during the wet season. Local directors of health may also request assistance from this program in reviewing data collected during the 2012 wet season.

cc: Suzanne Blancaflor, MS, MPH, Chief, Environmental Health Section, DPH Ellen Blaschinski, MBA, RS, Chief, Regulatory Services Branch, DPH Code Advisory Committee

P/RWS/Circular Letter 2012-39 Wet Season Monitoring