Drinking Water and Groundwater Protection Division

Wastewater System & Potable Water Supply Program Up-Date

March 25, 2015

State of Vermont

Agency of Natural Resources

Department of Environmental Conservation

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Drinking Water & Groundwater Protection Division

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WEBSITE:

www.anr.state.vt.us/dec/dwgwp/index.htm

What will you find in this issue?

Licensed Designers Class A Written Exam:

The Class A written exam will be given on April 15, 2015 at St. Leo's Hall in Waterbury, VT. More information is at http://www.anr.state.vt.us/dec/dwgwp/designerlicensingexams.htm or by contacting Mary Clark at mary.clark@state.vt.us or Julie Campbell at (802) 585-4911 or email at Julie.campbell@state.vt.us.

Designer Training:

Vermont Technical College in partnership with the University of Rhode Island and the Water/Wastewater Program is hosting two courses on April 3 and 4. April 3 is an all-day course on high strength wastewater with George Loomis and David Kalen instructors. April 4 is a half-day session on microorganisms in wastewater with Jose Amador instructor. We are encouraging any designers who design for commercial buildings or who want to better understand wastewater treatment consider attending. More information and registration links can be found at: http://greentrainings.vtc.edu/uri-wastewater-workshops.html

For more information on upcoming training opportunities, please visit our web site at: http://www.anr.state.vt.us/dec/dwgwp/designerlicensingtraining.htm

GPS Coordinates for the Center of Lots:

Based on the GPS coordinates included in some permit applications, we are apparently issuing permits in New York, Massachusetts, New Hampshire, and as far away as in the Atlantic Ocean. Please check your coordinates prior to filing an application. We are in the process of creating a new tracking system and one new feature will be a Google map that will automatically identify the property location based on the coordinates in the application. Once we have the new tracking system, applications will be returned or processing delayed if we find the coordinates are inaccurate.

Application Forms:

This is a reminder that the most recent permit application forms must be used for your projects. Submittals on old forms will be returned as administratively incomplete. Note that filing

applications using eDEC will automatically be using the most current application form. Current fillable pdf or handwritten pdf permit related application forms found at:

http://drinkingwater.vt.gov/poregionalofficespermits.htm

Application Plans:

There was some discussion around whether plans submitted with an application form can be stamped "Not for Construction", "For Review Only" or similar. Please remember that plans being submitted need to be plans that we will eventually stamp "Approved" and send to the landowner. Therefore we cannot accept plans stamped "Not for Construction" or similar since the wastewater system and water supply need to be constructed per the stamped plans and permit conditions. If you have questions about language you may want on the plans, please send an example and we will ask our legal department to review.

Legislative Update:

There are several bills that we are following that may impact our Program. They are:
H.25 regarding natural burial grounds contains isolation distances related to the Water/Wastewater program; H.53 regarding maintaining isolation distances around a potable water supply or wastewater system on the property being developed with provisions if the distances do extend onto neighboring properties; H.217 regarding partial delegation of the Wastewater System and Potable Water Supply Rules (i.e. municipal connections) to municipalities when the municipality owns both the sanitary sewer main and water main; H.375 regarding the use of ecological toilets and beneficial use of grey water; and S.70 regarding inspections of wastewater systems at the time of sale of property. At this time we are aware that H.25 and H.217 passed the House and were referred to the Senate Committees on Health & Welfare (H.25) and Natural Resources & Energy (H.217). The bills, as passed the House can be found at:
http://legislature.vermont.gov/bill/status/2016/H.25 and
http://legislature.vermont.gov/assets/Documents/2016/Docs/BILLS/H-0217/H-0217%20As%20Passed%20by%20the%20House%20Official.pdf

All bills at the Legislature can be searched at:
http://legislature.vermont.gov/bill/QuickSearch/2016?SearchBy=bill&SearchBills=h.25&SearchLegislators=&SearchCommittees=

I/A – New Products:

Please visit http://drinkingwater.vt.gov/wastewaterdisinnovativelist.htm to view all new and existing treatment and dispersal units approved for use in the State.

Please note all existing I/A approvals for treatment units were updated during 2014 to allow Service Providers as well as Designers approved by the Vendors to do annual inspections of I/A treatment units. The approval letters for existing I/A units may also include new models.

We also reformatted the letters to better outline the responsibilities of the landowner, designer, service provider, and vendor.

Inspections – Wastewater Systems:

We continue to work with you, landowners, vendors, and service providers to find Permit Numbers that can be added to your I/A inspection reports. We recognize this may result in additional research by you or the landowner but is important for the landowner to have their annual reports filed appropriately to avoid possible delays in property transfers.

Another feature of our new tracking system will be our ability to more easily track current landowners and compliance for permit conditions that require on-going inspections and reporting. Our ultimate goal is to enter into the tracking system the report due date, the date we receive the report, and, if the report is not received, to provide notification to landowners that the required report is overdue.

With the new tracking system, we plan on recording the dates an I/A service contract expires and, if we do not receive a new contract, notify landowners to renew their contract.

We continue to believe landowner educational outreach is important for systems to be properly maintained so they continue to function. Outreach documents for landowners on I/A systems and other topics such as wastewater systems can be found at: http://www.anr.state.vt.us/dec/dwgwp/poregionaloutreach.htm

River Corridors:

The Watershed Management Division and the Drinking Water & Groundwater Protection Division are working closely to implement the new Flood Hazard Area and River Corridor Rules. The DEC Rivers program created the following document to explain the authority his program has to review and approve new development within a river corridor.

River Corridors Protected in Vermont

Tropical Storm Irene sharpened Vermont's focus on minimizing flood and fluvial erosion hazards. The General Assembly established a policy to protect flood hazard areas and river corridors from new development where the State regulates:

- Activities exempt from municipal regulation under the new state Flood Hazard Area and River Corridor Rules, see http://www.watershedmanagement.vt.gov/rivers/docs/FHA&RC_Rule_Adopted_10.24.2014.pdf, including state owned roads and facilities and utility projects subject to Act 248; and
- Projects reviewed under Act 250 criterion 1(D) where the Agency will make floodway determinations and regulatory recommendations consistent with its revised Flood Hazard Area and River Corridor Protection Procedures, see http://www.watershedmanagement.vt.gov/rivers/docs/FHARCP_12.5.14.pdf.

Both the above Rules and Procedures set a high "No Adverse Impact" standard but also recognize the state's goal of promoting infill and redevelopment. Performance standards were established by the DEC to consider allowing new activities within already developed flood hazard areas and river corridors (see Section 7.0(a)(2) of the Procedure). While future articles will focus on the new requirements in flood hazard areas, as defined in both the Rule and Procedure, the remainder of this article will focus on river corridors.

Since 2004, the Vermont ANR has been measuring and calculating river meander belts to define a fluvial erosion hazard (FEH) component in its Act 250 criterion 1(D) floodway determinations. In 2012, state statute established a new term for the FEH area, the **"river corridor,"** as the land area adjacent to a river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel (i.e., meander belt and buffer) that is necessary for the natural maintenance or natural restoration of dynamic equilibrium conditions and for minimization of fluvial erosion hazards as delineated by the Agency of Natural Resources in accordance with river corridor protection procedures (10 V.S.A. § 1422(12)). The

Department created a Frequently Asked Questions paper, see http://floodready.vermont.gov/rcfaq, to further explain river corridors, the mapping process, and how the Protection Procedures will be applied.

The Statewide River Corridor Map Layer and best available stream geomorphic data not yet incorporated into the Statewide Layer shall be the applicable ANR river corridor maps for purpose of implementing the Rule and Procedure. The Statewide River Corridor Map Layer found on the ANR Natural Resource Atlas ("River Corridors" in the Watershed Protection folder at http://anrmaps.vermont.gov/websites/anra/) shall depict or indicate the following map categories:

- simple 50 foot top-of-bank setbacks indicated for perennial streams with a drainage area of less than or equal to two square miles;
- river corridors drawn using hydrographic and topographic data and human-imposed confining features as defined in the Procedure (referred to as the base layer or base map); and
- river corridors drawn as updates or administrative revisions to the base layer based on new data, detailed field studies, or municipal planning at the reach scale or the watershed scale.

As noted in the article above, most projects will not need approval by the Rivers Program since direct jurisdiction only applies to State facilities and projects needing Act 248 and Act 250 approvals. We will begin working more closely with the Watershed Management Division when a project is located within a river corridor. The first phase will be to track the number and location of projects that need a WW Permit but not a permit from the Rivers Program. This will allow the Rivers Program to assess the amount of development that is occurring in river corridors and floodplains and whether the Rules should be amended in the future to include further siting restrictions.

The other aspect is we may be seeking input from the Rivers Program on new projects that are located within a river corridor but not subject to the River Corridor Rules. Although not required, we encourage you, during the initial design phase of a project, to take into consideration the River Corridor Rules and how best to protect your client's investment. We believe the best way to help the public and their investment is to plan their project to avoid nature's wrath and future costs to replace or repair a potable water supply or wastewater system destroyed or damaged by being located in an area prone to erosion.

In the absence of jurisdiction by the River Corridor Rules, the Water/Wastewater Program needs to create guidelines for locating a wastewater system or water supply in an area where it is evident the river is eroding each year. The WW Rules states that the wastewater system and potable water supply needs to be located a minimum distance from surface waters. The isolation distance between the system or source and surface water needs to be maintained for the life of the project. It is therefore inappropriate to locate a system or source a minimum of 50 feet from a bank that is known to erode each year. While it is difficult to establish guidelines for many situations, one consideration is to place systems or sources in the shadow of pre-existing development or as infill between existing development. In this way new stream alterations that may increase erosion hazards along a stream or river may be minimized.