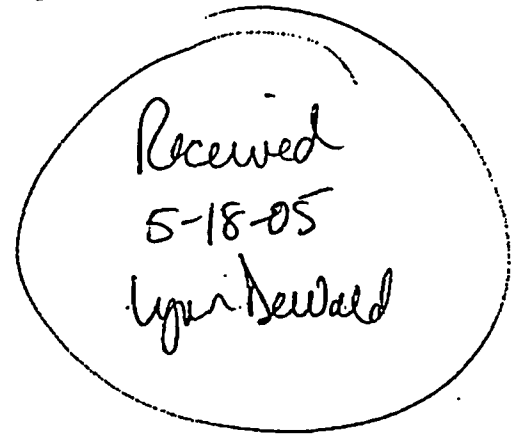


Valley Environmental Services  
63 French King Highway Unit 8  
Greenfield MA 01301  
(413) 774-5696  
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May 13, 2005

Mr. John Goodell, PE  
SVE Associates  
PO Box 1818 439 West River Road  
Brattleboro, VT 05302

Re: Additional Wetlands, Vermont Yankee Vernon, Vermont

Dear Mr. Goodell,

At your request, Valley Environmental Services visited the above site on May 13, 2005 in order to delineate the boundary of wetlands under the jurisdiction of the Vermont Wetland Rules and US Clean Water Act and their accompanying Regulations. The edges of the wetlands have been marked in the field with consecutively numbered pink stake flags. Although the wetlands have been accurately delineated, the final determination of the extent of the resource areas regulated under state law can be made only by the Vermont Agency of Natural Resources and/or the US Army Corps of Engineers.

#### Delineation Methodology

As you know, Vermont Yankee does not allow digging to more than a depth of six inches on their property. Therefore the edges of the wetlands were determined by examining two of three parameters. These parameters were the identification of areas with a dominance of hydrophytic vegetation and the presence of wetland hydrology (identification of hydric soils was omitted due to the digging restriction).

Hydrophytic vegetation was based upon the US Fish and Wildlife Service's *National List of Plant Species that Occur in Wetlands* (1988). The presence of wetland hydrology was based on the methods described in the 1987 Army Corps of Engineers manual for delineating wetlands.

## Site Description

Wetland 1 - Wetland 1 was delineated in the field with flags numbered 1-1 through 1-9. It is a small wetland located on the extreme southern end of the Vermont Yankee facility. The wetland had standing water on the day of our evaluation and is associated with site drainage. It has a culvert on the northern end of the wetland. The dominant wetland plants included, but were not limited to, sensitive fern (*Onoclea sensibilis*), field horsetail (*Equisetum arvense*) rough stemmed goldenrod (*Solidago rugosa*), late goldenrod (*Solidago gigantea*), meadowsweet (*Spiraea latifolia*), reed canary grass (*Phalaris arundinacea*), fringed sedge (*Carex crinita*), and jewelweed (*Impatiens capensis*). Wetland 1 is a Vermont Class 3 wetland.

Wetland 2 - Wetland 2 is another small isolated wetland found on the extreme northeastern side of the Vermont Yankee facility just north of Wetland A. The wetland edges can be identified in the field by pink stake flags numbered 2-1 through 2-11. The wetland is dominated by reed canary grass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), red top grass (*Agrostis alba*), and New England aster (*Aster novae angliae*) dark green bulrush (*Scirpus atrovirens*), and silky dogwood (*Cornus amomum*). A small area of water-stained plant material and obvious signs of water to the surface were used as hydrologic indicators. Wetland 2 is a Vermont Class 3 wetland.

## Wetland Resource Areas

The Vermont National Wetland Inventory Maps do not show any Class 2 wetlands on this parcel. It appears that all of the wetlands delineated in the area of investigation are Vermont Class 3 wetlands.

These wetland areas may also be jurisdictional to federal law. Sections 401 and 404 of the US Clean Water Act protect federal wetlands (Waters of these United States); there is no buffer zone to these wetlands. Any planned activities must conform to the Programmatic General Permit agreement that is in force between the federal government and the State of Vermont regarding work in federal wetlands.

Basically, work must be kept to under 3,000 square feet of wetland alteration in order to avoid a separate federal application for work in wetlands.

Given the current state of affairs over the interpretation of federal protection of isolated wetlands, only the ACOE can determine if all of the isolated wetlands on this parcel are jurisdictional to federal law. Some of these areas are very small.

## Conclusion and Recommendations

The wetlands on this parcel have been delineated in the field. As discussed earlier in this report it was not possible to examine the soils in most locations on this site due to Vermont Yankee safety restriction. Only the identification of hydrophytic plants and wetland hydrology were used to locate the wetland boundaries. Therefore no federal data forms have been filled out at the present time.

The wetland delineation flags placed in the field should be surveyed onto a site plan. At a minimum, the site plan should also show existing facilities, existing topography, the proposed work and any proposed re-grading. This site plan should be used in any application that is submitted to the Vermont Agency of Natural Resources or as part of any Vermont Act 250 application.

The US Army Corps of Engineers should be contacted regarding the wetlands flagged on this parcel in order to determine whether or not the wetlands are jurisdictional as "waters of these United States."

Please contact VES if you have any questions regarding this report.

Sincerely,  
Valley Environmental Services



William A. Lattrell, PWS  
Professional Wetland Scientist  
Restoration Ecologist

cc: Lynn Dewald, VT Yankee