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June 30, 2009

Mr. Robert Sterndale, Chairman Madbury Planning Board 13 Town Hall Road Madbury, NH, 03823

Re: Application for Conditional Use Permit

Stormwater Improvement Project

New England Metals Recycling LLC, Knox Marsh Road, Route 155

Dear Mr. Sterndale and Planning Board Members:

Normandeau Associates, Inc. is providing wetland consulting services for New England Metals Recycling LLC at their metal recycling facility located on Knox Marsh Road, Route 155, in Madbury. Certified Wetland Scientists have delineated wetlands, evaluated the potential effects of the proposed stormwater improvement project on wetland and buffer areas, and assisted in developing the planting design for the stormwater treatment wetland. On behalf of New England Metals Recycling LLC, and in support of their application for a Conditional Use Permit, we offer this letter describing our assessment of the effects of this project on the existing wetlands and wetland buffer to the Madbury Planning Board.

The stormwater treatment system as designed will require a small encroachment into the Wet Area Buffer of an isolated wetland that developed after gravel was mined from the site. This existing wetland is classified as a palustrine emergent wetland (PEM1), and is dominated by a sparse population of cattails (*Typha latifolia*), spikerush (*Eleocharis* sp), and grasses. A narrow border of willow (*Salix* sp.) shrubs is present along the south edge at the base of the steep upland slope. Mallards and green frogs were observed during a site visit, but wildlife habitat and other functions and values are low due to lack of plant cover and food sources, absence of inlets and outlets for import and export of biological material, poorly developed soils, residual man-made materials, and adjacent site activity. Currently, a portion of the drainage from the recycling facility flows to this wetland across a previously disturbed, sparsely vegetated area without benefit of detention or water quality improvement.

The constructed treatment wetland will be within 75 feet of the wetland boundary, but will be outside of the 25-foot buffer zone of Wetland A, except for the outfall channel which will temporarily disturb approximately 1,000 square feet of buffer zone. All of the earthwork within the 25-foot buffer zone will be revegetated with native wetland herbaceous species or conservation seed mix.



The small encroachment of the proposed stormwater project into this previously disturbed Wet Area Buffer will have no detrimental effect on the wetland or buffer, and the new system will result in a net positive benefit to the existing wetland by:

- Reducing the erosive force of water stormwater entering the wetland, thereby decreasing sedimentation (without increasing peak runoff from the site);
- Reducing contaminants in surface water and improving the overall quality of the surface water and groundwater entering the existing wetland;
- Providing an adjacent, densely vegetated marsh to augment the wildlife and stormwater functions of the existing wetland;
- Providing a new source of diverse, native shrub, emergent and aquatic plant species that can export seed to the existing wetland, thereby improving future cover, structure, species diversity, productivity, water quality functions, and overall habitat value in the existing wetland.

In conclusion, the proposed stormwater management system, which has been designed in accordance with New Hampshire Department of Environmental Services guidelines, will have an overall positive impact on the existing wetlands on the New England Metals Recycling facility site. The applicant met with the Madbury Conservation Commission on June 22, 2009 and provided them with the project plans and wetland-related information. Thank you for your consideration of this matter. Please feel free to call me with any questions you have.

Sincerely,

Normandeau Associates, Inc.

Lee E. Carbonneau, PWS (#882), CWS (#123)

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Senior Wetland Scientist