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January 18, 2011

City of Waterville Planning Board
c/o Ms. Ann Beverage
City of Waterville
One Common Street
Waterville Maine 04901

**RE: Site Plan Review Application Amendment
Pine Tree Waste Waterville Transfer Facility
3 Lafleur Road, Waterville, Maine – Tax Map 30, Lot 30**

Dear Members of the Planning Board:

On behalf of Pine Tree Waste, Inc. (PTW), Summit Environmental Consultants, Inc. and Walsh Engineering Associates (Summit/WEA) are pleased to submit the attached Site Plan Review Application for 3 Lafleur Road. The applicant is seeking to expand the existing container storage area and develop a dedicated transfer area to more efficiently handle existing single stream recycling deliveries at the Pine Tree Waste facility. This application amendment replaces the previous submittal dated February 5, 2010.

Project Background

PTW presently operates a solid waste transfer station on the 10.15-acre parcel at 3 Lafleur Road. The existing facility includes three buildings; an office and maintenance building, transfer building and a shed with associated paved drives and parking facilities. The facility normally operates daily (Monday through Saturday). Municipal and commercial solid waste, construction demolition debris (CDD), and recyclables are collected from the central Maine region and transferred at the Pine Tree Waste facility is transport to regional disposal and /or recycling facilities. Container storage is currently at several off-site locations, including the closed City of Waterville landfill on Webb Road. The roundtrip to pick-up and drop-off empty containers currently contributes to traffic impacts beyond the normal traffic flow in and out of Lafleur Road. PTW is proposing to construct an on-site gravel pad to provide additional container storage at the Waterville facility. The proposed location of the container storage area is shown on the Overall Layout and Materials Plan prepared by Summit/WEA included as Exhibit A.

Presently both municipal waste (MSW) and single stream recyclable materials are being transferred from collection trucks to larger transfer trailers within the transfer building. Because both processes are being done in the same building using the same tipping bay, there is significant inefficiency. When recyclable material is transferred, municipal waste must be removed from the tipping bay to prevent co-mingling of different waste streams. PTW is proposing to construct a new, dedicated, Single Stream Recycling transfer area to the west of the MSW transfer building as shown on the proposed Overall Layout and Materials Plan (Exhibit A). The Single Stream Recycling system will improve facility efficiency and mitigate potential for co-mingling of waste streams.

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Existing Conditions and Existing Permits

The site is accessed from Lafleur Road along the eastern property border by a single driveway. The office and maintenance building is located in the southeast portion of the site and the transfer building is located near the center of the site, with access drives encircling the transfer facility.

Generally the site slopes moderately from the south to the north, with a large wetland encompassing the northern portion of the site and extending off-site. Wetland fingers extend from the wetland upslope to the south nearly encircling the developed portion of the site and serve to collect surface drainage from the site. Original mapping of the wetlands was completed in 1999 and is shown on the Site Plan approved by the City of Waterville in 1999. Jones Associates of Poland, Maine verified the wetlands edges in August of 2009 as depicted on the plans.

The vegetation on the site consists of grassed areas immediately adjacent to the developed/paved areas with the majority of the remaining area wooded as a mature stand of deciduous and evergreen growth. In the wetland to the north, emergent wetland plants in standing water generally dominate.

The site currently is zoned as "General Industrial" according to the "Official Zoning Map of the City of Waterville", revised October 21, 2008. The "General Industrial" and "Airport Industrial" zone boundary coincides with the northerly and westerly property lines.

The site was originally permitted as a solid waste transfer station 1999. The following local, state and federal permits currently exist:

City of Waterville

The facility site plan was originally permitted by the City of Waterville Planning Board on July 19, 1999. Changes to the original site plan included employee parking area, trailer staging pad expansion parking at the office and parking at the transfer building. These changes, resulting in an increase to the original impervious area of 4,785 square feet (sq ft), were reviewed and approved by the Planning Board on July 21, 2008.

Maine DEP Solid Waste

The site currently holds a Solid Waste Permit approved by the Maine Department of Environmental Protection (Maine DEP) on November 3, 1999 per order No. S-021993-WH-A-N. A request for minor revision to this permit was submitted November 10, 2010 to address facility changes as described in this document. The request is currently under review by Maine DEP.

Maine DEP National Resource Protection Act (NRPA)

The Maine DEP approved a Tier 1 NRPA application for wetland fills of 3,710 sq. ft of impact to the freshwater wetlands per the plan prepared by Sevee & Maher Engineers, Inc. dated May 11, 1999.

Army Corps of Engineers (ACOE)

The wetland fills associated with the development of the site were approved by the ACOE on October 26, 1999 as ACOE permit No. 199902195. The permit indicates that 0.085-acre (3,700 sq ft) impact was permitted for the development of the site. The permit, coupled with the separately issued municipal Industrial Park permit (ACOE

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permit No. 199402694), permitted a cumulative impact of 0.95 permitted acres for the entire Industrial Park including the Pine Tree facility.

Federal Aviation Administration (FAA)

Due to proximity of the Waterville Municipal Airport, an Aeronautical study and "Determination of no hazard to air navigation" was completed in 1999. This determination found that there were no issues associated with the development of the original transfer station project due to building heights or equipment.

Proposed Development

An Overall Site Plan (Exhibit A) has been developed by Summit/WEA showing the proposed improvements including a container storage area encompassing approximately 0.3 +/- acres, a single stream tipping area, new stormwater treatment areas and grading.

Single Stream Recycling Area

A new single stream recycling transfer area is proposed on the westerly side of the existing transfer station. The tipping area would be constructed near the upper elevation of the transfer facility (elevation 291.5 feet msl +/-). To provide for truck access below the tipping area, the trailer pad is proposed to be constructed at an elevation of approximately 276.5 feet +/- and a retaining wall to support the soil bank would extend to the tipping pad area at elevation 290.5 +/- as shown on the Overall Layout and Materials Plan. The proposed segmental block retaining wall will allow recycling trucks to pull to the edge and tip directly into the transport trailers, eliminating the logistical issues associated with handling single stream recyclables within the transfer building. The travel area will be covered by a canopy structure and litter control fencing will be installed along the southern and western sides of the tipping area.

The development of the tipping area will require the removal of the existing slope, construction of the retaining wall and canopy and grading along the westerly drive. Stormwater from the single stream recycling area will be directed via overland flow and the closed storm drainage system. Once collected, the runoff will discharge through a new small pre-treatment tank into a new underdrain soil filter (UDSF No. 1). Runoff will be filtered through soil media before discharging into the downstream receiving waters.

Container Storage Area

As shown on the site plan, the proposed Container Storage Area provides 0.3 +/- acres of pad area to store empty solid waste containers. The storage area will be constructed as a gravel pad and located to avoid wetland impacts and maintain the required setbacks from wetlands. The majority of developed stormwater from the pad will be directed to two level spreaders for treatment via a vegetative buffer before discharging into downstream receiving waters.

Existing MSW Transfer Building Modifications

A new trench drain will be installed outside of the MSW Transfer Building to collect stormwater impacted by tipping floor activities and vehicle tracking immediately outside the building. An in-line oil-water separator will pre-treat stormwater collected in the trench drain and direct these flows to the sanitary sewer system. In addition, a new curb will be constructed along the outside of the west portion of the access road down to the lower area of the facility to better direct stormwater to the proposed new USDF. A low asphalt berm between the scale and the west portion of access road will also be constructed to direct stormwater to the new curb and ultimately to the USDF.

Existing Washdown Area Modifications

Periodic vehicle and container washing at the facility occurs on the paved washdown pad located north of the Transfer Building. Presently, the runoff from the wash down area is discharged into the existing sanitary sewer system; however, the limited use of the area as a washpad results in a significant amount of clean stormwater runoff entering the sanitary sewer system. As a Best Management Practice (BMP), two valves will be installed to direct flow from the catch basin structure located near the southwest corner of the pad, either allowing clean runoff to surface drain or, when washing operations are ongoing, to the sanitary sewer. By employing this valve system, a significant amount of runoff water can be diverted to the ground surface, thus reducing overall Site discharges to the sanitary sewer system. This BMP will be incorporated into the revised SWPPP for the facility.

In addition, edges of the access road and wash pad area pavements will be expanded to better facilitate truck turning radius and stormwater management.

Standards of Review

In Accordance with the City Ordinance, Section 1.3 Standards of Review, we offer the following information as it pertains to the proposed site development:

A. Water and Air Pollution

1. Floodplain Elevation:

No flood zones are identified on the site according to the Flood Insurance Rate Maps (FIRM) as issued by Federal Emergency Management Agency (FEMA).

2. Soils

Attached Exhibit F entitled "Geotechnical Report Container Storage and Recycling Transfer Area Pine Tree Waste Waterville, Maine" prepared by Summit Geoengineering Services and dated January 2010. The majority of the soils identified on-site are marine and glacial till soils. These soils are adequate for the proposed project and will require normal engineering practices for development.

3. Slope of Land and Effect on Effluents

The existing site generally slopes between 8 and 15% from Lafleur Road (the easterly property line) toward the westerly property line, where there is an existing wetland. The proposed site design will maintain these existing drainage patterns.

4. Capacity/Availability of Streams to Handle Effluent

The proposed site design will utilize under drained soil filters (UDSFs) to treat the quality and quantity of stormwater effluent. These UDSFs are designed to current Maine DEP standards.

5. Applicable Local and State Water Resource Regulations

The applicant has submitted an Application for a Solid Waste Project Minor Revision to the Maine DEP Solid Waste Program. The Solid Waste Program approval process will require this project to meet existing Maine DEP water resources regulations.

The applicant has obtained a permit for the disturbance of the wetland buffer and roughly 500 sq ft wetland impact for the crossing to Container Storage Area (see

Exhibit A). The Maine DEP Permit-by-Rule Notification Form is included as Exhibit B.

B. Water Availability – Potable and Fire Control:

The proposed site improvements will not change or increase potable water demand or fire control water demand.

C. Burden to Kennebec Water District:

The proposed site improvements will not change or increase potable water demand or fire control water demand.

D. Soil Erosion and Stormwater Impacts:

Erosion Control: See attached Exhibit C for the Erosion and Sediment Control Report for Container Storage Area Expansion and Recycling Transfer Area at Pine Tree Waste Waterville Transfer Facility, dated January 28, 2010. This report outlines the products, installation and maintenance of erosion control measures. Soil erosion control will be consistent the Best Management Practices (BMP's) as stipulated by the Maine DEP.

Stormwater Impacts: The proposed stormwater system has been designed to meet the State of Maine Stormwater Management Law (Chapter 500). Stormwater from the developed areas as well as treatment of some existing areas have been directed to an under drained soil filter (UDSF) where it will be treated prior to discharge. Refer to Exhibit D, Stormwater Management Report and Plan dated November 10, 2010 attached for details.

E. Traffic Analysis and Assessment

See the attached "Traffic Assessment proposed Casella Waste Systems, Inc. Waterville Waste Transfer Facility Improvements" as prepared by William Bray, PE dated January 16, 2010 (Exhibit E). The study concludes the following:

- The site modifications are not expected to increase off-site traffic.
- The existing facility site has very little impact on the Route 11/Airport Road intersection.
- According to the MDOT traffic bureau, there is a very low frequency of traffic crashes at the Route 11/Airport Road intersection.

F. Solid and Sewage Waste Disposal

Staffing levels at the Pine Tree Waste Transfer Facility will not change as a result of this modification. Therefore, an increase in solid waste generated by the facility or sewage waste volumes is not anticipated as a result of this project. As described in the following paragraph, proposed Site improvements associated with this project are anticipated to reduce sewage waste volumes from the facility.

The existing wash down pad located in the northeast portion of the site presently drains to the municipal sanitary sewer system at all times. Pine Tree Waste washes the trucks on an intermittent basis; therefore, currently a significant amount of clean stormwater runoff enters the sanitary sewer system. This plan proposes a diversion valve system which will divert storm runoff from the sanitary system. When truck washing is planned the valve system will be used to divert the flow to the sanitary sewer system.

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wetland impact (430 +/- Sq ft). A culvert will be installed at this location to provide for drainage through the wetland.

Enclosed you will find a copy of the City of Waterville Site Plan Application, a copy of the proposed Site Plan, an electronic copy of the application submittal, and the application fee. I trust you will find the information sufficient for review. We look forward to working successfully with you through the site plan process.

Respectfully,



William R. Walsh, III, P.E.
Walsh Engineering Associates, Inc.



Michael J. Walsh, P.E.
Summit Environmental Consultants, Inc.

- Enc. Site Plan Set (1 set)
- L1.0 – Existing Conditions Plan (1" = 40')
 - L2.0 – Overall Layout and Materials Plan (1" = 40')
 - L3.0 – Overall Grading, Drainage and Erosion Control Plan (1" = 40')
 - L3.1 – Grading and Drainage Plan: Transfer Station (1"=20')
 - L3.2 – Grading and Drainage Plan: Storage Area (1"=20')
 - L4.0 – Detail Site Plan: Recycling Transfer Station (1" = 10')
 - L5.0 – Site Details: Erosion Control
 - L5.1 – Site Details: Paving and Drainage
 - L5.2 – Site Details: Underdrain Soil Filter (USDF)
 - L5.3 – Site Details
 - L5.4 – Site Details
 - D1.0 – Stormwater Treatment Plan (1" = 40')
 - Exhibit A: Sheet L2.0, Overall layout plan (11" x 17")
 - Exhibit B: Maine DEP Permit By Rule Notification Form
 - Exhibit C: Erosion and Sediment Control Report
 - Exhibit D: Stormwater Management Report
 - Exhibit E: Traffic Assessment Report
 - Exhibit F: Geotechnical Report
 - Exhibit G: Financial Capacity Letter
- cc. David LaFountain, Waterville Fire Department
Roland LaPointe, P.E., Waterville Sewer District
Jefferson Longfellow, P.E., Kennebec Water District
Toni King, Pine Tree Waste