

## Wilson, Donna

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**From:** David Garrett [david@davidgarrettpe.com]  
**Sent:** Friday, September 10, 2010 12:05 PM  
**To:** Wilson, Donna  
**Cc:** 'Nick Marotta'; 'Dennis Gehle'  
**Subject:** Text for Wood Waste Recycling Area  
**Attachments:** Brownfield Engineering Report page 7-9.pdf; Brownfield Engineering Report page 3-4.pdf; Brownfield Engineering Report page 7-5.pdf

Please see the attached language that I propose to add to the PTC application for WCA Brownfield Road. I will modify the drawing and submit it as a draft this afternoon. Please provide your comments. Thanks.

### 3.3.3 Special Engineering Features

No seeps, springs, soft ground, or unstable conditions were identified in the characterization studies. As such, no special engineering design features are required. The subsurface investigations revealed differential weathering along the upper reaches of the bedrock – evidenced by variable depths to “auger refusal” within the central and eastern portions of Phase 2. This pattern suggests the presence of boulders embedded in a saprolite matrix, which does not constitute continuous “bedrock.” A preliminary blasting plan has been prepared to allow the Owner the option of removing boulders to predetermined elevations via ripping and carefully controlled blasting, and backfilling to design grades that will maintain the regulatory minimum 4 feet of separation to continuous bedrock. The preliminary blasting plan (submitted under separate cover) has been prepared for regulatory review based on successful blasting performed at other landfill facilities in North Carolina (under the author’s supervision) – once a contract has been let and the specifics of the weathered rock surface have been identified during construction of Phase 2, a detailed blasting plan will be prepared and made part of the CQA documentation for the Phase 2A construction.

### 3.3.4 Equipment Requirements

The minimum required equipment to operate the subject facility is as follows:

- One D-6 or equivalent dozer with single-tooth ripper
- One CAT 235 or equivalent track-mounted excavator
- One CAT 963D or equivalent track-mounted loader
- One CAT 826 or equivalent steel-wheel landfill compactor
- One 725 articulated off-road dump truck
- One water truck (make and model not specified)

Other equipment shall be contracted, rented, or purchased as needed to facilitate operation of the facility.

### 3.3.5 Other Solid Waste Activities

The facility operates an inert debris stockpile (concrete debris only) used for making beneficial fill and a **LCID T&P Facility for clean wood waste recycling** within the future “South” disposal area (see **Drawing S4** and **Figure A**). Upon approval of this plan, WCA will store and process pallets within the LCID area – **subject to the SWS rules for storage of unprocessed and processed materials** – with no “in-ground” LCID disposal activities on the premises (except within the approved C&D disposal facility).

### 7.4.3 Wastewater Treatment Sludge

WWTP sludge may **not** be disposed in the C&D Landfill, per Division rules. WWTP sludge may be used as a soil conditioner to enhance the final cover, upon receipt of permission from the Division, to be applied at agronomic rates.

### 7.4.4 Wood Waste

The Wood Recycling (LCID T&P) facility shall only accept the following wastes:

1. Naturally occurring vegetative debris (i.e., stumps, trees, limbs, brush) – no grass, leaves or yard waste.
2. Clean wood waste derived from construction only (i.e., dimension lumber) and pallets – no demolition materials, no painted or treated wood, no engineered or laminated wood products.

Refer to **Section 7.6.3.4**.

## 7.5 Waste Exclusions

No municipal solid waste (MSW), hazardous waste as defined by 15A NCAC 13A .0101, or hazardous waste from conditionally exempt small quantity generators (CESQG waste), or liquid waste will be accepted. No drums or industrial wastes shall be accepted. No tires, batteries, polychlorinated biphenyl (PCB), electronic devices (computer monitors), medical wastes, radioactive wastes, septage, white goods, yard trash, fluorescent lamps, mercury switches, lead roofing materials, transformers, or CCA treated wood shall be disposed. No pulverized or shredded C&D wastes may be accepted.

The Facility will implement a waste-screening program, described in **Section 7.6** below, to control these types of waste. The reader is directed to **Solid Waste Rule .0542 (e)** for further exclusions.

## 7.6 Waste Handling Procedures

In order to assure that prohibited wastes are not entering the landfill facility, screening programs have been implemented at the landfill. Waste received at both the scale house entrance and waste taken to the working face is inspected by trained personnel. These individuals have been trained to spot indications of suspicious wastes, including: hazardous placards or markings, liquids, powders or dusts, sludges, bright or unusual colors, drums or commercial size containers, and "chemical" odors. Screening programs for visual and olfactory characteristics are an ongoing part of the landfill operation.

Record. Once disposal and recording for asbestos waste is completed, the disposal area may be covered with waste. No excavation into designated asbestos disposal areas will be permitted.

**7.6.3.4 Wood Wastes** – Clean wood waste may be accepted at the facility for recycling, subject to the acceptance criteria (see **Section 7.4.4**). Unprocessed wood shall be stockpiled and ground periodically, whereupon the processed wood may be stockpiled in windrows and stored until distributed. The stockpile for unprocessed wood waste shall be no more than 25 feet in height and shall have stable side slopes. A maximum recommended volume for the unprocessed wood waste is 6,000 cubic yards – this translates to approximate pile dimensions of 140 feet square at the base for a height of 25 feet and a 1:1 side slope. If storage after grinding is needed, the windrows shall conform to the approximate maximum dimensions of 8 feet high at the center by 20 feet wide at the base, and the windrows shall be separated by a minimum of 25 feet for access in the event of a fire. Temperature monitoring is not required, whereas the acceptable materials are so designated to prevent excess composting temperatures from occurring. The location and dimensions of the LCID T&P Facility are shown on **Drawing S4**.

## **7.7 Cover Material**

### **7.7.1 Periodic Cover**

Wastes shall be covered with a minimum 6 inch thick layer of earthen material at least weekly, or whenever the exposed waste area exceeds one-half acre in size. This periodic cover is intended to control vectors, fire, odors, and blowing debris. Alternative periodic cover may be considered, including ground LCID, WWTP sludge and/or other non-C&D waste materials, but any alternative cover must be approved by the Division. Areas which will not have additional wastes placed on them for three months or more, but where final termination of disposal operations has not occurred, must be covered and stabilized with vegetative ground cover or other stabilizing material.

### **7.7.2 Final Cover**

Exterior slopes shall be closed upon reaching final grades in increments throughout the operation of the facility. The regulatory minimum final cover shall consist of at least 18 inches of compacted soil (with a minimum  $10^{-5}$  cm/sec permeability requirement), overlain by 18 inches of vegetation support soil. An interim soil cover (at least 12 inches in thickness) may be placed on exterior slopes that have attained final grade and left for no more than 20 days without temporary vegetation, until an area of approximately 2 to 3 acres is ready to be closed simultaneously. An alternative final cover under consideration shall consist of a flexible membrane (40-mil LDPE or HDPE) overlain by a single-sided

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**Sent:** Friday, September 10, 2010 4:08 PM  
**To:** Wilson, Donna  
**Cc:** 'Nick Marotta'; 'Dennis Gehle'  
**Subject:** Site Plan with LCID Processing Facility  
**Attachments:** SHEET 5A OVERALL FACILITY PLAN\_DRAWING S4A.pdf

Please see the attached drawing, which depicts the approximate dimensions of the LCID processing and storage area. Also, please note the 2010 wetlands delineation is shown, but this has not been certified by the Corps – scheduled for submittal to the Corps and DWQ in December.

