

Permit Renewal for Alleghany County Transfer Station Facility Site and Operation Plan

I. Introduction and Background

This operation plan has been created on behalf of the Alleghany County Transfer Station Facility (Permit 03-03T). Operations at this Facility will be conducted in agreement with this plan, the North Carolina Solid Waste Management Rules and generally sound environmental and waste management practices.

The Alleghany County Transfer Station has its waste transported to Foothills Environmental Landfill in Caldwell County, NC by Hilco Transport. This landfill is a lined waste management Facility (Permit 14-03). On occasion Alleghany County's waste may be transported to any properly permitted Republic Services of NC, LLC owned facility. (i.e. BFI – Motor Speedway Landfill, Charlotte, NC – permit # 13-04)

II. Facility Location

The Alleghany County Transfer Station is located in Sparta, North Carolina. The Facility, which is owned and operated by Alleghany County, is approximately 2 miles west of the intersection of US 21 and NC 18 in Sparta, North Carolina on Osborne Road.

The physical address is as follows:

Alleghany County Transfer Station
419 Osborne Road
Sparta, NC 28675

The mailing address is as follows:

Alleghany County Transfer Station
PO Box 366
Sparta, NC 28675

III. Facility Owner

The Transfer Station facilities are owned and operated by Alleghany County. The key personnel associated with operations are:

Don Adams, County Manager
PO Box 366
Sparta, NC 28675
Phone: 336-372-4179

Graylen Blevins, Public Works Director
PO Box 366
Sparta, NC 28675
Phone: 336-372-2010

IV. Facility Description

The main MSW transfer structure is a wood frame building constructed on a concrete slab, covered with ½" steel plates and has a block retaining wall. It is enclosed on three sides, keeping one open side for accessibility for incoming vehicles to the tipping floor. The tipping floor encompasses an area of approximately 1,824 square feet (48' x 38'). A transfer trailer is positioned in the loading bay under the tipping floor. Incoming loads are discarded onto the steel tipping floor where the waste is compacted into the trailer located on the lower level. Wastewater that is generated from normal activities and regular washing of the tipping floor is collected through drains in the lower level floor. These drains empty into an on-site holding tank which is pumped out by a licensed septage hauler and disposed into a wastewater treatment Facility. Any solid waste not removed from the Transfer Station is stored in an enclosed transfer trailer overnight.

V. Source, Types, and Quantities of Waste

The source of municipal solid waste is from residential, commercial, and industrial facilities located within Allegheny County. The Transfer Station will be used solely for the handling and conveyance of municipal solid waste generated within Allegheny County. The Facility will only accept solid waste as defined in G.S. 130A-290 (35). Any hazardous, liquid, or other prohibited material found in the waste stream shall be removed and held for proper disposal. The waste will be transferred to the site in publicly and privately owned vehicles of various types and sizes.

July 1, 2011 through June 30, 2012, the Allegheny County Transfer Station accepted 8,161 tons of MSW, which equates to approximately 680 tons per month. This rate is expected to remain relatively constant. Thus, a proportional increase in waste quantities should be expected as Allegheny County's population increases.

VI. Operation Plan

The Allegheny County Transfer Station Facility is open Monday through Saturday from 7:00am until 6:45pm allowing the employees to wash down the tipping floor each evening. The Facility will be closed in the observance of the following holidays: Thanksgiving Day and Christmas Day.

Waste collection and transportation vehicles are weighed in at the scale house and again weighed upon departure. Signs are posted directing traffic to the proper areas for disposal of the respective material. MSW is unloaded onto the tipping floor, where it will be gathered and moved into the transfer trailer. The operator, who is responsible for observing the contents of each load, will take action if unsuitable waste is received.

The following are other activities that occur at the Transfer Station Facility:

- Used tires are stacked into a storage trailer. When the trailer is full, the County contacts a private contractor to haul the tires to US Tire Company in Concord, North Carolina for disposal. The County received and disposed of approximately 250 tons of tires last year.
- A recycling warehouse is on site and run by a private individual who leases the warehouse from the County at no charge. The recyclables are separated on site, bundled and stored in trailers until enough materials are ready for market.
- The Alleghany County Transfer Station Facility accepts used oil from their residents. The operators pour the used oil into a storage container. The storage container is confined within four block walls and sits directly on a concrete slab. The Alleghany County Transfer Station Facility also accepts used oil filters. The used oil filters are deposited into a steel barrel. When the storage container and/or the filter barrel becomes full, the operators contact Necessary Oil Company, Bristol, TN to collect the stored oil and used oil filters. The County collects approximately 1,537 gallons of used oil every year.
- There is a Small Type I Compost Facility that accepts yard waste such a grass clippings, leaves, brush, pallets and other debris which is disposed of in a designated area behind the white goods building. Small Type I facilities received less than 1,000 cubic yards of material for composting each quarter, occupy less than two acres of land and store less than 6,000 cubic yards of material per quarter. An example of a 6,000 cubic yard stockpile is one that is a 200 ft. square and approximately 4 ft. high.

The County stores the yard waste onsite until the fall when County personnel grind up the waste into mulch. The mulch shall be placed in windrows and turned at least once per year. The temperature of the stockpile shall be maintained at or above 131 degrees Fahrenheit and aerated to maintain these elevated temperatures. In the winter and spring, the County offers the mulch to their residents at no charge.

- White goods are collected at the dedicated building within the Transfer Station Facility. Any white goods, which contain Freon, are separated from the other metal material. A private contractor removes the Freon from the disposed appliance then paints a large "X" on the appliance so the County knows which appliances they can crush and have hauled away. A private contractor hauls the crushed white goods once a month to Gordon's Iron and Metal in Statesville, NC. The County receives the proceeds from the sale of the metal. The County collects and recycles approximately 100 tons of white goods per year.

- The scale house is open during normal operating hours. Vehicles transporting MSW will be stopped and weighed before and after trips to the Transfer Station building.
- The Facility receives concrete debris that is permanently disposed of onsite in a designated area.
- The County instructs their residents to dispose of lead batteries at an auto parts store equipped to handle them. The County has no household hazardous waste program.
- The County currently contracts with eCycleSecure, LLC to recycle electronics. Electronics includes (but not limited to) computers, printers, televisions and all peripheral items. i.e. monitors, CPU's, keyboards, speakers. eCycleSecure, LLC provides the County with trailers, pallets and Gaylord boxes to collect these items. The County properly packs these items onto the trailer when dropped off by citizens. The County contacts eCycleSecure, LLC when pickup is required. eCycleSecure delivers an empty trailer to the County when it comes to pick up the fully loaded trailer. In FY 11/12 (July 1, 2011 – June 30, 2012), Alleghany County recycled 27.05 tons of televisions and 15.41 tons of all other electronics. This first year of electronic recycling will be used as the base year comparison for all future years of electronic recycling.

B. Equipment

The equipment, which is used at the Transfer Station Facility, is owned and operated by Alleghany County. County personnel conduct preventive and other maintenance to ensure the equipment remains in good operational condition. The following equipment is used at the Facility:

- 2 front end wheel loaders
- 1 front end track loader
- 7 open top transfer trailers
- 4 roll-off containers

The wheel loaders collect the waste from the Facility's tipping floor. Based on the current waste volume rates, the Transfer Station can be managed with one wheel loader and a backup wheel loader (in case of breaks down) and the track loader, which crushes the yard waste and white goods.

C. Personnel

The County employs four (4) workers at the Transfer Station Facility. The employees rotate on a six-day on, six-day off schedule. At all times during standards operating hours there are two (2) employees working. The County employs an additional four (4) maintenance workers whose duties include providing assistance at the Transfer Station Facility. All employees are routinely trained in safety issues such as recognizing and managing hazardous waste, fire prevention and firefighting, and other emergency and safety related topics. First aid supplies and fire extinguishers are provided at the Facility. All employees are required to immediately report all work related injuries and illnesses. All staff members are provided with the necessary safety equipment including gloves, dust masks, safety shoes, earplugs, safety glasses and related protective items as needed.

D. Waste Transfer

All vehicles will be weighed at the scale and then proceed to the Transfer Station or appropriate location. A two-lane all-weather access road will be maintained between the scale house and Transfer Station. Vehicles hauling MSW will back up to the Transfer Station and unload onto the tipping floor. A visual inspection is performed by the Transfer Station attendant to ensure only authorized waste is accepted. A wheel loader pushes the waste onto the transfer trailer. Once full, the trailer is transported by Hilco Transport to Foothills Environmental Landfill in Caldwell County, NC (Permit # 14-03). A standby empty transfer trailer replaces the departing trailer.

Outgoing trailers are weighed at the scale house for bookkeeping purposes and to ensure no overloaded vehicles will enter North Carolina roads. Weight records of MSW are maintained at the Facility and are used in preparation for the annual reports submitted to NC DENR Division of Solid Waste.

E. Wastewater Management

The tipping floor is cleaned by hosing it down and sweeping it with a push broom. Wastewater generated at the Facility, as a result of daily operations and cleanings, is collected by drains in the lower level floor. These drains lead to a grease/oil separator prior to entering the onsite 1,000 gallon holding tank. The holding tank is pumped out on an as-needed basis and is hauled by a licensed septage hauler to a wastewater treatment plant.

F. Hazard and Nuisance Control

Hazard and nuisance control for the MSW Transfer Station Facility is vital for proper management and efficient operations. The attributing factors to any waste transfer process include prohibited or unauthorized waste materials, fire, odors, disease, noise, dust and litter. The Material Screening process conforms to NCAC T15A.13B.0302 (2). Key elements of this plan consist of:

- a. Training of personnel to recognize regulated hazardous and unacceptable waste, including asbestos materials.
- b. Visual inspection of each load that comes into the Facility, as well as random checks of loads.
- c. A contingency plan to correctly manage any proscribed waste.

Training of Facility Personnel:

Anyone working at the Facility will be trained to identify suspicious, hazardous and unacceptable waste based on visual and odor characteristics. The Maintenance Supervisor or any personnel trained to identify and manage hazardous and liquid waste will administer inspections.

Visual Inspections:

These shall include observations of each truckload at the scale, unloading their shipment onto the tipping floor and observations before pushing the waste into the trailer. The truck and driver will be detained if objectionable material is found during the unloading process.

Random Load Inspections:

These are performed to abide by the minimum requirement of 1% screening of waste. This percentage can be raised depending on the type and nature of the incoming waste. Methodology for choosing the load to be examined will be based on:

- The probability that a load may contain proscribed waste based on type of business served or type of hauler involved.
- A random selection process that will ensure any load can be checked.
- The ability to distinguish and check ‘suspicious’ loads.

The shipment will be examined for prohibited and/or hazardous waste:

- Asbestos containing material;
- Containers with hazardous labels or markings’
- Containers with liquids, oils, paints, varnishes, etc.;
- Drums or commercial sized containers;
- Material with “chemical odors”, dust, powder, smoke or vapors;
- Materials with bright or unusual colors;
- Regulated biochemical waste;
- Sludges, biomass, etc.; and,
- Waste banned from landfill disposal by North Carolina Statutes

Fire:

The MSW Transfer Station Facility is equipped with fire extinguishers. Qualified personnel will conduct routine inspections of the fire prevention equipment. A qualified person will train all staff members in effective fire fighting procedures and prevention. There shall be no smoking allowed on the tipping floor or in the recycling center. No flammable liquids stored in or around the MSW Transfer Station will be allowed. A hose and water supply is located at the Transfer Station for firefighting measures and in the case of a fire, the local fire department will be contacted by calling 911.

Litter:

The implementation of covered transfer vehicles, staff supervision and fenced Facility is used to prevent litter. Windblown material will be picked up and discarded at the end of each operating day.

Odors and Vectors:

Measures taken to control odors and disease vectors include immediate removal of waste, invariable washing of the tipping floor and covering of any partial loads which may remain outside overnight. If vectors are discovered, adequate extermination measures are taken. The tipping floor area is empty and clean at the end of every working day.

Dust:

The access road to the Transfer Station is paved to help lessen the problems associated with dust. The Facility itself is located in a rural area.

Noise:

The tract of land on which the Transfer Station Facility is located has ample buffer to soften most noise pollution. Current levels are not expected to change.