

Permit No.	Date	Document ID No.
31-03	April 11, 2012	16420

I. INTRODUCTION AND BACKGROUND

This operation plan has been created on behalf of the Duplin County Department of Solid Waste for the Solid Waste Handling and Transfer Facility (Permit 35-03T). Operations at this facility will be conducted in agreement with this plan, the North Carolina Waste Management Rules, and generally sound environmental and waste management practices.

The MSW transfer facility transports its waste to the Sampson County Disposal Inc. Landfill in Roseboro, NC, which is a lined waste management facility (Permit number 82-02).

Zoning approval was acquired when the MSW transfer facility was originally permitted in 1993.

II. FACILITY LOCATION

The Duplin County MSW Transfer Facility is located near Rose Hill, North Carolina. The facility, which is owned and operated by the County of Duplin, is located approximately 4 miles northeast of Rose Hill, NC on Landfill Road (SR 1918).

The physical address is as follows:

Duplin County Transfer Station
325 Landfill Road
Rose Hill, North Carolina 28458

The mailing address is as follows:

Duplin County Transfer Station
PO Box 976
Kenansville, NC 28349

III. FACILITY OWNER

The facility is owned and operated by Duplin County. The key personnel associated with operations are:

Bee Barnett, Solid Waste Director
PO Box 976
Kenansville, NC 28349
Telephone (910) 289-3091

IV. FACILITY DESCRIPTION

The main MSW transfer structure is a metal building constructed on a concrete slab and retaining wall. It is enclosed on three sides, keeping one open facade that provides accessibility for incoming vehicles. One of the enclosed sides provides an entrance for service vehicles to the tipping floor. The tipping floor encompasses an area of approximately 10,000 square feet (100 feet by 100 feet). Transfer trailers are positioned in a loading bay under the tipping floor. Incoming loads are discarded onto the concrete tipping floor where they are compacted into the transfer trailer located on the lower level. Leachate that is generated from normal activities and from regular washing of the tipping floors is collected through drains in the lower level floor. These drains empty into the on site holding tanks which will be pumped out by a licensed septage hauler and disposed at Shamrock Environmental Corp., Brown's Summit, NC. Any solid waste not removed from the transfer station will be stored in an enclosed transfer trailer overnight.

V. SOURCE, TYPES, AND QUANTITIES OF WASTE

The source of municipal solid waste will be from residential, commercial, and industrial facilities located within Duplin County. The MSW handling and transfer facility will be used solely for the handling and conveyance of municipal solid waste generated within Duplin County. The Facility will only accept solid waste as defined in G.S. 130A – 290(35). Any hazardous, liquid, or other prohibited materials 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, 2004, through June 30, 2005, 26,777 tons of MSW was accepted at the Duplin Transfer Station, which equates to approximately 2,231 tons per month. This rate is expected to remain relatively constant relative to population growth. Thus, a proportional increase in waste quantities should be expected as Duplin County's population increases.

VI. OPERATION PLAN

A. General

The Duplin County Transfer Station will be open Monday through Friday from 7:00 AM until 5:00 PM and on Saturday from 7:00 AM to 12:00 PM. The facility will be closed in the observance of the following holidays: New Year's Day, Martin Luther King Jr. Birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Holidays, and Christmas Holidays.

Waste collection and transportation vehicles are weighed in at the scale house and again weighed upon departure. Signs will be posted directing traffic to the proper areas for

disposal of the respective material. MSW will be unloaded onto the tipping floor, where it will be gathered and moved into the transfer trailer. The operator will keep a log of all the daily activities. The station operator, who is responsible for observing the contents of each load, will take action if unsuitable waste is received.

Other activities that occur at the transfer facility include:

- Duplin County accepts used tires daily. Tires are stacked by the public into the storage trailer.. When the trailer is full, the County will contact Central Carolina Tire and have it switched out.
- A recycling warehouse is on site to process source separated recyclable materials for market.
- Used lead-acid batteries are collected in a designated location. These batteries are stored on a wooden pallet adjacent to the recycling warehouse. In general, the batteries are removed monthly.
- Yard Waste such as grass clippings, leaves, brush, and other debris (excluding pallets) is disposed of in the permitted area. Pallets are stacked into a roll off containers. When full, the container is shipped to Parker Bark Co., Rose Hill, NC where the pallets are ground into mulch.
- Old Metal materials and appliance are collected in an area designated for metals. These materials are generally processed and removed every two months or as needed.
- White Goods, which contain Freon, are collected by the facility and stored in one designated area in the metal storage area. The handling and disposal of these items are governed by 40 CFR 82 "Protection of Stratosphere Ozone". The discarded materials are removed every two weeks.
- The Scalehouse and Office are open during standard operating hours. Vehicles transporting MSW will stop at the scalehouse for weighing before and after trips to the transfer station.

B. Equipment

The equipment, which is used at the MSW Transfer Station, is owned and operated by Duplin County. County personnel will conduct preventive and other maintenance to ensure the equipment remains in good operational condition. The following equipment will be used at the transfer station:

- 1 CAT-924F Wheel Loader
- 5 Open-Top Transfer Trailers
- 3 Road Tractors
- 1 Yard Tractor
- 6 Roll-off Trucks
- 2 Pickup Trucks

A wheel loader will collect the waste from the facility's tipping floor. Then the waste is compressed and loaded into trailers located in the lower level of the transfer station. Based on the current waste volume rates, the transfer station can be managed with one wheel loader and the yard tractor. However, if the rates increase substantially, the owner will rent another loader for the duration of the increased volume or until another loader is acquired (if high rates persist).

C. Personnel

County staff will be present at the scalehouse to weigh vehicles in and out. Staff will also be stationed at the transfer areas to over see operations to ensure no hazardous or prohibited waste enters the transfer facility. All employees will be routinely trained in safety issues such as recognizing and managing hazardous waste, fire prevention and firefighting, and other emergency and safety related topics. A qualified person will conduct training. First aid supplies and training will be provided in the facility. All employees will be required to immediately report all work-related injuries and illnesses. All staff members will be 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 scalehouse and other structures. Vehicles hauling MSW will back up to the transfer stations loading bay and unload onto the tipping floor over the facility's dock. A visual inspection will then be performed by the transfer station attendant to ensure only authorized waste is accepted. A wheel loader will then push and compact the waste onto the transfer trailer through the loading bay. Once full, the transfer trailer will transport the waste to the Sampson County Disposal, Inc. Landfill near Clinton, NC and an empty trailer will replace the departing trailers.

Outgoing trailers will then be weighed at the scale house for bookkeeping purposes and to ensure no overloaded vehicles will enter NC roads. Weight records of MSW will be

maintained at the facility and will be used in preparation for the annual reports submitted to NC DENR Division of Solid Waste.

E. Leachate Management

The tipping floor will be cleaned daily by using a push broom. Leachate generated as a result of daily operations and periodic cleaning of the facility will be collected by a drain in the lower loading bay. These drains are then piped into a series of solids and grease/oil separators prior to entering the on site holding tank. The holding tank will be pumped out monthly and hauled to Shamrock Environmental Corporation's, wastewater treatment plant.

F. Hazard and Nuisance Control

Hazard and nuisance control for a MSW transfer station is vital for proper management and efficient operation. The attributing factors to any waste transfer process include prohibited or unauthorized waste materials, fire, odors, disease, vectors, 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 facility 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 scale house and/or transfer station will be trained to identify suspicious, hazardous and unacceptable wastes based on visual and odor characteristics. The Operations Manager or any personnel trained to identify and manage hazardous and liquid wastes will administer inspections. Transfer station employees will be SWANA certified Transfer Station Operations Specialists.

Visual inspections: These shall include observations of each truckload at the scale, unloading their shipment onto a concrete pad, and observations before loading onto the processing area. The truck and driver will be detained if objectionable material is found during the unloading process.

Random load inspections: These will be 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 loads 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
- Container with liquids, oils, paints, varnishes, etc.
- Drums or commercial sized containers
- Material with “chemical odors”, dust, powders, smoke, or vapors
- Materials with bright or unusual colors
- Regulated biochemical waste
- Sludges, biomass, etc
- Waste banned from landfill disposal by North Carolina statute

Fire: The MSW transfer station and associated buildings will be 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 procedure and fire prevention. There shall be no flammable liquids stored in or around the MSW Transfer Station. A hose and water supply will be provided inside the facility for fire fighting 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 a fenced facility will be used to prevent litter. Windblown material, if any, will be picked up and discarded daily.

Odors and Vectors: Measures to be 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 will be taken. The tipping area will be empty and clean at the end of each working day.

Dust: The access roads and the areas adjacent to the MSW Transfer Station are paved to help lessen the problems associated with dust.

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

