

Coastal Regional Solid Waste Management Authority

Operating Plan

Carteret County Transfer Station

Permit # 16-04T

Revised October 2006

Revised January 2009



Introduction

1.1 Purpose and Scope

This operating plan for the Carteret County Transfer Station presents general guidance for transfer station operations. This plan updates the original operating plan dated February 1992 and also the revised operating plan dated October 2001.

The Transfer Station Operating Plan consists of general information and operating procedures about:

- Source, quantity and type of waste received
- Destination of the waste
- Handling of non-conforming waste
- Equipment
- General operations
- Fire control
- Vector control

1.2 General Information

The Carteret County Transfer Station is located at 800 Hibbs Road, Newport, NC. The site is located about 1.2 miles off Hibbs Road in a section of the Croatan National Forest and is adjacent to the former Carteret County Landfill. From Hibbs Road, the site is accessed via a paved access road and the site is secured by fences and gates at the entrance from Hibbs Road and at the actual entrance to the permitted site.

The Authority is the owner and permit holder of the transfer station. The Authority operates the transfer station and contracts with a private company to haul the waste to the Tuscarora Landfill. The contact for the transfer station is:

Allen M. Hardison, Executive Director
Coastal Regional Solid Waste Management Authority
P.O. Box 128
Cove City, NC 28523
Telephone (252) 633-1564

1.3 Sources, Types and Quantities of Waste

The primary source of waste is from residents and businesses. Waste is primarily delivered to the transfer station by light trucks, commercial waste collection vehicles and contractor dump trucks. Very little residential waste is delivered to the transfer station by private citizens since Carteret County operates a convenience site near the entrance to the transfer station and accepts residential waste at no charge.

The waste stream consists of a mix of Municipal Solid Waste (MSW), Construction and Demolition (C&D) waste and yard waste. The majority of the waste is MSW derived from residential and commercial sources within Carteret County.

The Carteret County Transfer Station handles practically all waste from Carteret County, including residential, commercial and industrial waste. In some isolated instances, waste may be directed for disposal directly at the Tuscarora Landfill in Craven County. Such instances usually occur when a hauler has large objects that will damage the trailers during loading if accepted at the transfer station. The transfer station may accept waste generated from anywhere in Carteret, Craven and Pamlico counties, the Authority's designated service area.

Trailers for the collection and transportation of scrap tires are located at the transfer station. When full, the trailers are hauled to a contracted tire disposal facility for disposal in a permitted tire facility.

The transfer station does not accept infectious waste, medical waste, animal waste or animal carcasses, septage, sewage, radioactive waste or other hazardous waste.

Waste Volumes are as follows:

Average daily volume 375 tons per day

Peak volume 600 tons per day

Due to the heavy volume of tourism in Carteret County, there is a significant increase in waste deliveries to the transfer station in summer months. This will be a continuing factor in design and sizing of facilities. Waste volume has declined in the past 2 years, as a result of lower housing construction and the general economic slowdown. The Authority has purchased 35 acres for a separate C&D transfer station in Carteret County, to be built at a future date.

Transfer Station Operations

2.1 General

The transfer station operates from 7:30 a.m. until 4:30 p.m. Monday through Friday and from 7:30 a.m. until 12:00 noon on Saturdays. The station is closed on Sundays and on Thanksgiving, Christmas and New Year's Day. Operating hours are sometimes modified to accommodate unusually heavy increases in waste deliveries and other operational fluctuations. In addition, waste hauling operations of trailers from the transfer station to the landfill occur before and sometimes after waste delivery hours.

Daily operations are controlled by the scale operator and the equipment operators. Operations consist of receiving and transferring waste from commercial and publicly-owned vehicles to the landfill facility. In addition, scrap tires are received at the site for removal by a contractor and yard waste compost is sold in bulk to residential and commercial customers.

2.1.1 Equipment

Equipment consists of the following owned by the Authority:

- (2) Wheeled front-end loaders
- (15) Walking-floor, open-top trailers, 110 cubic yard capacity
- (4) Ejection-Blade, open-top trailers for C&D material
- (2) Spotter tractors
- (1) Grapple Loader for yard waste loading
- (3) Scrap tire collection trailers

In addition to the equipment stationed at the transfer station, other equipment is transported to the transfer station from the Tuscarora landfill as necessary.

2.1.2 Personnel

The facility operates with a minimum of seven personnel: one scale operator, five equipment operators and one laborer. Also, a Transfer Station Supervisor, overseeing both the Carteret Transfer Station and the Pamlico Transfer Station is based at this location. Trucking functions are conducted by a contracted hauler. Presently, the contract hauler uses five to eight tractors and drivers, depending on waste volume.

All employees are competent and well-trained in management of solid waste. Each employee receives adequate training in solid waste handling and safety procedures. Equipment operators complete the Transfer Station Operator's course offered by the NC Chapter of SWANA and are kept current on CEU hours. In addition, each employee is trained in solid waste screening and a screening is conducted in accordance with State of North Carolina Solid Waste rules as required.

First aid and safety supplies are provided for each in the break room. Employees are required to report all injuries or illnesses and any unsafe work condition to the Transfer Station Supervisor or Operations Manager.

2.1.3 Scavenging

No scavenging or salvaging of material is allowed on the site. Operational personnel may remove undesirable materials such as scrap tires and batteries from the tipping floor as needed.

2.1.4 Visitors

Any visitor to the facility is required to be escorted by a member of the operating staff and may be required to wear protective equipment. All visitors must check in at the scale house and identify the purpose of their visit.

2.1.5 Signage

A large sign is positioned at the entrance gate to the site with the following information:

- Name of the Facility
- Permit Number
- Hours of Operation
- Prohibited Materials
- Hours of Operation
- Contact Phone Number

In addition, a sign stating the disposal rates for different types of waste is located at the scales. Within the transfer station itself are traffic control signs and a sign directing haulers to wait for instruction before dumping.

2.1.6 Site Security and Access Control

The site is leased from the US Forest Service and is part of the Croatan National Forest. A steel, chain-link gate is located at the entrance from Hibbs Road, controlled by two padlocks, either of which can be opened for access to the site. One padlock is owned and controlled by CRSWMA, using controlled keying that cannot be duplicated without authorization. The other padlock is owned and controlled by the US Forest Service. There are no other entrances to the facility.

The site is also protected by a series of web cameras, with recording devices. The web cameras can be remotely controlled by CRSWMA administrative staff.

2.2 Waste Transfer

Vehicles arriving at the site for waster transferring will first proceed across the scales. Vehicles are required to identify their waste as either yard waste, scrap tires, MSW or C&D. After determining that the waste is acceptable, weights are recorded for fee purposes and the scale operator directs the vehicle to one of four areas for unloading.

2.2.1 Scrap Tire Transfer

Scrap tires are unloaded by the hauler onto a concrete pad. The tires are then loaded by CRSWMA personnel using the grapple loader into open-top van trailers provided by Central Carolina Tire. When a trailer is full, the contract hauler brings an empty trailer and hauls the full trailer back to the permitted tire facility.

2.2.2 Yard Waste Transfer

Yard waste is unloaded at the designated area as shown on the site plan. Operational personnel push the yard waste into a compact area several times per day. Yard waste is loaded into ejection blade trailers and transported to the Tuscarora landfill

site, where it is processed into compost. Yard waste hauling generally take place on Wednesdays and Thursdays, when MSW and C&D waste volume is less.

The yard waste collection area is unpaved, but adequate site preparation has been done to allow proper access and drainage.

2.2.3 MSW Transfer

The MSW transfer area is a covered, 7,200 square foot tipping floor accommodating two bays for transfer. Waste unloading is performed under the direction of the equipment operators on site. Equipment operators observe each vehicle unloading and note the presence of any unacceptable waste. If unacceptable waste is detected, the driver is ordered to place the waste back into his vehicle and remove it from the site. After collection vehicles exit the tipping area, equipment operators use front-end loaders to carefully push the waste into an open-top, walking-floor transfer trailer. Equipment operators will distribute the load of waste in a manner to maximize the net load of each trailer, not to exceed maximum legal limits.

When a trailer has been filled, it is pulled from the loading bay, covered with a tarp for transfer and an empty trailer is put in its place for filling. During peak times of the day, waste may be deposited on the tipping floor faster than it can be loaded into trailers. During these times, waste is stacked by the equipment operators for later loading. During this temporary storage time, care is taken to assure that the waste is placed within the confines of the tipping floor and not outside the designated tipping area. The tipping floor will be clear of all waste at the close of business for that day. Full trailers waiting for transport are parked along the south side of the transfer station building.

Each load of MSW is transported to the Authority's Tuscarora Landfill in Craven County. Each load is weighed as it exits the transfer station to ensure compliance with Department of Transportation weight limits.

2.2.4 C&D Transfer

C&D waste is deposited on the C&D Loading Facility area constructed in 2001. In times of heavy rainfall, C&D waste will be deposited in a segregated area of the MSW

tipping floor. This area consists of an 8,000 square foot, uncovered concrete surface with two loading bays. Prior to dumping, the equipment operator visually confirms that the waste is C&D. After the collection vehicle has exited the tipping area, the C&D waste is inspected for any large amounts of MSW that may have been mixed in the load. Any MSW is removed and deposited on the MSW tipping floor, immediately adjacent to this area. . If unacceptable waste is detected, the driver is ordered to place the waste back into his vehicle and remove it from the site. After collection vehicles exit the tipping area, equipment operators use front-end loaders to carefully push the waste into an open-top, ejection-blade transfer trailer. Equipment operators will distribute the load of waste in a manner to maximize the net load of each trailer, not to exceed maximum legal limits.

When a trailer has been filled, it is pulled from the loading bay, covered with a tarp for transfer and an empty trailer is put in its place for filling. During peak times of the day, waste may be deposited on the tipping floor faster than it can be loaded into trailers. During these times, waste is stacked by the equipment operators for later loading. During this temporary storage time, care is taken to assure that the waste is placed within the confines of the tipping floor and not outside the designated tipping area. The tipping floor will be clear of all waste at the close of business for that day. Full trailers waiting for transport are parked along the south side of the transfer station building.

Each load of C&D is transported to the Authority's Tuscarora landfill in Craven County. Each load is weighed as it exits the transfer station to ensure compliance with Department of Transportation weight limits.

2.3 Hazard and Nuisance Control

Hazards and nuisances at the transfer station consist of items such as dust, noise, odors, vectors, litter, fire and unacceptable waste. To reduce these hazards and nuisances, transfer station personnel are provided with and advised to use the following:

- Protective clothing
- Safety shoes
- Hardhats

- Protective Eyewear
- Gloves
- Hearing Protection devices
- Dust masks

2.3.1 Dust

Dust is caused by truck traffic on roadways. The authority has paved all roadways at the facility, minimizing dust problems.

2.3.2 Noise

Source of most objectionable noise at transfer stations is the exhaust noise from delivery trucks. The Authority maintains the exhaust system of all its equipment in a proper working manner. To minimize noise from waste delivery trucks, the Authority monitors trucks entering the facility and advises any trucks with improper equipment to repair the equipment before returning to the site.

2.3.3 Odor

Odor is difficult to control at a transfer station site. To minimize odor, all waste will be loaded into trailers as soon as possible. Operators sweep or scrub the floor with the loader bucket several times each day and the washdown water collection system is properly maintained. No waste will be allowed to remain on the tipping floor overnight; however, waste may be stored in transfer trailers overnight for unloading the following morning. The tipping floor will be washed down in whole or in part as necessary. Transfer trailers will be pressure-washed at least one time per month, with wash down water properly managed.

2.3.4 Vectors

Vectors include rodents, flies and mosquitoes. Control of vectors is accomplished by eliminating access to food and harborage. Complete removal of all waste and proper cleaning of the tipping floor is part of a proper vector control operation. Removal of

weeds, tall grass and standing water on the transfer site reduces the areas of habitation for rodents as well as flies and mosquitoes. Extermination is used in cases of severe infestation. Periodic re-grading of low areas is performed to eliminate standing water.

2.3.5 Litter

Litter comes from unsecured loads of waste, the tipping floor and indiscriminate dumping. Litter control is provided as follows:

- Haulers are required to have waste covered and secured on the vehicle. Unsecured loads are charged double the regular rate.
- Waste is loaded into transfer trailers as soon as possible to minimize blowing of litter.
- Full loads are immediately covered to prevent litter while waiting for transportation.
- Litter is picked up on a daily basis by operating personnel.
- As required and available, prison labor is obtained to maintain the entrance road.

2.3.6 Fire

The Authority has an aggressive program of fire prevention. The relatively remote location precludes the likelihood of a fire leaving the premises and endangering other property. All on-site buildings and equipment are equipped with fire extinguishers and all personnel are trained in the use of fire extinguishing devices. Equipment is regularly inspected by qualified personnel. While the hoses and water supply used for wash-down purposes are not adequate for fire suppression, they are available as a supplemental measure if necessary.

If a vehicle arrives at the transfer station with a load of burning waste, the waste load will be discharged onto a remote location on the tipping floor and soaked with water until all evidence of combustion are eliminated. Only after a proper cool-down period and further inspection will the waste be loaded into a transfer trailer. Local fire departments will be notified as needed.

2.3.7 Washdown Water

Washdown water is generated through drainage of waste on the MSW tipping floor and the periodic washing of the MSW tipping floor. Washdown water is collected through a floor drain system in the tipping floor and in the loading bays. From there it travels via gravity to a wet well, where it is pumped into an above ground storage tank. The tank level is monitored by operation personnel and pumped out and transported to the Authority's leachate pretreatment facility at the Tuscarora Landfill.

2.3.8 Unacceptable Waste

The Authority accepts only wastes for which the site is permitted. Loads arriving for deposit are first screened at the scales. Any unacceptable waste is rejected at this point and the vehicle is not allowed to proceed to the tipping area. In the event waste is inadvertently discharged at the transfer station, whether on the MSW floor or the C&D floor, an effort is made to order the delivery vehicle to remove the waste. In the event the delivery vehicle is unable or unwilling to remove the waste, the authority attempts to locate the generator of the unacceptable waste. If located, the generator is directed to remove the waste from the premises by the end of the day. If the waste is not removed by the end of the day, the Authority will arrange for removal and proper disposal and bill the cost to the generator or the hauler. In cases where the unacceptable waste constitutes an imminent threat, the Authority will notify proper State authorities and take appropriate action to immediately remove the material.

2.3.9 Contingency Plan for Adverse Weather or Catastrophic Event

In the event of adverse weather conditions or other event that causes the transfer station to close, haulers will be re-routed to the Tuscarora Landfill for disposal. Hours of operation at the landfill will be extended if necessary to accommodate increased traffic.

3. Random waste screening program

3.1. Authority

CRSWMA screens random loads of waste at the transfer station prior to transport to the Tuscarora Landfill. CRSWMA has developed this "Random Waste Screening Program" in accordance with North Carolina's Solid Waste Management Regulations, Rule .1626(1)(f). Key elements of Rule .1626(1)(f) addressing waste screening are as follows:

No hazardous or liquid wastes as defined in 15A NCAC 13A, or materials shall be accepted at the transfer station, except as specifically authorized by the facility permit or by the Division. The owner or operator shall implement an inspection program to detect and prevent disposal of hazardous and liquid wastes and polychlorinated biphenyls (PCB). This program shall include, at a minimum:

- Random inspections of incoming loads unless the owner or operator takes other steps to ensure that incoming loads do not contain regulated hazardous or liquid wastes or PCB wastes;
- Records of any inspections;
- Training of facility personnel to recognize regulated hazardous waste, liquid waste, and PCB wastes; and
- Development of a contingency plan to properly manage any identified hazardous and/or liquid wastes.

3.2. Random Selection

Random selection of vehicles to be inspected will be conducted on a regular basis. The selection may be at least one vehicle per week, but not less than one percent by weight of the waste stream based on the previous week's total. The personnel conducting the inspection will randomly select the load at the working face. A random truck and time will be selected (e.g., the tenth load after 10:00 a.m.) on the day of inspections.

3.3. Record Keeping

Report forms for record-keeping purposes are attached to the end of this plan. These forms are completed at each inspection. All reports and resulting correspondence are maintained at the Carteret Transfer Station office.

3.4. Training

Inspections will be carried out and supervised by transfer station staff trained to identify and manage hazardous and liquid waste. Transfer Station operators responsible for screening waste are trained by attending the Transfer Station Operator training course offered by the NC Chapter of the Solid Waste Association of North America.

3.5. Inspection Site

Inspections will be conducted in a designated area on the transfer station tipping floor.

3.6. Contingency Plan

The following action plan required by Rule .1626(1)(f)(iv) details the procedure for conducting random waste inspections.

- 1) Dump single load in a segregated area. Detain truck and driver until inspection is completed.
- 2) Spread waste with bucket loader and/or hand tools as appropriate. Hand rake loads that include large closed containers to avoid possible rupturing of the containers. Have appropriate safety equipment present. Minimum safety equipment will include:

- Rubber gloves;
- Rubber boots;
- Safety glasses; and
- Long handled hoe, shovel or rake.

3) Examine waste for excluded waste and/or safety hazards:

- Containers labeled hazardous;
- Excessive or unusual moisture;
- Regulated biomedical (red bag) waste;
- Powders, dusts, smoke, vapors, or chemical odors;
- Sludges, pastes, slurries, or bright colors (such as dyes); and
- Unauthorized out-of-area waste.

4) Take appropriate action(s) as follows:

- Incorporate acceptable waste into refuse trailers for transportation to landfill.
- Hold suspect waste for identification by on-site personnel and, if necessary, confirmation by others such as a contract laboratory, hazardous waste management firm, or state and/or federal regulator.
- Interview driver and hauler to identify the source of suspect waste in the load.
- Hold rejected hazardous or liquid waste for generator.
- Arrange for hazardous or liquid waste collection by licensed collector.

5) Document Actions:

- Record Inspection.
- Retain Reports.

Report hazardous, liquid, or PCB wastes to Solid Waste Section – DENR

4. Record keeping requirements

The following records will be maintained in the transfer station office:

- The operating permit and pertinent correspondence
- Operation Plan
- Trailer Inspection Records
- Waste Screening Records
- Operator Training Records

The following records will be maintained in the CRSWMA Administrative Office at the Tuscarora landfill:

- Amounts by weight of solid waste received at the facility, including the source of generation;

WASTE SCREENING FORM

Date & Time of Inspection: _____

Inspected by: _____

Source of Waste: _____

Name of Hauler: _____

Type of Waste: _____

Net Weight of Load: _____

Other Information: _____

Excluded Waste	Yes	No	If yes, How was waste handled and/or disposed of?
Hazardous Waste			
Liquid Waste			
PCB Waste			
Tires			
White Goods			
Yard Waste			
Used Motor Oil			
Anti-Freeze			
Batteries			
Aluminum Cans			
Other (specify):			
Waste Requiring Special Attention:			
Asbestos Waste			
Sludges			
Medical Waste			
Other (specify):			

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