



December 1, 2003

Jim Barber, Section Chief
Solid Waste Section, NCDENR
1646 Mail Service Center
Raleigh, NC 27699

**RE: Dunn Erwin Landfill Transfer Station
Harnett County, NC
Permit Extension Request
Permit # 43-07**

Fac/Perm/Co ID #	Date	Permit #
43-07 T	01/19/16	25481

Mr. Barber:

During our meeting on August 25, 2003 concerning the transfer station permit, you requested that as a part of the permit renewal, a current operational plan be submitted. Attached you will find three (3) copies of the current operational plan.

In addition to submitting the operation plan, we are requesting, on behalf of Harnett County, that the operating permit (# 43-07) be extended for an additional five years at this time.

Should you have questions concerning this request, please call me directly at (252) 672-0304 or on my mobile at (252) 671-6979.

Very truly yours,

C. T. Clayton, Sr., P. E.

Cc: Jerry Blanchard, Harnett County
Tyrus Clayton
File



Phone: 252 672-0304
Fax: 252 672-8577

PO Box 12794
NEW BERN, NC 28561

Mobile: 252 671-6979
Home Fax: 910 897-0660

COUNTY OF HARNETT

OPERATIONS PLAN

**DUNN/ERWIN LANDFILL
TRANSFER FACILITY**

Prepared by:



Clayton, Sr., P.E.

C.T. Clayton, Sr., Professional Engineer

**P.O. Box 12794
New Bern, NC 28561**

November, 2003

Project No. 3005

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SECTION 1 INTRODUCTION

1.1 Purpose

Harnett County constructed a Transfer Station to transfer solid waste in 1997 from both household and commercial sites to an approved Subtitle D landfill. This Operations Plan will assist Harnett County in the daily operations of the station and serve as a guide to safely maintain and operate the Dunn Erwin Transfer Station. This Operations Plan has been prepared in accordance with the North Carolina Solid Waste Rules 15A NCAC 13B .0402, Operational Requirements for Transfer Facilities. The Operations Plan also addresses pertinent operational requirements outlined in Rule .0505, Operational Requirements for Sanitary Landfills. The Operational Plan will discuss the following issues:

- Waste Acceptance Criteria
- Facility Operations
- Erosion Control Requirements
- Drainage Control and Water Protection
- Disease and Vector Control
- Sign and Safety Requirements
- Access and Security Requirements

1.2 Facility Location

The proposed Dunn Erwin Transfer Station is located near the scale house on the existing 225 acre County landfill property. The existing landfill is located in northeastern Harnett County just north of NCSR 1725. The closest town to its boundary is the town of Erwin, approximately 2 miles south of the landfill. The figure below is a location map for the Dunn Erwin Transfer Station. The transfer station site, including parking areas occupies approximately 5.0 acres within the confines of the existing landfill boundary. Harnett County began operating the existing MSW landfill in 1978 and ceased operations in 1997 to comply with closure deadlines for unlined landfills. Since 1997, a C&D (Construction and Debris) Landfill has been in operation in the remaining airspace of the closed MSW Landfill Cell. The transfer station site is located in an area previously designated as topsoil or borrow area storage. The building site, which includes the tipping building and tipping building apron encompasses 0.33 acres \pm of the 5.0 acre \pm development. All County planning and zoning requirements were met and approved in the original permitting process for this facility.

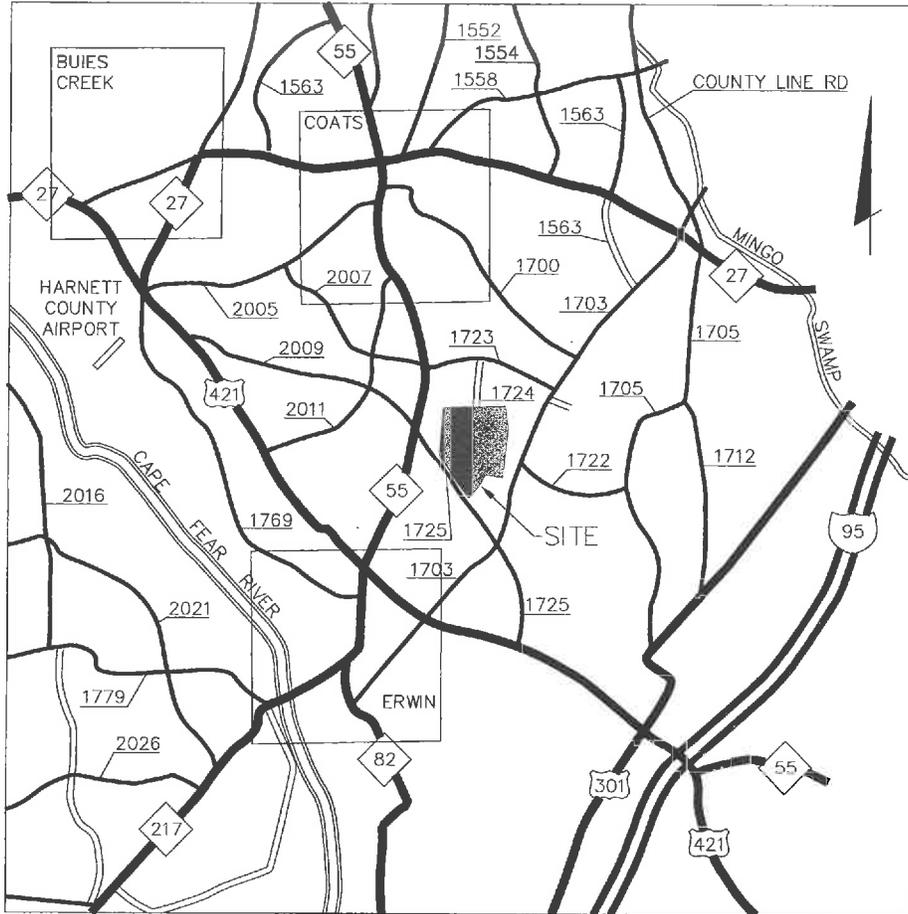


Figure 1: Site location map

The mailing address for the transfer facility is the same as the Solid Waste Department:

Harnett County
 General Services Office
 Solid Waste Department
 P.O. Box 940
 Lillington, NC 27546

1.3 Facility Description

The Harnett Transfer Station consists of a tipping building, tipping building apron, and access roads and trailer packing areas. The tipping building includes upper and lower level concrete slabs with metal wall panels on three sides of the building. The south side of the building is open for vehicle access to the tipping floor. Two exhaust fans installed along the north wall for odor control and air quality within the operating area. The tipping building apron and access roads have either an asphalt or concrete paved surface. The existing landfill scale house is used for weighing incoming vehicles. The

outgoing transfer trailer vehicles are weighed prior to disposal at a lined landfill. Currently the waste is being disposed at the Uwharrie Environmental facility (NCDENR SW Permit # 62-04) located in Troy, NC. A secondary optional disposal site for the disposal of the waste leaving the transfer station is the Waste Industries Landfill (NCDENR SW Permit# 82-02) located in Sampson County, NC. A complete set of approved Civil and Architectural drawings are currently on file with the NCDENR Solid Waste Section. The transfer facility was designed to operate as a tipping floor system.

Wash water from the tipping floor and truck drive through will be collected and directed to one of two 1,200-gallon on-site holding tanks. In addition, in 2000, a diversion berm was installed on the tipping pad access apron to direct wash down water and stormwater to a 3,000-gallon on-site holding tank. The County currently pumps and hauls the wastewater to the Buies Creek wastewater treatment plant.

Below is a figure showing the overall transfer station and convenience center facility:

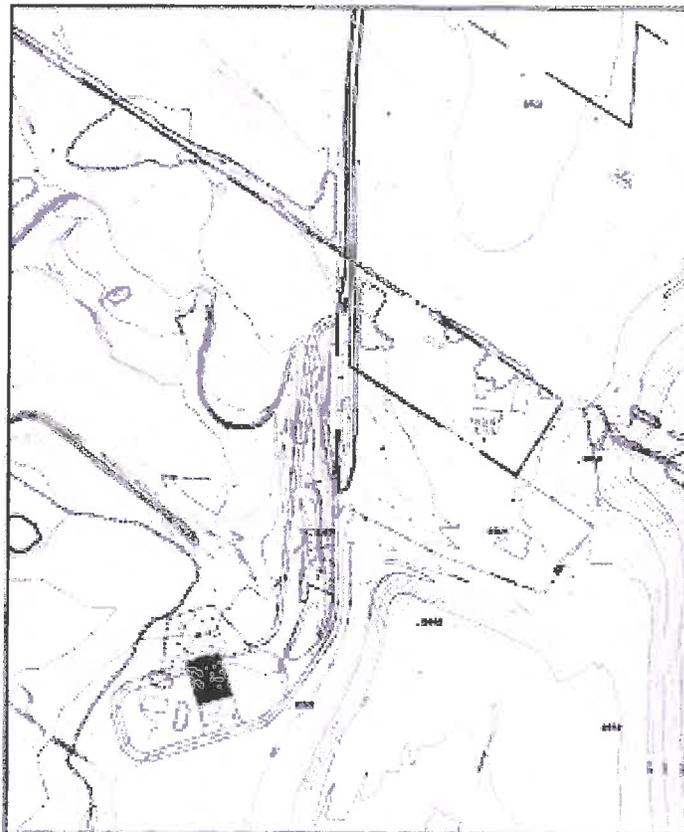


Figure 2: Transfer Station and Convenience Center Facility

The owner of the transfer station is Harnett County; the primary contact person for issues concerning operation of the transfer station will be:

Mr. Jerry Blanchard
General Services Manager and Solid Waste Director
Harnett County General Services
900 South 9th Street
P. O. Box 940
Lillington, NC 27546

Below are the secondary contacts for issues concerning operation of the transfer station:

Mr. Randy Smith, Landfill Operations Supervisor

Mr. David Shick, Onsite Facility Manager
*(these individuals can be reached at the address above)

SECTION 2 WASTE ACCEPTANCE CRITERIA

In accordance with 15A NCAC 13B .0402(1), a transfer facility shall only accept those wastes which it is permitted to receive. The Dunn Erwin Transfer Station will accept only municipal solid waste (MSW) (i.e., residential, commercial, and industrial waste) generated within the Harnett County service area. Based upon recent annual landfill waste disposal records, the County anticipates receiving a maximum annual tonnage rate of approximately 70,000 tons per year of MSW at the transfer station. The projected annual tonnage rate yields a daily rate of approximately 225 tons per day based upon 312 operating days per year. To accommodate fluctuations in the amount of waste delivered to the facility the transfer station has been designed to handle 250 tons per day. The residential waste is being transported to the transfer facility by residential and private hauler vehicles. The residential vehicles consist primarily of pick-up trucks and cars; while, the private hauler vehicles will be of the rear and side loader truck types. A convenience center has been constructed to route pick-up trucks and cars away from the transfer facility, mainly due to safety considerations. Commercial and industrial waste will be primarily transported to the facility by private waste haulers.

2.1 Recyclable Material

Harnett County currently operates a drop-off facility that accepts lead acid batteries, yard waste, white goods, and whole scrap tires at the existing landfill. A LCID (Land Clearing and Inert Debris) landfill is also in operation at the existing landfill. Harnett County will continue to provide these services after the existing landfill closes. A trained inspector capable of recognizing hazardous and liquid wastes will be available during all operating hours.

2.2 Prohibited Wastes

In accordance with Rule .05059(10)(e), the Harnett County Transfer Station will not accept barrels and drums unless they are empty and perforated sufficient to ensure that no liquid or hazardous waste is contained in them. In accordance with Rule .0505(11)(b), no hazardous or liquid waste shall be accepted at the transfer station. In addition, the transfer station will not accept infectious waste, medical waste, animal waste, animal carcasses, sludge or radioactive waste. A report shall be prepared for any attempted delivery of waste of which the transfer station is not permitted to receive, including waste from outside the permitted transfer station service area. The report will be forwarded to:

Department of Environment, Health and Natural Resources
Solid Waste Division
P. O. Box 27687
Raleigh, North Carolina 27611-8787
(919) 733-0692

SECTION 3

TRANSFER STATION OPERATIONS

The Dunn Erwin Transfer Station is open to the public Monday through Saturday from 7:30 a.m. to 4:30 p.m. The transfer station is closed on some federal and legal holidays. A sign is posted at the entrance to the transfer station identifying the hours of operation. The proper operation of the transfer station requires approximately 3 trained personnel working in cooperation with each other.

Since the Dunn Erwin Transfer Station is operated as a tipping floor facility, the only equipment required for safe and effective operation of the facility are the rubber-tired front-end loaders and, transfer trailers and waste collection trucks.

3.1 Tipping Floor Operations

Collection vehicles delivering residential, commercial, and industrial waste to the facility will proceed to the scale house to be weighed. Local resident vehicles will have to stop at the scale house. Here, depending on the type of waste, will be directed to where they can deposit their waste at this facility. Once vehicles have passed the scale house area, they will continue along the access road until reaching the tipping building apron at the transfer station. The tipping building apron provides access to the south side of the Dunn Erwin Transfer Station, which opens to the 3,960 square foot tipping floor. The transfer station has been designed with a 6 ft. high push wall that runs along the east, north and west sides of the tipping floor; and one (1) open pit approx. 40' long by 6' wide located at the north end of the facility approximately 14 ft. above the drive-thru areas. The figure below shows the general layout of the facility and the typical traffic patterns.

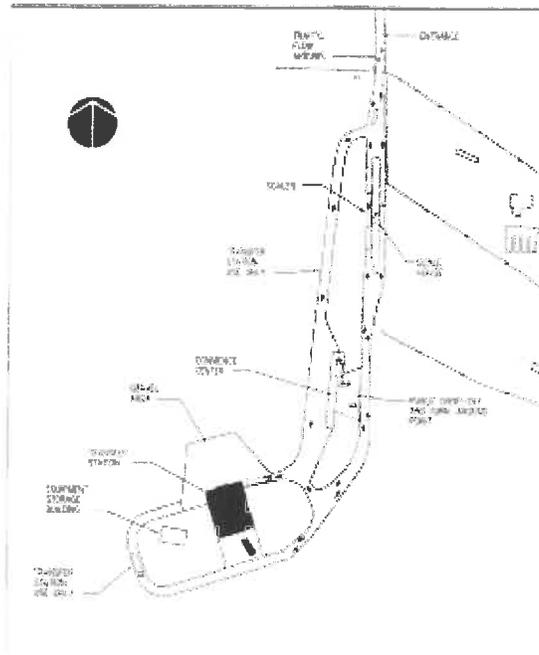


Figure 3: Transfer Station Traffic Flow

The transfer station attendant will direct vehicles, waiting to unload, back into the facility through the south entrance. The vehicles will back directly onto the tipping floor to an area designated by the attendant. Once the vehicle is in position and the waste has been inspected by the attendant, the waste load will be discharged directly onto the tipping floor. The Operator will continuously push deposited waste towards the open pit located at the north end of the upper level tipping floor. The lower level of the transfer station will have a drive-thru area for transfer trailer truck access. The open-top transfer trailer truck will pull into the drive-thru area and align itself beneath the open pit. Once the trailer truck is in position, the Operator will load and compact the waste into the transfer trailer. The lower drive-thru area has been designed to provide sufficient space for the driver to exit the vehicle; and, walk to safety in the event of an emergency. Once the transfer trailer has been completely loaded, the vehicle will be driven to the lined landfill at Troy for ultimate disposal.

The tipping floor and drive-thru area will be washed down as needed throughout the day and also at the end of each operating day. The current facility layout indicates that wash down water is collected by a trench drain located on the upper level and one driveway drain located in the middle of the drive-thru area on the lower level of the transfer station. The wash down water will ultimately drain into a 6" sanitary sewer line that connects to one of two on-site holding tank located on the northeast side of the transfer station. In addition, a low asphalt berm across the entrance to the tipping pad apron directs stormwater and wash down water off of the apron into a 3,000-gallon holding tank located on the southwest side of the transfer station. The tanks will be emptied as needed and hauled to the Buies Creek wastewater treatment plant.

A complete set of architectural, structural, plumbing, and HVAC drawings, which provide plan and sectional views of the tipping floor and drive-thru areas are currently on file with the DENR Solid Waste Division.

SECTION 4 EROSION CONTROL REQUIREMENTS

The Dunn Erwin Landfill has an existing erosion and sedimentation control plan for the entire operational area, which is relative to the location of the transfer station. The landfill area has several drainage ditches, sediment ponds and culverts, which transport and treat sediment-laden water prior to release. The most recent approval for this area was the May 10, 1995 issuance of the Erosion and Sediment Control permit for the Dunn/Erwin Landfill Yard Waste and Borrow area application. All drainage from the site is routed to an existing sediment basin.

SECTION 5 DRAINAGE CONTROL AND WATER PROTECTION REQUIREMENTS

In accordance with Rule .0505(7)(b), the Dunn Erwin Transfer Station will be operated so as to prevent ponded water from coming in contact with discharged waste, and to contain and properly discharge collected leachate.

The tipping floor of the transfer station is sloped away from the push pit area and towards the 11" trench drain located along the southern edge of the upper level concrete floor slab. The floor drains will collect any leachate (wash water) generated from washing the tipping floor during and after daily operations. The 11" trench drain connects to 6" sanitary sewer line which travels along the upper level toward the east wall of the building. At the east wall of the building, the sewer line exits the building and travels north to a manhole then east via a 6" sewer line to the on site storage tanks. The transfer station lower level contains the drive-thru area for transfer trailer vehicles. In the center of the drive-thru area is a sump drain that collects wash water. The sump drain connects to a 6" sewer line that flows to the septic holding tank. The system effectively collects and treats leachate separately from stormwater. The combined (upper and lower) flows travels via a 6" sewer line to a holding tank located outside the building.

In the area of the tipping floor entrance apron, a low asphalt berm intersects the entrance to the apron and directs any stormwater that has come in contact with trash and any wash down water that flows onto the entrance apron to a drop inlet. The drop inlet is located on the outside edge of the apron in the southwest corner. A 8" sewer line connects the drop inlet to the onsite storage tank located on the southwest side of the transfer station.

The collected leachate will be pumped and hauled to the Buies Creek Wastewater Treatment Plant.

The tipping floor and drive-thru areas are emptied and washed down at the end of each operating day. The upper level trench drain and lower level sump drain properly collects any leachate generated; and minimize areas of ponded water within the transfer station.

SECTION 6 DISEASE AND VECTOR CONTROL

In accordance with Rule .0505(12)(a), Harnett County shall provide effective vector control measures for the protection of human health and the environment. Disease vectors are defined as any rodent, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.

Control of disease vectors will be maintained by implementation of a daily cleaning program which involved removal of waste, leachate, and ponded water from the facility operating areas. The removal of waste at the end of each operating day protects against migration of vectors into and from the transfer station. Harnett County also utilizes deodorizers, paint, and wash water to keep the tipping floor and drive-thru areas clean and free from rodents, flies, and other animals. Stagnant ponded water is prevented from occurring to control mosquito breeding. If problems controlling disease vectors persist, County mosquito control or a licensed exterminator shall be employed to control vectors.

Since the transfer station is enclosed on three sides, wind blown trash is not a major operational concern for the County. Any wind blown trash discovered at the end of an operating day shall be collected and stored in a transfer vehicle or an on-site trash bin.

SECTION 7 SIGN AND SAFETY REQUIREMENTS

7.1 Sign Requirements

In accordance with Rule .0505(9)(a)(b)(c), Harnett County has posted signs at the transfer station entrance indicating operational procedures, hours of operation, tipping fee, and the permit number. Signs are clearly posted stating that no hazardous or liquid waste can be received. Traffic signs and markers have been provided as necessary to promote an orderly traffic pattern to and from the discharge area and to maintain efficient operating conditions.

7.2 Open Burning of Waste

In accordance with Rule .0505(10)(a), open burning of waste is prohibited at the Dunn Erwin Transfer Station.

7.3 Fire Protection Equipment

In accordance with Rule .0505(10)(b), equipment is provided to control accidental fires and arrangements have been made with the local fire protection agency to immediately provide fire-fighting services when needed. The transfer station building is equipped with an appropriate number of fire extinguishers and two hose bibs, located on the east side, to effectively control accidental fires.

7.4 Notification of Fire

In accordance with Rule .0505(10)(c), fires that occur at the Dunn Erwin Transfer Station require verbal notice to the Division of Solid Waste within 24 hours and written notification shall be submitted within 15 days. Verbal and written notification shall be submitted to the Raleigh Regional Waste Management Specialist:

Department of Environment, Health and Natural Resources
Solid Waste Division
P. O. Box 27687
Raleigh, North Carolina 27611-7687
(919) 733-0692

SECTION 8 ACCESS AND SECURITY REQUIREMENTS

8.1 Transfer Station Access and Security

In accordance with Rule .0505(8)(a), the transfer station is secured by means of gates, chains, berms, fences and other security measures approved by the Division of Solid Waste Management to prevent unauthorized entry. All vehicles delivering waste to the transfer station will enter and exit through the existing Dunn Erwin Landfill access control gate. Unauthorized vehicle access to the facility is prevented around the remaining portion of the transfer station and landfill property by chain link fence and Creeks.

8.2 Attendant

In accordance with Rule .0505(8)(b) The Dunn Erwin Transfer Station has a full time Scale Operator located in the scale house during operating hours. In addition, a Transfer Station Attendant is at the facility at all times during operating hours. Both the Scale Operator and Transfer Station Attendant are responsible for verifying that all vehicles comply with the permitted operational requirements.

8.3 Access Road

In accordance with Rule .0505(8)(c), the access roads for the Dunn Erwin Transfer Station are constructed of all-weather surface (asphalt, or concrete) and shall be maintained in good condition. Potholes, ruts and debris on the roads shall receive immediate attention in order to avoid damage to the vehicles.