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## OPERATIONS PLAN

Solid Waste Transfer Station and Convenience Center

Clay County  
North Carolina

MARK D. CATHEY, P.E.



**McGill**  
ASSOCIATES

Engineering • Planning • Finance  
*Asheville, North Carolina*

March 2006

06509

APPROVED 04/11/06  
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## **I. INTRODUCTION**

### **A. Purpose of Plan**

This operation plan has been developed for the Solid Waste Transfer Station and Convenience Center located in Clay County, North Carolina. It has been prepared in accordance with the requirements of the North Carolina Department of Environment and Natural Resources (DENR), Division of Solid Waste Management, Solid Waste Rules (15A NCAC 13B).

The purpose of this plan is to provide the owner/operator a reference manual that includes necessary information and procedures for properly operating the transfer station and convenience center and complying with all applicable rules concerning their operation. All personnel involved with the management or supervision of the facility operations will be required to review the Operation Plan and maintain the facility in conformance with applicable requirements. A copy of the Operation Plan will be kept in the vicinity of the transfer station at all times.

### **B. Facility Location**

The facility is located on Hinton Center Road (SR 1148), approximately two (2) miles southeast of the town limits of Hayesville, on land that is part of the closed Clay County Landfill.

### **C. Service Area**

The transfer station and convenience center serves the residents and businesses located in Clay County.

## **II. OPERATIONS**

### **A. Overview**

The transfer station consists of a pre-engineered metal building with a single loading bay. Incoming waste collection vehicles deposit municipal solid waste (MSW) onto the tipping floor or directly into an open-top trailer. These trailers are provided by Stafford (a private hauler subcontracted by Waste Management) who hauls the MSW to a Subtitle D Landfill in Pine Bluff, Cherokee County, Georgia. In accordance with DENR Solid Waste Management Regulations, no putrescible wastes are allowed to remain at the transfer station at the end of the working day unless it is stored in containers designed for waste storage. Refuse too large or otherwise not suitable for storage in containers is stored in a nuisance free manner consistent with requirements of Clay County.

The recycling convenience center consists of a pre-engineered metal building with three open sides and one recessed trailer bay to one side. White goods, other metals, batteries, propane cylinders and cardboard are received at the recycling building, while other recyclables including glass, paper and plastics are deposited in containers placed either in the building or outside in a small covered storage area. Aluminum is deposited in an outside open-top receptacle. A compactor is located inside the building and used for cardboard and plastics. Used motor oil and antifreeze is also accepted via two covered tanks next to the transfer building. An uncovered trailer bay large enough for two open-end trailers is located behind the transfer station. One trailer is for receiving used tires and the second is for loading bulk recyclables (such as glass and compacted papers or plastics) to prepare for transport.

Glass, cardboard and plastics are transported by Asheville Waste on an as-needed basis. Tires are picked up by US Tire Recycling once per month. Freon is removed from white goods by Anthony Cacioppo when needed, and the goods are then deposited along with other recyclable metals in an open-top trailer next to the recycling drop-off building. These are then transported on an as-needed basis by Desoto Trail.

Normal working hours for the facility are 8:00 a.m. to 5:00 p.m., Monday-Saturday. It is closed on Sunday and the following holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day and Christmas Day. Note: facility personnel will continue to load trailers after the regularly scheduled hours if unexpectedly heavy volumes occur.

## **B. Personnel**

The facility is owned and operated by Clay County. A minimum of two (2) staff employees are required for daily operation. These individuals are properly trained in safety procedures and the inspection of incoming wastes (refer to Part II, Section C, "Inspection of Wastes"). Training material published by the Solid Waste Association of North America (SWANA) is utilized for initial training of on-site personnel and for continuing education. Employees also direct and coordinate the movement of collection vehicles to and from unloading areas.

### **C. Inspection of Wastes**

Access is controlled by properly trained employees located at the entrance of the facility. As the contents of collection vehicles are emptied onto the tipping floor or into the open-top trailer, an employee will conduct periodic visual inspections of the waste materials. If unacceptable waste is found, the driver of the appropriate vehicle will be instructed to terminate dumping and the unacceptable waste will be reloaded onto the original vehicle for removal from the site.

Examples of unacceptable waste includes asbestos, large loads of animal or liquid waste, sludge, drums that have not been emptied and crushed prior to delivery, and containers either smoking or emitting noxious vapors (“hot loads”). Also, infectious or medical waste haulers are to be notified that the facility does not accept such wastes and they must transport these wastes to an approved disposal facility.

Waste collection agreements are kept on file for each of the waste delivery accounts and allow the transfer station operator to maintain accountability of haulers using the facility. If any hauler using the station develops a pattern of deceptive waste identification in order to circumvent proper regulation, the DENR Asheville Regional Office will be notified within 24 hours of attempted disposal (see Appendix A). They will be informed of the hauler’s identification and what type of waste is involved so that follow-up investigations can be conducted, if necessary.

If hazardous waste is identified during vehicle dumping, transfer station personnel will immediately notify the driver and if necessary, contact DENR and the Hazardous Materials Regional Response Team (see Appendix A). The appropriate information concerning the waste will be provided to those officials and the recommended steps will be taken until properly trained handlers of hazardous waste arrive on-site.

The above limitations on the types of wastes that will be accepted do not circumvent the incidental wastes that may be found in the residential waste stream that is expected at the facility.

### **D. Traffic Control**

As vehicles arrive at the facility, site personnel direct the driver to position the vehicle at the correct unloading location once there is sufficient room to maneuver. When the contents of the vehicle are emptied, the driver is instructed to move the vehicle away from the tipping floor and exit the transfer station. Directional signs located at the facility aid traffic control. At no time will waiting trucks be allowed to sit idle on Hinton Center Road.

During times when more than two vehicles are at the tipping area, haulers are instructed to wait near the scalehouse. If several vehicles arrive at the facility at one time, trucks must temporarily park in the trailer staging area behind the transfer station. The tipping area allows for a maximum of two trucks to dump simultaneously.

#### **E. Housekeeping, Litter and Vector Control**

Incoming commercial wastes are transported to the transfer station in covered or enclosed vehicles. Outgoing transfer trailers are also covered or enclosed. Throughout the day and at the end of each working day, facility personnel police the building and surrounding site for litter. Collected litter is placed in containers for proper disposal. Trench drains are located in the center and on either end of the floor beneath the transfer trailer. The outer trenches keep stormwater from entering the loading bay area. The central trench has a pipe connection to a 1000-gallon leachate collection tank, and leachate is pumped and hauled by Henson Septic of Hayesville on an on-call basis. The tank is checked by personnel at least once every two days, and it is pumped approximately once per month. A chemically-inert sorbent material is spread onto any liquid spills on the tipping floor or scale area. This material is then collected and placed into the open-top trailer in place at the facility.

Odors are controlled by prompt unloading and transfer of all delivered wastes at the transfer station. Since access to the tipping floor is completely open, adequate fresh air exchange is ensured. Each transfer trailer has a capacity of approximately 22 tons. Clay County produces enough waste to fill at least one transfer trailer per day, often two. During the summer and major holidays, the facility may fill up to five or six trailers in one day. Waste could remain on site for a period as long as 72 hours due to weekends or holidays. In such cases, waste will be stored in covered transfer trailers in accordance with DENR Solid Waste Management Regulations.

The daily removal of solid waste in conjunction with daily housekeeping procedures effectively controls the development of vector-related problems. The tipping floor and trailer parking areas are constructed of concrete, which is a relatively impervious and readily cleaned material. Floor and equipment cleaning at the transfer station also reduces both odor and vector problems. As described previously, a chemically inert sorbent material is used to collect liquids at the transfer station. Licensed exterminators are also available to visit the transfer station if needed.

## **F. Dust and Fire Control**

Since collection and transfer vehicles travel at low speeds on paved roads, dust generation is not a problem. Furthermore, a yard hydrant is available at the facility if watering of the access roads becomes necessary during extremely dry weather.

Fire control is provided by portable hand-held fire extinguishers located in the tipping area and scalehouse. A yard hydrant is also located at the transfer station building to help control a small fire. Fire protection is provided by the local fire department, which is aware of the fire control needs of the facility. In the event that a fire occurs, the local authorities will be notified immediately. The telephone numbers of local fire, police, ambulance and hospital facilities are posted in and around the facility at all times. If a fire occurs at the facility, the DENR will be notified within 24 hours and written notification will be submitted within 15 days.

## **G. Wastewater Collection**

Wastewater generation is minimized by the metal roof buildings which cover the tipping floor, loading bay and recyclables. Wastewater flow at the transfer station consists of minor volumes of seepage from the incoming MSW, which are collected either in the central trench drain or with a chemically inert sorbent material.

## **H. Stormwater Management and Erosion Control**

Areas adjacent to the transfer station are graded away from the facility. Trench drains are also placed at the entrances to the loading bay areas in order to keep stormwater from reaching the leachate storage tank. The loading bay floor is sloped toward the interior drain, which will assure that leachate cannot reach the outer trench drains. Gutters and downspouts are also positioned to divert discharge of stormwater down-gradient of the transfer station.

Due to the construction site being smaller than one acre in size, an erosion control permit was not required. However, standard erosion control practices, such as silt fencing, vegetating slopes, and diversion ditches were utilized at the site. Due to these measures, mixing of stormwater and wastewater at the facility will be minimized.

## **I. Zoning**

The transfer station site is not currently zoned. Refer to Appendix B for a letter from the county where this is indicated.

## **J. Facility Inspections**

Regular maintenance inspections of the facility are conducted by site personnel who are familiar with the buildings and equipment at the site, as well as operations of the facility. Monthly inspections, at a minimum, include inspections of the following:

1. Transfer trailers
2. Building and foundations
3. Retaining wall and push walls
4. Fire extinguishers
5. Electrical systems
6. Floor drains and yard hydrant

If unsatisfactory conditions are noted during the inspection or by transfer station personnel at any other time, the concerns will be reported to the Clay County Manager (see Appendix A). If a threat to safety or to the environment is identified, immediate action will be taken to correct the situation. Operations at the transfer station may be temporarily suspended until the proper corrective actions are complete. In the unlikely event of a severe accident, the proper authorities will be notified and off-site support requested.

**APPENDIX A**  
**Emergency Contact Information**

|  |                       |   |
|--|-----------------------|---|
| DENR, Asheville Regional Office                  | Jim Patterson         | 828-296-4500                                    |
| Hazardous Materials Regional Response Team (RRT) | Asheville Fire-Rescue | 828-444-2894 (pager)<br>828-252-1110 (dispatch) |
| County Manager                                   | Paul Leek             | 828-389-0089                                    |

APPENDIX B  
Zoning Letter

# CLAY COUNTY

P.O. Box 118 • Hayesville, North Carolina 28904 • (828) 389-0089

March 14, 2006

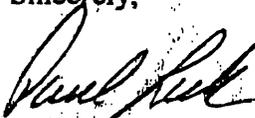
Mr. Nate Bowe  
McGill Associates, P.A.  
55 Broad Street,  
Asheville, NC 28801

Re: County Zoning

Dear Mr. Bowe:

At the present time there is no zoning in Clay County. If I can be of any assistance please do not hesitate to contact me.

Sincerely,



Paul Leek, County Manager

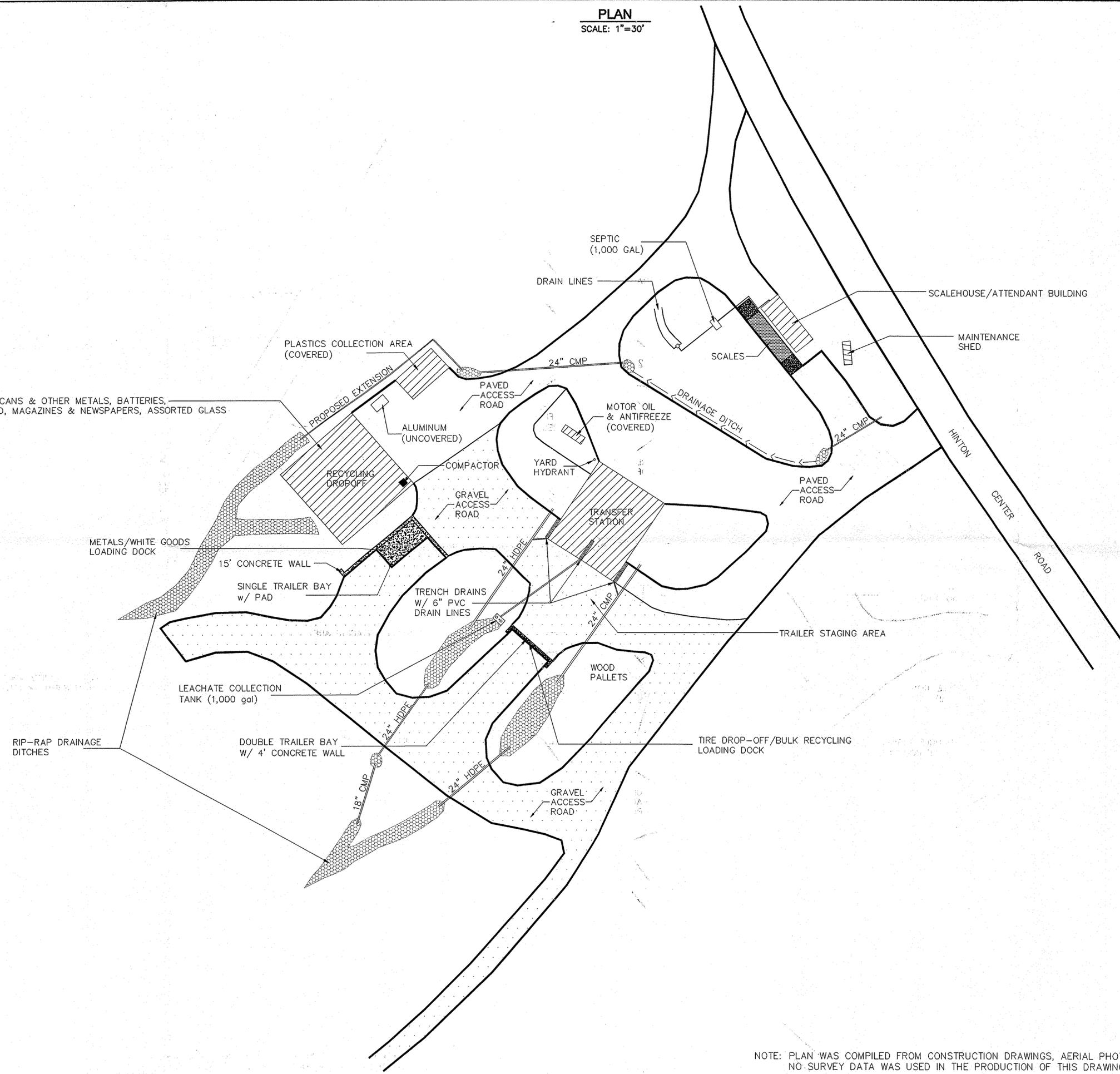
**Commissioners:**

**Chairman:** Stephen C. Sellers • Dwight Penland • Paul Jordan



PLAN  
SCALE: 1"=30'

WHITE GOODS, STEEL/ALUMINUM CANS & OTHER METALS, BATTERIES,  
PROPANE CYLINDERS, CARDBOARD, MAGAZINES & NEWSPAPERS, ASSORTED GLASS



NOTE: PLAN WAS COMPILED FROM CONSTRUCTION DRAWINGS, AERIAL PHOTOGRAPHS AND SITE VISITATION.  
NO SURVEY DATA WAS USED IN THE PRODUCTION OF THIS DRAWING.



Transfer Station & Convenience Center

CLAY COUNTY, NORTH CAROLINA

JOB NO.: 06509  
DATE: 3/17/06  
SCALE: 1"=30'  
DESIGNED BY: \_\_\_\_\_  
CADD BY: NDB  
DESIGN REVIEW: \_\_\_\_\_  
CONST. REVIEW: \_\_\_\_\_  
CLAY/SITEPLAN.DWG

SITE PLAN

SHEET

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