

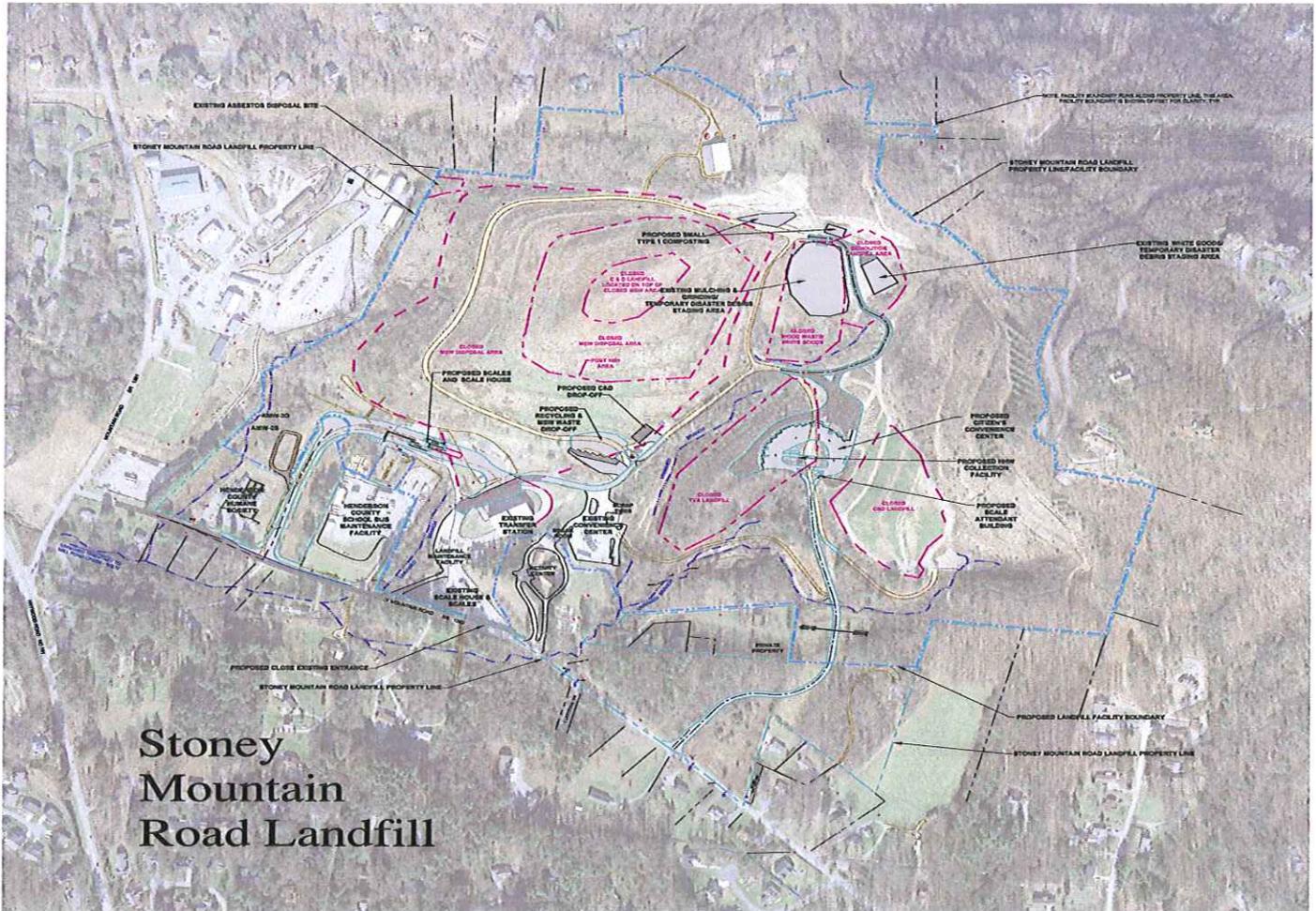
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# Permit Renewal

APPROVED DOCUMENT  
 Division of Waste Management  
 Solid Waste Section  
 Date April 12, 2011 By L.Y. Frost

## Stoney Mountain Road Landfill Solid Waste Transfer Station Permit No. 45-04T

Henderson County, North Carolina



PREPARED BY:



Engineering • Planning • Finance  
 Asheville, North Carolina

December 20, 2010

# OPERATIONS PLAN

STONEY MOUNTAIN ROAD LANDFILL  
SOLID WASTE TRANSFER STATION  
PERMIT NO. 45-04T

HENDERSON COUNTY, NORTH CAROLINA

MARK D. CATHEY, PE

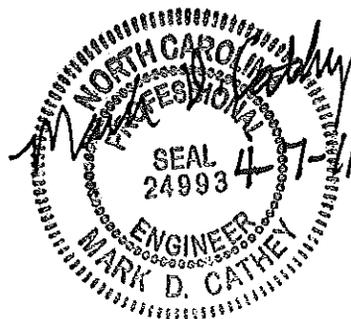


Engineering • Planning • Finance  
*Asheville, North Carolina*

**December 2010**

**Revised: April 2011**

**10.00727**



# OPERATIONS PLAN

## STONEY MOUNTAIN ROAD LANDFIL SOLID WASTE TRANSFER STATION PERMIT 45-04T

### HENDERSON COUNTY, NORTH CAROLINA

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December 2010  
Revised: April 2011

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- Appendix C: Figure 1, Boundary Plat, Stoney Mountain Road Landfill, Solid Waste Transfer Station, Permit No. 45-04T, Henderson County, North Carolina  
  
Figure 2, Facility Plan, Stoney Mountain Road Landfill, Solid Waste Transfer Station, Permit No. 45-04T, Henderson County, North Carolina
- Appendix D: North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section, Municipal Solid Waste Transfer Station, Permit No. 45-04T, Permit to Construct, December 14, 2010
- Appendix E: Henderson County Household Hazardous Waste Facility Operations Plan
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## **OPERATIONS PLAN**

### **STONEY MOUNTAIN ROAD LANDFILL SOLID WASTE TRANSFER STATION PERMIT NO. 45-04T**

**HENDERSON COUNTY, NORTH CAROLINA  
December 2010  
Revised: April 2011**

## **INTRODUCTION**

### **1.0 Overview**

This Operation Plan has been developed for the Solid Waste Transfer Stations and other County operated/provided services at the Stoney Mountain Road Landfill Facility located in Henderson County, North Carolina. This plan has been prepared in accordance with the requirements of the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Solid Waste Management, Solid Waste Rules (15A NCAC 13B).

The purpose of this plan is to provide the owner and operator with a reference manual that includes necessary information and procedures for properly operating the Transfer Stations, and other ancillary services. The plan will assist the County with complying with the applicable rules and regulations concerning the operation of various processing facilities. All personnel involved with the management or supervision of operations at the facility will be required to review the Operations Plan and to maintain the facility in conformance with applicable requirements. A copy of the Operations Plan will be kept in the vicinity of the various operations at all times.

### **2.0 Facility Location**

The Solid Waste Transfer Stations, Citizen's Convenience Center, Mulching and Grinding Treatment and Processing Facility and other ancillary services are located on property owned by Henderson County at 802 Stoney Mountain Road, or just north-northwest of Hendersonville, North Carolina. This property also contains closed municipal solid waste (MSW) landfills, a closed construction and demolition (C/D) landfill, and the Scale House Facility.

### **3.0 Service Area**

The Transfer Station Facility and the ancillary collection/disposal facilities provide a means of waste collection and disposal services for waste materials generated in Henderson County only.

### **4.0 Zoning**

The zoning for the property that compiles the Stoney Mountain Road Landfill Facility falls within three major zoning classifications. These classifications are: Local Commercial, Local Commercial (CD) and Residential-1. County owned and/or operated solid waste facilities are permitted in all zoning classifications in accordance with Chapter 200A, Henderson County Land Development Code, Article II, Zoning District Regulations, Subpart E. Table of Permitted and Special Uses, §200A-62. Table of Permitted and Special Uses. Zoning information for the site is provided in Appendix A.

### **5.0 Erosion and Sediment Control**

The Henderson County Stoney Mountain Road Landfill has an approved Erosion and Sedimentation Control Plan, HENDE-2010-006, for the site as a part of the proposed Capital Improvements Project. A copy of the Letter of Approval along with a copy of the Certificate of Plan Approval is enclosed in Appendix B. Presently the facility has various drainage ditches and sediment ponds which convey and filter the stormwater prior to discharge off site. The proposed improvements will add various new lined and unlined conveyance channels in addition to seven (7) new sediment basins equipped with appropriately sized skimmers. All unpaved areas will be established with vegetative cover to prevent the erosion of the underlying soil material.

### **6.0 Boundary Plat / Facility Plan**

The Boundary Plat is included in Appendix C as Figure 1, Boundary Plat, Stoney Mountain Road Landfill, Solid Waste Transfer Station, Permit No. 45-04T, Henderson County, North Carolina. The Plat defines a compilation of the metes and bounds description of the parcels that make up the Stoney Mountain Road Landfill Facility and the location of the Facility Boundary. Appendix C also includes a Facility Plan of the Stoney Mountain Road Landfill Facility as Figure 2.

### **7.0 Site Signage**

Signs providing information such as the name of the facility, permit number, hours of operation, waste acceptance policies and other pertinent information will be posted at the entrance to the transfer stations and the convenience center.

Traffic control signs, markers and other pertinent informational signage will be provided as necessary to promote an orderly traffic pattern to and from the various disposal facilities and maintain efficient operating conditions.

## **8.0 Capital Improvements Project**

The Capital Improvements Project for the Stoney Mountain Road Landfill Facility will enhance the County's ability to provide safe and efficient solid waste collection and disposal services for the commercial customers and the residents of Henderson County. These proposed improvements were originally approved for construction by the North Carolina Department of Environment and Natural Resources (NCDENR) in accordance with the Permit to Construct/Operate, Municipal Solid Waste Transfer Facility, Permit No. 45-04T, issued July 26, 2010. Changes were made to the Plans to include upgrades/modifications to the Transfer Stations and a new Permit to Construct/Operate, Municipal Solid Waste Transfer Facility, Permit No. 45-04T, was issued on November 30, 2010. A copy of the Permit to Construct/Operate, issued November 30, 2010, is included in Appendix D. The two major components of the proposed plan include the construction of the new access road and Scale House for use by the commercial customers and the construction of a new relocated Citizen's Convenience Center with a separate access road. The existing entrance into the Stoney Mountain Road Landfill Facility will be closed and permanently fenced. The existing scale house and scales will remain in place for weighing the transfer trailers prior to staging for hauling and disposal off site. Other major improvements will include the construction of a proposed Recycling and MSW Drop-Off Area, a proposed C&D Drop-Off Area, a proposed Composting Area and an upgraded White Goods Collection Area. The proposed Citizen's Convenience Center will provide collection facilities for recyclable products and MSW waste delivered by the residents of Henderson County. Other waste/recyclable material collection facilities at the Convenience Center will include waste oil/filters, antifreeze, cooking oil, batteries, and electronics. The Household Hazardous Waste (HHW) Collection Facility will be relocated to the Citizen's Convenience Center for operation on specific County-designated collection dates.

## **9.0 Henderson County School System**

The Henderson County School System presently utilizes two areas within the landfill Facility Boundary for parking and/or storage of school system vehicles scheduled for maintenance or temporarily out of service. These areas are contiguous to the School Bus Maintenance Facility and are located north of the Maintenance Facility on either side of the existing cemetery. Security fencing is in place to isolate these vehicle storage areas from the landfill facility operations.

## **SOLID WASTE TRANSFER STATIONS**

### **1.0 Overview**

The Transfer Station facility consists of two pre-engineered metal buildings with a lowered access/loading corridor for transfer trucks. Transfer Station No. 1, constructed in 1977, has a tipping floor area of approximately 3,600 square feet and Transfer Station No. 2, constructed in 2007, has a tipping floor area of approximately 4,500 square feet. Each transfer station has a concrete paved floor with thirteen-foot (13') high concrete push walls along the sides that lead to open pits at the southern end of the building. These pit openings discharge directly into the transfer trailers staged below.

### **2.0 Facility Location**

The Solid Waste Transfer Stations are operated by Henderson County. The Solid Waste Transfer Stations are located south of the closed MSWLF. The Facility Plan, Figure 2, Appendix C shows the location of the Solid Waste Transfer Stations.

### **3.0 Operating Hours**

Normal operating hours for the Transfer Station are 8:00 a.m. to 4:30 p.m., Monday through Saturday. The Transfer Station is closed on Sunday and holidays, as designated by the County

### **4.0 Personnel**

The facility is owned and operated by Henderson County. A minimum of two (2) staff employees is required for the daily operation of the Transfer Stations. These employees are properly trained in safety procedures and the inspection of incoming wastes (refer to Section 7, "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. The Transfer Station employees also direct and coordinate the movement of collection vehicles into and out of the Transfer Stations.

### **5.0 Access and Security**

Under the proposed Capital Improvements Plan, the transfer stations, scalehouse and other ancillary disposal facilities in the general area of the transfer stations will be enclosed by security fences and gates. The proposed new Scale House and scales will be located at the site entrance to evaluate and weigh all incoming waste for proper disposal. A full-time scale attendant will be on duty at all times the Facility is open for the acceptance of waste for disposal. Unauthorized vehicle

access to the remaining portion of the Facility is controlled or prevented by other gated and/or buffered areas.

## **6.0 Traffic Control**

Access to the site is controlled by fencing and manned gates. As vehicles arrive at the Facility, they must first cross the scales at the Scale House. The vehicles will be weighed in and directed to the appropriate disposal facility. Site personnel control access to the Transfer Station. As vehicles arrive at the Transfer Station, site personnel will direct the driver to position the vehicle at the correct unloading location once there is sufficient room to maneuver on the tipping floor. 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.

During times when several vehicles are at the Transfer Station at the same time, haulers are instructed to wait within the staging area located outside the entrance to the building. The tipping area of each transfer station building will allow for two (2) to three (3) vehicles to dump simultaneously.

## **7.0 Housekeeping, Litter and Vector Control**

Incoming wastes will be transported to the Transfer Station in covered or enclosed vehicles. Outgoing transfer trailers will also be covered or enclosed. Throughout the day and at the end of each working day, facility personnel will police the building and surrounding site for litter. Collected litter will be disposed of in an available transfer trailer or placed in containers for proper disposal. The equipment used for pushing trash on the tipping floor will also have a bucket equipped with a squeegee to enhance the ability to thoroughly push all waste to the chute opening and minimize wear of the tipping floor.

Odors are controlled by prompt unloading and transfer of all delivered wastes at the Transfer Stations. The Transfer Stations have the entrance end of the building completely open, which will allow adequate access to all areas of the buildings to ease operations, maintenance, and cleaning. The open end of the buildings and ventilation fans will provide adequate fresh air exchange to control odor problems. Floor and equipment cleaning and/or wash-downs at the Transfer Station will also serve to reduce odor problems at the facility. Should odor become a problem the County may opt to utilize commercially available deodorizers specifically formulated for use at solid waste facilities to control the odor.

The daily removal of solid waste from the tipping floor, in conjunction with daily housekeeping procedures, effectively controls the development of vector related problems. Floor and equipment cleaning and/or wash-downs at the Transfer

Station will also serve to reduce vector problems. Licensed exterminators will also be available to visit the Transfer Station as needed to control vectors.

The tipping floors of the transfer stations are constructed of concrete or other specialty type hard-surface materials which are readily cleanable surfaces. The tipping floor surfaces will be inspected at the end of each day's operations and will be cleaned as necessary to prevent the build-up of residual waste material. Cleaning activities may include regularly scheduled sweeping or wash-downs with hoses and spray nozzles. Wash-downs will also include the adjacent push walls. Yard hydrants are available to facilitate the wash-down activities. Periodically the tipping floors and push walls will be pressure washed and inspected for wear and/or other damage. Areas requiring repair will be addressed as necessary. As described below, wash water is collected and ultimately diverted to the County-operated pump station for ultimate disposal to the Cane Creek Sanitary District. Stagnant or ponded water shall be prevented from occurring to control mosquito breeding.

## **8.0 Dust and Fire Control**

Under the proposed Capital Improvements Plan access to the transfer stations and other ancillary disposal facilities will be on paved surfaces and will be maintained in good condition. Furthermore, periodic wash down of the tipping floor and equipment will also prevent excessive build-up of dirt and dust at the facility.

Fire control is provided by an appropriate number of portable hand-held fire extinguishers as well as a yard hydrant located just outside the building. Fire protection will be provided by the local fire department, which is aware of the fire control needs for 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. In the event of a fire at the facility, the NCDENR will be notified within 24 hours and written notification will be submitted within 15 days.

## **9.0 Storm Water Management**

Areas adjacent to the transfer stations are graded away from the building to divert stormwater to designated storm drain conveyance structures/ditches. Gutters and downspouts are positioned on the building to divert discharge of storm water to designated storm drain conveyance structures/ditches.

## **10.0 Wastewater Collection**

The wash water from the tipping floor flows into a trench drain located at each building entrance. The drain will be covered by a metal grate system to block large debris that might clog the drain. The metal grate is raked periodically and

the collected trash is placed on the tipping floor or into containers for proper disposal. As a part of the Capital Improvements Plan, each trench drain from the building entrances will be connected to a manhole located west of Transfer Station No. 2. From the manhole, the liquid will flow to a grit chamber located southwest of Transfer Station No. 2. Driveway drains are located on the lower level (transfer trailer staging area) to collect wash down water from this area. These drains also discharge to the grit chamber located southwest of Transfer Station No. 2. From the grit chamber the wastewater flows by gravity sewer to an on-site pump station operated by the County. The pump station ultimately discharges to the Cane Creek Sanitary District pump station located adjacent to the NCDOT Maintenance Facility.

The roof that covers each Transfer Station minimizes wastewater generation. The driveways are sloped away from the transfer station floor to restrict outside flow from entering building. Wastewater flow at the Transfer Station will generally consist of the wash down water.

#### **11.0 Characterization of Waste Stream**

The Henderson County Transfer Station will only accept municipal solid waste (MSW) and construction and demolition waste (C&D) generated within the Henderson County service area. No hazardous, liquid or infectious waste shall be accepted. Wastes prohibited for handling include those hazardous wastes as defined in 15A NCAC 13A (including hazardous waste from conditionally exempt small quantity generators), polychlorinated biphenyls (PCB) as defined in 40 Code of Federal Regulations (CFR) 761, septic waste, waste oil or any waste that is determined to contain "free liquids" as defined by the paint filter liquids test. In addition, the Transfer Station will not accept medical wastes, animal carcasses, hatchery waste or other animal waste.

#### **12.0 Transfer Station Operation**

Incoming waste collection vehicles deposit municipal solid waste (MSW) and construction and demolition (C&D) waste directly onto the concrete tipping floor of the facility. Once the waste material has been dumped onto the tipping floor, a loader will push the material to the rear of the tipping floor where it will be dropped into a transfer trailer on the lower level. The loader operator, properly trained to identify unacceptable waste, will observe each load as it is being pushed to the open chute. Should unacceptable material be observed, the loader operator will attempt to isolate the material from the waste stream or contact other County staff to assist in the removal of the noted material. Unacceptable waste will be handled in accordance with the procedures generally outlined in Paragraph 13.0 Inspection of Wastes.

The lower level of the Transfer Station facility has two drive-thru lanes (one for each building) for transfer trailer truck access. The open-top trailers are

positioned below the pit openings in the transfer station tipping floor by County operated site tractors. Once the trailers are in position, the operator will load the waste into the trailer. Once the trailer is loaded, the County-operated site tractor will remove the trailer and weigh the load for compliance with applicable load limits. Once the loaded trailer is in compliance with applicable load limits, it will be staged in the trailer staging area and covered with a tarp for ultimate hauling to a landfill for ultimate disposal.

Transfer trailers that are over the applicable load limits will be restaged under the pit opening and waste removed to bring the load into compliance with applicable load limits. The removed waste will be staged on the transfer station tipping floor for loading in the next available transfer trailer. Once the loaded trailer is in compliance with applicable load limits, it will be staged in the trailer staging area and covered with a tarp for ultimate hauling to the landfill.

Transfer trailers that are under the applicable load limits and are able to accept additional waste will be restaged under the pit opening and additional waste added to the trailer until full or within the applicable load limit. Once the loaded trailer is in compliance with applicable load limits, it will be staged in the trailer staging area and covered with a tarp for ultimate hauling to the landfill.

The loaded and staged waste transfer trailers will be transferred by truck to the Upstate Regional Landfill, South Carolina Facility I.D. No. 442441-1101, operated by Republic Services, located in Enoree, South Carolina per the County's Agreement with Republic Services of North Carolina, LLC, dated October 14, 2010. A permit modification will be applied for should the County desire to change the approved disposal site or add additional sites in the future.

### **13.0 Inspection of Wastes**

Access to the Transfer Station is controlled by properly trained employees, located at the entrance of the facility. As the contents of the collection vehicles are emptied onto the tipping floor, an employee will conduct periodic visual inspections of the waste materials. If unacceptable waste is found, the driver of the vehicle will be instructed to terminate dumping and the unacceptable waste will be reloaded onto the vehicle for removal from the site. Examples of unacceptable wastes include large containers of liquid waste, sludges, drums that have not been emptied and crushed prior to delivery, and containers either smoking or emitting noxious vapors.

If hazardous waste is identified during vehicle dumping, facility personnel will immediately notify the driver and if necessary, contact NCDENR and the Hazardous Materials Emergency Response Team. 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.

Infectious or medical waste haulers are advised that the Transfer Station does not accept such wastes and that the hauler will have to transport the infectious wastes to an approved facility for disposal.

Should a "hot load" occur in a vehicle using the facility; the attendant will not permit the load to be discharged onto the tipping floor. The vehicle operator will be advised to move the vehicle to a paved area located outside the Transfer Station where the load will be discharged. The local fire department will be notified prior to discharge to identify the cause of the problem and extinguish the load fire. Once the load has been extinguished and the cause determined, the load will be taken into the facility for disposal. No asbestos or animal wastes will be accepted at the Transfer Station.

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.

#### **14.0 Facility Inspections**

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

1. Building, foundation, and push walls
2. Ventilation system
3. Fire equipment
4. Electrical systems
5. Trench Drains and driveway drains
6. Yard Hydrants
7. Grit collection chamber
8. County-operated pump station

If unsatisfactory conditions are noted during the inspection or by Transfer Station personnel at any other time, the concerns will be reported to the Henderson County Solid Waste Director. If a threat to safety or to the environment is identified, immediate action will be taken to correct the situation. If necessary, operations at the Transfer Station will be suspended temporarily until the proper corrective actions have been taken. In the unlikely event of a severe accident, the proper authorities will be notified and off-site support requested.

## **CITIZEN'S CONVENIENCE CENTER**

### **1.0 Overview**

Henderson County presently operates a small Citizen's Convenience Center east of the transfer stations and north of the Henderson County Activity Center. As a part of the proposed Capital Improvements Project, the Citizen's Convenience Center will be relocated to a designated area just west of the Closed C&D Landfill in the vicinity of the old TVA Landfill. A paved access road will be constructed to the facility with access directly to Stoney Mountain Road. Use of this access will generally be limited to the residents of Henderson County accessing the facility for the disposal of their personal household waste and recyclables. The facility will generally consist of a paved circular drive around the inside of a retaining wall. Recyclable material and MSW waste collection boxes will be staged on the lower side of the retaining wall. An attendant will be posted at the end of the access road, just prior to entering the Convenience center site. The Convenience Center will also contain facilities for the collection of other recyclable material (i.e., waste oil, antifreeze, batteries, etc.) along with the Household Hazardous Waste Collection Facility.

### **2.0 Facility Location**

The existing Citizen's Convenience Center, operated by Henderson County, is located south of the closed MSWLF and northeast of the Henderson County Activity Center. The proposed Citizen's Convenience Center will be located to an area just west of the Closed C&D Landfill in the vicinity of the old TVA Landfill. The Facility Plan, Figure 2, Appendix C shows the location of the existing Citizen's Convenience Center and the location of the proposed Citizen's Convenience Center constructed as a part of the Capital Improvements Project.

### **3.0 Operating Hours**

Normal operating hours for the Citizen's Convenience Center will be 8:00 a.m. to 4:30 p.m., Monday through Saturday. The Citizen's Convenience Center is closed on Sunday and holidays as designated by the County.

### **4.0 Personnel**

The facility is owned and operated by Henderson County. A minimum of two (2) staff employees is required for the daily operation of the Citizen's Convenience Center. These employees are properly trained in safety procedures and the inspection of incoming wastes. These employees will be responsible for manning the attendant's station at the entrance, coordinating the flow of traffic within the convenience center, performing general housekeeping activities and coordinating the transfer in and out of the various collection boxes.

## **5.0 Access and Security**

Under the proposed Capital Improvements Project, the Citizen's Convenience Center will be enclosed by security fences and gates. Access to the entrance road, off Stoney Mountain Road, will also be controlled by a gated entrance, fencing and natural buffer. Unauthorized vehicle access to the remaining portion of the Facility is controlled or prevented by other gated and/or buffered areas.

## **6.0 Traffic Control**

Access to the Citizen's Convenience Center will be controlled by the attendant located at the end of the access road, just prior to entering the Convenience Center site. The attendant will direct the residents to the applicable disposal area based on the type of waste and/or recyclable material requiring disposal. The on-site personnel will monitor the internal site traffic and ensure that residents follow the prescribed traffic pattern to the various disposal stations and exit the site. The on-site personnel will also ensure that residents do not loiter around the site once their waste and/or recyclable material is properly disposed of.

## **7.0 Housekeeping, Litter, and Vector Control**

Incoming wastes from the residents will be transported in covered or enclosed vehicles. Outgoing container boxes pulled from the Convenience Center will be covered or enclosed depending on the type of roll-off box and the material contained therein. Throughout the day and at the end of each working day, facility personnel will police the access road and the Convenience Center area for litter and other debris. This material will be collected and disposed of in the proper collection container. Odors will be controlled by promptly removing and disposing of the offending material. Vectors shall be controlled so as to protect the public health and welfare.

## **8.0 Fire Control**

Fire control will be provided by an appropriate number of portable hand-held fire extinguishers. Fire protection will also be provided by the local fire department, which is aware of the fire control needs for 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. In the event of a fire at the facility the NCDENR will be notified within 24 hours and written notification will be submitted within 15 days.

## **9.0 Storm Water Management**

Under the proposed Capital Improvements Project, stormwater management will be handled through the construction and maintenance of various stormwater management basins, collection inlets, piping and conveyance channels.

## **10.0 Wastewater Collection Facilities**

Under the proposed Capital Improvements Project, wastewater collected from the MSW collection box area will be collected and drained to the on-site pump station operated by the County. The collection drains will be covered by a metal grate system to block large debris that might clog the drain. The metal grates will be periodically raked and the collected waste disposed of in an appropriate container.

## **11.0 Collection Facilities/Services**

Municipal Solid Waste (MSW): Municipal solid waste delivered to the site by Henderson County residents in their personal vehicle will be collected for disposal in dedicated open-top roll-off boxes. County staff will coordinate the removal, disposal and staging of the roll-off collection boxes on an as needed basis.

Recyclable Material: The household recyclable material presently collected by Henderson County includes: containers (glass, metal, and plastic (bottles, jars and jugs)) and fiber (cardboard, newspaper, and mixed paper). The collection of additional recyclable material items will be initiated as markets and processing facilities become available. Recyclable material will generally be collected in dedicated recycle roll-off collection containers. County staff will coordinate the removal, unloading and staging of the recycle roll-off collection boxes on an as needed basis.

Waste Oil, Antifreeze and Used Oil Filters: A covered designated collection station presently exists at the existing convenience center and a new designated facility will be constructed at the Citizen's Convenience Center as a part of the Capital Improvements Project. Waste oil, used oil filters and antifreeze are periodically collected by an authorized recycler for processing.

Cooking Oil: A designated collection station presently exists at the existing convenience center and a new designated collection station will be provided at the Citizen's Convenience Center, constructed as a part of the Capital Improvements Project. Used cooking oil is periodically collected by an authorized recycler for processing.

Batteries: A designated collection station will be provided at the Citizen's Convenience Center, constructed as a part of the Capital Improvements Project. Used batteries will be periodically collected by an authorized recycler for processing.

Electronics: Electronics are presently collected at a site north of the transfer stations. This collection site will be relocated to the Citizen's Convenience Center, constructed as a part of the Capital Improvements Project. The electronic material presently collected includes, but is not limited to: cathode ray tube monitors (CRT), televisions, hard drives, scanners, fax machines, copiers, and other miscellaneous electronic equipment. The County will continue to collect these items as well as initiate the collection of additional electronic type devices as collection/processing services or markets become available. Electronics will be periodically collected by an authorized recycler for processing.

## **HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY**

### **1.0 Overview**

The County presently operates a facility for the collection of Household Hazardous Waste (HHW) products under EPA ID No. NCPH0450801. The HHW facility operates only on specific collection dates as designated by the County.

### **2.0 Facility Location**

The existing HHW Collection Facility is presently located northwest of the transfer stations. Once the proposed new Citizen's Convenience Center is constructed as a part of the Capital Improvements Project, the HHW Collection Facility will be relocated to a permanent location within this facility. The Facility Plan, Figure 2, Appendix C shows the location of the proposed HHW Collection Facility at the proposed Citizen's Convenience Center constructed as a part of the Capital Improvements Project.

### **3.0 Wastes Received**

The household hazardous waste collection facility only receives household hazardous waste (HHW) generated by homeowners from within Henderson County.

The household hazardous waste collection facility will not accept any radioactive waste, explosives or infectious waste.

### **4.0 Reporting Requirements**

The County shall maintain records on the amount of household hazardous waste received for disposal at the facility and the amounts shipped off site for recycling, reuse, treatment and/or disposal. Records will be compiled on a monthly basis and maintained at the facility for inspection.

On or before August 1<sup>st</sup> of each calendar year, the County shall report to the Solid Waste Section the amount of household hazardous waste received at the facility and the amounts shipped off site for recycling, reuse, treatment and/or disposal. The reporting period shall be for the previous year, beginning July 1<sup>st</sup> and ending June 30<sup>th</sup>.

## **5.0 Operations Plan**

The Henderson County Household Hazardous Waste Facility operates in general accordance with the Operations Plan included in Appendix E. The operator for the facility is Henderson County. The contact for the County varies periodically due to staff changes and/or reassignments of responsibilities within the County staff. The County staff responsible for conducting or overseeing a HHW collection event will be familiar with the procedures as outlined in the Operations Plan. The transporter and disposer/recycler, for a collection event or series of events, are contracted by the County as needed. The transporter and disposer/recycler will be properly licensed to perform the hauling and disposing/processing of household hazardous waste collected in conjunction with the HHW collection events. Certain items such as waste oil, used oil filters, antifreeze, batteries, etc. are collected through designated on-site collection facilities and are not generally collected as a part of a HHW collection event.

## **6.0 Site Specific Health and Safety Plan**

A Site Specific Health and Safety Plan was developed for the operation of the HHW facility by Mountain Environmental Group in January, 2008. A copy of the Site Specific Health and Safety Plan is included in Appendix F. Henderson County operates the HHW facility in general conformance with the Site Specific Health and Safety Plan. Revisions to the Plan, relative to contacts, etc. are updated as needed.

## **OTHER SERVICES, COLLECTION FACILITIES AND/OR OPERATIONS**

### **1.0 White Goods/Metals**

The Stoney Mountain Road Landfill Facility accepts white goods and other recyclable metal products. These items are taken to a designated collection area located in the northeast quadrant of the facility property. The County staff manages the area by periodically stockpiling the material that does not contain chlorofluorocarbon (CFC) refrigerants until it is removed by an authorized scrap metal processor. All appliances containing chlorofluorocarbon (CFC) refrigerants are segregated from the other scrap metals at the time of delivery. Any refrigerator/freezer equipped with locking doors will have the door(s) removed immediately. The authorized scrap metal processor removes the refrigerant from the applicable appliances prior to processing the appliances as scrap metal for shipment to a regional market. Records of this activity are maintained on site.

The existing White Goods/Metals collection area, which will be upgraded as a part of the proposed Capital Improvements Project is located northeast of the closed MSWLF. The Facility Plan, Figure 2, Appendix C shows the location of the existing White Goods/Metals Collection area.

The White Goods/Metals collection area has also been designated as a Temporary Disaster Debris Staging/Storage Areas for vegetative waste from within Henderson County resulting from a significant natural disaster. A copy of the Permit application is included in Appendix H. The waste would be processed in accordance with this Plan or depending on the volume, may be removed for processing and/or disposal at an off-site permitted facility.

### **2.0 Scrap Tires**

The Stoney Mountain Road Landfill Facility accepts scrap tires for recycling. Scrap tires are taken to a designated collection station located in the northeast quadrant of the existing Citizen's Convenience Center. The scrap tire collection area will remain in operation at the existing location. The scrap tires are manually loaded into covered transport trailers for shipment off site. Once the tire trailers are loaded, an authorized tire recycler will remove the trailers for processing.

The Facility Plan, Figure 2, Appendix C shows the location of the scrap tire collection area.

## **RECYCLING AND MSW DROP-OFF AREA**

### **1.0 Overview**

As a part of the Capital Improvements Project, the County intends to construct a drop-off area for recyclable material collected by the permitted haulers operating within the County as well as a collection area for MSW and C&D waste brought to the site for disposal by small commercial customers. Small commercial customers would generally be classified as those customers who do not have the capability to mechanically dump a load but must unload their waste by hand. The intent is to provide a location for them to discharge their load without causing undue congestion in and around the transfer station tipping floor. In addition, numerous permitted haulers now collect single stream recyclables in conjunction with their normal household MSW collection services. The proposed drop-off area would provide a location for these haulers to unload and/or consolidate their load of recyclables with other similar recyclables until such time as a full load is acquired, whereby the County would transport the load to a recycling facility for further processing.

### **2.0 Facility Location**

The Recycling and MSW Drop-Off Area will be located at the Stoney Mountain Road Landfill Facility just north of the existing Citizen's Convenience Center. The Facility Plan, Figure 2, Appendix C shows the location of the proposed Recycling and MSW Drop-Off Area to be constructed as a part of the proposed Capital Improvements Project.

### **3.0 Operating Hours**

Normal operating hours for the Recycling and MSW Drop-Off Area will be 8:00 a.m. to 4:30 p.m., Monday through Saturday. The Recycling and MSW Drop-Off Area is closed on Sunday and holidays as designated by the County.

### **4.0 Personnel**

The facility is owned and operated by Henderson County. County staff will monitor the activities at the facility and provide assistance/direction as needed to ensure the safe and proper disposal of waste and/or recyclable material. The site will not be manned on a full time basis. The County staff may assist in the coordination of traffic in and around the site to ensure a continued safe operation. County staff will also coordinate the removal, dumping and staging of roll-off boxes on an as needed basis.

## **5.0 Access and Security**

Access to the site is through the main entrance facility and Scale House. As each load of waste is weighed across the scales, the scale attendant will direct the customer to the appropriate disposal facility.

The site will be enclosed by fencing and gates to prevent unauthorized access.

## **6.0 Housekeeping, Litter and Vector Control**

Incoming wastes will be transported in covered or enclosed vehicles. Outgoing container boxes will be covered or enclosed on an as needed basis depending on the type of waste and the distance to the ultimate disposal site. Throughout the day and at the end of each working day, facility personnel will police the area for litter. Mosquitoes and rodents shall be controlled so as to protect the public health and welfare.

## **7.0 Fire Control**

In the event that a fire occurs, the local authorities will be notified immediately. Fire extinguishers are also available at the transfer stations. The telephone numbers of local fire, police, ambulance and hospital facilities are posted in and around the facility at all times. In the event of a fire at the facility the NCDENR will be notified within 24 hours and written notification will be submitted within 15 days.

## **8.0 Storm Water Management**

Under the proposed Capital Improvements Project, storm water management will be handled through the construction and maintenance of various storm water collection inlets, piping and conveyance channels.

## **9.0 Wastewater Collection Facilities**

Under the proposed Capital Improvements Project, wastewater collected from the roll-off collection box area will be collected and drained to the on-site pump station operated by the County. The collection drains will be covered by a metal grate system to block large debris that might clog the drain. The metal grates will be periodically raked and the collected trash disposed of in an appropriate container.

## **C&D DROP-OFF AREA**

### **1.0 Overview**

As a part of the Capital Improvements Project, the County intends to construct a drop-off area for certain loads of construction and demolition (C&D) material brought to the site by commercial customers. The loads of C&D waste generally diverted to the C&D Drop-Off Area would be those loads containing sufficient recyclable materials (i.e., clean wood waste, rubble, scrap metal, etc.) to justify separation of the material prior to disposal of the unusable waste.

### **2.0 Facility Location**

The C&D Drop-Off Area will be located at the Stoney Mountain Road Landfill Facility just north of the existing Citizen's Convenience Center. The Facility Plan, Figure 2, Appendix C shows the location of the proposed C&D Drop-Off Area to be constructed as a part of the proposed Capital Improvements Project.

### **3.0 Operating Hours**

Normal operating hours for the C&D Drop-Off Area will be 8:00 a.m. to 4:30 p.m., Monday through Saturday. The C&D Drop-Off Area is closed on Sunday and holidays, as designated by the County.

### **4.0 Personnel**

The facility is owned and operated by Henderson County. County staff will monitor the activities at the facility and provide assistance/direction as needed to ensure the safe and proper disposal of C&D waste material. The site will not be manned on a full-time basis. The County staff may assist in the coordination of traffic in and around the site to ensure a continued safe operation. Staff personnel will be trained in the type of materials that can be recycled and/or reused.

### **5.0 Access and Security**

Access to the site is through the main entrance facility and Scale House. As each load of waste material is weighed across the scales and the scale attendant will direct the customer to the appropriate disposal facility.

The site will be enclosed by fencing and gates to prevent unauthorized access.

## **6.0 Housekeeping, Litter and Vector Control**

Incoming wastes will be transported in covered or enclosed vehicles. Outgoing container boxes containing recyclable material or waste material will be covered or enclosed on an as needed basis depending on the type of waste and the distance to the ultimate disposal site. Throughout the day and at the end of each working day, facility personnel will police the area for litter. Mosquitoes and rodents shall be controlled so as to protect the public health and welfare.

## **7.0 Fire Control**

In the event that a fire occurs, the local authorities will be notified immediately. Fire extinguishers are also available at the transfer stations. The telephone numbers of local fire, police, ambulance and hospital facilities are posted in and around the facility at all times. In the event of a fire at the facility the NCDENR will be notified within 24 hours and written notification will be submitted within 15 days.

## **8.0 Storm Water Management**

Under the proposed Capital Improvements Plan, storm water management will be handled through the construction and maintenance of various storm water collection inlets, piping and conveyance channels.

## **9.0 Operations**

Selected loads of C&D waste material would be diverted to the C&D Drop-Off area for separation of the recyclable/reusable material prior to disposal of any residual waste material. The load of waste material would be discharged onto a contained paved surface and the recyclable/reusable material removed and/or separated from the unusable waste. The separation of the material will be performed by hand or with the use of on-site equipment depending on the general type of material being screened at the time. Items separated will generally be clean wood waste that can be ground as mulch, clean rubble that can be further processed and used by the County for road surfacing, and scrap metal that can be placed in the white goods/metal scrap pile for recycling. The residual waste will be collected and disposed of through the transfer station operation. Proper protective equipment will be worn by the site personnel during the separation process.

## **MULCHING AND GRINDING TREATMENT AND PROCESSING**

### **1.0 Purpose of Plan**

This operations plan has been developed for the Mulching and Grinding Treatment and Processing (MGTP) Facility located at the Stoney Mountain Road Landfill in Henderson County, North Carolina. This plan 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 and operator with a reference manual that includes necessary information, procedures, and applicable rules for properly operating the Treatment & Processing Facility. All personnel involved with the management or supervision of operations at the facility will be required to review the Operations Plan and to maintain the facility in conformance with applicable requirements. A copy of the Operations Plan will be kept in the vicinity of the MGTP Facility at all times.

### **2.0 Facility Location**

The MGTP Facility is located at the Stoney Mountain Road Landfill Facility at 802 Stoney Mountain Road, Hendersonville, North Carolina 28791 and is operated by Henderson County. The MGTP Facility is located east of the closed MSWLF. The Facility Plan, Figure 2, Appendix C shows the location of the MGTP Facility.

### **3.0 Service Area**

This MGTP Facility will provide service for all of Henderson County.

### **4.0 Siting Requirements**

The proposed MGTP Facility siting requirements are described as follows:

- 1) The proposed MGTP Facility is not located in the 100-year flood plain.
- 2) A 50-foot buffer between all property lines and the treatment and processing areas is maintained.
- 3) The site grades are designed to ensure that there will be no standing water in the treatment and processing area and there will be no off-site drainage problems.
- 4) An all-weather gravel access road to the site will be kept passable at all times.
- 5) Access to the MGTP Facility is controlled by properly trained employees.

- 6) The area will be graded to divert runoff to a sediment basin. Both the ditches and the sediment basin can be utilized to control runoff from a potential fire.

## **5.0 Operations Procedures**

### **5.1 Overview**

The MGTP Facility will consist of an area of approximately 1.5 acres located east of the closed MSWLF. The location of the facility is shown in Figure 2, Appendix C. The facility is authorized to process and store not more than six thousand (6,000) cubic yards of acceptable material per quarter. At the present time the County has an agreement with Waste Stream Innovations (WSI) to collect and haul the mulchable material (land clearing debris, brush and tree limbs, pallets, etc.) to WSI's site at 4028 Haywood Road for processing. A copy of the County's Agreement Letter and a copy of WSI's Solid Waste Composting Demonstration Permit, Permit No. SWCD-45-01 is included in Appendix G. The mulchable material collected by WSI will generally be used as a part of the composting mixture in accordance with WSI's operating permit. Waste material not acceptable to WSI will be removed from the collection site and disposed of through the transfer station operation or processed through other means in accordance with the applicable rules and regulations. In the future a portion of the mulched material may be used as a bulking agent in the County's adjacent Small Type 1 Composting Facility.

The normal operating hours for the MGTP Facility will be 8:00 a.m. to 4:30 p.m., Monday through Saturday. The MGTP Facility is closed on Sunday and holidays, as designated by the County.

### **5.2 Personnel**

The Facility is owned and operated by Henderson County. Specified County personnel will operate the MGTP Facility on an as needed basis depending on the intake of applicable waste. These employees are properly trained in safety procedures and the inspection of incoming 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. The employees also direct and coordinate the movement of collection vehicles into and out of the MGTP Facility.

### **5.3 Technical Operational Requirements**

The following operational criteria shall be met at the MGTP Facility:

- 1) Only clean, unpainted, untreated wood, land clearing debris, brush and tree limbs will be used in the mulching process. The facility will not process more than 6,000 cubic yards of acceptable material per quarter.
- 2) Mulched materials will be removed from the site several times a year to ensure that no more than 6,000 cubic yards of material are stored on site per quarter.
- 3) Sludges may not be included in mulched materials.
- 4) Neither hazardous waste nor asbestos containing waste shall be accepted at the mulching facility.
- 5) Household hazardous waste shall not be accepted at the mulching facility.
- 6) Material received at the site that can not be processed onsite will be removed from the collection site and disposed of through the transfer station operation or processed through other means in accordance with the applicable rules and regulations.
- 7) The Facility shall not allow uncontrolled public access.

A Mulching Operations Data Log is included as Appendix H. This log will be used to record operations activities/observations that take place at the site such as grinding operations, mulch material moved to other locations on site or transferred off site or any other activities pertaining to mulching operations.

The tonnage and classification of waste materials received at the Mulching and Grinding Treatment and Processing Facility as well as the tonnage of material hauled off site is recorded at the Scale House. These records will be monitored to ensure the volume of material processed and stored on site does not exceed 6,000 cubic yards during any given quarter. The facility's staff may periodically measure stockpiles of processed material to confirm the scale tonnage records and ensure compliance with the 6,000 cubic yard per quarter limitation.

### **5.4 Traffic Control**

Access to the MGTP Facility is controlled by properly trained employees who are located at the Scale House of the SMRLF Facility. As vehicles arrive at the MGTP Facility, site personnel, when needed, will direct the driver to position the vehicle at the correct unloading location. When the contents of the vehicle are emptied, the driver is instructed to move the vehicle away from the MGTP Facility area.

## **5.5 Housekeeping, Litter, and Vector Control**

Incoming wastes will be transported to the MGTP Facility in covered or enclosed vehicles. Outgoing transfer trailers will also be covered or enclosed. Throughout the day and at the end of each working day, facility personnel will police the area for litter as necessary. Vectors shall be controlled so as to protect the public health and welfare.

## **5.6 Fire Control**

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. In the event of a fire at the facility the DENR will be notified within 24 hours and written notification will be submitted within 15 days.

## **5.7 Storm Water Management**

Standard erosion control practices, such as a sediment basin, silt fencing, vegetating slopes, and diversion ditches will be utilized at the site. Runoff from the processing area will be diverted through storm water conveyance channels to a sediment basin prior to discharge off the property.

## **5.8 Temporary Disaster Debris Staging/Storage Area**

The MGTP Facility has been designated as one of the Temporary Disaster Debris Staging/Storage Areas for vegetative waste (i.e., brush, tree limbs, etc.) from within Henderson County resulting from a significant natural disaster. A copy of the Permit application is included in Appendix I. Prior to the use of the site as a temporary disaster debris staging or storage area, NCDENR's Senior Environmental Specialist with the Asheville Regional Office (828-296-4500) will be notified in order to activate the site for the collection of vegetative waste material. The waste would be processed in accordance with this Plan or depending on the volume, may be removed for processing and/or disposal at an off-site permitted facility. All waste resulting from a significant natural disaster will be removed from the staging/storage area within six (6) months of the triggering event and the site will be restored to its pre-event condition.

## **SMALL TYPE 1 COMPOSTING FACILITY**

### **1.0 Purpose of Plan**

This Operations Plan has been developed for the proposed Small Type 1 Composting Facility located at the Stoney Mountain Road Landfill in Henderson County, North Carolina. This Plan has been prepared in accordance with the requirements of the North Carolina Department of Environment, Health, 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 and operator with a reference manual that includes necessary information, procedures, and applicable rules for properly operating the Composting Facility. All personnel involved with the management or supervision of operations at the facility will be required to review the Operations Plan and to maintain the facility in conformance with applicable requirements. A copy of the Operations Plan will be kept at the Landfill Office, in the vicinity of the Composting Site at all times.

### **2.0 Facility Location**

The Small Type 1 Composting Facility is located at the Stoney Mountain Road Landfill at 802 Stoney Mountain Road, Hendersonville, North Carolina 28791 and is operated by Henderson County. The Small Type 1 Composting Facility is located just north of the Mulching and Grinding Treatment and Processing Area and the White Goods/Metal Area. The Facility Plan, Figure 2, Appendix C shows the proposed location of the Small Type 1 Composting Facility.

### **3.0 Service Area**

The Composting Facility will provide service for all of Henderson County.

### **4.0 Siting Requirements**

The proposed Small Type 1 Composting Facility site is located north east of the closed MSWLF, and just north of the Mulching and Grinding Treatment and Processing Area and the White Goods/Metals Area. The proposed Small Type 1 Composting area is not located over a closed disposal site. Siting requirements are described as follows:

- 1) The proposed Composting Facility is not located in the 100-year flood plain.
- 2) A 200-foot buffer is maintained between the composting facility and all residences.
- 3) A 100-foot buffer is maintained between the composting facility and water supply wells.

- 4) A 50-foot buffer is maintained between all property lines and the composting facility.
- 5) A 25-foot minimum distance between compost areas and swales or berms will be maintained in order to allow for adequate access of fire-fighting equipment.
- 6) Diversion berms and drainage ditches are designed to ensure that there will be no standing water in the composting area and there will be no off-site drainage problems and also to divert runoff from composting areas to sediment basins.
- 7) A 50-foot minimum buffer between perennial streams and the compost area will be maintained.
- 8) An all-weather gravel access road to the site will be kept passable at all times.
- 9) Site screening of the composting site is not required.
- 10) Access to the composting facility is controlled by properly trained employees.
- 11) The site has diversion berms leading to a sediment basin. Both the ditches and the sediment basin can be utilized to control runoff from a potential fire.

## **5.0 Operations Procedures**

### **5.1 Overview**

The Small Type 1 Composting Site will consist of an area of approximately 1 acre where composting will take place. The County intends to use yard and garden waste, silva cultural waste, untreated and unpainted wood waste, or any combination thereof in its composting operation. Additionally, there are additional clean wood materials available at the landfill for composting as a result of the mulching and grinding operation, but these materials are typically used prior to them becoming available for composting. Composted material will either be utilized on site as a soil amendment for newly grassed areas or given/sold to the public, in accordance with the Solid Waste Rules for Small Type 1 Composting Facilities. When compost is used as a soil amendment, the rate of compost use will be determined as the compost is developed and the chemical constituency of the material is known. The County will consult with the County Agricultural Extension to determine application rates.

Normal operating hours for the Small Type 1 Composting Site are 8:00 a.m. to 4:30 p.m., Monday through Saturday. The facility is closed on Sunday and holidays, as designated by the County.

## **5.2 Personnel**

The facility is owned and operated by Henderson County. Specified County personnel will operate the Small Type 1 Composting Facility on an as needed basis depending on whether compost is being produced or not. These employees are properly trained in safety procedures and the inspection of incoming 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. The employees also direct and coordinate the movement of collection vehicles into and out of the Composting Site.

## **5.3 Technical Operational Requirements**

On or before August 1<sup>st</sup> of each year, the owner or operator shall report to the North Carolina Solid Waste Section, for the previous year beginning July 1<sup>st</sup> and ending June 30<sup>th</sup>, the type and amount of waste that was received at the facility and composted, the composting process that was used, and intended distribution of the finished product. The following operational criteria shall be met at the Composting Site:

- 1) Small Type 1 Composting Facilities shall process or store less than 6,000 cubic yards of material for composting per quarter, and occupy less than two acres of land.
- 2) The Composting Facility is not located over a closed-out disposal site.
- 3) Waste acceptable for a Type 1 facility may include yard and garden waste, silva cultural waste, untreated and unpainted wood waste or any combination thereof.
- 4) Sludges may not be included in a Type 1 Composting Facility.
- 5) Neither hazardous waste nor asbestos containing waste shall be accepted at the composting facility.
- 6) Household hazardous waste shall not be accepted at the composting facility.
- 7) The composting site shall not allow uncontrolled public access.
- 8) Compost shall be maintained at or above 131 degrees Fahrenheit for 3 days and aerated to maintain elevated temperatures. The temperature of all compost produced shall be monitored sufficiently to ensure that the pathogen reduction criteria are met.
- 9) Nitrogen bearing wastes shall be incorporated as necessary to minimize odor and the migration of nutrients.

A Composting Operations Data Log is included as Appendix J. This log will be used to record operations activities/observations that took place at the site such as windrow formation date, date and temperature recordings, materials used and source of materials, or any other activities pertaining to the composting operations. The tonnage and classification of waste materials received at the

Small Type I Composting Facility as well as the tonnage of material hauled off site is recorded at the scalehouse.

#### **5.4 Traffic Control**

Access to the Composting Site is controlled by properly trained employees who are located at the entrance of the landfill. As vehicles arrive at the Composting Site or landfill scales, site personnel will direct the driver to position the vehicle at the correct unloading location. When the contents of the vehicle are emptied, the driver is instructed to move the vehicle away from the Composting Site.

#### **5.5 Housekeeping, Litter, and Vector Control**

Incoming wastes will be transported to the Composting Site in covered or enclosed vehicles. Outgoing trailers will also be covered or enclosed. Throughout the day and at the end of each working day, facility personnel will police the area for litter. Vectors shall be controlled so as to protect the public health and welfare.

#### **5.6 Fire Control**

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. In the event of a fire at the facility the NCDENR will be notified within 24 hours and written notification will be submitted within 15 days.

#### **5.7 Storm Water Management**

Standard erosion control practices, such as a sediment basin, silt fencing, vegetating slopes, and diversion ditches will be utilized at the site. Runoff from the composting areas will be diverted to an existing sediment basin, prior to discharge to surface waters. Runoff from areas adjacent to the composting facility will be diverted around the composting operation.

## CONTINGENCY PLAN

### **1.0 Purpose of Plan**

Contingency Plans are developed to provide general guidance to the facility staff in the event normal operations are disrupted due to a naturally occurring event or other unanticipated situation.

### **2.0 Fire Control:**

Fire control will be provided by an appropriate number of portable hand-held fire extinguishers. Fire protection will also be provided by the local fire department, which is aware of the fire control needs for the facility. In the event that a fire occurs, the local authorities will be notified immediately. The telephone numbers of local fire, as well as the police, ambulance and hospital facilities, are posted in and around the facility at all times. In the event of a fire at the facility the NCDENR Solid Waste Section's Senior Environmental Specialist, in the Asheville Regional Office must be notified at (828) 296-4500 within 24 hours of the triggering event and written notification will be submitted within 15 days.

### **3.0 Power Failure:**

Battery backup on the weigh system will provide for short term continued operation. This allows vehicles presently in the system to be weighed out and the computer operating system shut down. Incoming traffic will be temporarily held at the scale house pending the restoration of power. In the event of a prolonged power outage, load sizes may be estimated and the vehicles allowed to enter the appropriate waste disposal facility for disposal of their waste load. Estimated waste tonnages processed through the transfer station will be reconciled with the waste tonnages processed through the off-site disposal facility. Depending on information available from the power company, relative to the anticipated duration of the power outage, the County may opt to acquire and temporarily operate the weigh system with a portable generator.

On-site utility systems (i.e., pump stations, etc.) will be regularly monitored to ensure the wet wells (storage capacity) is not exceeded. Standby generator power will be brought in to operate the systems on an as needed basis.

### **4.0 Equipment Failure:**

The County has sufficient back-up equipment to maintain continuous operations should any one piece be down for service or repair. However, should the need arise, the County will acquire basic operating equipment from other County departments or rent the appropriate equipment from local equipment rental companies or contractors.

## **5.0 Weather Related Issues:**

The primary weather related issue pertains to ice and snow accumulation during the winter months. During inclement weather periods, the facility will not open in the mornings, for the acceptance of waste, until such time as adequate staff is on site to manage the daily operations and the access roads are adequately cleared and/or treated to provide safe ingress and egress to the various disposal facilities. County equipment will generally be used to maintain the access roads during inclement weather.

Inclement weather occurring during normal operating hours will be dealt with on a per occurrence basis. Safe ingress and egress will be maintained to the various waste disposal operations at all times. The facility will be closed should conditions deteriorate to the point that continued operations become unsafe for the customers, citizens and staff. The facility will remain closed until such time as weather conditions improve and/or safe access to the site can be restored.

## **6.0 Other:**

Other disruptions to the normal waste disposal activities will be dealt with on a per occurrence basis. The landfill staff has the training and experience to handle situations as they may arise in order to protect the citizens, customers and other staff members as well as human health and the environment. Emergency personnel (i.e., police, fire, ambulance, etc.) will be notified on an as needed basis. The telephone numbers for the local response agencies are posted in and around the facility. NCDENR will be notified when required by the applicable rules and regulations.

**APPENDIX A**

Zoning Compliance Letters

**Henderson County**  
**CODE ENFORCEMENT SERVICES**

100 North King Street • Hendersonville, North Carolina 28792  
Phone (828) 697-4857 Fax (828) 697-4658

December 10, 2010

Marcus Jones  
Henderson County Landfill  
Stoney Mountain Road  
Hendersonville, NC 28791

Dear Mr. Jones:

This letter confirms the approval from the Henderson County Technical Review Committee (TRC), on December 7, 2010 of the Major Site Plan for Henderson County Transfer Station Convenience Center. The plan was approved for the Convenience Center subject to compliance with the following Conditions and Supplemental Requirements:

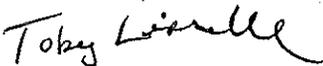
\*Recombination of adjoining parcels to be reflected on site plan.

**SR 9.10. Solid Waste Facility, County Owned/Operated**

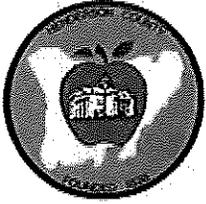
- (1) Site Plan. Major Site Plan required in accordance with §200A-299 (Major Site Plan Review).
- (2) Lighting. Adequate lighting shall be placed in areas used for vehicular/pedestrian access including, but not limited to: stairs, sidewalks, crosswalks, intersections, or changes in grade. Lighting mitigation required.
- (3) Dust Reduction. Unpaved roads, travelways and/or parking areas shall be treated to prevent dust from adversely affect adjacent properties.
- (4) Security. The operations of a waste collection and transfer facility shall be totally enclosed by: (1) a security fence at least eight (8) feet in height; (2) a wall at least eight (8) feet in height; or (3) a fireproof building. Entrances and exits should be secured and locked during non-operating hours.
- (5) Perimeter Setback. One hundred and fifty (150) feet from a residential zoning district. Necessary ingress and egress to the proposed use (s) may be located within the perimeter setback.
- (6) Perimeter Buffer. A B2 buffer as described in Article V (Landscape Design Standards), Subpart A (Buffer Requirements) is required around the perimeter boundary of the site, the operational area(s), or any combination thereof. Preserved existing trees may be credited toward the required buffer.
- (7) Sedimentation Control. Permanent control measures are required to retain all noncompacted soils on site.
- (8) Operations. Where feasible, debris reduction methods such as chipping and mulching (using portable equipment) shall be utilized to reduce the amount of debris permanently withheld on site.

Upon completion of these conditions, the applicant can apply for Property Address, Zoning Permit, Erosion Control Permit, Environmental Health Permit, Building Permit and any other local, state, or federal permits as required. Major Site Plan approval shall be valid for two years, however, for just cause, the Technical Review Committee may grant extensions of development plan approval for a maximum of one (1) additional year. No full Certificate of Occupancy will be granted until all conditions are met.

Sincerely,



Toby Linville, Director  
Henderson County Code Enforcement  
Cc: Bill Sperry, McGill Associates



# Henderson County (Planning) – Zoning Permit

100 N. King Street, Hendersonville, N.C. 28792  
Phone : (828) 697-4857

**Project No:** 10010109931  
**Permit No:** 10020109932  
**Status:** ISSUED  
**Appl. Dt.:** 11/23/2010  
**Status Dt.:** 11/23/2010  
**Exp. Dt.:** 5/23/2011

### Owner Information

**Name :** Henderson Co Landfill  
**Address :** Stoney Mtn Road  
Hendersonville NC 28791  
**Phone(W) :**  
**Phone(H) :**  
**Phone(M) :**

### Applicant Information

**Name :** Henderson Co Landfill  
**Address :** Stoney Mtn Road  
Hendersonville NC 28791  
**Phone(W) :**  
**Phone(H) :**  
**Phone(M) :**

### Property Information

**PIN # :** 9650727217  
**Address :** 806 Stoney Mountain Rd  
Hendersonville NC 28791  
**Subdivision :** Henderson County Landfill  
**Lot # :**  
**Acreage :** 62.40  
**Directions :**  
**Zoning Districts :** L-LC

### Occupant Information

**Name :** Henderson Co Landfill

### Permit Information

**Type & Use :** Waste Collection And Transfer Facility (non-hazardous)  
**Permission :** Special Use Permit  
**Purpose :** Not Applicable  
**Year of Manuf. Home :**  
**Condition :** SR 9.10.  
**Work Desc. :** See Site Plan

**Notes :** TSL

### Inspections Conducted

Inspections	Signed Off/User ID	Date	Status	Reason
Zoning Inspection				

### Payment Information

Permit	Receipt No.	Fee	Ref#1	Amount	Status	Ref#2	Amount	Status	Ref#3	Amount	Status
MAINPERMIT	10020108446	100.00	Journal Entry CHECK	100.00	PAID						
<b>Total</b>			100.00								

### READ CAREFULLY AND SIGN BELOW

The Information shown herein and on any other application materials and plans submitted is, to the best of my knowledge, true and accurate. and is in compliance with the terms, requirements, standards and conditions of the Henderson County Zoning Ordinance for a zoning compliance permit. By my signature below, I agree to conform to all applicable ordinances of Henderson County, North Carolina, and the laws of the State of North Carolina related to the use of land and/or structure(s) indicated herein.

BY LAW ALL IMPROVEMENTS MUST BE LISTED WITH THE ASSESSOR'S OFFICE DURING THE MONTH OF JANUARY. FAILURE TO DO SO WILL RESULT IN A PENALTY OF 10% OF THE VALUE OF THE IMPROVEMENT.

**Signature:** \_\_\_\_\_  
(Applicant: Occupant/Agent of owner)

**Date:** \_\_\_\_\_

**Approved:** \_\_\_\_\_  
(Zoning Official Name & Title)

**Date:** \_\_\_\_\_

**Denied:** \_\_\_\_\_  
(Zoning Official Name & Title)

**Date:** \_\_\_\_\_



# Henderson County (Planning) – Watershed Permit

100 N. King Street, Hendersonville, N.C. 28792  
Phone : (828) 697-4857

**Project No:** 10010109931  
**Permit No:** 10280110634  
**Status:** ISSUED

**Appl. Dt.:** 12/17/2010      **Exp. Dt.:** 6/17/2011  
**Status Dt.:** 12/17/2010

### Owner Information

**Name** : Henderson Co Landfill  
**Address** : Stoney Mtn Road  
Hendersonville NC 28791  
**Phone(W)** :  
**Phone(H)** :  
**Phone(M)** :

### Applicant Information

**Name** : Henderson Co Landfill  
**Address** : Stoney Mtn Road  
Hendersonville NC 28791  
**Phone(W)** :  
**Phone(H)** :  
**Phone(M)** :

### Property Information

**PIN #** : 9650727217  
**Address** : 806 Stoney Mountain Rd  
Hendersonville NC 28791  
**Subdivision** : Henderson County Landfill  
**Lot #** :  
**Acreage** : 62.40  
**Directions** :  
**Zoning Districts** : L-LC  
**Prop. Purpose** : NA

### Occupant Information

**Name** : Henderson Co Landfill

### Permit Information

**WS Type** : IV  
**WS Area Class** : Protected Area  
**WS Name** : Upper French Broad River  
(Asheville)  
**Proposed units per acre** :  
**Proposed Built Upon Area** :  
**Land Disturb** : 0

**Work Desc** : Additional scale house, convenience center and driveways into existing County Landfill.  
**Notes** : TSL

### Inspections Conducted

Inspections	Signed Off/User ID	Date	Status	Reason
Other				
Watershed Inspection				

### Payment Information

Permit	Receipt No.	Fee	Ref#1	Amount	Status	Ref#2	Amount	Status	Ref#3	Amount	Status
MAINPERMIT	10280108877	0	CASH	0	PAID						
<b>Total</b>		0									

### READ CAREFULLY AND SIGN BELOW

I certify that the information shown above is true and accurate and is in compliance with the conditions for a subdivision of land as defined in the Watershed Protection Ordinance. If permit is granted, \_\_\_\_\_ agree to conform to all Ordinances of Henderson County, North Carolina, and the Laws of the State of North Carolina regulating such work.

BY LAW ALL IMPROVEMENTS MUST BE LISTED WITH THE ASSESSOR'S OFFICE DURING THE MONTH OF JANUARY. FAILURE TO DO SO WILL RESULT IN A PENALTY OF 10% OF THE VALUE OF THE IMPROVEMENT.

**Signature:** \_\_\_\_\_  
(Applicant:Occupant/Agent of owner)

**Date:** \_\_\_\_\_

**Approved/Rejected:** \_\_\_\_\_  
(Watershed Administrator)

**Date:** \_\_\_\_\_

**Remarks:** \_\_\_\_\_

**APPENDIX B**

Erosion and Sedimentation Control

Letter of Approval

North Carolina Department of Environment and Natural Resources

Division of Land Resources

Land Quality Section

July 13, 2010



North Carolina Department of Environment and Natural Resources  
Division of Land Resources  
Land Quality Section

James D. Simons, PG, PE  
Director and State Geologist

Beverly Eaves Perdue, Governor  
Dee Freeman, Secretary

July 13, 2010

**LETTER OF APPROVAL**

Henderson County  
ATTN: Marcus A. Jones, Henderson County Director of Engineering  
100 North King Street  
Hendersonville, North Carolina 28792

RE: Project Name: Stoney Mtn. Rd. Landfill - Capital Improvements Project  
Acres Approved: 33.6  
Project ID: HENDE-2010-006  
County: Henderson  
Street and City: S.R. 1383 - Stoney Mtn. Road  
River Basin: French Broad  
Stream Classification: WS-IV  
Latitude: 35.35558 Longitude: -82.49531  
Submitted By: McGill Associates, Dave Pasko  
Date Received by LQS: June 17, 2010  
Plan Type: New Submittal

Dear Mr. Jones:

This office has reviewed the subject erosion and sedimentation control plan. We find the plan to be acceptable and hereby issue this Letter of Approval. The enclosed Certificate of Approval must be posted at the job site. This plan approval shall expire three (3) years following the date of approval, if no land-disturbing activity has been undertaken, as is required by Title 15A NCAC 4B .0129.

Title 15A NCAC 4B .0118(a) requires that a copy of the approved erosion control plan be on file at the job site. Also, this letter gives the notice required by G.S. 113A-61.1(a) of our right of periodic inspection to insure compliance with the approved plan.

2090 US Highway 70, Swannanoa, North Carolina, 28778-8211  
Telephone 828-296-4500 ▲ Fax 828-299-7043  
[www.enr.state.nc.us/](http://www.enr.state.nc.us/)

An Equal Opportunity / Affirmative Action Employer

One  
North Carolina  
*Naturally*

# CERTIFICATE OF PLAN APPROVAL



The posting of this certificate certifies that an erosion and sedimentation control plan has been approved for this project by the North Carolina Department of Environment and Natural Resources in accordance with North Carolina General Statute 113A - 57 (4) and 113A - 54 (d) (4) and North Carolina Administrative Code, Title 15A, Chapter 4B.0107 (c). This certificate must be posted at the primary entrance of the job site before construction begins and until establishment of permanent groundcover as required by North Carolina Administrative Code, Title 15A, Chapter 4B.0127 (b).

**Stoney Mtn. Rd. Landfill -**

**Henderson**

Project Name and Location

**Capital Improvements Project**

**HENDE-2010-006**

**July 13, 2010**

Date of Plan Approval

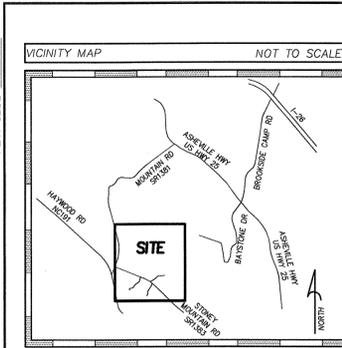


*James S. Boyer*  
Regional Engineer

## **APPENDIX C**

Figure 1  
Boundary Plat  
Stoney Mountain Road Landfill  
Solid Waste Transfer Station  
Permit No. 45-04T  
Henderson County, North Carolina

Figure 2  
Facility Plan  
Stoney Mountain Road Landfill  
Solid Waste Transfer Station  
Permit No. 45-04T  
Henderson County, North Carolina



**LEGEND**

- CONCRETE MONUMENT
- ALUM DISC = ALUMINUM DISC FOUND
- △ NATIONAL GEODETIC SURVEY
- CP = CALCULATED POINT
- RFB = REBAR FOUND
- IPS = IRON PIN SET
- CTIPE = CRIMPED TOP IRON PIN FOUND
- OTIPE = OPEN TOP IRON PIN FOUND
- (G) = NC STATE PLANE GRID DISTANCE
- (H) = HORIZONTAL GROUND DISTANCE
- CORS = CONTINUOUSLY OPERATING REFERENCE STATION

--- INDICATES LANDFILL FACILITY BOUNDARY  
 --- INDICATES BOUNDARY LINE  
 --- INDICATES EXISTING RIGHT OF WAY  
 --- INDICATES LINE NOT SURVEYED AT THIS TIME  
 --- INDICATES INTERIOR BOUNDARY LINE  
 --- INDICATES OVERHEAD ELECTRIC LINE  
 --- INDICATES FENCE LINE  
 --- STREAM LOCATION FROM PHOTOGRAMMETRY  
 --- INDICATES TRAVEL DRIVE  
 --- INDICATES TREE LINE  
 --- INDICATES BUILDING LOCATION FROM PHOTOGRAMMETRY

**BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE (H)
L1	S82°33'58"E	116.82
L2	S36°45'48"E	90.18
L3	S74°15'15"E	21.48
L4	N82°01'50"E	115.54
L5	N19°30'17"W	82.36
L6	N73°06'07"E	250.47
L7	N71°21'42"E	32.12
L8	S6°32'48"W	171.79
L9	S0°06'00"W	63.78
L10	S7°08'42"W	66.39
L11	S71°3'48"W	126.82
L12	S29°48'59"E	113.37
L13	S46°38'30"E	114.51
L14	S41°38'22"E	8.29
L15	S76°17'13"E	91.09
L16	S2°20'38"W	17.51
L17	S77°39'53"W	41.40
L18	S24°19'10"W	121.68
L19	S19°38'26"W	81.10
L20	S13°01'05"E	133.68
L21	S36°42'58"W	34.70
L22	S37°10'07"E	107.92
L23	S8°74'57"E	59.19
L24	N43°32'28"W	5.83
L25	N48°50'52"W	151.08
L26	N48°51'47"W	177.25
L27	S12°52'22"E	216.58
L28	S12°49'47"E	164.78
L29	S13°49'15"E	32.34
L30	N45°37'25"E	149.89
L31	N48°32'11"W	145.37
L32	N30°04'22"W	154.36
L33	N49°22'20"W	186.97
L34	N48°30'14"W	187.38
L35	N49°20'07"E	318.97
L36	S83°42'55"E	49.36
L37	N65°57'55"W	85.00
L38	N68°42'55"W	142.80
L39	N69°50'49"W	208.45
L40	N69°27'39"W	102.45
L41	N69°34'13"W	71.94
L42	N19°01'30"E	430.10
L43	N63°30'09"W	285.06 (TOTAL)
L44	S20°55'28"W	73.80
L45	S20°55'49"W	120.83
L46	S20°55'49"W	126.23
L47	S20°55'49"W	130.02
L48	S20°55'49"W	28.90
L49	N67°41'12"W	23.16
L50	N65°21'25"W	86.65
L51	N63°21'08"W	153.54
L52	N62°10'57"W	137.17
L53	N63°25'00"W	118.30
L54	N66°32'48"W	57.11
L55	N68°40'12"W	26.44
L56	N40°22'29"E	30.73
L57	S40°22'29"W	478.04
L58	S39°31'02"W	122.10
L59	S0°30'51"E	147.83
L60	S59°42'24"W	446.90 (TOTAL)

**BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE (H)
L61	N83°40'18"W	59.95
L62	N83°39'23"W	110.06
L63	N83°43'14"W	29.90
L64	N83°53'12"W	140.84
L65	S5°20'15"W	318.23
L66	N84°44'03"W	293.08
L67	S6°15'41"W	230.15
L68	N83°44'59"W	277.38
L69	N83°44'59"W	39.95
L70	N83°43'27"W	60.07
L71	N83°43'27"W	215.35
L72	N83°42'55"W	172.38
L73	N35°17'04"E	75.00
L74	N53°17'04"E	41.00
L75	N88°47'04"E	50.00
L76	N31°22'09"E	40.94
L77	N85°50'02"E	637.66
L78	S6°15'39"W	25.00
L79	N6°14'47"E	70.00
L80	N83°34'30"W	39.97
L81	N83°52'20"W	60.01
L82	S6°17'54"W	69.93
L83	N41°41'01"E	141.49
L84	N85°50'07"E	135.64
L85	S6°17'54"W	69.97

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
C1	66.43	48.40	N87°20'22"W	48.27
C2	236.61	134.94	N37°19'09"E	133.12
C3	65.80	57.11	N11°50'47"E	55.33
C4	65.74	153.64	N30°41'11"W	120.99
C5	147.32	165.40	S78°26'53"W	156.85

**BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE (H)
L86	N40°22'29"E	1.26
L87	S82°27'07"E	69.35
L88	N07°52'12"E	80.26
L89	N17°37'34"E	114.18
L90	N17°37'34"E	38.79
L91	N23°32'57"E	50.29
L92	N23°32'57"E	89.82
L93	N23°32'57"E	44.02
L94	N33°50'46"E	15.32
L95	N23°32'57"E	1.14
L96	N23°32'57"E	91.01
L97	N23°32'57"E	44.32
L98	N17°37'34"E	41.60
L99	N17°37'34"E	140.73
L100	N17°37'34"E	83.29
L101	S64°48'05"W	66.85
L102	S0°50'49"W	8.28
L103	S55°52'53"E	41.13
L104	S48°48'30"E	123.64
L105	S48°16'45"E	311.14
L106	S49°51'48"E	293.17
L107	S49°16'43"E	60.64
L108	S45°42'03"E	257.55

**AREA TABLE**

DESCRIPTION	ACRES	SQ. FT.
BOUNDARY AREA WITHOUT PARCELS (CRISP & AUSTIN)	145.571	6,341,068
NEW DOT RIGHT-OF-WAY	1.549	67,457
AREA IN STONEY MTN. ROAD	0.759	33,054

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
C6	2518.57	52.96	S89°31'28"E	52.96
C7	2518.57	220.72	N85°44'39"W	220.63
C8	2518.57	38.78	S62°47'34"E	38.78
C9	32.01	50.10	N72°42'41"E	45.14
C10	530.12	54.80	N20°35'15"E	54.78
C11	137.53	24.12	N28°54'22"E	24.09
C12	25.01	15.78	N19°31'18"E	15.52
C13	55.01	237.16	S89°03'10"E	91.70
C14	137.53	88.22	N43°59'38"E	86.14
C15	470.11	48.60	N20°35'15"E	48.58
C16	32.01	45.81	N21°21'01"W	41.85

**BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE (H)
L86	N40°22'29"E	1.26
L87	S82°27'07"E	69.35
L88	N07°52'12"E	80.26
L89	N17°37'34"E	114.18
L90	N17°37'34"E	38.79
L91	N23°32'57"E	50.29
L92	N23°32'57"E	89.82
L93	N23°32'57"E	44.02
L94	N33°50'46"E	15.32
L95	N23°32'57"E	1.14
L96	N23°32'57"E	91.01
L97	N23°32'57"E	44.32
L98	N17°37'34"E	41.60
L99	N17°37'34"E	140.73
L100	N17°37'34"E	83.29
L101	S64°48'05"W	66.85
L102	S0°50'49"W	8.28
L103	S55°52'53"E	41.13
L104	S48°48'30"E	123.64
L105	S48°16'45"E	311.14
L106	S49°51'48"E	293.17
L107	S49°16'43"E	60.64
L108	S45°42'03"E	257.55

**BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE (H)
L109	N17°37'34"E	140.73
L110	N17°37'34"E	83.29
L111	S64°48'05"W	66.85
L112	S0°50'49"W	8.28
L113	S55°52'53"E	41.13
L114	S48°48'30"E	123.64
L115	S48°16'45"E	311.14
L116	S49°51'48"E	293.17
L117	S49°16'43"E	60.64
L118	S45°42'03"E	257.55

**NOTES:**

Field work completed: September 9, 2010  
 Office work completed: October 8, 2010

All distances shown on this map are horizontal ground lengths unless otherwise noted. To convert to NC grid distances, multiply by the average combined scale factor of 0.999775304.

Areas computed by coordinate method.

Property shown hereon is subject to all rights-of-ways, easements and restrictions which exist as a matter of record or exist de facto.

Property shown hereon is subject to the rules, regulations, ordinances and/or jurisdictions of local, state and/or federal agencies if any. The requirements of said rules, regulations, ordinances, and/or the limits of said jurisdictions are not shown hereon unless stated otherwise.

No missing corners were set by surveyor except as shown hereon as 'IPS'.

This survey was performed to determine the exterior boundary line for specific parcels owned by Henderson County, (PIN nos. 9650830296, 9650727217, 9650629650, 965027041, 9650829071, 9650616886, 9650614773, 9650616012, 9650615489, 9650716325, 965080835, 965080685 and 9650920038).

The Landfill Facility Boundary line as shown on this plat is for reference only. No field survey was performed to determine or mark the position of this line.

Rectified orthophotography and photogrammetric mapping were used for the location of certain features (excluding property boundaries and streams crossing property boundaries) where ground measurements were not otherwise necessary to locate those features to an appropriate and acceptable accuracy relative to a nearby property boundary of the subject parcel as required by the State of North Carolina surveying and mapping requirements. Complete details of this mapping and the certification of the photogrammetrist can be found in the attached photogrammetrist's survey report.

The site was flown and photographed in December 2009 by Carolina Resource Mapping, Inc., project no. N09-0053.

Orthophotography and photogrammetry were performed by Carolina Resource Mapping, Inc., NC, Corporate No. C-2264. Scott C. Williams, NC PLS L-4701, PPS 3517 Wrightsville Avenue, Suite B Wilmington, NC 28403 (910) 799-8100

**PARCELS**

LETTER	OWNER	PIN No.	DEED BOOK	PLAT SLIDE
A	HENDERSON COUNTY	9650847723	DB 1029/Pg 73	PLAT CAB. A SLIDE 211
B	HENDERSON COUNTY	9650870704	DB 1029/Pg 73	PLAT CAB. A SLIDE 211
C	HENDERSON COUNTY	9650868888	DB 1019/Pg 458	SLIDE 2808
D	HENDERSON COUNTY	9650847723	DB 1029/Pg 73	PLAT CAB. A SLIDE 211
E	HENDERSON COUNTY	9650816812	DB 1029/Pg 73	SLIDE 1894
F	HENDERSON COUNTY	9650815489	DB 1006/Pg 97	PLAT CAB. A SLIDE 211

**SURVEYOR'S CERTIFICATION**

I, J. Dallas Gordon, certify that this plat was drawn under my supervision from deed description recorded in Book 1019/Pg 459, Book 1006/Pg 97, Book 824/Pg 213, Book 450/Pg 127, Book 613/Pg 175, Book 554/Pg 171, Book 1055/Pg 631, Book 1381/Pg 308, Book 660/Pg 17, Book 441/Pg 589, Book 1270/Pg 751, Book 894/Pg 311, Book 1023/Pg 71, Book 1142/Pg 183, Book 1029/Pg 73, Slide 3576, Slide 2140, Plat CAB. A Slide 211, Plat Book 5/Pg 87; that the boundaries not surveyed are clearly indicated as drawn; that the ratio of precision as calculated meets or exceeds 1:10,000; that this plat was prepared in accordance with G.S. 47-30 as amended. Witness my doted original seal and signature.

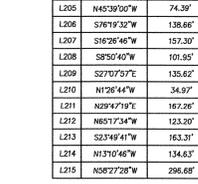
I further certify that the survey is of an existing parcel or parcels of land and does not create a new street or change an existing street.

*J. Dallas Gordon*  
 J. DALLAS GORDON NC PLS L-4626  
 NOVEMBER 18, 2010  
 DATE



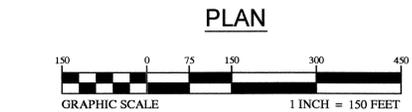
**INTERIOR LANDFILL FACILITY BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE
L200	N86°56'42"W	475.31
L201	N16°49'39"W	204.06
L202	N83°09'26"W	133.88
L203	N15°13'29"W	69.80
L204	N29°01'41"W	45.83
L205	N45°39'00"W	74.39
L206	S76°19'32"W	138.68
L207	S16°26'46"W	157.30
L208	S85°40'07"W	101.95
L209	S27°07'37"E	135.62
L210	N12°44'4"W	34.97
L211	N29°47'19"E	167.26
L212	N65°17'34"W	123.20
L213	S23°49'41"W	163.31
L214	N13°10'46"W	134.63
L215	N06°27'28"W	296.68



**REVISION DESCRIPTION**

NO.	DATE	BY	REVISION DESCRIPTION



PLAT OF SURVEY FOR:  
**HENDERSON COUNTY**  
 TOWN OF HENDERSONVILLE  
 HENDERSONVILLE TOWNSHIP  
 HENDERSON COUNTY, NORTH CAROLINA

**McGill ASSOCIATES**  
 ENGINEERING • PLANNING • FINANCE  
 55 BROAD STREET ASHEVILLE, NC 28801 PH: (828) 252-6575 FIRM LICENSE # C-0459

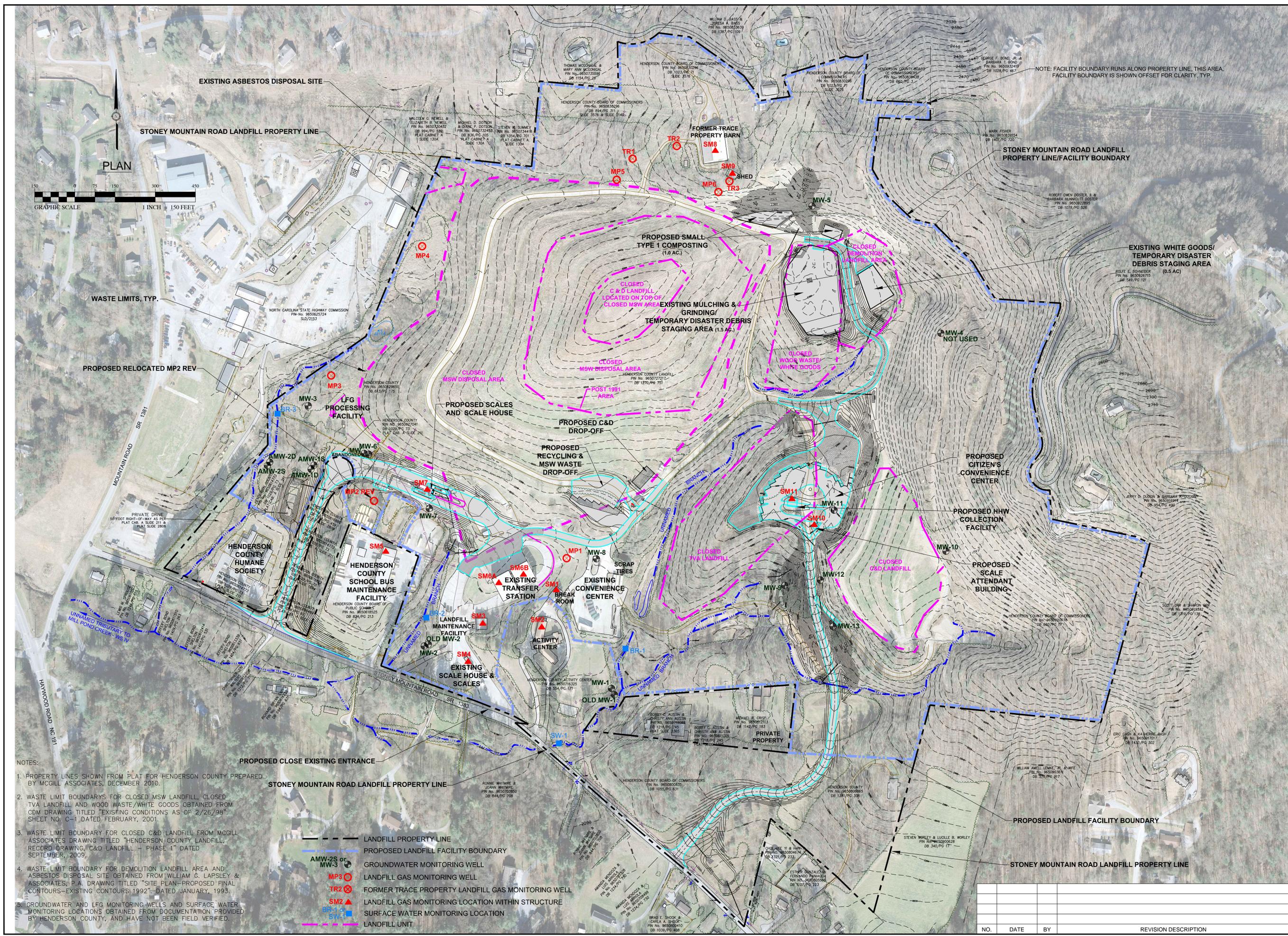
**STONEY MOUNTAIN ROAD LANDFILL SOLID WASTE TRANSFER STATION PERMIT NO. 45-047**

**HENDERSON COUNTY**  
 HENDERSON COUNTY, NORTH CAROLINA

JOB NO.: 10.00727  
 DATE: NOVEMBER 2010  
 DESIGNED BY: \_\_\_\_\_  
 CADD BY: KMC  
 DESIGN REVIEW: \_\_\_\_\_  
 CONST. REVIEW: \_\_\_\_\_  
 FILE NAME: Hendersonville Landfill Plat.dwg

**BOUNDARY PLAT**

**FIGURE 1**



PLAN



NOTE: FACILITY BOUNDARY RUNS ALONG PROPERTY LINE. THIS AREA FACILITY BOUNDARY IS SHOWN OFFSET FOR CLARITY, TYP.

- NOTES:
1. PROPERTY LINES SHOWN FOR HENDERSON COUNTY PREPARED BY MCGILL ASSOCIATES, DECEMBER 2010.
  2. WASTE LIMIT BOUNDARIES FOR CLOSED MSW LANDFILL, CLOSED TVA LANDFILL AND WOOD WASTE/WHITE GOODS OBTAINED FROM CDM DRAWING TITLED "EXISTING CONDITIONS AS OF 2/26/98" SHEET NO. C-1 DATED FEBRUARY, 2001.
  3. WASTE LIMIT BOUNDARY FOR CLOSED C&D LANDFILL FROM MCGILL ASSOCIATES DRAWING TITLED "HENDERSON COUNTY LANDFILL, RECORD DRAWING, C&D LANDFILL - PHASE 1" DATED SEPTEMBER, 2009.
  4. WASTE LIMIT BOUNDARY FOR DEMOLITION LANDFILL AREA AND ASBESTOS DISPOSAL SITE OBTAINED FROM WILLIAM G. LAPSELY & ASSOCIATES, P.A. DRAWING TITLED "SITE PLAN-PROPOSED FINAL CONTOURS-EXISTING CONTOURS 1992" DATED JANUARY, 1993.
  5. GROUNDWATER AND LFG MONITORING WELLS AND SURFACE WATER MONITORING LOCATIONS OBTAINED FROM DOCUMENTATION PROVIDED BY HENDERSON COUNTY, AND HAVE NOT BEEN FIELD VERIFIED.

- LANDFILL PROPERTY LINE
- PROPOSED LANDFILL FACILITY BOUNDARY
- GROUNDWATER MONITORING WELL
- LANDFILL GAS MONITORING WELL
- FORMER TRACE PROPERTY LANDFILL GAS MONITORING WELL
- LANDFILL GAS MONITORING LOCATION WITHIN STRUCTURE
- SURFACE WATER MONITORING LOCATION
- LANDFILL UNIT

NO.	DATE	BY	REVISION DESCRIPTION



JOB NO.: 10.00727  
DATE: NOVEMBER 2010  
DESIGNED BY: DP  
CADD BY: DP  
DESIGN REVIEW: \_\_\_\_\_  
FILE NAME: 10.00727 Figure 1-Facility Plan2.dwg

C:\2010\10.00727\Design\Solid Waste\Drawings\10.00727 Figure 1-Facility Plan2.dwg 12/20/2010 11:59 AM DAVE PASKO

## **APPENDIX D**

North Carolina Department of Environment and Natural Resources  
Division of Waste Management  
Solid Waste Section  
Municipal Solid Waste Transfer Station  
Permit No. 45-04T  
Permit to Construct  
December 14, 2010



Facility Permit No: 45-04T  
Permit to Operate - Modification  
Henderson County Transfer Station  
Generator ID No. NCPH0609801  
December 14, 2010  
DIN 12378  
Page 1 of 11

North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
Secretary

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
SOLID WASTE SECTION

**MUNICIPAL SOLID WASTE TRANSFER FACILITY**  
**Permit No. 45-04T**

HENDERSON COUNTY  
are hereby issued a

**PERMIT TO CONSTRUCT/OPERATE**

HENDERSON COUNTY TRANSFER STATION  
A MUNICIPAL SOLID WASTE TRANSFER FACILITY

Located at the *Henderson County Landfill, 802 Stoney Mountain Road, Henderson County, North Carolina*, in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The legal description of the site is identified on the deeds recorded for this property listed in Attachment No. 1 of this permit.

cn=Edward F. Mussler III P.  
E., o=Division of Waste  
Mngt, ou=Solid Waste  
Section, email=ed.  
mussler@ncdenr.gov, c=US  
2010.12.14 10:44:16 -05'00'

Edward F. Mussler, III, P.E.,  
Permitting Branch Supervisor  
Solid Waste Section

**ATTACHMENT 1**

**PART I: PERMITTING HISTORY**

1. Original Permit for construction of the facility was issued July 1997. DIN 5447.
2. Initial construction completed the original permit to operate was issued in May 1998. DIN 5448.
3. Permit was renewed August 2003. DIN 5449.
4. Permit renewed March 2006. DIN 5450.
5. Permit was modified for the addition of a permanent household hazardous waste unit at the facility, September 2008. DIN 5491.
6. Permit was modified for the improvement of the existing facilities and expansion of on-site services, July 2010. DIN 11096.
7. Permit is modified to include changes to the existing plans. December 2010. DIN 12316.
8. **Permit is modified to include changes to the approved disposal sites. December 2010. DIN 12378.**

<b>Permit Type</b>	<b>Date Issued</b>
Permit to Construct	July 29, 1997
Permit to Operate	May 1, 1998
Permit to Operate – Amendment	August 22, 2003
Permit to Operate – Amendment	March 21, 2006
Permit to Operate – Modification	September 2, 2008
Permit to Operate – Modification	July 26, 2010
Permit to Operate/Construct – Modification	November 30, 2010
<b>Permit to Operate/Construct – Modification</b>	<b>December 14, 2010</b>

**PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN**

1. Approved Site and Construction Plans. May 1997.
2. Approved Transfer facility permit application and operations plan. May 29, 1997 and received February 19, 1997.
3. Letter dated 14 May 1997 from Donna M. Fain and Zoning Permit. June 2, 1997.
4. Letter from the Division of Land Resources, approving the Erosion and Sedimentation Control Plan. June 26, 1996

5. Electronic message requesting permit for the next five year period. No changes in operations anticipated. May 7, 2003.
6. *Henderson County MSW Transfer Station Phase II, Construction Plans*. Prepared by CDM, Raleigh NC. Prepared for Henderson County, NC, including a drawing set, Sheets, C1-2, A1-3, S1-6, H1-2, P1-5, and E1-4. February 2006.
7. Zoning Compliance Letter from the Henderson County Zoning Administration. February 14, 2006.
8. *Operations Plan*. Prepared by CDM, Raleigh NC. Prepared for Henderson County, NC. February 22, 2006. Document Id No. 5454
9. *Site Specific Health and Safety Plan for Henderson County Household Hazardous Waste Facility*. Prepared by Mountain Environmental Group. Prepared for Henderson County. January 31, 2008. Document ID No. 4620.
10. *Application for Household Hazardous Waste Identification Number*. Prepared by Mountain Environmental Group. Prepared for Henderson County. May 2008. Document ID No. 4622.
11. *Henderson County Household Hazardous Waste Facility, Operations Plan*. Prepared by Mountain Environmental Group. Prepared for Henderson County. July 22, 2008. Document No. 5453.
12. *Request For Permit Modification, Capital Improvement Project, Stoney Mountain Road Landfill, Henderson County, North Carolina, Permit # 45-04-T*. Prepared for Henderson County. Prepared by McGill. June 30, 2010. DIN 11095
13. *Request for Permit Modification, Capital Improvement Project, Stoney Mountain Road Landfill, Henderson County, North Carolina, Permit # 45-04-T*. Prepared for Henderson County. Prepared by McGill. October 4, 2010. DIN 11970.
14. *Permit modification for 45-04T Attachment 3, Part I, Condition No. 4 of the permit*. Prepared by Henderson County. December 8, 2010. DIN 12377.

**PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY**

<b>Henderson County, N.C., Register of Deeds</b>			
Book	Page	Acreage	Grantee
1029	73	4.62	Henderson County
1006	097	0.42	Henderson County
1029	073	0.53	Henderson County

<b>Henderson County, N.C., Register of Deeds</b>			
1019	459	0.39	Henderson County
1029	073	0.94	Henderson County
0613	175	5.78	Henderson County
0554	171	6.4	Henderson Co. Stoney Mtn. Activity Center
0450	127	0.41	Henderson Co. Humane Society Inc.
1055	631	6.97	Henderson County; Board of Commissioners
1381	308	6.96	Henderson County
0660	017	37.6	Henderson County Board of Commissioners
Parcel Number	9904095	61.89	Henderson Co. Landfill
0894	311	12.03	Henderson Co. Board of Commissioners
		144.94	Total Site Acreage

**PART IV: GENERAL PERMIT CONDITIONS**

1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule 15A NCAC 13B .0201(d), a solid waste management facility permit shall have two parts: a Permit to Construct and a Permit to Operate. The Permit to Construct must be implemented in accordance with Attachment 2 of this permit. The Permit to Operate must be implemented in accordance with Attachment 3 of this permit.
2. The persons to whom this permit is issued (“permittee”) are the owners and operators of the solid waste management facility.
3. (Intentionally blank)
4. (Intentionally blank)
5. By receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.
6. Operation of this solid waste management facility must be in accordance with the Solid Waste Management Rules, 15A NCAC 13B, Article 9 of the Chapter 130A of the North

Carolina General Statutes (NCGS 130A-290, et seq.), the conditions contained in this permit; and the approved plan. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition.

7. This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in Attachment 1, "List of Documents for Approved Plan," and which constitute the approved plan for the facility. Where discrepancies exist, the most recent submittals and the Conditions of Permit shall govern.
8. This permit may be transferred only with the approval of the Section, through the issuance of a new or substantially amended permit in accordance with applicable statutes and rules. In accordance with NCGS 130A-295.2(g) the permittee shall notify the Section thirty (30) days prior to any significant change in the identity or business structure of either the owner or the operator, including but not limited to a proposed transfer of ownership of the facility or a change in the parent company of the owner or operator of the facility.
9. The permittee is responsible for obtaining all permits and approvals necessary for the development of this project including approval from appropriate agencies for a General or Individual NPDES Stormwater Discharge Permit. Issuance of this permit does not remove the permittee's responsibilities for compliance with any other local, state or federal rule, regulation or statute.

*- End of Section -*

## **ATTACHMENT 2**

### **CONDITIONS OF PERMIT TO CONSTRUCT**

#### **PART I – TRANSFER FACILITY CONSTRUCTION CONDITIONS**

1. This permit authorizes construction at the transfer facility in accordance with the approved plans, Attachment I, Part II. Any revision or modification to these plans shall be submitted to the NC Solid Waste Section (Section) for review and approval prior to installation, construction or implementation of the change.
2. The initial, substantial, construction authorized by this Permit to Construct must commence within 18 months from the issuance date of this permit. If substantial construction does not begin within 18 months from the issuance date of this permit, then the permit to construct shall expire. Substantial construction includes, but is not limited to, issuance of construction contracts, mobilization of equipment on site, and construction activities including installation of sedimentation and erosion control structures. The

permittee may reapply for the permit to construct prior to the expiration date. The re-application will be subject to the statutes and rules in effect on that date and may be subject to additional fees.

3. An approval to operate by the Section is required prior to commencement of operations at the referenced transfer facility. The following requirements shall be met prior to issuance of an approval to operate:
  - a. A site inspection shall be made by a representative of the Section.
  - b. Construction must be completed in accordance with the approved plan. A certification letter stating that the facility and related infrastructure was constructed in accordance with the approved plan shall be submitted to the Section by the Project Engineer who shall be a North Carolina registered professional engineer.
  - c. Three (3) copies of the construction record (As-built) drawings shall be submitted to the Section for filing and records.
4. A representative of the Section shall notify the Permitting Branch Supervisor in writing, either by letter or e-mail, that the conditions have been met. The owner and operator shall be copied on the correspondence. The notification shall suffice as permission to operate as of the date of the notification.
5. Pursuant to the NC Solid Waste Management Rule (Rule) 15A NCAC 13B .1626(5) burning of land-clearing debris generated on site as a result of construction activities requires approval by the Section prior to initiating the burn. In addition, the Division of Air Quality and local fire department must approve the activity prior to burning.

#### Erosion and Sedimentation Control Requirements

7. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit during the service life of the facility.
8. All earth disturbing activities must be conducted in accordance with the Sedimentation Pollution Control Act of 1973 (15 NCAC 4) and consistent with any other local, state or federal requirements.
9. Facility construction, operations or practices must not cause or result in a discharge of pollution, dredged material, and/or fill material into waters of the state in violation of the requirements under Sections 401 and 404 of the Clean Water Act, as amended.
10. Modifications to the approved sedimentation and erosion control activities require approval by the North Carolina Land Quality Section. The Section must be notified of any sedimentation and erosion control plan modifications.

### ATTACHMENT 3

#### CONDITIONS OF OPERATING PERMIT

##### PART I: OPERATING CONDITIONS

1. The Permit to Operate shall expire **March 21, 2011**. Pursuant to 15A NCAC 13B .0201(g), no later than **December 21, 2010**, the owner or operator must submit a request to the Section for permit review and must update pertinent facility plans including, but not limited to, the facility operation and waste screening plans.
2. The facility is permitted to receive solid waste as defined in NCGS 130A -290 (35).
3. The facility must meet the requirements of 15A NCAC 13B.0105. In addition, the following, at a minimum, must not be accepted at the facility; hazardous waste, liquid wastes, regulated medical waste, sharps not properly packaged, regulated-asbestos containing material as defined in 40 CFR 61, PCB waste as defined in 40 CFR 761.
4. This facility is permitted to receive municipal solid waste generated within Henderson County. Waste must be transported for disposal to the **Upstate Regional Landfill, 868 Wildeat Road, Enoree, South Carolina**. Proposed changes to the service area and/or the disposal facility must be approved by the Section and will constitute a permit modification and be subject to the applicable permitting fee.
5. The permittee must not knowingly dispose of, or accept for transfer for subsequent disposal, municipal solid waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of municipal solid waste from disposing of that type or form of municipal solid waste.
  - b. Requires generators or collectors of municipal solid waste to recycle that type or form of municipal solid waste.
6. A responsible individual trained and certified in facility operations must be on-site at all times during all operating hours of the facility, in accordance with G.S. 130A-309.25.
7. The permittee must develop, and use, a training and screening program at the facility for detecting and preventing unauthorized wastes from being accepted at the facility. At a minimum, the program must include:
  - a. Random inspections of incoming loads or other comparable procedures.
  - b. Records of all inspections.
  - c. Training of personnel to recognize hazardous, liquid and other excluded waste types.

8. The facility must not cause nuisance conditions.
  - a. The tipping floor and transfer trailer loading area must be maintained in a clean, sanitary condition at all times and must be cleaned at least daily in accordance with the approved Operational Plan.
  - b. Waste must only be deposited on a "tipping floor" or directly into a transfer container. Waste must not be stored on the "tipping floor" after operating hours.
  - c. Waste may be stored on-site, in leak proof transfer trailers, with watertight covers, a maximum of 24 hours except that a minimal amount of waste may be stored for a maximum of 72 hours when the facility is closed during a weekend or holiday. Storage of the waste must not cause any nuisance, such as odor or attraction of vectors.
  - d. Effective vector control measures must be applied at all times to control any potential vectors including flies, rodents, insects, and other vermin.
  - e. Control measures must be utilized to minimize and eliminate visible dust emissions and blowing litter.
    - i) Fugitive dust emissions are prohibited.
    - ii) Windblown materials must be collected by the end of the day and no windblown material may be allowed to leave the facility boundary.
9. All water that comes in contact with solid waste, including vehicle wash-down water, is leachate and must be captured and properly treated before release to the environment.
  - a. The leachate control system, such as floor drains, leachate collection devices, sanitary sewer connections and leachate storage tanks, must be operational during facility operations.
  - b. The tipping floor must drain away from the building entrance and into the leachate collection system.
10. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated under 15A NCAC 4.
11. Copies of this permit, the approved plans and all records required to be maintained by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.
12. The permittee must maintain a record of the amount of solid waste received at the facility, including daily records of waste received and origins of the loads. Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.

13. On or before August 1 annually, the Permittee must submit an annual facility report to the Solid Waste Section, on forms prescribed by the Section.
  - a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
  - b. The annual facility report must list the amount of waste received in tons and be compiled:
    - i) On a monthly basis.
    - ii) By county, city or transfer station of origin.
    - iii) By specific waste type.
    - iv) By receiving disposal facility.
    - v) By diversion to alternative management facilities.
  - c. The completed report must be forwarded to the Regional Environmental Specialist for the facility by the date due on the prescribed annual facility report form.
  - d. A copy of the completed report must be forwarded to each county manager for each county from which waste was received at the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Environmental Specialist by the date due on the prescribed annual facility report form.

## PART II: MISCELLANEOUS SOLID WASTE MANAGEMENT CONDITIONS

### General Conditions

14. Wastes received and product stored shall be maintained in reasonably sized piles with adequate fire breaks and lanes in accordance with the approved operational plans and the pertinent rules.
15. Surface water shall be diverted from all operational and storage areas to prevent standing water in operational areas and under or around storage piles. Water that comes in contact with solid waste shall be contained on-site or properly treated prior to discharge.
16. These areas shall be operated and maintained with sufficient dust control measures to minimize airborne emissions and to prevent dust from becoming a nuisance or safety hazard.
17. These areas shall be operated and maintained in a manner so as to minimize odors, prevent the creation of a nuisance, potential health hazard, or a potential fire hazard.
18. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, or vermin.

19. The facility must manage all operations according to all applicable statutes and rules of the State of North Carolina.

Operational Conditions – White Goods

20. The facility is permitted to receive white goods as defined in North Carolina General Statute Article 9, Chapter 130A-290(44).
21. The facility must manage white goods according to the Operation Plan included in Attachment II, "List of Documents for the Approved Plan". This document is included in the approved plan. Any revisions to the approved plan shall be approved by the North Carolina Division of Waste Management (DWM), Solid Waste Section, prior to implementation.
22. White goods collection areas shall provide for the proper removal of chlorofluorocarbon refrigerants.

Operational Conditions – Tires

23. The facility is permitted to receive tires and scrap tires as defined in North Carolina General Statute Article 9, Chapter 130A-309.53(6) & (7).
24. Scrap tire collection areas shall be operated in accordance with the requirements of 15A NCAC 13B, Rule .1107.
25. The facility must manage tires according to the Operation Plan included in Attachment II, "List of Documents for the Approved Plan". This document is included in the approved plan. Any revisions to the approved plan shall be approved by the North Carolina Division of Waste Management (DWM), Solid Waste Section, prior to implementation.

Operational Conditions – Household Hazardous Waste (HHW)

26. This permit is for operation of a Permanent Household Hazardous Waste Collection Unit.
27. This permanent household hazardous waste collection unit is permitted to receive household hazardous waste (HHW) generated by homeowners and conditionally exempt small quantity generators of Henderson County. Unacceptable HHW that shall not be collected at this facility includes radioactive waste, explosives, and infectious waste.
28. Document number 11 of Attachment 3, "Approved Documents", is included in the approved plan. Any revisions to the approved plan shall be approved by the North Carolina Division of Waste Management (DWM), Solid Waste Section, prior to implementation.
29. This facility shall conform to all operating procedures in the approved plan, 15A NCAC 13B .0400, and the current Section policies and guidelines for HHW Collection Facilities.

30. Household Hazardous Waste Identification Number **NCPH0450801** shall be used to ship wastes off site for recycling, treatment or disposal.
31. The permittee shall maintain records for the amount of HHW received at the facility and the amounts shipped off-site for recycling, treatment, and disposal. Records must be compiled on a monthly basis and maintained at the facility for inspection upon request by Solid Waste Section personnel.
32. On or before August 1 of each year, the permittee shall report to the Solid Waste Section, the amount of HHW waste (in pounds) received at this facility and the amounts shipped off-site for recycling, reuse, and/or disposal. The reporting period shall be for the previous year, beginning July 1 and ending June 30.
33. A copy of this permit and the approved plan shall be maintained at the facility. Copies of this permit shall be forwarded to the local fire department, local hospitals, and other appropriate emergency agencies.

*- End of Permit Conditions -*

**APPENDIX E**

Henderson County Household Hazardous Waste Facility  
Operations Plan

.....

# **Henderson County Household Hazardous Waste Facility Operations Plan**

## **1.0 Introduction**

The purpose of this plan is to define a standard operations procedure for Henderson County Landfill to operate an on-site, Household Hazardous Waste (HHW) program. This plan should be utilized by personnel that have been trained to a minimum, at the **operations level** according to the OSHA 1910.120 standard also known as the Hazardous Waste Operations and Emergency Response (HAZWOPER) standard. This involves undergoing twenty four hours of hands - on and classroom training. Please see the Contingency Plan (Appendix A)

## **2.0 Facility Preparation**

Prior to the scheduled HHW collection, Henderson County personnel should complete the following checklist;

- Check drive thru and post signage such as No Smoking, Stay in your vehicle...
- Set up tables and cover them in plastic.
- Place fire extinguishers under tables.
- Place the emergency air horn (evacuation signal) under table.
- Open storage building and inventory contents.
- Organize work area. Example, locate drums in a convenient area for processing and make sure they are labeled.
- Make safety supplies available in a convenient area. Safety supplies such as gloves, Tyvek aprons/suits/coats, safety glasses...
- Conduct site safety meeting including a review of emergency facilities and procedures.

## **3.0 Receiving Waste**

Personnel should unload wastes onto tables in the receiving area. This process should remain organized in a manner that prevents incompatible chemicals from mixing, and minimizes potential exposure, slips, trips, falls and spills. If the work area becomes too cluttered personnel should stop vehicle unloading until wastes are segregated and placed in appropriate containers and safe working conditions have been restored. Personnel unloading vehicles should look for labels on containers and if a container is not labeled ask the resident about the contents. Vehicle unloaders should look for leaking containers and provide containment for leaking containers immediately.

Spills associated with leaking containers should be cleaned up immediately. **Any containers that are unknown, in bulging containers, have crystallized or appear to be unstable should be brought to attention of the chemist immediately. Do not move these items prior to having the chemist check them.** Once the onsite chemist has determined the best procedure for processing this waste personnel can resume normal work practices. Personnel Protective Equipment (PPE) should be as follows:

- Unloaders Level D
- Segregators Level D with Level C available
- Chemist Level D with Level C available

### **Personal Protective Equipment**

Personal Protective Equipment (PPE) is necessary when handling hazardous materials to prevent skin contact with harmful substances. Normally, contractor personnel will not be opening containers, so airborne exposures will be minimal. However, PPE is needed to protect persons from spills, broken containers and sharp objects. PPE that is to be worn by contractor personnel are specified according to the Health & Safety Plan. The following states the typical PPE which would be utilized at household hazardous waste collection programs;

#### **Persons Removing Waste from Cars or Pickup Trucks**

- White Tyvek- suits/coveralls
- Safety glasses with side shields
- Chemical resistant gloves with outer leather or other puncture resistant gloves
- Safety shoes
- Traffic vest

NOTE: Depending on the substances being handled, a higher level of PPE including chemical resistant coveralls and appropriate respirators may be required.

#### **Persons Opening containers**

- Chemical resistant coveralls (polyethylene-coated type or equivalent), or splash aprons
- Polyurethane or other chemical resistant safety boots.
- Respirator with organic vapor cartridge and high efficiency particulate air (HEPA) filter if necessary (as determined by the waste material being handled)
- Chemical resistant inner glove and outer puncture-resistant (leather glove)

### **Persons Segregating Waste from Vehicles**

- Safety glasses
- White Tyvek suits/coveralls
- Safety shoes/ boots
- Respirator (as required for splash or respiratory hazards) Chemical resistant inner glove and puncture resistant outer glove

### **Persons Lab Packing Household Hazardous Waste**

- Safety glasses (with goggles or full-face shield when necessary)
- White Tyvek or chemical resistant coverall
- Safety boots
- Respirator (as required)
- Chemical resistant inner glove and puncture resistant outer gloves

## **4.0 Segregating Waste**

Personnel are unloading wastes onto tables in the processing area and helping segregate these items during the unloading process. There will be a person working at the tables in this area whose job is segregating and packing the wastes as they come into the facility. The wastes should be segregated by DOT hazard class. Please see the Chemical Incompatibilities Chart Appendix B and the Household Hazardous Substance and Primary Hazards List Appendix C. Utilize the charts in the appendices to aid in the following categorization strategy;

- Flammable cubic yard boxes include: 1 gallon containers (or smaller) of adhesives, glues, cement, oil based - paint, paint thinner, sealants, polishes, and strippers. The box should be labeled **OIL BASED PAINT**.
- Non-flammable cubic yard boxes include: 1 gallon (or smaller) containers of; latex paint, latex based sealants, coatings, strippers, polishes, deck cleaner, glues and adhesives. The box should be labeled **LATEX PAINT**. **Non-flammables can go in flammable boxes because it is exempt waste but, flammables are regulated wastes and CANNOT go into the non-flammables boxes.**
- 55 gallon open top Poly drums are suitable for corrosives. The acid drum will contain products with a pH of 0-7 such as muriatic acid. It is important to pH products as they are received and write the pH on the container. Place acids in the acid drum as they are received. Label the drum **ACIDS pH 0-7**. Acids should be segregated into **Organic** and **Inorganic** and should not be placed in the same container.
- 55 gallon open top Poly drums suitable for corrosives. The Alkali drum will contain products with a pH of 8-14 such as oven cleaner and other household cleaners and strippers. It is important to pH products as they are received and write the pH on the

container. Place alkalis in the alkali drum as they are received. Label the drum **ALKALI pH 8-14**.

- The North Carolina Department of Agriculture (NCDA) will take all pesticides, insecticides, rodenticides and lawn care products that have an EPA Registry number free on scheduled dates. Keep these items on the shelves in the storage building and in containers in that same room. Segregate these into liquids and solids. NCDA will not accept fertilizers through this program.
- Reactives and Oxidizers will be handled as they are received in order to assure secondary containment and appropriate storage. Photo chemicals and swimming pool products usually fit into these categories.
- Aerosol cans should be placed into 55 gallon steel open top drums as they are received. This drum should be labeled **FLAMMABLE AEROSOLS**.
- Small flammable containers (16 ounce or less) can be placed in a 55 gallon steel drum labeled **FLAMMABLE LOOSEPACK**. These items may include touch up paints, glues, caulks, epoxies, polishes, waxes, gasoline additives, inks, and various chemicals.
- A small 5 gallon Poly lab pack should be designated for mercury wastes such as thermometers and thermostats. This container should be labeled **MERCURY**.
- Fluorescent light bulbs should be placed in cardboard boxes labeled **UNIVERSAL WASTE LAMP(S)** and kept **CLOSED** except when adding or removing wastes (this is true for 4' & 8' lamps). Compact fluorescents should be placed into a 5 gallon Poly lab pack and labeled **UNIVERSAL WASTE LAMP (S)** also.
- Used oil will be collected or poured in the tank labeled **USED OIL**.
- Used antifreeze should be collected or poured in 55 gallon steel drums labeled **USED ANTIFREEZE**.
- Used automotive and recreational vehicle batteries should be collected on pallets, shrink wrapped and stored in a manner that prevents potential release into the environment.
- Rechargeable batteries should be segregated into lithium ion, nickel/metal hydride, or cadmium categories. Each category may be stored in a 6 gallon lab pack that is appropriately labeled.

Unknown wastes that are received will undergo field screening tests to determine their classification. In the event that field screening measures are not adequate for identification purposes the waste will remain on-site, isolated in a container by itself. If it is necessary for off-site analysis to be performed, contractor personnel will prepare samples for chemical analysis. Contractor personnel will maintain a chain of custody and deliver samples to a state certified laboratory for analysis. Once the analytical results are received, the material will be properly packaged for transport and scheduled for appropriate disposal.

Partially filled containers will remain on-site until adequate amounts are collected and properly packaged for transport. At the end of each collection event all materials will be properly packaged and safely stored in accordance with state and local fire codes until the next collection or transportation whichever comes first.

If pumping, pouring, or bulking of wastes is required, grounding and explosion-proof equipment will be used as needed. For lab pack and bulk packaged waste, all containers will meet DOT specifications, as far as type, and size most appropriate for the specific waste type and planned method of treatment or disposal. Wastes will be packed in either fiber, plastic, or steel containers of open or closed-head types in sizes ranging from 5-gallon pails to 1 cubic yard boxes.

## **5.0 Packing and Labeling**

The Project Manager for your contractor will assist with packing, labeling, transporting, placarding, manifesting and disposal. When packing waste remember that waste must be packed in a suitable DOT - approved container that is compatible with the waste. When packing wastes the following containers will be used;

- DOT - approved for shipping hazardous materials, triple walled cubic yard boxes with poly liners.
- DOT - approved open top steel drums with bungs, ring and gasket.
- DOT - approved open top poly drums with bungs, ring and gasket.

The container will have at least one 4" X 4" DOT diamond indicating the appropriate hazard class. If the container contents have more than 1 hazard then there will be more than 1 label with the primary hazard label being placed above the secondary hazard. For example acetic acid is an organic acid that is both acidic and flammable. A drum of acetic acid would have a primary hazard of corrosive and a secondary hazard of flammable. When labeling this drum the corrosive label would be first and on top then the flammable label would be placed beneath and to the right. Please see the DOT Hazard Classes listed below;

- Class 1 Explosives
- Class 2 Flammable, Non-flammable and poisonous Gases
- Class 3 Flammable and combustible liquids
- Class 4 Flammable solids, spontaneously combustible materials, and dangerous when wet materials.
- Class 5 Oxidizers and organic peroxides
- Class 6 Poisonous materials and infectious substances.
- Class 7 Radioactive materials
- Class 8 Corrosive materials.
- Class 9 Miscellaneous hazardous materials.

The majority of the waste coming into the facility will be class 3 flammable and combustible liquids class 6 poisonous materials and infectious substances and class 8 corrosive materials. The operations permit issued by the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Waste Management (DWM) forbids the acceptance of explosives, Biohazardous waste, and radioactive materials. The wastes will also have a Non-Hazardous Non-Regulated label or a Non-Hazardous Waste label on each container to the left of the DOT hazard class diamond. The Non-

Hazardous Waste label is a 6" X 6" square that includes the waste description and generator information such as address, EPA ID # and phone number. The waste description should include the name such as oil based - paint; DOT hazard class, packing group, and Emergency Response Guidebook (ERG) guide number. This information will also be required on the manifest.

For any necessary lab packing, wastes will first be segregated according to DOT hazard class, then by chemical compatibility and by acceptance criteria of specific waste recycling, treatment, or disposal facilities. An absorbent material such as vermiculite will be used to surround inner containers, prevent breakage, absorb any leaking materials, and prevent release from the outer shipping container. Each inner container will be recorded on container content forms, providing a complete report of the contents of any drum.

Whether lab pack or bulk, the filled drums will be closed, labeled, and marked in accordance with DOT and EPA shipping requirements, and the proper information will be recorded on the manifest. The generator's notification and certification will also be prepared as required under the land-ban regulations if applicable.

## **6.0 Storage and Accumulation**

The Henderson County Permanent HHW Collection Facility will be designed and constructed to ensure safe and efficient operation. According to state guidance concerning the storage of ignitable and reactive wastes, the structure will be located at least 50 feet from the facility's property line. The storage building will be segregated from other operational areas of the solid waste facility in order to minimize damage in the event of a fire. The location of the HHW facility relative to other operational areas is shown on the enclosed map.

As required for safety and environmental protection the structure will be:

- Designed to contain spills and leaks
- Covered to exclude rainwater
- Secured to control access
- Constructed in accordance with all applicable National Fire Protection Association codes

The storage building will be designed to accommodate the temporary accumulation of several classes of hazardous materials.

In accordance with state requirements for temporary storage, the date upon which each period of accumulation begins will be clearly marked and visible on each container. A complete inventory log of materials will be kept on-site.

Storage time may vary according to the volume of wastes received. The contractor will schedule removal of waste as necessary to minimize expense while still complying with the applicable regulations and safety considerations. Wastes will not be stored longer than 180 days without written permission from the NC DENR Division of Solid Waste Management.

## **7.0 Provisions for Ignitable, Reactive, or Incompatible Wastes**

Facility and contractor personnel will use special precautions to protect ignitable or reactive wastes from sources of ignition or reaction. These wastes will be separated from other wastes being stored in the collection facility. Any ignitable or reactive wastes will be protected from possible sources of ignition or reaction, including but not limited to: open flames, hot surfaces, frictional or radiant heat, and spontaneous ignition [e.g., from heat-producing chemical reactions). Any tools used for equipment maintenance in areas containing ignitable wastes will be of a non-sparking type.

Maintenance activities such as welding or cutting, which potentially could generate sparks or open flame, will be allowed only by special permission of the contractor's Project Supervisor or designee. This permission will be granted only after the area has been inspected and tested for flammable vapors, and all ignitable or reactive materials have been removed or protected.

Policy will prohibit smoking or open flame within or near the storage building. "No Smoking" signs will be placed at the entrance to unloading and storage areas and will be conspicuously placed wherever there is a direct hazard from ignitable or reactive wastes. Areas in which ignitable materials are stored will require the use of explosion-proof equipment and lighting. Proper grounding will be maintained in order to dissipate any accumulation of static charges generated by the movement of hazardous liquids in pouring or bulking operations.

Regarding incompatible wastes, the following special provisions apply:

- Incompatible wastes will not be placed in the same container;
- Hazardous wastes will only be placed in new, unused containers or in containers cleaned and reconditioned by a licensed manufacturer (and labeled as such);
- A storage container holding a hazardous waste that is Incompatible; with any waste or other materials stored in close proximity will be separated from them by containment structures such as built-up curbs or will have secondary containment such as drip pans constructed of steel or polyethylene.

As a general rule, the handling and storage of all hazardous wastes (especially any that are ignitable, reactive, or incompatible) will be conducted so that it does not:

1. Generate extreme heat or pressure, fire or explosion, or violent reaction;
2. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

3. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
4. Damage the structural integrity of the device or facility containing the wastes; or
5. Threaten human health or the environment.

The procedures to comply with these provisions depend upon:

- Proper identification of waste materials as they are received;
- Segregated storage according to compatible hazard class; and
- No co-mingling, bulking, or combining of incompatible hazard classes.

## **8.0 Manifesting and Transporting**

HHW is exempt and should be manifested using a Non-Hazardous Waste manifest. The manifest should include the following information:

- Generator's ID number (this is the facility's EPA ID #).
- Emergency response phone number
- Waste tracking number
- Generator's name and mailing address
- Generator's site address if it is different from the mailing address.
- Transporter name and EPA ID #
- Designated facility name, site address, phone # and facility EPA ID #
- Waste shipping name and description (this will include DOT hazard class, packing group and ERG Guide #).
- The number of containers for each description, container type, total quantity, and the unit weight/volume.
- Any special handling instructions
- **The Generator's Certification** including signature
- Transporter signature
- Designated facility information including signature and certification of receipt of materials

Once the waste has been received by the designated facility and the manifest has been signed by the facility certifying receipt the receiving facility will send a signed return manifest back to the County. This return manifest must be received within 45 days or the County must file an exception report with the NC DENR HWS which will start an investigation of the disposition of the waste. **For this reason it is strongly recommended that in the event the County has not received a signed return manifest from the receiving facility within 30 days they should call the facility and make arrangements to get the appropriate documentation from them.**

Once the return manifest has been received it should be stapled to the initial manifest and kept on file for a minimum of 3 years.

When transporting the waste you must use a licensed hazardous waste transporter. The facility generating the waste is equally liable for the waste during transportation as the transporter. Facility personnel will need to verify that all of the information on the manifest is accurate and that the truck is placarded correctly on all 4 sides before allowing the transporter to leave the facility.

## **9.0 Unacceptable Waste**

### **Radioactive Waste**

Smoke detectors are the most likely household waste to contain radioactivity. Residents will be advised by government employees to mail the used smoke detector back to the manufacturers if they are still in business. If the company is no longer in business, then the Nuclear Regulatory Commission recommends landfilling the smoke detector in a municipal solid waste landfill.

Other household wastes are unlikely to have any measurable radioactivity except static eliminators from record players which have a very short life. The Radiation Protection Office of University of North Carolina recommends landfilling these when they become unusable.

### **Explosives**

If explosives are delivered to the facility, the first step will be to immediately assess the possible danger and close the site if necessary until these materials are removed. Henderson County Sheriff's Department will handle any small arms ammunition including rifle, shotgun, and handgun. For any military type explosives, the Sheriff's Department can be contacted to handle explosives.

### **Infectious Waste**

The County will receive sharps if they are packaged in approved collection boxes, and will contract for collection and disposal at an approved facility.

Other, non-sharp, unregulated or regulated medical waste that may show up at the facility may be received by the County, on a case by case basis, and collected and transported by a contractor to be disposed of at an approved medical waste facility. Regulated medical waste will either be treated through steam sterilization, incineration per the regulations of the State, or microwaving which is a new technology, that the State allows for medical waste.

**Contingency Plan for the Henderson County Permanent  
Household Hazardous Waste Collection Facility**

**Responsible Agency:** Henderson County Solid Waste  
802 Stoney Mountain Road  
Hendersonville, NC 28792

**Facility Address:** Henderson County Landfill  
Same As Above

**Emergency Coordinators** (listed in the order they should be contacted):

**Primary Contact:** Director of Engineering and Facilities Services  
Gary Corn  
802 Stoney Mountain Road  
Hendersonville, NC 28791  
(Ph) 828-697-4505  
(Cell) 828-674-0242

**Secondary Contact:** Solid Waste Manager  
Marcus Jones  
213 1<sup>st</sup> Avenue East  
Hendersonville, NC 28792-5097  
(Ph) 828-694-6560  
(Cell) 828-699-9276

**Additional Contacts:** Recycling Coordinator  
Adrienne Autcalt  
802 Stoney Mountain Road  
Hendersonville, NC 28791  
(Ofc) 828-694-6524

Department of Environment and Natural Resources,  
Hazardous Waste Section  
Spring Allen  
2090 US Hwy # 70  
Swannanoa, NC 28778  
Ph: 828-299-4500

Contractor Operations Manager  
Denese Ballew  
Mountain Environmental Group  
Project Manager  
1560 Pisgah Drive  
Canton, NC 28716  
(Ph) 828-648-5556 (cell) 828-734-1374  
After Hours/Emergency 1-800-261-0031

### **Contingency Plan Purpose and Implementation**

This plan is designed to minimize hazards to human health and the environment from fires, explosions, or any unplanned, sudden or non-sudden release of hazardous constituents to air, soil, or surface water. The provisions of this plan will be carried out immediately whenever there is an emergency at the facility.

### **Contingency Plan Contents**

This plan contains emergency procedures for four types of incidents: spills, fires, explosions, and non-project-related disasters (as defined below).

- A spill is an unintentional release of materials in a quantity that is sufficient to cause environmental or personal harm.
- A fire is the ignition or conflagration of either waste materials or paper and wood trash.
- An explosion is a sudden detonation of waste materials
- Non-project-related disasters include unlikely events such as tornadoes, earthquakes, floods, or bomb threats.

### **Facility Staffing and Emergency Responsibilities**

The Henderson County Permanent HHW Collection Facility will be operated largely through existing County and Government staff. Contractors will be used for some over-packing, transport, and disposal/recycling of materials. Local government representatives (from the responsible agency listed above) intend to receive appropriate training prior to undertaking related tasks. In the event of an emergency, all appropriately trained personnel who are available (possibly including both contractor personnel and local government representatives) would participate in the response as directed by the designated emergency coordinator (Gary Corn). Accordingly, throughout the remainder of this plan, the term "personnel" will be used to refer to appropriately trained representatives of both groups.

### **Arrangements with Local Authorities**

Local government representatives from the responsible agency will make arrangements to familiarize local authorities with all pertinent aspects of the facility and its operations. In Henderson County, primary emergency authority is assigned to Henderson County Emergency Management, with other agencies in supporting roles. The responsible agency will therefore

work with this Emergency Management office to ensure that all appropriate local authorities are properly prepared. In this case, Park Ridge Hospital and/or Pardee Hospital may be utilized as needed.

### **Contingency Plan Revisions**

This contingency plan will be kept at the facility and will also be distributed to local authorities (as described above). The contingency plan will immediately be revised whenever:

- a) The plan fails in an emergency;
- b) There are significant changes in facility design, construction, operation, or maintenance;
- c) The list of emergency contacts is changed;
- d) The list of emergency equipment is changed.

### **Emergency Response Materials and Equipment**

A variety of emergency response materials and equipment will be kept at the facility. These materials will include some or all of the following, as deemed necessary by the Coordinator or Project Supervisor for this facility: spill control equipment (described in a subsequent section), decontamination solutions, fire extinguishers, personnel protective equipment, emergency eyewash station, and first aid kit.

### **Designation of Emergency Coordinator**

At all times, there will be at least one local government representative either on the facility premises or on call with the responsibility for coordinating all emergency response measures. This coordinator will be familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, local and characteristics of wastes to be handled, location of all facility records, and facility layout. In addition, this person will have the authority to commit the resources needed to implement the contingency plan. The emergency coordinator will coordinate all emergency response activities with the contractor's Project Supervisor or designee and will supervise the implementation of emergency procedures described in the following sections of this plan.

### **Spill Response Equipment and Procedures**

Normal spill prevention techniques will be used at the facility and standard spill control equipment will be available. This equipment will include some or all of the following: bulk absorbents, over-pack drums, absorbent booms or pillows, polyethylene liners, containers for contaminated absorbent, non-sparking tools, and decontamination products.

In the event that a release occurs, the following procedures will be adhered to:

- 1) The individual who notices the spill will alert other personnel by voice or three blasts of an air horn.
- 2) All personnel will stop work and secure their areas of responsibility.

- 3) The emergency coordinator will direct all public participants to a safe area if necessary.
- 4) The emergency coordinator will identify the character, exact source, amount, and real extent of any released materials. The coordinator will assess the possible hazards to human health and the environment, considering both direct and indirect effects (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface-water runoff from water or any chemical agents used). The emergency coordinator will also determine the proper protective equipment needed and will monitor for leaks, pressure buildup, gas generation, or ruptures in equipment as appropriate.
- 5) If the release is serious enough to affect human health or the environment outside of the facility, the emergency coordinator will immediately contact local authorities and will also notify the National Response Center or the government official designated as the on-scene coordinator for the area. This report will include: name and telephone number of the reporter; name, address, and telephone number of the responsible agency; name, address, and telephone number of the facility; date and time of the incident; type of incident; name and quantities of materials involved; extent of injuries; and possible hazards to human health and the environment. If this level of notification becomes necessary, it is essential keep a record of the notification including the assigned Incident Number and the name of the Officer spoken to.
- 6) Personnel will be assigned to control the spill and prevent its spread or other complications. If necessary, personnel can be assigned to isolate storm drains and sewers. Personnel will don their protective equipment and take the appropriate steps for cleaning up the spill. Any incompatible materials located near the spill will be removed. A fire watch will be established and the local fire department will be notified. Reasonable measures will be taken to ensure that the problem does not recur or spread to other wastes.
- 7) If the emergency coordinator determines that outside assistance is needed, then appropriate calls will be made using the emergency phone list.
- 8) Once the spill is contained and cleaned up, any response equipment used will be decontaminated, inspected, and put back in service when returned to an acceptable condition.
- 9) If the emergency coordinator determines that a significant amount of wastes escaped from the facility's secondary containment structures, the facility's transportation and disposal contractor will take soil and/or surface-water samples to determine the extent of contamination of the area and possible remedial action.
- 10) The affected areas of the facility will not be placed in operation again until the responsible agency listed at the beginning of this plan has notified the appropriate authorities that the facility is once again functional.
- 11) The responsible agency will make a report of the incident in the operating record and will also notify the NC DENR's Division of Waste Management within 24 hours. A written report will be filed with the Division within 15 days, and it should include all the information listed in item 5 above, plus the estimated quantity and disposition of recovered material from the incident.

#### **Fire/Explosion Response Procedures**

Emergency procedures to be used in the event of a fire or explosion are as follows:

- 1) The individual who notices the fire or explosion will alert other personnel by voice or a long blast (at least 10 seconds) from an air horn.
- 2) All personnel will stop work and secure their areas of responsibility.
- 3) The emergency coordinator will alert the local fire department and will move public participants to a secure location.
- 4) Personnel will be assigned to contain and halt the fire unless an explosion is possible (in which case the emergency coordinator will call for evacuation). If the fire is chemical in nature or spreads to the chemical waste, personnel will don positive pressure self-contained breathing apparatus. Personnel will fight the fire using fire extinguishers and/or soil and absorbents. Water will generally not be used if the fire is due to the ignition of a flammable liquid because the water spray could cause spattering or allow the liquid to spread.
- 5) If the fire goes beyond the incipient stage and cannot be controlled with extinguishers, the emergency coordinator will notify appropriate authorities and prepare to evacuate the work area. Personnel will assist local responders when necessary. Such assistance may include helping to evacuate local residents; blocking off storm drains and berming water sources; removing all unnecessary personnel and vehicles from the area; and removing waste material, if possible.
- 6) If the fire or explosion is serious enough to affect human health or the environment outside of the facility, the emergency coordinator will immediately contact local authorities and will also notify the National Response Center or the government official designated as the on-scene coordinator for the area. This report will include: name and telephone number of the reporter; name, address, and telephone number of the responsible agency; name, address, and telephone number of the facility; date and time of the incident; type of incident; name and quantities of materials involved; extent of injuries, and possible hazards to human health and the environment.
- 7) Once the fire has been extinguished, then cleanup of the area will commence. During cleanup activities, the emergency coordinator will monitor for leaks, pressure buildup, gas generation, or ruptures in equipment as appropriate. If the fire was chemical in origin or spread to the waste area, all potentially contaminated cleanup materials will be disposed of as waste.
- 8) Further response to a fire will proceed according to steps 8 through 11 as described under the preceding spill response section of this contingency plan.

#### **Procedures for Non-Project-Related Disasters**

In the unlikely event of disasters such as floods, tornadoes, earthquakes, and bomb threats, the following procedures will be used:

- 1) The individual noticing the situation will notify other personnel by voice or long blast (at least 10 seconds) of an air horn.

- 2) All personnel will stop work and secure their areas of responsibility.
- 3) The emergency coordinator will alert the appropriate authorities and move personnel to a secure location. The affected area will be secured to prevent access.
- 4) If necessary, further procedures will be determined and implemented as appropriate given the specific nature of the emergency.

### **Evacuation Plans**

Whenever there is an emergency incident at the facility, the emergency coordinator will decide if evacuation is necessary. In making this decision, the emergency coordinator will consider various factors, including the following: a) potential for the fire and/or explosion to intensify or spread; b) potential for release of toxic fumes; and c) quantity of released material.

If evacuation of the facility is necessary, personnel will be immediately notified by voice or air horn. The following procedures will then be implemented:

- 1) All personnel will leave the facility as quickly as possible through the nearest exit and proceed directly to a designated assembly area at a safe distance from the facility. All site personnel will be accounted for. If any personnel are missing, attempts to find them will not involve endangering the lives of others. No personnel or vehicles will be allowed to re-enter the facility unless specifically authorized by the emergency coordinator. Normally, the only persons allowed to re-enter the facility will be the emergency response personnel.
- 2) After the emergency is over, re-entry will not be allowed until the emergency coordinator has determined that the facility is safe and has given appropriate notification to personnel.
- 3) Drills will periodically be held to practice these evacuation procedures and will be treated with the same seriousness as an actual emergency.

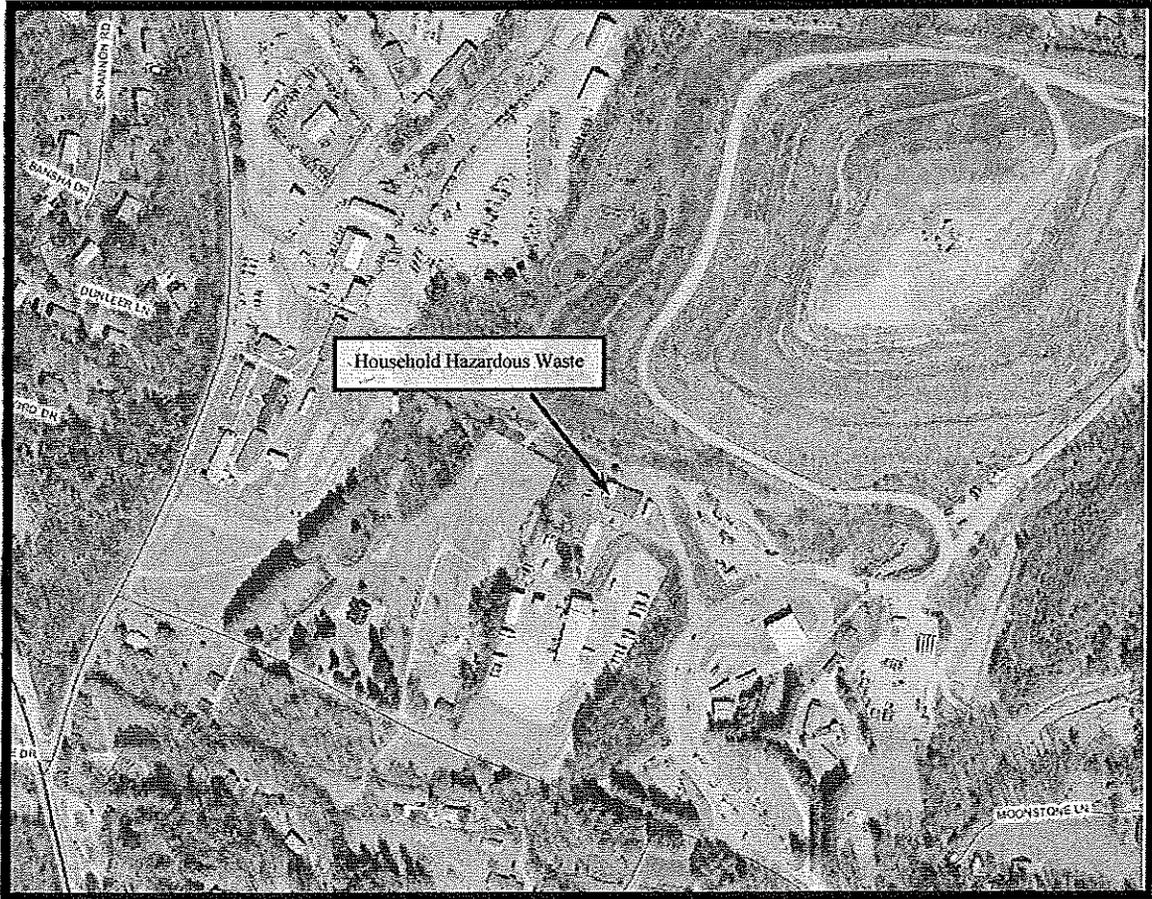
### **National or Regional Sources of Assistance**

- |     |                                       |                |
|-----|---------------------------------------|----------------|
| 1.  | Mountain Environmental Services, Inc. | (828) 648-5556 |
| 2.  | EPA (RCRA Superfund Hotline)          | (800) 424-9346 |
| 3.  | Project Manager (MES)                 | (828) 648-5556 |
| 4.  | Chemtrec (24 hours)                   | (800) 424-9300 |
| 5.  | Bureau of Explosives (24 hours)       | (202) 639-2222 |
|     | (Association of American Railroads)   |                |
| 6.  | CSX Transportation Railroad Emergency | (800) 232-0144 |
| 7.  | Communicable Disease Center           | (404) 633-5313 |
|     | (Biological Agents)                   |                |
| 8.  | National Response Center              | (800) 424-8802 |
|     | (Oil and Hazardous Substances)        |                |
| 9.  | DOT Office of Hazardous Operations    | (404) 305-6120 |
|     | DOT (Regulatory Matters)              | (202) 366-4700 |
| 10. | U.S. Coast Guard                      | (800) 424-8802 |
|     | (Major Incidents)                     |                |
| 11. | Pesticide Health Hotline              | (800) 858-7378 |

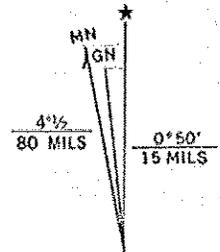
12. Carolina Poison Center

(800) 848-6946

Henderson County Household Hazardous Waste



2001 Aerial Photograph from Henderson County Tax (GIS) Office  
Scale as Shown

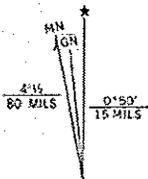
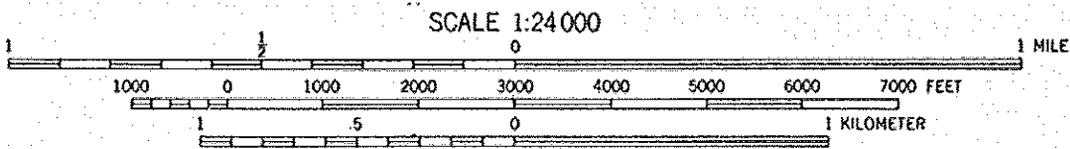
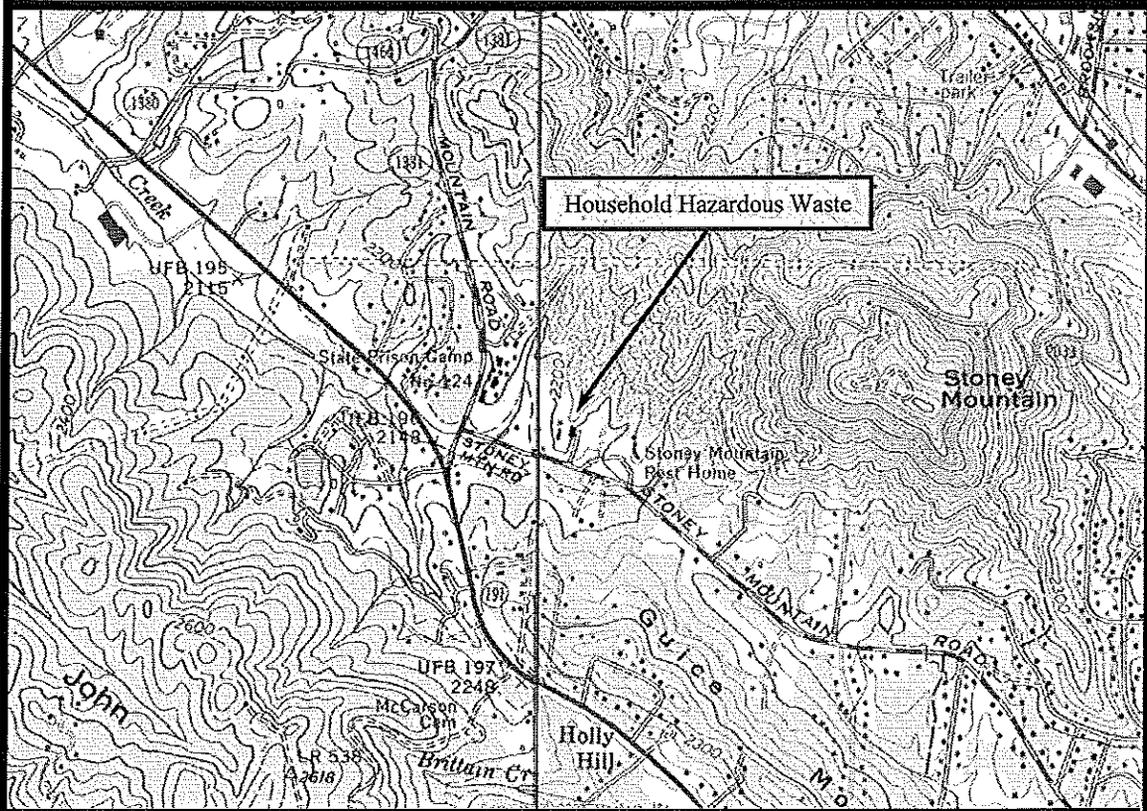


**Figure 2**  
Orthophotograph from Henderson County Tax Office  
Henderson County Household Hazardous Waste  
Hendersonville, NC



HORSE SHOE QUADRANGLE  
 NORTH CAROLINA  
 7.5 MINUTE SERIES (TOPOGRAPHIC) 193-SE

HENDERSONVILLE QUADRANGLE  
 NORTH CAROLINA-HENDERSON CO.  
 7.5 MINUTE SERIES (TOPOGRAPHIC) 202-SW



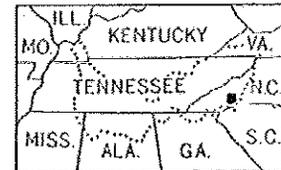
UTM GRID AND 1990 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

HORSE SHOE, N. C.  
 35082-C5-TF-024

1985  
 PHOTOREVISED 1991  
 DMA 4484 I SE - SERIES V842

HENDERSONVILLE, N. C.  
 35082-C4-TF-024

1965  
 PHOTOREVISED 1990  
 DMA 4554 IV SW - SERIES V842



QUADRANGLE LOCATION

**Figure 1**  
**Site Vicinity Map**  
 Henderson County Household Hazardous Waste Facility  
 Hendersonville, NC



**APPLICATION FOR  
 HOUSEHOLD HAZARDOUS WASTE IDENTIFICATION NUMBER**

A household hazardous waste I.D. number shall be required to ship collected materials off-site for treatment and/or processing.  
 Please check the appropriate box and fill in the blanks.

Temporary Event

Permanent Facility

**OPERATOR/CONTRACTOR**

Facility/Event Host	Henderson County Solid Waste	County	Henderson		
Contact Person	Will Sagar	Title	Solid Waste Manager		
Mailing Address	802 Stoney Mountain Road				
City	Hendersonville	State	NC	Zip	28792
Phone	828-694-6560	Fax	828-698-5154	E-mail	wsagar@hendersoncountync.org
On-Site Contractor	Mountain Environmental Group				
Contact Person	Denese Ballew	Title	Project Manager		
Mailing Address	1560 Pisgah Drive				
City	Canton	State	NC	Zip	28716
Phone	1-800-261-0031	Fax	828-648-1566	E-mail	dballew@mountainenvironmental.com

**TRANSPORTER**

Company Name	STAT INC	ID No.	NCD980799142		
Contact Person	Gary Sparks	Title	President		
Mailing Address	3062 Eli Lane				
City	Hudson	State	NC	Zip	28638
Phone	828-396-2304	Fax	828-396-2253	E-mail	statinc@charter.net

**DISPOSER/RECYCLER**

Company Name	Ecoflo	ID No.	NCD980842132		
Contact Person	Ray Strauss	Title	Account Manager		
Mailing Address	2750 Patterson Street				
City	Greensboro	State	NC	Zip	27407
Phone	1-800-999-6510	Fax	336-855-4137	E-mail	rstrauss@ecoflo.com

**COLLECTION DETAILS**

Physical Location of Event/Facility	802 Stoney Mountain Road Hendersonville, NC 28792
Date of Temporary Event (if applicable)	NA
Materials To Be Collected	Oil & Latex paint, paint related material, solvents, cleaners, fuels, pesticides, herbicides and insecticides
Materials To Be Recycled	All items that can be recycled or reused will be. Items such as farm protection products must be incinerated. Usually 98% recycled & 2% incinerated.
Additional Comments	

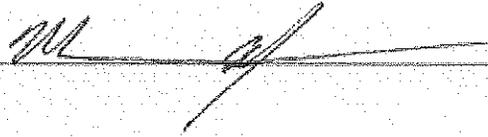
**CERTIFICATION OF OPERATOR/CONTRACTOR:**

I certify that the information supplied is accurate and correct to the best of my knowledge and belief, and that this facility will only accept household hazardous waste. I am authorized to make this request on behalf of the operator at the location given.

Name MARCUS A. JONES PE Title DIRECTOR

Company COUNTY OF HENDERSON

Signature



Date

5/22/00

**Purpose:** Application for household hazardous waste identification number. This number shall be used to ship collected materials off-site for treatment and/or processing.

**Distribution:** Mail completed original to the following address:

Division of Waste Management  
Solid Waste Section  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

**Contact:** Bill Patrakis (919) 508-8512

**Disposition:** This form shall be maintained in accordance with the standards of the Solid Waste Section's Records Disposition Schedule published by the North Carolina Division of Archives and History.

The Solid Waste Section shall assign an identification number upon receipt of application.

**\*Temporary Day -** Upon completion of a Temporary Collection day, a report on HHW collected, disposed, and recycled shall be returned to the Solid Waste Section.

**\*Permanent Site -** An annual report on HHW collected, disposed, and recycled shall be returned to the Solid Waste Section.

**SOLID WASTE SECTION USE ONLY**

Date Received: \_\_\_\_\_

Date Approved: \_\_\_\_\_

HHW ID Number: NC \_\_\_\_ H \_\_\_\_\_



### Chemical Incompatibility Matrix

	Acids, Inorganic	Acids, Oxidizing	Acids, Organic	Alkalis (Bases)	Oxidizers	Poisons, Inorganic	Poisons, Organic	Water Reactives	Organic Solvents
Acids, Inorganic			X	X		X	X	X	X
Acids, Oxidizing			X	X		X	X	X	X
Acids, Organic	X	X		X	X	X	X	X	
Alkalis (Bases)	X	X	X				X	X	X
Oxidizers			X				X	X	
Poisons, Inorganic	X	X	X				X	X	
Poisons, Organic	X	X	X	X	X	X			
Water Reactives	X	X	X	X	X	X			
Organic Solvents	X	X		X	X	X			

**APPENDIX F**

Site Specific Health and Safety Plan for  
Henderson County Household Hazardous Waste Facility

Scanned by	Date	Doc ID #
LY Frost	June 3, 2008	4620



RECEIVED  
May 30, 2008  
 Solid Waste Section  
 Asheville Regional Office

**SITE SPECIFIC HEALTH AND SAFETY PLAN  
 FOR  
 HENDERSON COUNTY HOUSEHOLD HAZARDOUS WASTE FACILITY**

Mountain Environmental Group  
 1560 Pisgah Drive  
 Canton, North Carolina 28716

This site specific Health and Safety Plan has been prepared for exclusive use at the Henderson County's HHW Facility for use by Henderson County personnel. The intended purpose of this Site Specific Health and Safety Plan is to establish personal protection standards and mandatory safety practices and protocol. This plan delineates responsibilities establishes standard operating procedures, and provides for contingencies that may occur during the performance of the stated work scope at the previously referenced site. The provisions of this Plan are mandatory for all on-site personnel. Any supplemental health and safety plans utilized by other contractors or associated personnel shall conform to this plan as a minimum. All personnel who engage in project activities must be familiar with the provisions of this plan, comply with its requirements, and confirm acknowledgement by signing this Title Page.

PREPARED BY: Denese Ballew.

PREPARATION DATE: January 31, 2008

COPIES DISTRIBUTED TO:

NAME \_\_\_\_\_ TITLE: Project Manager

SIGNATURE \_\_\_\_\_ DATE: / /

NAME \_\_\_\_\_ TITLE:

SIGNATURE \_\_\_\_\_ DATE: / /

NAME \_\_\_\_\_ TITLE: Health and Safety

SIGNATURE \_\_\_\_\_ DATE: / /

Mountain Environmental Group  
Health and Safety Plan  
PROJECT: Henderson County HHW  
LOCATION: 802 Stoney Mountain Road  
Hendersonville, NC  
DATE: 2/14/08/ Revision 1.0

**I. SITE HISTORY AND DESCRIPTION:**

**A. DESCRIPTION OF SITE:**

The subject site is located at the Solid Waste Facility, which is located on the north side of Stoney Mountain Road in Mountain Home Township of Henderson County, North Carolina. The site is a 61.89 acre parcel identified as Henderson County PIN 9650727217. Although the subject property is within the Hendersonville incorporated city limits in Henderson County, North Carolina, the Town of Hendersonville appears to maintain regulatory jurisdiction and zoning of the property. The location of the site is depicted in **Figure 1** which is a copy of a portion of the United States Geological Survey (USGS) 7.5-minute topographic map for the Horse Shoe and Hendersonville, NC Quadrangles included as Attachment 1. The subject site is identified by the Henderson County Tax Office as parcel, PIN 9650727217, owned by Henderson County as the Grantee for the deed recorded in the Henderson County Register of Deeds Office in Book 001270 Page 00751.

The subject property is bounded to the north by residential properties. To the west, the property is bounded by the Henderson County School bus garage with the correctional facility, commercial and residential properties beyond. The subject site is bounded to the south and west by residential and undeveloped properties.

The subject site is located in an area of Hendersonville that is predominantly commercial and residential. The site is located at the approximate geo-physical co-ordinates:

**Latitude:** 35° 21' 11.44" North  
**Longitude:** 082° 29' 55.06" West

The location of the site is depicted in Figure 1, which is a copy of portions of the USGS 7.5 minute topographic maps of the Horse Shoe and Hendersonville, NC Quadrangles included in the attachment section of this plan and depicts relevant local topographic features such as roads, streams, bodies of surface water, and drainage features. The structures and relevant site features are depicted by Figure 2, which is a copy of an aerial photograph obtained from the Henderson County Tax Mapping Office (on-line services) and depicts the subject site in 2007.

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**B. ACTIVITIES PERFORMED ON SITE PRIOR TO FACILITY DEVELOPMENT:**

The site is being developed by the construction of a HHW and electronics recycling facility. Prior to being utilized for recycling purposes, this area was at one time an animal shelter for the County.

**C. TOPOGRAPHIC AND/OR UNUSUAL FEATURES:**

- (1)The project site is located on the north side of Stoney Mountain Road.
- (2)The site is currently and has historically served as a municipal landfill, transfer station, and recycling complex.

**D. RESULTS OF PREVIOUS SURVEYS OR ASSESSMENTS:**

Mountain Environmental Group knows of no intrusive assessment conducted at the subject site.

**E. Constituents of Concern:**

The constituents of concern for the Henderson County project site are not fully known but are expected to be volatile, semi-volatile, organic fluids, metals, and semi-solids that are part of the HHW stream. The disposal areas are in a separate area from the HHW collection area, and for this reason, these areas are not of concern in regards to this operation.

**F. WASTE TYPES:**

Waste generated by the HHW collection activities includes the following:

1. LIQUIDS:

Liquids may be difficult to contain and are easily splashed onto unprotected body surfaces. Exercise caution when working in areas where liquid contaminants may be present. Avoid spillage of contaminated liquids. Liquids will include petroleum based solvents and paint related wastes, latex based paint related materials, acid and alkali cleaners, reactives and oxidizers from spa and pool products, pesticides, used oil, and antifreeze.

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## 2. SOLIDS:

Solids will include acid and alkali based cleaners, reactives and oxidizers from spa and pool products, universal waste lamp(s), batteries, and waste personal protective equipment. These materials will be placed into drums or lab packs and sealed to await appropriate recycling/disposal.

## 3. GASSES/VAPORS:

Gasses and vapors are not generally visible, may displace oxygen in low lying or enclosed areas, may not excite the olfactory senses, and are readily inhaled into the respiratory system. For this reason, aerosols collected at the facility will be stored in a well ventilated area in order to minimize exposure potential.

## **G. WASTE CHARACTERISTICS:**

Wastes collected at the facility may have extreme pHs and may be capable of skin irritation and possible burns. Liquids and aerosols may be flammable or combustible. Both solids and liquids collected may be oxidizers, reactive, or toxic.

## **H. PHYSICAL HAZARDS:**

### 1. Explosion/Fire Hazard

Gasoline vapors have a flash point of approximately  $-45^{\circ}\text{F}$  ( $-42.8^{\circ}\text{C}$ ) and can pose an extreme explosion hazard. Auto ignition temperature for gasoline ranges from  $536^{\circ}$  to  $850^{\circ}\text{F}$ .

Diesel fuel is combustible (flash point  $140^{\circ}\text{F}$ ,  $60^{\circ}\text{C}$ ) and may pose a moderate fire risk. Auto ignition temperature for #2 diesel fuel is approximately  $490^{\circ}\text{F}$ .

### 2. Acid and base cleaners may have extreme pHs and can cause skin irritation and/or burns.

### 3. Toxics and reactives may be poisonous in relatively low concentrations and should be handled with caution.

### 4. Heat Stress

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The use of personal safety equipment may produce heat stress for personnel, especially in the late spring through the early fall of the year. Monitoring of personnel wearing personal protective equipment will be conducted when the ambient air temperature exceeds 70° F (21.1° C). Monitoring frequency should increase as the ambient temperature increases or as slow heat stress recovery rates are observed. Personnel should be trained in self monitoring techniques as outlined in Attachment 4 and logged appropriately in Attachment 5. Heat stress monitoring by a person possessing a valid first aid certification and who is trained to recognize heat stress symptoms may be warranted depending upon site and work conditions.

### 3. Cold Related Illness

Working in cold weather presents special considerations to avoid injury to personnel performing HHW activities in cold environments. Personnel should be trained in self monitoring techniques as outlined in Attachment 4 in order to be able to identify and reduce the risk of cold weather injuries, such as hypothermia and frost bite. It is not anticipated that the scope of work will continue into cold-weather seasons.

### 4. Location Hazards

The site is located in the highway business section of Hendersonville. The site is located within an active community and will have standard business vehicle and pedestrian traffic, as well as emergency vehicular traffic. During waste processing activities, be aware of surroundings and keep in mind the most probable safety hazards are due to slips, trips, and falls

## J. WEATHER CONDITIONS:

The facility may be operating in each of the four seasons; however, weather conditions for the region typically range from moderate day and nighttime temperatures in the spring and fall seasons to extremes of heat and cold experienced in the summer and winter seasons, respectively.

### 1. Ambient Temperatures:

Day: Variable (typical summer temperatures 70-85 degrees)  
Night: Variable (typical summer temperatures 55-65 degrees)

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2. Special Weather Considerations:

Icy roads and hazardous driving conditions may be encountered from late fall (Mid-November) through late spring (early May). During spring and summer seasons, thunder storms may occur thereby limiting or restricting HHW activities during these periods.

**II. SITE ORGANIZATION AND CONTROL:**

In an attempt to establish control of the site to provide a safe work area with regards to the types and established levels of contamination, the prevailing wind and site conditions, and the scope of work activities to be conducted, the site will be organized as follows:

1. Exclusion Zone:

In the event of an emergency, the exclusion zone will be the immediate area around the spill. Access to this area should be restricted to authorized personnel only. All zones (hot, contaminant reduction, and cold) should be delineated by the placement of traffic hazard cones, warning tape, and/or the support vehicle(s).

2. Contamination Reduction Zone/Decontamination Corridor:

The contamination reduction zone and decontamination zone will be the area surrounding decon equipment with a radius of approximately 40 feet, depending upon site conditions and limitations of available space.

3. Support Zone:

The support zone will consist of the area surrounding the support vehicle and should include an area with a radius of approximately 60 feet, depending upon site conditions and limitations of available space.

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### **Access Control and Work Zones**

Access to areas of chemical handling is controlled to prevent unnecessary public exposure to potentially harmful substances. Access control is done by clearly marking areas where chemicals may be handled. Contractor personnel will be stationed in strategic locations and serve as checkpoint personnel to direct the flow of traffic and people. Prescribed operations will occur in work zones which are designed to prevent the migration of contaminants.

Movement of personnel and automobile traffic between zones and into the chemical handling area will be limited by access control points. Personnel leaving the work zone will enter the decontamination zone. Decontamination will primarily be proper doffing of personal protective equipment unless otherwise specified.

All traffic will be controlled so that the number of automobiles in the receiving area will be limited to a manageable number. The checkpoint (entry) area will be the principal focus for control of vehicle activity. The distance between these areas, and the size and shape of each must be based on conditions specific to each location. The following criteria are used in establishing dimensions and boundaries:

- Physical and topographical features of the work location
- Weather conditions
- Potential for release and exposure
- Size of area needed to conduct operations
- Decontamination procedures
- Proximity to residential or industrial areas

### **III. PERSONNEL:**

Personnel conducting operation activities will consist of:

- (1) Unloaders
- (2) Segregators
- (3) Chemists

### **V. EQUIPMENT:**

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Equipment utilized in HHW operations will include, but may not be limited to the following:

- (1) Spill equipment such as booms, pads, and various other absorbent materials.
- (2) Safety shower/eyewash station.
- (3) Personal Protective Equipment
- (4) Hazard categorization supplies, such as pH paper.
- (5) Packing materials and containers.

## **VI. PROTECTION LEVELS:**

Level C protection is required when the concentration and type of airborne substances is known and the criteria for using air purifying respirators are met. Typical Level C equipment includes full-face air purifying respirators, inner and outer chemical-resistant gloves, hard hat, escape mask, and disposable chemical-resistant outer boots. The difference between Level C and Level B protection is the type of equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The main criterion for Level C is that atmospheric concentrations and other selection criteria permit wearing an air-purifying respirator.

If ambient air monitoring indicates contaminant concentration levels do not exceed applicable TLV, STEL, and TWA values, then Level D personal protective equipment may be appropriate.

Level D protection is the minimum protection required. Level D protection may be sufficient when no contaminants are present or work operations preclude splashes, immersion, or the potential for unexpected inhalation or contact with hazardous levels of chemicals. Appropriate Level D protective equipment may include gloves, coveralls, safety glasses, face shield, and chemical-resistant, steel-toe boots or shoes.

Regardless of the personal protective equipment level, caution should be exercised by all personnel to reduce hand-to-mouth/hand-to-face contact. Activities relating to smoking, drinking, and eating should be restricted to periodic break times and only after following field decontamination protocol.

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### **Personal Protective Equipment**

Personal Protective Equipment (PPE) is necessary when handling hazardous materials to prevent skin contact with harmful substances. Normally, contractor personnel will not be opening containers, so airborne exposures will be minimal. However, PPE is needed to protect persons from spills, broken containers, and sharp objects. PPE that is to be worn by contractor personnel is specified according to the Health & Safety Plan. The following states the typical PPE which would be utilized at household hazardous waste collection programs:

#### **Persons Removing Waste From Cars or Pickup Trucks**

- White Tyvek
- Safety glasses with side shields
- Chemical resistant gloves with outer leather or other puncture resistant gloves
- Safety shoes
- Traffic vest

**NOTE: Depending on the substances being handled, a higher level of PPE including chemical resistant coveralls and appropriate respirators may be required.**

#### **Persons Opening Containers**

- Chemical resistant coveralls (polyethylene-coated type or equivalent) or splash aprons
- Polyurethane or other chemical resistant safety boots.
- Respirators with organic vapor cartridge and high efficiency particulate air (HEPA) filter if necessary (as determined by the waste material being handled)
- Chemical resistant inner gloves and outer puncture-resistant (leather) gloves

#### **Persons Segregating Waste from Vehicles**

- Safety glasses
- White Tyvek
- Safety shoes/ boots
- Respirators (as required for splash or respiratory hazards) Chemical resistant inner gloves and puncture resistant outer gloves

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### **Persons Lab Packing Household Hazardous Waste**

- Safety glasses (with goggles or full-face shield when necessary)
- White Tyvek or chemical resistant coverall
- Safety boots
- Respirators (as required)
- Chemical resistant inner gloves and puncture resistant outer gloves

**NOTE: Persons handling or moving drums may require metatarsal safety shoes. Regular safety shoes may be substituted for chemical resistant safety shoes (polyurethane boots) when no chemical exposure hazard exists.**

### **VIII. SAFETY EQUIPMENT:**

Health and safety equipment will consist of:

- a. Personal protective equipment associated with level "C" activities

Protection Level "C" requires clothing and protective equipment typically associated with "construction" type activities plus typical Level C equipment including: full-face air purifying respirators (APRs), inner and outer chemical-resistant gloves, hard hat, escape mask, and disposable chemical-resistant outer boots, non-constrictive work clothing, steel toe work boots, work gloves, hard hats, hearing protection (ear plugs, noise reducing ear muffs, etc.), and latex gloves for handling contaminated materials.

- b. Fire extinguisher

A #20 dry chemical fire extinguisher will be committed to the work area and maintained to contain or extinguish small fires only. **All fires must be reported to the Mountain Home Fire Department as a 911 emergency.**

- c. First aid kit

A commercial first aid kit will be located in the Solid Waste office. This equipment will be used for minor injuries.

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## **IX. CONTINGENCY PLANS:**

### **A. Local Sources of Assistance:**

Both **Hendersonville** and **Henderson County** employ the **911 emergency** telephone response system and should be utilized for first responder assistance. The facility site is located on the campus of the Henderson County Landfill and Transfer Station and the following should be considered the closest emergency first response facility.

1. Hospitals:
  - Park Ridge Hospital  
100 Hospital Drive  
Hendersonville, North Carolina 28792  
(828) 681-2300
  
  - Pardee Hospital  
800 North Justice Street  
Hendersonville, North Carolina 28791  
(828) 696-1000
  
2. Ambulance:Henderson County EMS
  - 911  
211 1<sup>st</sup> Avenue East  
Hendersonville, North Carolina 28792  
(828) 433-6609
  
3. Fire:
  - Mountain Home Volunteer Fire Department  
(828) 879-9901
  
  - Henderson County Fire Marshall  
Rocky Hyder or Wally Hollis  
211 1<sup>st</sup> Avenue East  
Hendersonville, North Carolina 28792  
(828) 433-6609

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4. Local Emergency Management:

Henderson County Emergency Management  
Call 911  
(828) 697-4527  
Contact: Rocky Hyder

5. Local Police: Henderson County Sheriff Department  
(828) 697-4930

6. State Police: NC Highway Patrol  
(828) 298-4252

**B. National or Regional Sources of Assistance**

- |     |  |                                  |
|-----|--|----------------------------------|
| 1.  | Mountain Environmental Services, Inc.                                  | (828) 648-5556                   |
| 2.  | EPA (RCRA Superfund Hotline)   | (800) 424-9346                   |
| 3.  | Project Manager (MES)  | (828) 648-5556                   |
| 4.  | Chemtrec (24 hours)  | (800) 424-9300                   |
| 5.  | Bureau of Explosives (24 hours)<br>(Association of American Railroads) | (202) 639-2222                   |
| 6.  | CSX Transportation Railroad Emergency                                  | (800) 232-0144                   |
| 7.  | Communicable Disease Center<br>(Biological Agents)                     | (404) 633-5313                   |
| 8.  | National Response Center<br>(Oil and Hazardous Substances)             | (800) 424-8802                   |
| 9.  | DOT Office of Hazardous Operations<br>DOT (Regulatory Matters)         | (404) 305-6120<br>(202) 366-4700 |
| 10. | U.S. Coast Guard<br>(Major Incidents)                                  | (800) 424-8802                   |
| 11. | Pesticide Health Hotline   | (800) 858-7378                   |
| 12. | Carolina Poison Center   | (800) 848-6946                   |

ATTACHMENT 1  
Mountain Environmental Services, Inc.  
HEALTH AND SAFETY PLAN

**SITE AND VICINITY MAP**  
**AERIAL PHOTOGRAPH**  
**EMERGENCY RESPONSE PLAN**

Henderson County Solid Waste  
802 Stoney Mountain Road  
Hendersonville, NC

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## ATTACHMENT 2: Weather Related Hazards and Self Monitoring Protocol

### 1.0

### HOT WEATHER OPERATIONS

Operations conducted during the summer months can create a variety of hazards to the employees. This may be especially true if personal safety measures require protective clothing, respiration devices, and other equipment. Heat cramps, heat exhaustion and heat stroke may be experienced, and if not remedied, can be life threatening. Therefore, it is important that all personnel associated with field activities be able to recognize symptoms representative of these conditions, as well as being able to arrest the problem as quickly as possible.

#### HEAT CRAMPS

Heat cramps usually affect personnel working in hot environments who perspire a lot. Loss of salt from the body causes very painful cramps of the leg and abdominal muscles. Heat cramps may also result from drinking iced fluids either too quickly or in too large a quantity. The symptoms of heat cramps are as follows:

- Muscle cramps in legs or abdomen
- Pain accompanying cramps
- Faintness
- Profuse perspiration

To provide emergency care for heat cramps, remove the employee from his or her location and take to a cool place. Give employee relatively small sips of liquids which contain electrolyte replacements, such as "Gatorade" or an equivalent fluid. Apply manual pressure to the cramped muscle. Remove the affected employee to a hospital if there is any indication of a more serious problem.

#### HEAT EXHAUSTION

Heat exhaustion occurs in individuals working in hot environments; this disorder may often be associated with heat cramps. It is brought about by the pooling of blood in the vessels of the skin. The heat is transported from the interior of the body to the surface by the blood. The skin vessels become dilated and a large amount of blood is pooled in the skin. This condition, plus the blood pooled in the lower extremities when in an upright position, may lead to an inadequate return of blood to the heart and eventually to physical collapse. The symptoms of heat exhaustion are as follows:

- Weak pulse
- Rapid and usually shallow breathing

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## ATTACHMENT 2: Weather Related Hazards and Self Monitoring Protocol (Cont'd)

- Generalized weakness
- Pale, clammy skin
- Profuse perspiration
- Dizziness
- Unconsciousness
- Appearance of having fainted (the patient responds to the same treatment administered to cases of fainting)

To provide emergency care for heat exhaustion, remove the employee to a cool place. Give employee relatively small sips of liquids which contain electrolyte replacements, such as "Gatorade" or an equivalent fluid. If possible, fan the patient to remove heat by convection, but do not allow chilling or over cooling. Treat the patient for shock and remove him to a medical facility if there is an indication of a more serious problem.

### HEAT STROKE

Heat stroke is a profound disturbance of the heat regulating mechanism associated with high fever and collapse. Sometimes this condition results in convulsions, unconsciousness, and even death. Direct exposure to the sun, poor air circulation, poor physical condition, and advanced age (over 40 years) bear directly on the tendency for heat stroke. It is a serious threat to life and carries a 20% mortality rate. Alcoholics are extremely susceptible. The symptoms of heat stroke are as follows:

- Sudden onset
- Dry, hot and flushed skin
- Dilated pupils
- Early loss of consciousness
- Full and fast pulse
- Breathing deep at first, later shallow and even almost absent
- Muscle twitching growing into convulsions
- Body temperature reaching 105° to 106° or higher

When providing emergency care for heat stroke, remember that this is a true emergency. Transportation to a medical facility should not be delayed. Remove the patient to a cool environment, if possible, and remove as much clothing as possible. Assure an open airway. Reduce body temperature promptly by dousing the body with water or preferably by wrapping with a wet sheet. If cold packs are available, place them under the arms, around the neck, at the ankles, or at any place where blood vessels that lie close to the skin can be cooled. Protect the patient from injury during convulsions, especially from tongue biting.

Please note that in the case of heat cramps or heat exhaustion "Gatorade" or its equivalent is suggested as part of the treatment regime. The reasoning for this type of liquid refreshment is that these beverages will replace much needed electrolytes to the system. Without these electrolytes, body systems can not function properly, thereby enhancing the represented health hazard. Therefore, when working in situations where the ambient temperature and humidity are high, and especially in situations where protection levels A, B, and C are required, the Site Health and

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Safety Officer must:

Assure that all employees drink plenty of fluids and electrolyte replacement ("Gatorade" or its equivalent)

Assure that frequent breaks are scheduled so overheating does not occur

Revise work schedules, when necessary to take advantage of the cooler parts of the day (ie. 5:00 a.m. to 11:00 a.m. and 6:00 p.m. to nightfall)

When protective clothing must be worn, especially levels A and B, the suggested guidelines relating ambient temperature and maximum wearing time per excursion are:

<u>Ambient Temperature</u>	<u>Maximum Wearing Time per Excursion</u>
Above 90° F	15 minutes
85 - 90°	30 minutes
80 - 85°	60 minutes
70 - 80°	90 minutes
60 - 70°	120 minutes
50 - 60°	180 minutes

#### HEAT STRESS MONITORING

- A. HEART RATE EVALUATION: Establish heart rates early in the morning prior to site activities. Take a 30 second radial pulse (Exert slight pressure on the thumb-side of the wrist using the middle and ring fingers) then multiply by two (2). Repeat this procedure early during the rest periods. If the heart rate exceeds 110 beats per minute, increase the length of the rest period.
- B. BODY TEMPERATURE: Log body temperatures using an oral thermometer. Temperatures should be taken prior to site activities and early during the rest periods (prior to eating, drinking or smoking, etc.). If the body temperatures exceeds 99.0° F, the length of the rest period must be extended and the employee may not return to work activities until the body temperature returns to 99.0° F or below.
- C. BODY WATER LOSS: Weigh employees prior to site activities and at the beginning of each rest period. (The clothing worn should be similar for each weighing.) Body water loss should not exceed 1.5% of the total body weight. If it does, fluid intake as well as the rest period should be increased. (Fluids offered during extremely hot weather should be cool but not ice cold. Ice cold temperatures tend to constrict the blood vessels which have dilated to provide body cooling.)

The procedures listed may be accomplished by providing a log sheet and an area with a scale and thermometers. Train employees to utilize self-monitoring.

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## 2.0

## COLD WEATHER OPERATIONS

Field operations conducted during the winter months can create a variety of hazards to the employees. This may be especially true if personal safety measures require protective clothing, respiration devices, and other equipment are not adequately insulated to protect the employee from the cold. Frost bite and hypothermia are two of the conditions that may be experienced, and if not remedied, can be life threatening. Therefore, it is important that all personnel associated with field activities be able to recognize symptoms representative of these conditions, as well as being able to arrest the problem as quickly as possible.

### HYPOTHERMIA:

Hypothermia is defined as a decrease in patient's core body temperature below 96°F. The body temperature is normally maintained by a combination of central (brain and spinal chord) and peripheral (skin and muscle) activity. Interferences with any of these mechanisms can result in hypothermia, even in the absence of what normally is considered "cold" ambient temperature. Symptoms of hypothermia include:

- Shivering
- Apathy
- Listlessness
- Sleepiness and unconsciousness

When providing emergency care for hypothermia, remember that this is a true emergency. Transportation to a medical facility should not be delayed. Remove the patient to as warm an environment as possible and keep the patient wrapped in blankets or other protective clothing. The key to successful hypothermia emergency care is to raise the CORE body temperature, not only the peripheral tissue and extremities. Assure an open airway. Raise body temperature promptly by immersing the body in warm (not hot) water. If the patient is conscious, attempt to give him warm liquids. Protect the patient from injury during convulsions, especially from tongue biting, should they occur.

### COLD WEATHER MONITORING

- A. **BODY TEMPERATURE:** Log body temperatures using an oral thermometer. Temperatures should be taken prior to site activities and early during the rest periods (prior to eating, drinking, or smoking, etc.). If the body temperature drops below 97.5° F, the length of the rest period within a heated environment must be extended and the employee may not return to work activities until the body temperature returns to 97.5° F or higher.
- B. **OBSERVATION BY FIELD TEAM LEADERS:** Observations of employees by supervisory personnel should be conducted to look for signs of disorientation, confusion, apathy, and the other symptoms of cold weather injury. Observational personnel should be those who are not exposed to the cold weather

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conditions who may not be affected by clod weather injury as well.

#### C. FROSTBITE:

Frostbite is both a general and medical term given to localized area of cold injury. Unlike systematic hypothermia, frost bite rarely occurs unless temperatures are less than freezing and generally less than 20° F. Symptoms of frostbite are:

- Skin exhibits a waxy or white appearance
- Sudden blanching or whitening of the skin (and is firm to the touch)
- Tissues are cold, pale, and solid

To provide emergency care for frostbite, remove the employee to a warm place. Give employee relatively small sips of warm liquids. Apply warm (not hot) water to the affected areas and transport to a medical facility as soon as possible.

Workers should be trained for self monitoring procedures. However, cold weather injury may affect perception of existing patient conditions and therefore cloud the patient's ability to detect early or advance signs of cold weather injury. Hypothermia may be caused in ambient temperatures which might not normally be considered "cold" and care must be given to prevent loss of body heat. In addition to "cold" ambient temperatures, affects of the wind on body tissues may add to the injury experience in cold weather. The effect termed "wind chill" promotes evaporation of perspiration on the skin, gives the perception of colder temperatures than may actually exist and may speed up the on-set of frostbite and hypothermia. Protection of exposed skin from the wind will greatly reduce potential for damage due to the wind chill.

Notes:



**APPENDIX G**

Letter Agreement with Waste Stream Innovations

Waste Stream Innovations  
Solid Waste Composting Demonstration Permit  
Permit No. SWCD-45-01



HENDERSON COUNTY  
ENGINEERING DEPARTMENT  
ASSITANT COUNTY ENGINEER  
KING STREET OFFICES  
100 NORTH KING STREET  
HENDERSONVILLE, NC 28792  
PHONE (828) 694-6523  
CELLPHONE (828) 691-5079  
FAX (828) 694-4535

June 26, 2010

Waste Stream Innovations  
C/O Andrew Huske  
290 Cashdon Drive  
Mills River, NC 28759

RE: Agreement for brush and/or pallet removal from Henderson County transfer station

Dear Mr. Huske,

We received your Department of Environment and Natural Resources (DENR) Solid Waste Composting Demonstration (SWCD-45-01) permit for High Oaks Farm located at 4028 Haywood Road, Mills River, NC 28759. We also received your letter stating all material will be used for composting only.

We are in agreement and that your company may come to the transfer station to receive brush and/or pallets from our facility for your composting process. Henderson County will provide labor and equipment to load your vehicles at a designated time and date to be predetermined. Waste Stream Innovations shall contact the Solid Waste Manager twenty-four (24) hours prior to the needed appointment time. Henderson County staff shall stop by High Oaks Farms periodically to inspect the facility and confirm the proper use of the brush and/or pallets.

This agreement expires April 23, 2011 at close of business day. Henderson County will consider renewing this agreement and see if any modifications should be made at that time.

We look forward to working with your company. If you need any additional information do not hesitate to contact me direct.

Sincerely,

*Natalie J. Berry*

Natalie J. Berry, PE  
Assistant County Engineer  
Interim Solid Waste Manager

cc: Marcus A. Jones, PE, Director of Engineering



North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
Secretary

April 23, 2010

Mr. Andrew Huske  
Waste Stream Innovations (WSI)  
290 Cashdon Drive  
Mills River, NC 28759

Dear Mr. Huske:

The Division of Waste Management, Solid Waste Section, has reviewed your request for approval of a Solid Waste Composting Demonstration Approval (SWCD-45-01) on High Oaks Farm located at 4028 Haywood Road, Mills River, NC 28759.. Your request is considered approved in accordance with the N.C. Solid Waste Management Rules, 15A NCAC 13B .1409 and subject to the following conditions:

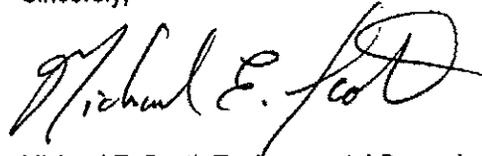
- (1) The approval period is from receipt of this letter to April 23, 2011. If an extension is needed it must be requested by January 23, 2011 with a justification for the extension.
- (2) A full Solid Waste Compost facility permit will not be issued for this facility without approval from the appropriate local zoning officials or a letter indicating that the property is not zoned. Any local zoning approvals necessary for the demonstration approval are the responsibility of the applicant.
- (3) Composting at this site shall be limited to the materials specified in the application.
- (4) The site shall be prepared to control run-off and run-on. Best management practices shall be utilized for this purpose. All run-off from the site and any leachate generated shall be managed to prevent any impact to ground or surface waters. A full Solid Waste Compost facility permit will not be issued for this facility until storm water and leachate from the site are managed according to the Division of Water Quality's standards.
- (5) This approval is subject to immediate revocation if activities on site result in a direct or potential threat to the public health or the environment or if significant odor problems are created. The Division of Waste Management reserves the right to apply any other requirements of 15A NCAC 13B Section .1400 as the Division deems necessary during the above approval period.
- (6) Operation of the facility and compost monitoring activities shall be in accordance with the approved application and Section .1406 of the Solid Waste Management Rules. Records of temperatures shall be maintained to show pathogen reduction and vector attraction reduction requirements have been met and shall be available to representatives of the Section upon request.
- (7) Compost testing, frequency of testing, and reporting of test results shall be in accordance with the

approved application and Section .1408 of the Solid Waste Management Rules. Classification and distribution of compost shall be in accordance with Section .1407 of the Solid Waste Management Rules.

- (8) All compost shall be tested and the results approved by the Solid Waste Section prior to removal from the facility for any use.
- (9) Any changes or additions to this facility, subsequent to receipt of this letter shall be approved prior to the start of the operation.
- (10) The compost area must be clearly delineated with permanent markers. Storage of food waste and animal manure feedstocks shall be limited to the area on the site plan labeled as compost area.
- (11) This approval is not transferable.
- (12) Andrea Keller, Environmental Senior Specialist, will be responsible for oversight and inspection of the facility and related activities. Andrea Keller can be contacted at 828-296-4700.

If you have questions concerning this approval please contact me at (919) 508-8508.

Sincerely,



Michael E. Scott, Environmental Supervisor  
Composting and Land Application Branch

cc: Andrea Keller, Environmental Senior Specialist  
Deb Aja, Western District Supervisor  
Ken Pickle, NC Division of Water Quality

**Request for:**

**Demonstration Permit of a New Composting Operation:**

**1. Land Owners:**

French Broad Partners LLC  
C/o Gene Goodson or Ann Goodson-Daily  
4028 Haywood Road  
Mills River, NC 28759

Gene Goodson Phone: 734-417-2484

**2. Site Operators:**

Waste Stream Innovations (WSI)  
Andrew Huske 828-273-7585  
Larry Gabbard 828-280-7547

290 Cashdon Drive  
Mills River, NC 28759

**3. Location:**

High Oaks Farm  
4028 Haywood Road  
Mills River, NC 28759

**4. Materials Processed:**

WSI plans to receive:

1. Yard Trash, Land Clearing Debris, Seasonal Leaves; (tot. vol. 12,000 cyd.)
2. Greenhouse Wastes (tot. vol. 5,000 cyd.)
3. Pre and Post consumer Food Waste (15 tons/week)
4. Pallet wastes (100 tons)
5. Animal Manure (5,000 cyd.)
6. Soils and sand for final mixes (proportional depending on mixes requested)

**5. Proposed Schedule:**

WSI requests a 12-month period with optional 12-month extension. The majority of our feedstock generators are seasonal by nature and we would like to have the extra time to learn the fluctuations and how to prepare for them.

**6. Management Plan:**

WSI will receive wastes in a designated receiving/pre-mixing area. The wastes will be blended with a front-end loader to achieve a 25:1 C:N ratio. Using the loader bucket measure we will be mixing 4 scoops carbon mix to 2 scoops nitrogen mix. The carbon mix will consist of growing media, seasonal leaves, and ground type 1 materials. The nitrogen mix will be manures and food wastes. Any wet material received will be thoroughly mixed with dry materials to absorb excess

## COMPOST DEMO APPLICATION : WASTE STREAM INNOVATIONS 4-23-2010

moisture. This material will then be placed into the windrows for composting. Windrow turning will be accomplished using a Midwest Bio-systems turner, generating a 10-foot wide and 5 foot tall windrow. We are exploring using inoculants supplied by Mid-West Bio Systems.

On site data collection will be managed through Green Mountain Technologies "Windrow Manager" Software package. Daily readings will be taken in the mornings using a GMT 40-inch temp/oxygen probe with hand held computer and downloaded to the program. The readings will be taken every 25 feet at a depth of 36 inches. Starting point on the windrows will be alternated between the end of row or 12 feet in to achieve more sampling points in the row. Moisture assessment will be done at the same time using the "hand squeeze test"; final moisture tests will be achieved with wet/dry weight measurement. Turnings will be scheduled based on these readings.

Additional evaluation and exploration of a rotating drum, vermi-composting, and anaerobic digestion with energy extraction are of interest. If we pursue any of these we will request amendments to the permit with specific details proposed.

### **7. Aeration:**

Aeration will be achieved using the MWB-120 Windrow Turner. This will be done in accordance with 5 turnings in 15 days while at or above 131 degrees F. After this period turnings will be scheduled based on temp. /oxygen/co2 readings.

### **8. Blending:**

Blending into final products will be based on requested components from customers. This will happen after satisfactory lab results are obtained. We anticipate offering soil, sand, and mulch blends.

### **9. Monitoring and Testing:**

All results gathered from field samples will be entered into management software for compilation for later reporting.

Lab samples will be collected and submitted for analysis of:

- Foreign Matter
- Pathogens
- Heavy Metals
- Nutrient content

These values will be included in reports to the state. The testing schedule will consist of an initial test and every 6 months or 20,000 tons thereafter.

### **10. Record Keeping:**

The windrow manager software records and generates data in many formats.

We will track:

- material in/out
- time at temperature

- composting time
- lab data for particular batches
- batch components
- labor hours for processing
- sales/client data

**12. Lechate control:**

Every effort will be made to reduce the chance of run-on and run-off from the composting area. This includes not receiving excessively wet materials into our program. The windrows will be oriented in order to help with this effort. At the edge of the active composting area we will maintain a mulch filter berm that will intercept all flow from the site. As the berm loads up with material it will be collected and placed into the compost cycle and replaced with fresh mulch. Immediately following the mulch berm will be a 50 foot grassed buffer strip to further filter nutrients from the run-off. The last line of protection prior to the agricultural area is a silt fence installed at the far side of the grassed buffer. The area past the buffer strip is in agricultural production and typically has corn silage and cover crops in rotation.

**13. Product Use:**

We intend to market compost generated in this operation for wholesale and retail. There will be direct and indirect sales of our products. Custom blends will be offered based on market demands and customer request.

**14. End of Project Report:**

- Amount and types of material received in cubic yards
- Amount of compost produced in cubic yards
- Amount of compost distributed in cubic yards
- Copies of all monitored data and lab reports
- Overall assessment of project

**MAPQUEST**

Notes

DIRECTIONS TO WSI  
4/21/2010

**Trip to 4028 Haywood Rd**

Mills River, NC 28759-9762

6.65 miles - about 9 minutes

★ **EXIT 40/ASHEVILLE REG'L AIRPORT/W  
I-26 W, Fletcher, NC 28732**



1. Start out going **NORTH** on ramp toward  
**NEW AIRPORT RD / NC-280.**

go 0.2 mi



2. Turn **LEFT** onto **NEW AIRPORT RD /  
NC-280.** Continue to follow **NC-280 S.**

go 4.9 mi



3. Turn **LEFT** onto **HAYWOOD RD /  
NC-191.**

go 1.6 mi



4. **4028 HAYWOOD RD** is on the **RIGHT.**

go 0.0 mi



**4028 Haywood Rd, Mills River, NC 28759-9762**

Total Travel Estimate : 6.65 miles - about 9 minutes

Route Map [Hide](#)

STATE OF NORTH CAROLINA §

COUNTY OF HENDERSON

§  
LEASE AGREEMENT FOR  
§AGRICULTURE/COMMERCIAL  
PROPERTY

This Lease Agreement is entered into as of the 14th day of April, 2010, by and between French Broad Partners LLC (FBPLLC) which has a mailing address of 4028 Haywood Road, Mills River NC 28759, (hereinafter referred to as "Lessor"), and Waste Stream Innovations (WSI), which has a mailing address of 647 Allstar Lane, Hendersonville NC 28739, (hereinafter referred to as "Lessee"). The principals of each entity are as follows: FBPLLC- Anne Goodson and Gene Goodson representing all members of FBPLLC and Andrew Huske and Larry Gabbard, owner/operators of a composting company.

WITNESSETH:

That for and in consideration of the rental hereinafter reserved and the covenants and agreements herein contained, Lessor has agreed to lease and does hereby demise and lease unto Lessee, and Lessee has agreed to take and lease and does hereby lease from Lessor, that certain real property and improvements located thereon which is locally known as described below under "Purpose" and more specifically as follows: The 20 acres in this agreement consists of and starts at a point of intersection at the North-East end of the "Grove Line" which runs North-East by South-West and on the South-East side along the edge of the area known as "The Grove". From this point "A" running to a point "B" 650 feet East-South-East parallel to Highway 191, From point "B" running 1160 feet South-West to point "C", From point "C" running 1015 feet North-West crossing "Grove Line" to point "D", From point "D" running 405 feet North-East to point "E" parallel to the drainage ditch, From point "E" running 465 feet South-South-East in front of the barn area to point "F" which is located on the "Grove Line" 755 feet from point "A" completing the area boundary. Additionally WSI has unobstructed "Right-of-Way to Boyleston Creek via a 15 foot road parallel to the drainage ditch running on line "D-E" for water necessary to the composting operations. Maintenance of said road is the responsibility of WSI. The current intended use by WSI breaks down as approximately 3-acre grass strip buffer between silage operation and the 12-acre compost operation and 5 acre agricultural operation. All the area described in this paragraph lies within and is part of the land described in the description above.

PURPOSE

WSI is to use a specified portion of "High Oaks Farm" the 120 acres of land and certain buildings at 4028 Haywood Road, Hendersonville, NC, 28792 located in Henderson County for composting using biomass materials, which include necessary carbon and nitrogen sources, for compost production. WIS intends to develop a composting business using the land and limited facilities of FBPLLC, which is profitable and makes all attempts to continue the agricultural heritage and appearance of the property.

#### TERM OF LEASE:

The term of this agreement is determined by an "evergreen" concept, which begins with the initial term of 3 years. An annual review meeting, the first of which will occur within 11 months of execution of this agreement and which meeting will allow the parties to determine whether the agreement is to be extended for an additional year beyond the remaining 2 years of the initial term. Thereafter, subsequent meetings will occur annually. Lessee may cancel this lease upon 30 days written notice in the event of catastrophic business failure.

Payments for the initial 3-year period will consist of *direct annual payment to FBP of \$2000 (\$100/ acre), \$2000 in-kind services of lawn/ grove maintenance (\$100 per acre) and \$2000 in-kind property improvement projects (\$100/acre).* The yearly payment of \$2,000 cash shall be paid at the rate of \$500 per quarter with the first payment due June 1, 2010 and every three months after that for the first 3-year term of the lease.

The following projects and maintenance will make up the in-kind portions of the contract:

1. Evergreen buffer installation along grove and part of Hwy 191
2. Demolish and remove old tobacco barn and milking parlor
3. Remove standing and downed dead trees
4. Shore up where needed parts of barn, add electrical, and possible addition with FBP final approval
5. Road construction from 191 to barn area
6. Lawn/grove maintenance

Following the third year, direct payments of \$1000 shall be made quarterly for a \$4000 annual total unless negotiated differently at that time. Lawn and grove maintenance in-kind shall continue.

#### USE OF PREMISES:

The lease premises are being leased "As Is". The lease premises are leased for commercial purposes as described herein. Lessor shall not be responsible for or held liable for any occurrence in connection with the use of the premises by lessee. Lessee may use and occupy the leased property for the purposes described herein. WSI shall obtain and keep current all permits and licensing requirements for operation of said business and keep current all fees, taxes and associated payments.

Lessee shall, throughout the term of this Lease, at his sole expense, promptly comply with all laws and regulations of all federal, state, or local governments, and appropriate departments, commissions, boards, and/or officers thereof which may be applicable to the leased property. The Lessee shall, at his sole expense, obtain all licenses and permits as may be required for use of said leased premises, or for the making of repairs, alterations, improvements, or additions which are made or to be made in conformity with the terms of this lease.

#### UTILITIES:

Lessee shall pay all charges for gas, electricity, water, light, heat, power, telephone and other communication and utility services used, rendered, or supplied upon or in connection with the subject lease premises, and shall indemnify the Lessor against any liability or damages on such account. Lessee shall pay all costs to run utilities to their operation and shall be responsible for determining the amount of usage attributed to their operation if jointly metered.

#### ALTERATIONS:

Only with the prior written consent and approval of Lessor, Lessee may, at its sole cost and expense, make such alterations, additions or changes to the appearance of the subject lease premises as it finds reasonably necessary or desirable for its' business purposes. In no event, shall any alterations, additions or changes be made which affect, alter or compromise the structural integrity of the subject lease premises. All capital improvements to FBPLLC land and buildings will be the property of FBPLLC if the agreement is not extended beyond the initial 3-year term. Upon any expiration of this agreement, WSI will leave the land and buildings in the same or better condition than that which was present at the execution of this lease. The parties agree that Lessee may erect "Portable" Clearspan structures for storage of equipment and materials to maintain a clean and neat appearance, and that said structures do not become fixtures and may be removed by Lessee upon termination of the lease.

#### REPAIRS:

Lessee shall be solely responsible for the repair and upkeep of the interior of the subject lease premises, which includes, but is not limited to, all electrical, plumbing, heating, air conditioning, and other mechanical installations therein and all glass windows and doors in good order and repair. Lessee agrees to surrender the subject lease premises at the end of the lease term or earlier termination of the lease in as good a condition as when received, excepting only reasonable and ordinary wear and tear and damage by fire or other casualty of the kind insured against in standard policies of fire insurance and extended coverages.

#### TRADE FIXTURES:

All trade fixtures installed by the Lessee in the subject lease premises shall inure to the benefit of the Lessor and shall remain affixed to the property at the time of expiration of the lease term or earlier termination of the lease. Excepting the previously mentioned "clearspan" structures and contents.

#### ASSIGNMENT AND SUBLETTING:

No assignment or subletting of the subject lease premises will be allowed by the Lessee during the term of this lease without the prior written consent and approval of the Lessor. In the event such prior written consent and approval is made by Lessor, Lessee shall remain liable notwithstanding such assignment or subletting for the future performance of all terms, covenants and conditions of this lease and for payment of all sums which shall come due for the remaining term of this lease. Provided, however, that Lessee may sublet for agricultural use, or work with a third party, in a joint venture, producing an agricultural commodity.

#### INSURANCE:

Lessee agrees that it will at all times during the term hereof, at its own expense, purchase, maintain and keep in force public liability insurance against claims for bodily injury, death or property damage or loss occurring in or on or about the subject lease premises and will also provide at its sole cost and expense, such fire and extended coverage and vandalism and malicious mischief insurance covering the contents of the subject lease premises and the building and improvements thereon. Lessee agrees to provide proof of such insurance coverages to Lessor prior to the date when Lessee allows public access to the leased property.

#### NON-COMPETITION:

For a three (3) year period immediately following the date of termination of this lease, Lessor shall not engage in any activity in direct competition with Lessee's operation, whether directly or indirectly including the use of agents or new Lessee's for the leased property.

#### DEFAULT AND REMEDIES:

It is expressly understood and agreed that if the subject lease premises is abandoned or becomes vacant during the term of this Contract, or if the Lessee fails to pay rent when due, or violates any other provision of this lease, and remains in default thereof for a period of ten (10) days after date of issuance of a notice of default by Lessor or his agent(s), then Lessor, or his agent(s) shall have the right, without further notice or demand, to immediately annul and terminate the Contract, to re-enter and take possession of the premises without prejudice to any other legal remedy Lessor may have on account of such default, and shall have the further right, immediately upon the failure to cure such default to breach of this Contract by the tenant to place a "For Rent" on the premises.

#### BINDING AGREEMENT:

This lease agreement shall be binding upon the parties hereto, their heirs, assigns, personal representatives, and successors in interest. This agreement may be executed in one or more counterparts, each of which shall be deemed an original.

## ADDITIONAL TERMS

WSI will keep FBPLLC apprised of any major changes or events affecting the operation of WSI. WSI agrees to fully cooperate with Tony Carland's operation or any other leaseholder of FBPLLC to facilitate access and operation of their endeavors without interruption or complication. WSI expects the same in return. The Hunt club should not actively hunt during the operational hours of WSI. WSI will coordinate with the Hunt Club for scheduling. WSI commits to keep the entire operation as clean and orderly as possible in keeping with a demonstration project for customers and visitors and constantly monitor and take action to absolutely minimize any related undesirable odor from the operation. WSI agrees to request Gene Goodson to serve on a company advisory board allowing review of the entire operation.

WSI will hold FBPLLC harmless and indemnify FBPLLC for any costs incurred by FBPLLC due to legal action taken against FBPLLC, which arises out of the operations of WSI.

IN WITNESS HEREOF, the parties have hereunto set forth their hands and seals, the day and year first written above.



\_\_\_\_\_  
For the Lessor: R. Eugene Goodson, Secretary & Treasurer, FBPLLC

\_\_\_\_\_  
WSI, Lessee: Larry Gabbard, Principal

\_\_\_\_\_  
WSI, Lessee: Andrew K. Huske. Principal

**APPENDIX H**

Mulching Operations Data Log



**APPENDIX I**

Emergency Site Selection Evaluation Sheet



Division of Waste Management - Solid Waste Section  
**Emergency Site Selection Evaluation Sheet**  
 Disaster Debris

Site Name: Henderson County -Stoney Mtn Rd Landfill      Site Location: Stoney Mountain Road

Physical Address  
 or Directions: 802 Stoney Mountain Road

City: Hendersonville, NC 28791      County: Henderson

Primary Contact: Natalie Berry, PE, Henderson Co. Solid Waste Dept.      Telephone #: 828-694-6526

Additional Contact: Marcus Jones, PE, Henderson Co. Engineer      Telephone #: 828-694-6560

Approx. Size of Area to be used for Disaster Debris: 2.0 Acres      GPS Coordinates (decimal degrees): 35.3561 N 82.4938 W

**Intended Use of Site:**

- Staging/Storage for **Removal**       Staging/Storage for **Chipping**       Staging/Storage for **Burning**

Please provide a brief description of planned operations:

Vegetative disaster debris from within Henderson County would be brought to the Henderson County Stoney Mountain Road Landfill in the event of a significant natural disaster (hurricane, tornado, ice storm, etc.). The County would grind the vegetative waste to mulch. However, the County may opt to remove some of the accumulated vegetative debris for processing and/or disposal at an off-site permitted facility should the volume of waste material received exceed the County's ability to process on site in a timely manner. Henderson County currently operates a permitted mulching and grinding operation and white goods temporary storage area at this location.

**Type of Waste:**

- Vegetative Debris**       **Demolition Debris**

Comments: \_\_\_\_\_

**Buffers Required (the following must be clearly delineated with flagging, survey stakes, etc.):**

- 100 feet from property boundaries and on-site structures  
 100 feet from residences, private wells (vegetative debris only), and septic tank systems  
 100 feet from surface waters  
 250 feet from potable wells (demolition debris)  
 300 feet from grinding operations to residence and business properties, publicly owned roads or properties

**Please attach a site plan and/or aerial photograph showing the boundaries and location or the proposed site.**

Additional information can be found at <http://www.wastenotnc.org/swhome/planning.asp>

**DWM Use Only:**

Buffers have met DWM Requirements  YES /  NO

Flood Plain or  
Flood Prone Areas

---

Wetlands

---

Erosion Control

---

Access, Site  
Security

---

Safety Issues -  
Power Lines,  
Traffic, etc.

---

Coordination with the Division of Air Quality  YES /  NO /  NA

Buffers have met DAQ Requirements  YES /  NO

Coordination with Land Quality Section  YES /  NO /  NA

Coordination with State Historic Preservation Office (SHPO)/Office of State Archaeology  YES /  NO

Coordination with Natural Heritage Program (endangered species)  YES /  NO

General Comments

---

Coordinates Verified  YES /  NO

Solid Waste Section  
Representative

---

Date of  
Inspection

---

**APPENDIX J**

Composting Operations Data Log

**Stoney Mountain Road Landfill**  
**Composting Operations Data Log**

Windrow Date of Formation \_\_\_\_\_  
(if more than one windrow is formed on the same date, add A,B,C designator. Note location of windrows for future identification. Include weight of compost if known.)

Materials used and source \_\_\_\_\_

<u>Date</u>	<u>Temperature Noted</u>	<u>Date</u>	<u>Temperature Noted</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Observations: \_\_\_\_\_  
\_\_\_\_\_

Windrow Date of Formation \_\_\_\_\_  
(if more than one windrow is formed on the same date, add A,B,C designator. Note location of windrows for future identification. Include weight of compost if known.)

Materials used and source \_\_\_\_\_

<u>Date</u>	<u>Temperature Noted</u>	<u>Date</u>	<u>Temperature Noted</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Observations: \_\_\_\_\_  
\_\_\_\_\_