



Permit No.	Scan Date	DIN
<b>4504T-TRANSFER-1998 4504-HHW-2011</b>	<b>April 8, 2016</b>	<b>25938</b>

**HENDERSON COUNTY ENGINEERING  
SOLID WASTE DIVISION**  
191 Transfer Station Drive  
Hendersonville, North Carolina 28791  
(828) 697-4505

RECEIVED  
**March 22, 2016**  
Solid Waste Section  
Asheville Regional Office

**To:** **Larry Frost, Environmental Engineer**  
Permitting Branch, Solid Waste Section  
Division of Waste Management, NC DEQ  
2090 US Highway 70  
Swannanoa, NC 28778

**From:** Henderson County Solid Waste Division, Engineering Department  
**RE:** Henderson County Solid Waste Permit 45-04T, Renewal & Operations Plan  
Submission

Mr. Frost:

March 21, 2016

The Henderson County Municipal Solid Waste Management Facility Permit #45-04T was issued on April 12, 2011 and expires in April 2016. We are writing to request a permit renewal to continue operating this facility. Since the issuance of our 2011 permit, an approved capital improvements was implemented and changes are reflected in our updated operations plan, boundary plat, and facility map.

Enclosed you will find our updated operations plan for all Henderson County Solid Waste facilities on Stoney Mountain Road, submitted by Greg Wiggins, Operations Director, and Rachel Kipar, Environmental Programs Coordinator.

Please contact us should you have any questions or concerns. Thank you for your consideration.

Sincerely,

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**Henderson County Solid Waste Facility  
Permit # 45-04T  
Permit Renewal Submission**

**Henderson County, North Carolina  
Operations Plan  
March 2016**

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Solid Waste Section  
Asheville Regional Office



**HENDERSON COUNTY RECYCLES**

**Greg Wiggins,  
Solid Waste Operations Manager**

**Rachel Kipar,  
Environmental Programs Coordinator**

# **OPERATIONS PLAN**

**HENDERSON COUNTY SOLID WASTE FACILITY  
PERMIT NO. 45-04T**

**HENDERSON COUNTY, NORTH CAROLINA**

**Greg Wiggins,  
Solid Waste Operations Manager**

**Rachel Kipar,  
Environmental Programs Coordinator**

**OPERATIONS PLAN**  
**HENDERSRON COUNTY SOLID WASTE FACILITY**  
**PERMIT NO. 45-04T**

**HENDERSON COUNTY, NORTH CAROLINA**

**MARCH 2016**

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**LIST OF ACRONYMS**

- CCC: Citizen’s Convenience Center
- CFC: Chlorofluorocarbon
- C&D: Construction and Demolition Debris
- DHEC: Department of Health and Environmental Control
- HCSWF: Henderson County Solid Waste Facility
- HHW: Household Hazardous Waste
- HAZWOPER: Hazardous Waste Operator
- MGP: Mulching, Grinding, and Processing
- MSW: Municipal Solid Waste
- MSWLF: Municipal Solid Waste Landfill
- NC DEQ: North Carolina Department of Environmental Quality (formerly NC DENR, North Carolina Department of Natural Resources)
- NCDOT: North Carolina Department of Transportation
- SH: Scale House
- SWANA: Solid Waste Association of North America
- TS: Transfer Station(s)

**OPERATIONS PLAN**  
**HENDERSON COUNTY SOLID WASTE FACILITY**  
**PERMIT NO. 45-04T**  
**HENDERSON COUNTY, NORTH CAROLINA**  
**Revised March 2016**

**INTRODUCTION**

**1.0 Overview**

This Operation Plan has been developed for the Henderson County Solid Waste Transfer Stations and other County owned/operated services at the Stoney Mountain Road Facility (hereto after “Henderson County Solid Waste Facility,” or HCSWF) located in Henderson County, North Carolina. This plan has been prepared in accordance with the requirements of the North Carolina Department of Environmental Quality (NC DEQ), 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 is 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, and Processing Facility and other ancillary services are located on property owned by Henderson County at 191 Transfer Station Drive or just north-northwest of Hendersonville, North Carolina. This property also contains a closed municipal solid waste landfill (MSWLF) and a closed construction and demolition (C&D) landfill.

**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 at HCSWF falls within three major zoning classifications. These classifications are: Local Commercial (LC) and Residential-1 (R1). County owned and/or operated solid waste facilities are permitted in accordance with Henderson County Land Development Code, Chapter 42A, Article II, Subpart E §42-62, SR 9.11. Solid Waste Facility, County Owned/Operated.

## **5.0 Erosion and Sediment Control**

The HCSWF has an approved Erosion and Sedimentation Control Plan (HENDE-2010-006) for the site. The facility has various drainage ditches and sediment ponds which convey and filter the stormwater prior to discharge offsite. Enhancements from the Capital Improvements Plan added various new conveyance channels in addition to seven (7) new sediment basins. All unpaved areas are established with vegetative cover to prevent erosion of the underlying soil.

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

The Facility Plan (Site Map) can be viewed in Appendix D and the Boundary Plat is included in Appendix E. The plat defines the HCSWF parcels and the location of the facility boundary.

## **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 is posted at the entrance to the Transfer Stations and the Citizen's Convenience Center. Traffic control signs, markers and other related informational signage are provided as necessary to promote an orderly traffic pattern to and from the various disposal facilities and maintain efficient operating conditions.

# **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 Shed No.2, constructed in 1997, has a tipping floor area of approximately 4,000 sq.ft. and Transfer Station No. 1, constructed in 2007, has a tipping floor area of approximately 7,200 sq.ft. Transfer Station Shed No.1 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. Transfer Station No. 2 has a concrete paved floor with ten-foot (10') 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, see Appendix D.

## **3.0 Operating Hours**

Normal operating hours for the Transfer Stations are 8:00 a.m. to 4:00 p.m. for hand unloaders and until 4:30 p.m. for hydraulic dump vehicles, Monday through Saturday. The facility is closed on Sunday and holidays as designated by the County unless a flexible schedule is approved by the County Engineer.

## **4.0 Personnel**

The facility is owned and operated by Henderson County. A minimum of one (1) Certified Transfer Station Operations Specialist (as certified by Solid Waste Association of North America, or SWANA) must be on staff during daily operations of the Transfer Stations. Transfer Station employees are trained in safety procedures and the inspection of incoming wastes (refer to Section 13, "Inspection of Wastes"). Training material published by SWANA is utilized for initial training and 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**

The transfer stations, scale house and other ancillary disposal facilities in the general area of the transfer stations are enclosed by security fences and gates. The Scale House (SH) and scales are located at the site entrance to evaluate and weigh all incoming waste for proper disposal. A scale attendant is on duty during operating hours. 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, where applicable. As vehicles arrive at the facility, they must first cross the scales at the SH. The vehicles are weighed in and directed to the appropriate disposal facility. Staff controls access to the TS. As vehicles arrive at the TS, staff 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 TS.

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

Incoming wastes are transported to the TS in covered or enclosed vehicles. Outgoing transfer trailers are covered or enclosed. Throughout the day and at the end of each

working day, staff monitors the building and surrounding site for litter. Collected litter is disposed of in an available transfer trailer or placed in containers for proper disposal. The equipment used for pushing trash on the tipping floor has a bucket equipped with a squeegee to 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 TS. The entrances are completely open, which allows adequate access to all areas of the buildings to ease operations, maintenance, and cleaning. The open end of the buildings and ventilation fans provide adequate fresh air exchange to control odor problems. Floor and equipment cleaning and/or wash-downs at the TS 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 TS will also serve to reduce vector problems. Licensed exterminators will also be available to visit the TS as needed to control vectors (see Appendix G).

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 are inspected at the end of each day's operations and are cleaned as necessary to prevent the build-up of residual waste material. Cleaning activities may include regularly scheduled sweeping or wash-downs with hoses or spray nozzles. Wash-downs also include the adjacent push walls. Yard hydrants are available to facilitate the wash-down activities. Periodically the tipping floors and push walls are pressure washed and inspected for wear and/or other damage. Areas requiring repair will be addressed as necessary. Wash-down activities are performed when outside temperatures are above freezing. Wash water is collected and ultimately diverted to the county-operated pump station for ultimate disposal to the Cane Creek Sewer District. Stagnant or ponded water shall be prevented from occurring to control mosquito breeding.

## **8.0 Dust and Fire Control**

Dust and fire control is provided by periodic wash down of the tipping floor and equipment to 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 is provided by the local fire department, which is aware of the fire control needs for the facility. In the event that a fire occurs, 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, NC DEQ will be notified within 24 hours and written notification will be submitted within 15 days.

## **9.0 Stormwater Management**

Areas adjacent to the TS 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 stormwater to designated storm drain conveyance structures/ditches.

## **10.0 Wastewater Collection**

The wash water from the tipping floors flows into a trench drain located at each building entrance. The drain is covered by a metal grate system to prevent clogging by large debris. The metal grate is raked periodically and the collected trash is placed on the tipping floor or into containers for proper disposal. All wash water flows from the stations to the grit chamber, located west of Transfer Station Shed No.1. Drains located in each pit are also connected to the grit chamber to convey wash water. The grit chamber discharges into the pump station operated by Cane Creek Sewer District.

The roof that covers each Transfer Station minimizes wastewater generation. The driveways are sloped away from the transfer station floors to restrict outside flow from entering the buildings. Wastewater flow at the TS generally consists 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.

## **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 pushes the material to the rear of the tipping floor where it is dropped into a transfer trailer on the lower level. The loader operator, properly trained to identify unacceptable waste, observes 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 is 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. The loads are then covered by the contracted hauler before leaving the facility.

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. The loads are then covered by the contracted hauler before leaving the facility.

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. The loads are then covered by the contracted hauler before leaving the facility.

The loaded and staged waste transfer trailers are 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 July 1, 2015 (See Appendix B). 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. Refer to Section 11.0, "Characterization of Waste Stream" and NC G.S. § 130A-309.10 for the complete list of banned items that are not acceptable at the HCSWF.

If hazardous waste is identified during vehicle dumping, staff will immediately notify the driver and if necessary, contact NC DEQ and the Hazardous Materials Emergency

Response Team. Pertinent information about 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, if necessary, 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 will be accepted at the Transfer Station.

The above limitations on the types of wastes that are acceptable 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 are conducted. The inspections are 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 reviews 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 TS personnel at any other time, the concerns will be reported to the Henderson County Solid Waste Manager. 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 TS 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 offsite support requested.

# **CITIZEN'S CONVENIENCE CENTER**

## **1.0 Overview**

The Citizen's Convenience Center (CCC) is located in a designated area just west of the Closed C&D Landfill in the vicinity of the old TVA Landfill. A paved access road provides access directly from Stoney Mountain Road. Residents of Henderson County access this facility for the disposal of their personal household waste and multiple types of recyclables. The facility consists of a paved circular drive around the inside of a retaining wall. Recyclable material and MSW waste collection boxes are staged on the lower side of the retaining wall. An attendant is posted at the end of the access road, just prior to entering the Convenience Center site as needed. The Convenience Center also provides facilities for the collection of other recyclable materials or banned items (i.e., waste oil, antifreeze, batteries, etc.) along with the permanent Household Hazardous Waste Collection Facility and the Mercury Products Recycling Collection Facility.

## **2.0 Facility Location**

The CCC is located at 265 Convenience Center Drive, Hendersonville NC 28791 (see Appendix D).

## **3.0 Operating Hours**

Normal operating hours are 8:00 a.m. to 4:30 p.m., Monday through Saturday but subject to change per Henderson County Administration. The CCC 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 one (1) employee is required for the daily operation of the CCC. The employees are properly trained in safety procedures and the inspection of incoming wastes. The employees are responsible for manning the attendant's station at the entrance, coordinating the flow of traffic within the CCC, performing general housekeeping activities and coordinating the transfer in and out of the various collection boxes.

## **5.0 Access and Security**

The CCC is enclosed by security fences and gates. Access to the entrance road, off Stoney Mountain Road, is controlled by a gated entrance, fencing and a 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**

The attendant directs the residents to the applicable disposal area based on the type of waste and/or recyclable material requiring disposal. The onsite personnel monitor the

internal site traffic and ensure that residents follow the prescribed traffic pattern to the various disposal stations and exit the site. The onsite personnel also ensures 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 are transported in covered or enclosed vehicles. Throughout the day and at the end of each working day, facility personnel monitor the access road and the CCC area for litter and other debris. This material is collected and disposed of in the proper collection container. Odors are 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 CCC at all times. In the event of a fire at the facility, the NC DEQ will be notified within 24 hours and written notification will be submitted within 15 days.

## **9.0 Stormwater Management**

Stormwater management is handled through the construction and maintenance of various stormwater management basins, collection inlets, and piping and conveyance channels.

## **10.0 Wastewater Collection Facilities**

Wastewater collected from the household waste collection box area is drained to the onsite pump station operated by the County. The collection drains are covered by a metal grate system to prevent clogging by large debris. The metal grates are periodically raked and the collected waste is disposed of in an appropriate container.

## **11.0 Collection Facilities/ Services**

Household Waste: Household waste delivered to the site by Henderson County residents in their personal vehicles is collected for disposal in dedicated open-top roll-off boxes. County staff coordinates the removal, disposal, and staging of the roll-off collection boxes on an as-needed basis.

Recyclable Material: The household recyclable material 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 is generally collected in dedicated recycle roll-off collection containers. County staff coordinates 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 exists at the CCC. Waste oil, used oil filters, and antifreeze are periodically collected by an authorized recycler for processing.

Cooking Oil: A designated collection station exists at the CCC. Used cooking oil is periodically collected by an authorized recycler for processing.

Batteries: A designated collection station is provided at the CCC. Used batteries are periodically collected by an authorized recycler for processing.

Electronics: TVs and monitors are presently collected north of the TS (see Appendix D for exact location). At the CCC, peripherals and other electronics (except TVs and monitors) are collected. 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 are periodically collected by an authorized recycler for processing.

Mercury Products Recycling: A designated collection facility is provided for the collection of mercury containing devices and lamps containing mercury from residents of Henderson County. No business wastes containing mercury are collected at this site, and only staff is permitted to enter the facility so as to prevent accidents. The collected items include, but are not limited to: thermometers, fluorescent tubes and bulbs, elemental mercury, switches, and barometers. Items are carefully packed by trained staff and are periodically shipped by an authorized recycler for processing.

## **12.0 White Goods / Metals**

The CCC accepts white goods and other recyclable metal products. Chlorofluorocarbon (CFC) refrigerants are extracted by County staff or contractor before removal from site. Any refrigerator/freezer equipped with locking doors will have the door(s) removed by staff when accepting these items. Records of this activity are maintained at the SH (see Appendix D).

# **HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITY**

## **1.0 Overview**

The County 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. Dates and operation hours are subject to change as designated by the County.

## **2.0 Facility Location**

The HHW Collection Facility is a permanent location at the CCC, located at 265 Convenience Center Drive, Hendersonville NC 28791. See Appendix D.

## **3.0 Wastes Received**

The collection facility only receives HHW generated by homeowners from within Henderson County. The household hazardous waste collection facility will not accept any radioactive waste, explosives, or bio-infectious wastes. The County retains the right to refuse any waste during events and will work with NC DEQ, when appropriate, to find the best disposal options for those refused HHW items.

## **4.0 Reporting Requirements**

The County shall maintain records of the amount of HHW (and CESGQ HHW waste) received for disposal at the facility and the amounts shipped off site for recycling, reuse, treatment and/or disposal. Copies of shipment records are provided to Henderson County Solid Waste and/or Environmental Programs by an authorized household hazardous waste shipping company via original manifests. Records are compiled following collection events and maintained by staff for inspection.

On or before August 1<sup>st</sup> of each calendar year, the County shall report to the NC DEQ Solid Waste Section the amount of HHW 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 HHW facility operates in general accordance with the Operations Plan included in Appendix J. The contact for the County varies periodically due to staff changes and/or reassignments of responsibilities within the County staff but in general is an employee within the Solid Waste or Environmental Programs Divisions. County staff responsible for conducting or overseeing an HHW collection event are familiar with the procedures as outlined in the Operations Plan and are trained through by an authorized HHW professional to receive a 40-hour HAZWOPER certification. Reauthorization of this training occurs annually for both the event supervisor and all assisting staff. The

transporter and disposer/recycler for a collection event(s) are contracted by the County as needed. The transporter and disposer/recycler is 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 mercury products, waste oil, used oil filters, antifreeze, batteries, etc. are collected through designated onsite collection facilities and are not generally collected as a part of an HHW event.

## **6.0 Safety Plan**

A copy of the Safety Plan is included in Appendix K. 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.

## **7.0 CESQG Events**

Conditionally Exempt Small Quantity Generator (CESQG) hazardous waste and electronics recycling collection events will begin through Henderson County Solid Waste at a future date when an authorized vendor is secured. These events will take place during the year as designated by the County. Items accepted during these events will consist of hazardous waste such as, but not limited to: household-type cleaning chemicals, excess maintenance chemicals, and office-related electronics. Limits on quantities brought to the events by county businesses will be limited by volume and must be verified on a signed collection form. A full operations and safety plan will be developed at a future date and sent to the NC DEQ Solid Waste Engineer for approval. Managers and staff working these events will be 40-hour HAZWOPER trained. Training sessions will occur annually.

## **8.0 Hard-to-Recycle Events for Citizens**

Hard-to-recycle events for citizens will begin at a future date when authorized vendors are secured to handle those items not regularly accepted at the CCC. Examples of hard-to-recycle items include, but are not limited to: furniture, mattresses, ceramic fixtures, medical and other film, polystyrene foam, and rigid plastics. No commercial or business-generated wastes will be accepted during these events unless otherwise designated by the Henderson County Solid Waste Director or County Engineer. No hazardous wastes or paints will be accepted during these events.

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

## **1.0 Scrap Tires**

The HCSWF accepts scrap tires for recycling. Scrap tires are taken to a designated collection station located in the northeast quadrant of the TS. The scrap tires are manually loaded into covered transport trailers for shipment offsite. Once the tire trailers

are loaded, an authorized tire recycler removes the trailers for processing (see Appendix D).

## **2.0 Paint Bulking and Collection Facility**

The HCSWF accepts paints for recycling at a designated facility behind the Transfer Stations during designated dates and times. Latex paint is bulked at this facility into 55-gallon steel drums, and then stored. Only non-flammable paints are bulked in this facility. Flammable paints or paint-related materials are collected outside of this facility in cubic fiber boxes by 40-hour HAZWOPER trained Solid Waste staff. Both latex drums and cubic fiber boxes are carefully labeled and periodically hauled away by an authorized HHW recycler for processing. See Appendix I, Part I.

## **3.0 Asphalt Shingles Recycling**

The HCSWF accepts asphalt shingles for recycling. Loads of clean shingles are taken to a designated area for dumping in the northeast quadrant of the TS. Clean loads of asphalt shingles can contain felt and nails, though no other roofing items, trash, or recyclables can be dumped into the designated containers. Trash and recycling dumpsters are provided separately for wastes. Absolutely no asbestos shingles are accepted at the Henderson County Transfer Station facility or at this designated shingle recycling area. Solid Waste staff periodically inspects incoming wastes to ensure that no asbestos shingles have been brought into the facility. Once the open-top dumpsters are loaded, an authorized, contracted recycler removes them for processing offsite. See Appendix I, Part II.

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

## **1.0 Overview**

The County operates a drop-off area for recyclable material collected by 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 collect single stream recyclables in conjunction with their normal household MSW collection services. The drop-off area provides 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.

## **2.0 Facility Location**

The Hauler recycling and MSW drop-off area is located at the HCSWF, 191 Transfer Station Road, Hendersonville NC 28791 (see Appendix D).

## **3.0 Operating Hours**

Normal operating hours for the Hauler recycling and MSW drop-off area are 8:00 a.m. to 4:30 p.m., Monday through Saturday. The Hauler 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 monitors 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 is not 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 also coordinates 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 SH. As each load of waste is weighed across the scales, the scale attendant will direct the customer to the appropriate disposal facility. The site is enclosed by fencing and gates to prevent unauthorized access.

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

Incoming wastes are transported in covered or enclosed vehicles. Outgoing container boxes are covered or enclosed appropriately 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 monitor the area for litter. Mosquitoes and rodents are 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 NC DEQ will be notified within 24 hours and written notification will be submitted within 15 days.

## **8.0 Stormwater Management**

Stormwater management is handled through the construction and maintenance of various stormwater collection inlets, piping and conveyance channels.

## **9.0 Wastewater Collection Facilities**

Wastewater collected from the MSW collection box area is drained to the on-site pump station operated by the County. The collection drains are covered by a metal grate system to prevent clogging by large debris. The metal grates are periodically raked and the collected waste is disposed of in an appropriate container.

## **BENEIFICAL FILL DROP-OFF AREA**

### **1.0 Overview**

The County operates a drop-off area for certain loads of beneficial fill (clean, unpainted concrete) material brought to the site.

### **2.0 Facility Location**

The beneficial fill area is located at the HCSWF at 191 Transfer Station Drive, Hendersonville, NC 28791 (see Appendix D).

### **3.0 Operating Hours**

Normal operating hours for the beneficial fill area are 8:00 a.m. to 4:30 p.m., Monday through Saturday, and 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 monitor the activities at the facility and provide assistance/direction as needed to ensure the safe and proper disposal of beneficial fill material. The site is not manned on a full-time basis. County staff may assist in the coordination of traffic in and around the site to ensure a continued safe operation. Staff is trained to identify types 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 SH. Each load of waste material is weighed across the scales and the scale attendant will direct the customer to the appropriate disposal area.

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

Incoming wastes are transported in covered or enclosed vehicles. Throughout the day and at the end of each working day, facility personnel monitor the area for litter. Mosquitoes and rodents are 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, NC DEQ will be notified within 24 hours and written notification will be submitted within 15 days.

## **8.0 Stormwater Management**

Stormwater management is handled through the construction and maintenance of various Stormwater collection inlets, piping and conveyance channels.

## **9.0 Operations**

Selected loads of beneficial fill material are diverted to the beneficial fill area for separation of the recyclable/reusable material prior to disposal of any residual waste material. The load of waste material is discharged onto a contained unpaved surface and the recyclable/reusable material is removed and/or separated from the unusable waste. The separation of the material is 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 into 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 is collected and disposed of through the transfer station operation. Proper protective equipment is worn by the site personnel during the separation process.

# **MULCHING AND GRINDING PROCESSING**

## **1.0 Purpose of Plan**

This operations plan has been developed for the Mulching, Grinding, and Processing (MGP) Area located at the HCSWF. This plan has been prepared in accordance with the requirements of the NC DEQ, 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 processing area. All personnel involved with the management or supervision of operations at this designated area are required to review the operations plan and to maintain the location in conformance with applicable requirements. A copy of the operations plan is kept at the SH.

## **2.0 Facility Location**

The MGP Area is located at the HCSWF, 191 Transfer Station Drive, Hendersonville, NC 28791 (see Appendix D).

## **3.0 Service Area**

This MGP Area will provide service for all of Henderson County.

## **4.0 Siting Requirements**

The MGP Facility siting requirements are described as follows:

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

The MGP Area consists of approximately 1.5 acres located east of the closed MSWLF. The location of the facility is shown in Appendix D. Henderson County Solid Waste is authorized to process and store not more than six thousand (6,000) cubic yards of acceptable material per quarter. At least once per year, or more as often as needed, Henderson County will contract with a local authorized company to properly process the materials onsite if applicable (see Appendix H). Waste material not acceptable to be processed by the contracted company 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 proposed adjacent Small Type 1 Composting Facility.

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

## **6.0 Personnel**

The area is owned and operated by Henderson County. County staff will operate the MGP Area 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 SWAN) is utilized for initial training of onsite personnel and for continuing education. The employees also direct and coordinate the movement of collection vehicles into and out of the MGP Facility.

## **7.0 Technical Operational Requirements**

The following operational criteria shall be met at the MGP 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 cannot 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.
- 8) Leaves are also collected at this site and only used onsite for erosion control purposes to stabilize banks and/or slopes.

The tonnage and classification of waste materials received at the MGP Area, as well as the tonnage of material hauled offsite, is recorded at the SH. These records are monitored to ensure the volume of material processed and stored on site does not exceed 6,000 cubic yards during any given quarter. 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.

## **8.0 Traffic Control**

Access to the MGP Area is controlled by properly trained employees who are located at the Scale House. As vehicles arrive at the MGP 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 MGP Facility area.

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

Incoming wastes are transported in covered or enclosed vehicles. Outgoing container boxes are covered or enclosed appropriately 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 monitor the area for litter. Vectors are controlled so as to protect the public health and welfare.

## **10.0 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 NC DEQ will be notified within 24 hours and written notification will be submitted within 15 days.

## **11.0 Stormwater 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 Stormwater conveyance channels to a sediment basin prior to discharge off the property. Stormwater management is handled through the construction and maintenance of various stormwater collection inlets, piping and conveyance channels.

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

The MGP Area 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. Prior to the use of the site as a temporary disaster debris staging/storage area, NC DEQ's Senior Environmental Specialist with the Asheville Regional Office 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 offsite 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 (FUTURE) 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 NC DEQ, 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 Scale House, 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, Grinding, and Processing Area (see Appendix D).

## **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 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**

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, silvicultural waste, untreated and unpainted wood waste, or any combination thereof in its

composting operation. Additionally, there are clean wood materials available at the landfill for composting as a result of the mulching and grinding operation, though these materials may typically get 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 Cooperative 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, and is closed on Sunday and holidays, as designated by the County.

## **6.0 Personnel**

The facility is owned and operated by Henderson County. County staff 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.

## **7.0 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 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, silvicultural 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 will be maintained at the Scale House. 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 will be recorded at the scale house.

## **8.0 Traffic Control**

Access to the composting site will be controlled by properly trained employees who are located at the entrance of the landfill. As vehicles arrive at the composting site or scales, staff 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.

## **9.0 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, staff will monitor the area for litter. Vectors shall be controlled so as to protect the public health and welfare.

## **10.0 Fire Control**

In the event that a fire occurs, 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, NC DEQ will be notified within 24 hours and written notification will be submitted within 15 days.

## **11.0 Stormwater Management**

Standard erosion control practices, such as sediment basins, silt fencing, vegetative slopes, and diversion ditches will be utilized at the site.

## **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. The contingency plan outlined below describes operations for the Transfer Station and Citizen's Convenience Center facilities.

### **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, 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 NC DEQ Solid Waste Section's Senior Environmental Specialist, in the Asheville Regional Office will be notified within 24 hours of the triggering event and written notification will be submitted within 15 days.

### **3.0 Power Failure**

Generator backup on the weigh system will provide for long-term continued operation. In the event of a prolonged power outage, load sizes may be estimated and the vehicles allowed to enter the appropriate waste disposal facility. Estimated waste tonnages processed through the TS will be reconciled with the waste tonnages processed through the offsite disposal facility.

Onsite utility systems (i.e., pump stations, etc.) will be regularly monitored to ensure the wet wells (storage capacity) is not exceeded. A standby generator is stationed onsite in the event of a power outage.

### **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 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 onsite 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 Disruptions**

Other disruptions to the normal waste disposal activities will be dealt with on a per occurrence basis. 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.

## **APPENDICES**

- 1) Appendix A. DHEC Permit, Union County Regional MSW Landfill
- 2) Appendix B. Transportation and Disposal Agreement between Republic Services and Henderson County
- 3) Appendix C. Certificates of Occupancy for Solid Waste Properties Post Capital Improvement Plan Implementation
- 4) Appendix D. Henderson County Solid Waste Facilities Site Map
- 5) Appendix E. Boundary Plat of Henderson County Solid Waste Property
- 6) Appendix F. Daily Inspections Reports and Screening Reports
- 7) Appendix G. Vector Control Vendor Letter of Service Verification
- 8) Appendix H. RFP for Mulching/ Material Reduction
- 9) Appendix I. Non-hazardous Waste Collection Operations Plan Modifications, Part I
- 10) Appendix I. Non-hazardous Waste Collection Operations Plan Modifications, Part II
- 11) Appendix J. Safety Plan for Henderson County Household Hazardous Waste Collection
- 12) Appendix K. Example CESQG Generator Statement & Example Waste Collection Plan

## Appendix A. DHEC Permit, Union County Regional MSW Landfill



C. Earl Hunter, Commissioner

*Promoting and protecting the health of the public and the environment.*

OFFICE OF ENVIRONMENTAL QUALITY CONTROL  
BUREAU OF LAND AND WASTE MANAGEMENT  
CLASS 3 LANDFILL PERMIT  
Permit #442441-1101

Date of Issuance: June 8, 2000  
Date of Modification: April 22, 2009  
Effective Date of Modification: May 7, 2009

Permission is hereby granted to:

Name of Facility: Union County Regional Municipal Solid Waste Landfill  
dba Upstate Regional MSW Landfill  
Permittee: Republic Services of Kentucky, LLC  
Mailing Address: PO Box 188  
Cross Anchor, South Carolina 29331  
Contact Person: Mr. Tony Davies  
Telephone: (864) 969-4460

for the operation of a Class 3 landfill operated by Republic Services of Kentucky, LLC and located east of the intersection of SC Highways 56 and 49; more specifically; approximately 1.5 miles southeast of the intersection of SR-44-262 and SR-44-261 between the Cross Anchor and Cross Keys communities in Union County.

This permit is modified pursuant to S.C. Code Ann. Sections 44-96-10 et seq. (supp. 2008) and 25A S.C. Code Regs. 61-107.19. The authority granted hereunder is subject to the requirements of the aforementioned law and regulation and the attached conditions.

Kent M. Coleman, P.G. Director  
Division of Mining and Solid Waste Management  
Bureau of Land & Waste Management

CLASS 3 LANDFILL PERMIT  
Permit #442441-1101

A. SPECIAL CONDITIONS

- 1) The permittee shall adhere to the following approved plans:

*Design/specifications & operational plan- dated December 2006*

unless permit conditions state otherwise.

- 2) The allowable rate of disposal for this landfill is 910,000 tons per fiscal year (July 1-June 30). The Permittee shall make available to the Department, upon request, its record regarding the amount of waste being received at the landfill.

B. ENVIRONMENTAL MONITORING CONDITIONS

1) GROUNDWATER DETECTION MONITORING SYSTEM

- a) The Permittee shall maintain a groundwater detection monitoring system consistent with the most recently approved Groundwater Detection Monitoring Plan and as required in R. 61-107.19 Part V Subpart E. The groundwater detection monitoring system shall consist of monitoring wells as designated in the most recently approved Groundwater Detection Monitoring Plan and any other monitoring wells specified by the Department. Modifications to the current groundwater detection monitoring system shall be in accordance with the requirements of 61-107.19 Part V 258.51 of Subpart E.
- b) The Permittee shall perform all groundwater sampling activities in accordance with the most recently approved Groundwater Detection Monitoring Plan and in accordance with the requirements of R.61-107.19 Part V 258.53 of Subpart E along with any subsequent modifications deemed necessary by the Department to uphold the intent of this permit.
- c) The Permittee shall evaluate analytical results in accordance with the most recently approved Sampling and Analysis Plan and any subsequent modifications required by the Department.
- d) The permittee must determine during each sampling event the groundwater elevation in each well relative to mean sea level (MSL) to the nearest hundredth of a foot. All elevations should be determined on the same day. The Permittee shall determine the total depth of each well on an annual basis.
- e) Groundwater samples shall be analyzed by a laboratory certified in the state of South Carolina.

2) METHANE MONITORING

The Permittee shall maintain a methane monitoring system consistent with the most recently approved Methane Monitoring Plan and as required in R.61-107.19 Part V 258.23 of Subpart C. Methane monitoring shall be conducted on a quarterly basis and results shall be submitted in the Semi-Annual, and Annual Groundwater Monitoring Reports that are referenced in permit condition B.4.a. If methane levels are detected at levels that exceed the limits specified in R.61-107.19 Part V 258.23.a of Subpart C, the permittee shall perform the actions required in R.61-107.19 Part V 258.23.c of Subpart C.

3) ASSESSMENT OF GROUNDWATER IMPACT

The Permittee shall perform any necessary assessment and corrective actions consistent with the requirements of R.61-107.258 Subpart E.

4) REPORTING

- a) The permittee shall analyze groundwater samples for the constituents outlined in Appendix I of R.61-107.258 and submit these groundwater data on a semi-annual basis in accordance with the following schedule:

<u>Sampling event</u>	<u>Due</u>
1st semi-annual event	July 15
2nd semi-annual event (Annual Report)	January 15

- b) The Permittee shall submit an annual report signed by a qualified groundwater scientist. The annual report shall summarize the semi-annual determinations of groundwater elevation, flow direction shown on a potentiometric map of each event, flow rate, analytical results, statistical analyses results, and quarterly methane monitoring results, with a discussion of the results and any exceedences of applicable standards. A determination of the ability of the groundwater monitoring well network to effectively detect a release from the facility shall also be included.
- c) The items specified under condition 4.b. of this permit shall be submitted to the SCDHEC, Bureau of Land and Waste Management, Division of Hydrogeology, Solid Waste Section and to the District Hydrologist in the Region 2 Environmental Quality Control Office in Spartanburg, South Carolina.

## **Appendix B. Transportation and Disposal Agreement between Republic Services and Henderson County**

### TRANSPORTATION AND DISPOSAL AGREEMENT

THIS TRANSPORTATION AND DISPOSAL AGREEMENT (this “Agreement”) is entered into effective as of July 1, 2015, by and between the County of Henderson, a political subdivision, organized and existing under the laws of the State of North Carolina ( “County”), and Republic Services of Kentucky, LLC, a Kentucky limited liability company ( “Republic”).

#### RECITALS

WHEREAS, the County owns the Transfer Station (as defined below);

WHEREAS, the County has a need for certain waste delivered to the Transfer Station to be transported and disposed of in a disposal facility;

WHEREAS, the County issued a Request for Proposals for Hauling and Disposal Services for Solid Waste with responses due April 2, 2015;

WHEREAS, Republic is a provider of solid waste transportation and disposal services and operates a disposal facility, and Republic responded to the County’s Request for Proposals;

WHEREAS, the County, after evaluating responses to its Request for Proposals, selected Republic to transport and dispose of certain waste delivered to the Transfer Station upon the terms and conditions set forth below.

#### AGREEMENT

NOW, THEREFORE, in consideration of these premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, each intending to be legally bound, agree as follows:

1. Definitions. For the purpose of this Agreement, the following terms shall have the meanings set forth below:

(a) “Affiliate” shall have the meaning set forth in Rule 12b-2 of the General Rules and Regulations under the Securities and Exchange Act of 1934, as amended, and shall additionally include successors, designees, and assigns,

(b) “Agreement” means this Transportation and Disposal Agreement between Republic and the County, as modified, supplemented or restated from time to time, together with any exhibits, schedules or attachments hereto.

(c) “Construction or Demolition Waste” means solid waste resulting solely from construction, remodeling, repair, or demolition operations on buildings, or other structures, but does not include inert debris, land-clearing debris or yard debris.

(d) “County Area” means the geographic jurisdiction of the County and each municipality within the County,

(e) “CPI” means the Consumer Price Index for All Urban Consumers (Water, Sewer and Trash Collection Services) U.S. City Average, as published by United States Department of Labor, Bureau of Statistics.

(f) “Disposal Facility” means the disposal facility known as the Upstate Regional MSW Landfill, located at 868 Wildcat Road, Enoree, South Carolina, 29331 and owned by Republic or any other disposal facility designated by Republic. A ten (10) day notice shall be given to the County prior to any change in the landfill used for disposal.

(g) “Effective Date” means July 1, 2015.

(h) “Environmental Laws” means all applicable laws, directives, rules, ordinances, codes, guidelines, regulations, governmental, administrative or judicial orders or decrees or other legal requirements of any kind, including, without limitation, common law, whether currently in existence or hereafter promulgated, enacted, adopted or amended, relating to safety, preservation or protection of human health and the environment (including, without limitation, ambient air, surface water, groundwater, land, or subsurface strata) and/or relating to the handling, treatment, transportation or disposal of waste, substances or materials, including, without limitation, any matters related to Releases and threatened Releases of materials and substances,

(i) “Fees and Taxes” means any federal, state, local or other taxes, assessments, fees, host charges, surcharges or similar charges directly or indirectly related to the acceptance, transportation, or disposal of Waste which are imposed on the Disposal Facility or Republic by law, ordinance, rule, regulation and/or agreement with a governmental authority at any time during the term of this Agreement, whether imposed retroactively or prospectively as such may be increased from time to time.

(j) “Force Majeure” means any event relied upon by Republic as justification for delay in or excuse from complying with any obligation required of Republic under this Agreement, including, without limitation: (i) an act of God, landslide, lightning, earthquake, fire, explosion, storm, flood or similar occurrence; (ii) any act of any federal, state, county or local court, administrative agency or governmental office or body that stays, invalidates, or otherwise affects this Agreement, the operation of, or any permits or licenses associated with or related to, the Disposal Facility with respect to the acceptance, transportation and/or disposal of Waste; (iii) (a) the denial, loss, suspension, expiration, termination, failure of renewal or (b) the attainment of any maximum disposal amounts within any applicable time period, of any permit, license or other governmental approval required to accept, transport and/or dispose of Waste; (iv) the adoption or change (including a change in interpretation or enforcement) of any federal, state, county, or local law, rule, permit, regulation or ordinance after the Effective Date hereof, applicable to the obligations hereunder, including, without limitation, such changes that have a substantial, material and adverse effect on the cost of performing the contractual obligations herein; (v) the institution of a legal or administrative action, or similar proceeding, by any person or entity which delays or prevents any aspect of the acceptance, transport and/or disposal of Waste; or (vi) the failure of Republic to obtain an expansion of the Disposal Facility for the acceptance and disposal of waste.

(k) “Hazardous Materials” means any pollutant, contaminant, hazardous or toxic substance, constituent or material, including, without limitation, petroleum products and their derivatives, or other substances, regulated under or pursuant to any Environmental Laws. The term “Hazardous Materials” also includes Hazardous Waste and any pollutant, contaminant, hazardous or toxic substance, constituent or material, including, without limitation, petroleum products and their derivatives, or other substance that is, on or after the Effective Date of this Agreement, deemed hazardous by any judicial or governmental entity, body or agency having jurisdiction to make that determination.

(l) “Hazardous Waste” means any waste regulated as hazardous under or pursuant to any Environmental Laws. The term “Hazardous Waste” also includes any waste that is, on or after the Effective Date of this Agreement, deemed hazardous by any judicial or governmental entity, body or agency having jurisdiction to make that determination.

(m) “Release” means any release, spill, emission, leaking, pumping, injection, deposit, disposal, discharge, dispersal, leaching or migration into the indoor or outdoor environment, including, without limitation, the movement of Hazardous Materials through the ambient air, soil, subsurface water, groundwater, wetlands, lands or subsurface strata.

(n) “Special Waste” means non-hazardous waste that requires special handling or management due to its composition or volume. All such waste must comply with Republic’s Special Waste procedures prior to acceptance.

(o) “Ton” means 2,000 pounds.

(p) “Transfer Station” means the transfer station owned by the County and located at 802 Stoney Mountain Road, Hendersonville, North Carolina,

(q) “Unacceptable Waste” means any and all solid waste which the Disposal Facility is not authorized to accept for disposal pursuant to its permits and licenses, including, without limitation, yard waste, highly inflammable substances, Hazardous Materials, Hazardous Waste, liquid wastes, certain pathological and biological wastes, explosives, radioactive materials, and other materials deemed by local, state, or federal law, or in the reasonable discretion of Republic, to be dangerous or threatening to human health or the environment, to the transport of Waste, or to the operations conducted at the Disposal Facility.

(r) “Waste” means any and all non-hazardous solid waste, including construction and demolition materials but excluding Unacceptable Waste, transported from the Transfer Station and delivered to the Disposal Facility by Republic on behalf of the County which Republic is authorized to transport and which the Disposal Facility is authorized to accept pursuant to its permits and licenses in existence at such time.

2. Term. Subject to the terms and conditions of this Agreement, the term of this Agreement shall commence on the Effective Date and shall continue for five years (the “Initial Term”). Upon the mutual agreement of the parties at the end of the Initial Term, this Agreement may be renewed for additional one year periods (each, a “Renewal Term”, and collectively with the Initial Term, the “Term”).

3. Disposal Fees.

3.1 The County shall pay Republic disposal fees of \$35.24 per Ton for the transportation of Waste, including Construction or Demolition Waste, from the Transfer Station to the Disposal Facility and the disposal of Waste at the Disposal Facility, plus any (i) Fees and Taxes and (ii) increased operational costs or expenses incurred by Republic caused by the adoption or change (including a change in interpretation or enforcement) of any Environmental Laws or regulations, whether imposed retroactively or prospectively (such amount as adjusted by (i) and (ii) is referred to herein as the "Disposal Fees"). The Disposal Fees, specified in this Section 3 shall be increased in accordance with any increases to the CPI as follows: effective on July 1 of each year during the Term (commencing on July 1, 2016), the Disposal Fees shall be increased by 90% of the increase in the CPI. If the CPI does not increase, then no adjustments shall be made to the Disposal Fees in such year. The change in the CPI shall be measured by comparing the CPI of April of the current year to the CPI of April of the previous year not to exceed 5% each year. The term "Disposal Fees" as used in this Agreement shall include any adjustments made pursuant to the immediately preceding sentence. The parties hereto agree that the Disposal Fees only apply to Waste delivered to the Disposal Facility if such Waste is collected from the Transfer Station and delivered to the Disposal Facility by long-haul transfer trailers. The CPI adjustment shall be automatic.

3.2 The Disposal Fee is based upon diesel fuel cost of \$3.00 per gallon. Each \$0.10 increase or decrease above or below this range will result in a 1% fuel surcharge or credit per Department of Energy published price for Lower Atlantic Region. The price posted on the last Monday of each month shall be used to determine the fuel surcharge or credit applicable for the upcoming month's billing.

3.3 The Disposal Fee is also based on a minimum average load weight of Waste transported from the Transfer Station hereunder of 19 tons (the "Minimum Average"). If the monthly average load is less than the Minimum Average, the parties agree that all of the loads for the month will be billed at the Minimum Average. Republic or its subcontractor may request to haul a load less than the Minimum Average for trailer logistical purposes, and in such event, such load would be disregarded in calculating the average load weight for purposes under this Section 3.3.

3.4 If Republic performs disposal services outside its regular business hours or any additional services due to special circumstances concerning the services hereunder not caused by Republic (including, without limitation, as requested by the County), Republic may adjust the Disposal Fees to offset the additional costs in performing such services.

3.5 Republic shall send the County an invoice for the Disposal Fees. The County shall pay Republic the full amount within one month of receipt of the invoice via check, electronic fund transfer (EFT) or automated clearing house (ACH), without offset. Unpaid invoices shall carry interest at the lesser of (i) of one and one half percent (1.5%) per month or (ii) the maximum amount permitted under applicable law. The obligations of the County to pay the Disposal Fees and other amounts payable hereunder shall be absolute and unconditional. In the event that the County fails to timely pay any outstanding amount that is not being contested by the County in good faith, Republic may, in addition to any other remedies available to

Republic, suspend the County's right of transport and disposal of Waste at the Disposal Facility pursuant to this Agreement and/or terminate this Agreement, by giving thirty (30) days written notice to the County.

3.6 Republic may increase the Disposal Fees as a result of any of the following acts which occur outside of Republic's control (i) any increases in taxes, fees and other governmental charges, and (ii) certain increases in costs incurred by Republic due to (a) any third party or municipal disposal facility being used, (b) changes in local, state, or federal rules, ordinances or regulations, or (c) changes in taxes, fees or other governmental charges (other than income or real property taxes). Notwithstanding anything to the contrary in Section 3.6(ii), neither party anticipates using any third party or municipal disposal facility, and none will be used in the absence of governmental regulation requiring the same.

3.7 In the event that (i) any Waste requires special handling or management due to its composition or volume or (ii) Republic agrees to dispose of any Unacceptable Waste, the County and Republic shall determine in advance, on a case by case basis, the charge to the County for Republic's transportation and disposal of such wastes. Payment for such transportation and disposal shall be upon the same terms as the payment of other Disposal Fees.

4. Delivery and Acceptance of Waste.

4.1 The County agrees that all of the Waste delivered to the Transfer Station shall be loaded by the County onto Republic's transportation vehicles and transported and delivered by Republic to the Disposal Facility. All trailers, trucks and any other equipment that Republic furnishes under this Agreement shall remain Republic's property, The County shall use the equipment only for its proper and intended purpose and shall not overload (by weight or volume), move or alter the equipment.

4.2 Republic shall have the right to weigh all vehicles delivering Waste to the Disposal Facility. At any time, Republic or the County may confirm the tare weight of any vehicle delivering Waste to the Disposal Facility on behalf of the County.

4.3 The County acknowledges that Republic intends to reject waste that, in Republic's sole determination, contains Unacceptable Waste, would be in violation of this Agreement, Republic's then existing licenses or permits, or would result in a violation of applicable federal, state or local laws, statutes, orders, rules, regulations or ordinances. The operator of the Transfer Station shall visually inspect Waste delivered to the Transfer Station. If, following Republic's acceptance of a load of waste hereunder, Republic determines that Unacceptable Waste has been loaded onto its vehicles or included in such waste, Republic shall provide telephonic notice to the County as soon as reasonably practicable to the County manager or his designee (who has been so designated in writing to Republic) of such Unacceptable Waste, and Republic shall provide written follow-up notice to the County manager of such Unacceptable Waste within two (2) business days after the date of such determination, Republic can reject such waste at any time during the execution of services under this Agreement, including after such waste has been delivered to the Disposal Facility.

4.4 Ownership of Waste delivered to the Disposal Facility on behalf of the County shall pass to and be accepted by Republic when the vehicle transporting the Waste leaves the Transfer Station. Ownership of Unacceptable Waste loaded onto Republic's vehicles or delivered to the Disposal Facility by or on behalf of the County shall not pass to Republic at any time unless Republic specifically agrees in writing in advance to accept such Unacceptable Waste.

4.5 Republic may detain and inspect the contents of all vehicles delivering Waste on behalf of the County that are delivering Waste to the Disposal Facility.

4.6 The County shall not load onto Republic's vehicles Unacceptable Waste or cause Unacceptable Waste to be delivered or disposed of at the Disposal Facility. If any Unacceptable Waste is loaded onto Republic's vehicles or delivered to the Disposal Facility by or on behalf of the County, Republic shall have the right to refuse or reject such waste or, if not detected prior to loading onto Republic's vehicles or acceptance at the Disposal Facility, Republic may remove such waste and assure its proper disposal, all at the County's expense, which expense the County agrees to promptly pay upon presentation by Republic of an invoice setting forth the actual costs in reasonable detail.

4.7 If Republic's trucks receive Unacceptable Waste at the Transfer Station, or deliver such waste to the Disposal Facility, and that delivery disrupts or otherwise affects the normal operations of the transportation of Waste or the Disposal Facility, or if Republic incurs any liabilities, obligations, costs, expenses (including reasonable attorneys' fees and costs) or damages as a result of the transportation or delivery of such waste, the County shall be liable to Republic, and upon presentation by Republic of an accounting in reasonable detail, the County shall promptly pay, perform and discharge Republic for and indemnify and hold Republic harmless against all such liabilities, obligations, costs, expenses or damages that Republic incurs as a result of the transportation or delivery of Unacceptable Waste.

4.8 In addition to other remedies provided in this Agreement, Republic may suspend the services it is required to provide pursuant to this Agreement and/or terminate this Agreement upon repeated loadings or deliveries or the one-time intentional loading or delivery of Unacceptable Waste by the County, as such are determined by Republic. In such event, Republic shall notify the County in writing of its intention to suspend services and/or terminate this Agreement, and such suspension and/or termination shall become effective one hundred twenty (120) days following delivery of such notice (provided, however, if during such one hundred twenty (120) day period, Unacceptable Waste is loaded or delivered to Republic, then Republic may suspend and/or terminate this Agreement immediately),

4.9 Republic shall only be responsible for transportation of Waste from the Transfer Station to the Disposal Facility. Republic shall not be responsible or liable for any other transportation, including redelivery to the County, of any waste, including Unacceptable Waste. Republic may, in its sole discretion, deem a violation by the County of any applicable law, statutes, ordinances, rules, regulations, or orders relating to the transportation and handling of solid waste a breach of this Agreement.

4.10 Republic agrees to comply in all material respects with all applicable federal, state, and local laws, statutes, ordinances, rules, regulations, operational plans and orders concerning the transportation and handling of solid waste.

4.11 Republic shall not be responsible for injuries, damages, or fines, including, without limitation, overweight penalties or losses, excluding overweight axles, damage to driveways, parking areas, loading areas, or other surfaces at the Transfer Station, arising directly or indirectly from or connected in any manner with overload. Republic shall also be responsible for tarping and untarping the trailers upon receipt and disposal of Waste and shall not negligently allow any Waste to fall out of its trailers during the hauling and transportation of Waste to and from the Disposal Facility. The County shall be responsible for damage to Republic's trailers, including damage to trailers belonging to any of Republic's subcontractors, resulting from negligent or willful acts or omissions of the County or any of its officers or employees.

4.12 The County shall operate the Transfer Station during the following hours: Monday through Saturday — 8:00 AM to 5:00 PM, excluding holidays as established by the County. Republic will supply an adequate number of spare trailers to be used to load and store all solid waste to assure that the waste is never left on the tipping floor overnight. The County will provide a vehicle to move spare trailers at the solid waste transfer station. Republic will be allowed to operate outside of operating hours and will be issued a key to gain access to the Solid Waste Transfer Station. If at any time the County has to leave Waste on the tipping floor overnight due to Republic's inability to transport the Waste in a timely manner on the terms and conditions of this Agreement, Republic will forfeit the disposal fee for this load. Republic would also be responsible for half (1/2) of any fines levied against the County by the State as a result of its inability to transport such Waste, subject in all cases to the terms and conditions of this Agreement (including without limitation, Section 5).

4.13 Republic shall have the right, in its sole discretion, to subcontract the transportation of Waste from the Transfer Station to the Disposal Facility without the consent of the County. Republic shall continue to be responsible for its transportation obligations in the event transportation of waste is subcontracted. Republic, and not the County, shall be liable for any obligations between Republic and any subcontractor.

5. Suspension and/or Termination. In the event of an event of Force Majeure, either party hereunder may suspend its obligations hereunder and such party shall not have any liability to the other party due to such Force Majeure or such suspension. It is mutually understood and agreed that the obligation of Republic to transport and dispose of Waste for the Disposal Fees provided in Section 3, as adjusted, for a period of not less than forty-two (42) months is fixed and non-terminable, provided, however, that Republic may terminate this Agreement upon (i) an event of Force Majeure which continues unabated for a period of thirty (30) days and which, in Republic's reasonable discretion, renders the transportation of Waste or operation or maintenance of the Disposal Facility infeasible for any reason; or (ii) any breach or default of this Agreement by the County, pursuant to Section 11 hereof.

6. Covenants, Representations and Warranties of the County. The County agrees and represents and warrants to Republic as follows:

6.1 Existence and Good Standing. The County is and will continue to be throughout the term hereof) validly existing as a political subdivision and is in good standing under the laws of the State of North Carolina.

6.2 Approval and Authorization. The County has full power and authority to enter into this Agreement and to fully perform all of its duties and obligations hereunder pursuant to various and other enabling sections of the North Carolina General Statutes. The Board has duly authorized and the applicable North Carolina statutes so authorize the following: the execution and delivery of this Agreement, the County's performance of all of its duties and obligations contained herein, the County's collection of all necessary fees and charges, the County's making of all necessary expenditures, and the County's taking of all other necessary actions to meet these obligations, including, but not limited to, to the extent allowed by law and the North Carolina and United States Constitutions, and adopting solid waste management plans. This Agreement constitutes a valid and legally binding obligation of the County during the term of this Agreement, is binding upon all future Boards, and is enforceable in accordance with its terms.

6.3 No Litigation. There is no action, suit, or proceeding pending or, to the best of County's knowledge and belief, threatened against or affecting the County, at law or in equity or before or by any federal, state, municipal or other governmental department, commission, board, bureau, agency or instrumentality wherein any decision, ruling or finding would adversely affect the transactions contemplated herein.

6.4 Non-discretionary Functions. This Agreement pertains solely to non-discretionary, proprietary functions. The County's continuing obligations under this Agreement bind all future County Boards or other governing bodies, during the term of this Agreement, to make all necessary appropriations and take all necessary actions to meet these obligations.

6.5 County Support. The County fully supports the operation of the Transfer Station and the transport and disposal by Republic of Waste at the Disposal Facility and is committed to fully supporting the performance of this Agreement.

6.6 Covenant for Delivery of Waste. The County, shall: (i) exclusively use the Transfer Station and the Disposal Facility for disposal of all Waste delivered to the Transfer Station from within the County; (ii) not contract with any other Person for services which are the same or similar to those provided by Republic in this Agreement; and (iii) not establish or operate a solid waste management facility within the County Area offering the same or similar services as those provided by Republic in this Agreement; provided, however, that nothing herein shall prevent the County and municipalities within the County from implementing waste recycling and waste reduction programs.

7. Covenants, Representations and Warranties of Republic. Republic represents and warrants as follows:

7.1 Existence and Good Standing. Republic is duly organized under the laws of Kentucky and is authorized to do business in North Carolina and will continue to be,

throughout the term hereof validly existing in good standing under the laws of the State of Kentucky and authorized to do business in the State of North Carolina.

7.2 Approval and Authorization. Republic has all requisite power and authority to enter into and fully perform this Agreement. Republic's execution and delivery of this Agreement and Republic's performance of all of their duties and obligations contained herein have been duly authorized by all necessary action on the part of Republic, and this Agreement of Republic is enforceable against Republic in accordance with its terms.

7.3 No Litigation. There is no action, suit or proceeding pending or, to the best knowledge and belief of Republic, threatened against or affecting Republic, or any of its affiliates, at law or in equity or before or by any federal, state, municipal, or other governmental department wherein any decision would materially, adversely affect the transactions contemplated herein.

7.4 Compliance with Laws. Republic covenants and agrees that, in the operation of the Disposal Facility, Republic will comply, in all material respects, with any and all federal, state, and local laws, including all Environmental Laws applicable to Republic concerning the operation of the Disposal Facility subject to Republic's right to contest in good faith the interpretation, application and enforcement of any such laws.

## 8. Indemnification.

8.1 Indemnification by Republic. Republic agrees to indemnify and save harmless the County, its officers and employees from any loss, claim, liability, penalty, fine, forfeiture, demand, cause of action, damages, suit and costs and expenses incidental thereto (including cost of defense, settlement and reasonable attorney's fees including any of the preceding relating to liability under the Environmental Laws or to investigation and cleanup under the Environmental Laws) ("Indemnified Costs"), arising out of or in connection with Republic's negligent performance of this Agreement; provided, however, that Republic shall not indemnify the County or any of its officers or employees from any Indemnified Costs to the extent caused by or resulting from any negligent or willful act or omission of the County or any of its officers, employees, agents or contractors, or any breach by the County of any agreement, representation or warranty of the County contained in this Agreement. Further, Republic agrees to indemnify and save harmless the County, its officers and employees from any loss, claim, liability, penalty, fine, forfeiture, demand, cause of action, damages, suit and costs and expenses incidental thereto (including cost of defense, settlement and reasonable attorneys' fees) incurred by the County to the extent caused by the loss of any required permits or authority to do business by Republic (or any of its affiliates providing services under this Agreement) that materially affect Republic's ability to provide the services under this Agreement. The indemnity obligation of Republic under this Section 8.1 shall survive the expiration or termination of this Agreement, for any reason whatsoever, subject to any applicable statute of limitation.

8.2 Indemnification by the County. The County agrees to indemnify, defend and save harmless Republic, its officers and employees, from any Indemnified Costs caused by or resulting from any negligent or willful act or omission of the County, its officers, employees, agents or contractors, or resulting from the breach by the County of any of the agreements,

representations, or warranties of the County contained in this Agreement: provided, however, that the County shall not indemnify Republic from Indemnified Costs to the extent caused by or resulting from any negligent or willful act or omission of Republic, its officers, employees, agents or contractors including, without limitation, any such act or omission in connection with Republic's transport and disposal of Waste, or any breach by Republic of any agreement, representation or warranty of Republic contained in this Agreement. The indemnity obligations of the County under this Section 8.2 shall survive the expiration or termination of this Agreement for any reason whatsoever, subject to any applicable statute of limitation. The County agrees not to contest by action or defense the enforceability of its indemnity obligations herein.

9. Insurance. Republic shall at all times, during the term of this Agreement, maintain in full force and effect coverage in the amounts shown below. Before commencement of work hereunder, Republic agrees to furnish the County certificates of insurance to the effect that such insurance has been procured and is in force. The certificates shall contain the following express obligations: "This is to certify that the policies of insurance described herein have been issued to the insured for which this certificate is executed and are in force at this time." Additionally, the insurance will include a Notice of Endorsement that will provide the County with thirty (30) days prior notice of a cancellation or material change in policy affecting Republic.

For purposes of this Agreement, Republic shall carry the following types of insurance in at least the limits specified below:

<u>Coverage</u>	<u>Limits of Liability</u>
Worker's Compensation	Statutory Limits
Employer's Liability	\$1,000,000 \$1,000,000 Aggregate
Commercial General Liability (Bodily Injury and Property Damage)	\$1,000,000 each occurrence \$3,000,000 aggregate
Commercial Automobile Liability (Bodily Injury and Property Damage)	\$1,000,000 each occurrence \$3,000,000 aggregate
Excess/Umbrella Liability	\$3,000,000 each occurrence

10. Notices. All notices or other communications to be given hereunder shall be in writing and shall be sent by overnight delivery or registered or certified United States mail, return receipt requested, properly addressed as follows:

To Republic:

Area President and General Manager  
 Republic Services of South Carolina, LLC  
 684 Mauldin Road

With copies to: Greenville, SC 29607

Republic Services, Inc.  
18500 North Allied Way  
Phoenix, AZ 85054  
ATTN: Deputy General Counsel, East Region

To The County:

Henderson County  
1 Historic Courthouse Square, Suite 2  
Hendersonville, NC 28792  
Attn: County Manager

With copy to:

Henderson County  
1 Historic Courthouse Square, Suite 5  
Hendersonville, NC 28792  
Attn: County Attorney

11. Default; Remedies.

11.1 Breaches. A breach of this Agreement shall mean a material failure to comply with any of the material provisions of this Agreement.

11.2 Events of Default. An event of default shall include, but not be limited to, the following:

(a) Republic voluntarily commencing any proceeding or filing any petition seeking relief under the United States Bankruptcy Code or any federal, state or foreign bankruptcy, insolvency or similar law; (ii) consenting to the institution of, or failing to controvert in a timely and appropriate manner, any such proceeding or filing of any such petition; (iii) applying for or consenting to the appointment of a receiver, trustee, custodian, sequestrator or similar official for a substantial part of its property; (iv) filing an answer admitting the material allegations of a petition filed against it in any such proceeding; or (v) making a general assignment for the benefit of creditors;

(b) the commencement of an involuntary proceeding or the filing of an involuntary petition in a court of competent jurisdiction seeking (i) relief in respect of Republic, or of a substantial part of Republic's property, under the United States Bankruptcy Code or any other federal, state or foreign bankruptcy, insolvency or similar law, which petition shall remain undismissed for 120 days; (ii) the appointment of a receiver, trustee, custodian, sequestrator or similar official for Republic or for a substantial part of Republic's property and such petition shall continue undismissed for 120 days; or (iii) an order or decree approving or ordering any of the foregoing shall continue and stay in effect for 60 days;

(c) a breach of this Agreement by Republic or the County, which breach is not cured pursuant to Section 11.3 hereof;

(d) failure to maintain the insurance required under Section 10. Notwithstanding any other provision, the County may terminate this Agreement if Republic does not reinstate coverage within fifteen (15) days after receipt of written notice from the County; or

(e) failure of the County to fulfill its cooperation obligations in Section 12.

(f) failure of Republic to transport the waste in a timely manner, as discussed in Section 4.12

11.3 Obligation to Cure Breaches. Each party shall in the case of any breach of its obligations under this Agreement either (i) cure the breach within 30 days of receipt of written notice from the non-breaching party, or (ii) continuously demonstrate within such cure period that it is actively and continuously pursuing a course of action which reasonably be expected to lead to a curing of the breach (the 30-day period will be extended for so long as the breaching party is actively and continuously pursuing such a course); provided, however, that if any party to this Agreement fails to pay the other party or parties any sum or dollar amount required to be paid when due hereunder, cure shall consist of payment which shall be made within 15 days of written demand from the non-breaching party, together with interest accruing at the legal rate from the date the payment was due.

#### 11.4 Remedies for Default.

(a) In the event of a default under this Agreement, the non-defaulting party shall, upon 5 days prior written notice to the defaulting party, have the right, but not the obligation or duty, to cure such default, including the right to offset the costs of curing the default against any sums due which become due to the defaulting party under this Agreement. In any event, such costs shall be considered Indemnified Costs. The non-defaulting party shall use its commercially reasonable efforts to employ an economically reasonable method of curing any such default.

(b) If an event of default occurs and is not cured in the manner allowed hereunder, then the non-defaulting party shall have the right to (i) take whatever action at law or in equity that it deems necessary or desirable to collect any amounts then due or thereafter to become due under this Agreement or to enforce performance of any covenant or obligation of the breaching party under this Agreement; and/or (ii) suspended services provided pursuant to this agreement or terminate this Agreement.

(c) Notwithstanding any other provision in this Section in recognition of the gravity and scope of the subject matter of this Agreement, the parties agree that, notwithstanding the provisions for breach, cure and default hereunder, no party to this Agreement may elect to terminate this Agreement upon a default by the other party until the party seeking termination has first sent 90 days prior written notice of termination to the defaulting party, provided, however, that (i) only 60 days notice of termination is required if a default is based on a failure to pay fees when due under this Agreement, and (ii) termination is effective upon the County's receipt of notice where the default is the repeated or one-time intentional loading or delivery of Unacceptable Waste, as provided in Section 4.08. Notwithstanding anything to the contrary in this Agreement, for purposes of termination, unless otherwise specified therein, the written notice of breach and Obligation to cure contemplated in Section 11.3 shall be deemed the written notice of termination contemplated in this Subsection, and the cure period required under Section 11.3 shall be included within, and not in addition to,

the notice period requirements in this Subsection. Provided, however, that there shall be no cure for repeated violations of the same or similar nature which have been the subject of default and cure in the past.

(d) Subject to the terms and conditions of Section 11 hereof, all rights and remedies under this Section are cumulative and the exercise of any one remedy does not preclude the exercise of one or more of any other available remedies, including any remedies not specified herein.

12. County Cooperation In Maintaining Waste Disposal. The County shall fully and actively support the transport of Waste from the Transfer Station and disposal of Waste at the Disposal Facility, cooperate fully with Republic in order to assist Republic in maintaining approvals and permits for such transport and disposal that are contemplated by this Agreement (including, without limitation, cooperation related to permits and amendments), and shall supply to Republic in a timely manner such information as Republic may reasonably request which is necessary or useful to Republic in fulfilling such obligations and which the County has in its possession or control.

13. Independent Contractor; No Agency. Republic will act hereunder as an independent contractor and not as an agent of the County. Similarly, the County is neither an agent of Republic nor empowered or authorized to Obligate Republic in any way.

14. Assignment. Neither party shall assign, transfer or delegate, or permit the assignment, transfer or delegation of, this Agreement or any right or duty hereunder, without the prior written consent of the other party, which shall not be unreasonably withheld, provided, however, for purposes of this section, neither the transfer or assignment of this Agreement to corporate affiliates of Republic, nor the change of control of Republic, will be deemed an assignment, transfer or delegation.

15. Severability. In the event any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, unconstitutional, or unenforceable in any respect, such invalidity, illegality, unconstitutionality or unenforceability shall not affect any other provision of this Agreement and this Agreement shall be construed as if such invalid, illegal, unconstitutional or unenforceable provision had never been contained herein; provided, however, that it is the intention of the parties hereto that in lieu of each term, clause, or provision that is held to be invalid, illegal or unenforceable, there shall be added by mutual agreement as part of this Agreement a term, clause or provision as similar in terms to such invalid, illegal or unenforceable term, clause or provision as may be possible and valid, legal or enforceable. Notwithstanding the above, if the term of this Agreement is held to be invalid, illegal, or unenforceable in any respect, then the term of this Agreement shall automatically be the maximum valid and legal term allowed by applicable common or statutory law.

16. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of North Carolina.

17. Binding Effect. This Agreement shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns. Specifically, this Agreement shall

bind the successors and assigns of the County, including, but not limited to, any transferee of the Transfer Station, as if such successors and assigns had executed this Agreement on the date hereof, and such shall inure to the benefit of Republic and its successors and assigns.

18. Construction. Words importing the singular number shall include the plural in each case and vice versa, and words importing persons shall include firms, corporations, or other entities. The terms “herein”, “hereunder”, “hereto”, “hereof” and any similar terms, shall refer to this Agreement; the term “heretofore” shall mean before the date of adoption of this Agreement; and the term “hereafter” shall mean after the date of this Agreement, This Agreement is the result of joint negotiations and authorship and no part of this Agreement shall be construed as the product of any one of the parties hereto.

19. Entire Agreement. This Agreement constitutes the entire understanding between the County and Republic, and cancels and supersedes all prior negotiations, representations, understandings and agreements, either written or oral, between such parties with respect to the subject matter hereof. No changes, amendments, alterations, or modifications to this Agreement will be effective unless in writing and signed by the parties hereto.

20. Counterparts. This Agreement may be executed in two counterparts, each of which will be considered an original.

21. Court Jurisdiction. The parties mutually consent and agree that the court of competent jurisdiction with respect to any legal actions related to this Agreement shall be the United States District Court for the Western District of North Carolina.

*[Signature page to follow]*

IN WITNESS WHEREOF, the County and Republic have caused their respective duly authorized officers or representatives to execute this Agreement, as of the day and year first above written.

ATTEST:

HENDERSON COUNTY, NORTH CAROLINA

By:   
Clerk to the Board

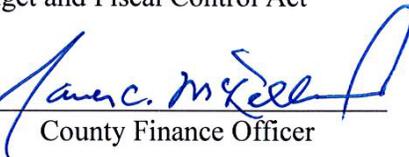
By:   
County Manager

[Seal]

APPROVED AS TO FORM:

By:   
County Attorney

This instrument has been pre-audited in the Manner required by the Local Government Budget and Fiscal Control Act

By:   
County Finance Officer

ATTEST:

REPUBLIC SERVICES OF KENTUCKY, LLC

By: \_\_\_\_\_

By:   
Name: SHANE WALKER  
Title: GM

**Appendix C. Certificates of Occupancy for Solid Waste Properties Post-Capital Improvement Plan Implementation**

**Certificate of Occupancy**

Henderson County , State of North Carolina



5/26/2015

**Project #** : 10010109931  
**Project Description** : ADDITIONAL SCALE HOUSE.  
**Type & Use** : Waste Collection and Transfer Facility (Non-hazardous)  
**Permit #** : 11150101986 **Issue Date** : 4/5/2012  
**PIN #** : 9650727217  
**Owner Name** : Henderson Co Landfill  
**Occupant Name** : Henderson Co Landfill  
**Property Address** : 191 Transfer Station Dr Hendersonville NC 28791  
**Directions** : 191 TRANSFER STATION DR; 25N L STONEY MTN RD TO LANDFILL TO NEW SCALE HOUSE BEHIND OLD SCALE HOUSE  
**Contractor** : Cooper Construction Co , Inc  
**Type of occupancy** : Unknown  
**Notes** : NEW SCALE HOUSE @ LANDFILL ...JP

**Certificate of Occupancy**

Henderson County , State of North Carolina



5/26/2015

**Project #** : 04010152022  
**Project Description** : NEW TRANSFER STATION  
**Type & Use** : Public facilities, & public buildings  
**Permit #** : 06150108289 **Issue Date** : 5/26/2015  
**PIN #** : 9650727217  
**Owner Name** : Henderson Co Landfill  
**Occupant Name** : Henderson Co Landfill  
**Property Address** : 806 Stoney Mountain Rd Hendersonville NC 28791

# Certificate of Occupancy

Henderson County , State of North Carolina



5/26/2015

**Project #** : 11010101992  
**Project Description** : CONVENIENCE CENTER FOR LANDFILL  
**Type & Use** :  
**Permit #** : 11150101993 **Issue Date** : 11/18/2011  
**PIN #** : 9650727217  
**Owner Name** : Henderson County  
**Occupant Name** : Henderson County  
**Property Address** : 265 Convenience Center Dr Hendersonville NC 28791

# Certificate of Occupancy

Henderson County , State of North Carolina



5/26/2015

**Project #** : 12010102169  
**Project Description** : PHOTOVOLTAIC SOLAR RACK AND BATTERY SYSTEM  
**Type & Use** : Miscellaneous  
**Permit #** : 12150102228 **Issue Date** : 5/26/2015  
**PIN #** : 9650727217  
**Owner Name** : Henderson County  
**Occupant Name** : Henderson County  
**Property Address** : 265 Convenience Center Dr Hendersonville NC 28791

# Certificate of Occupancy

Henderson County , State of North Carolina

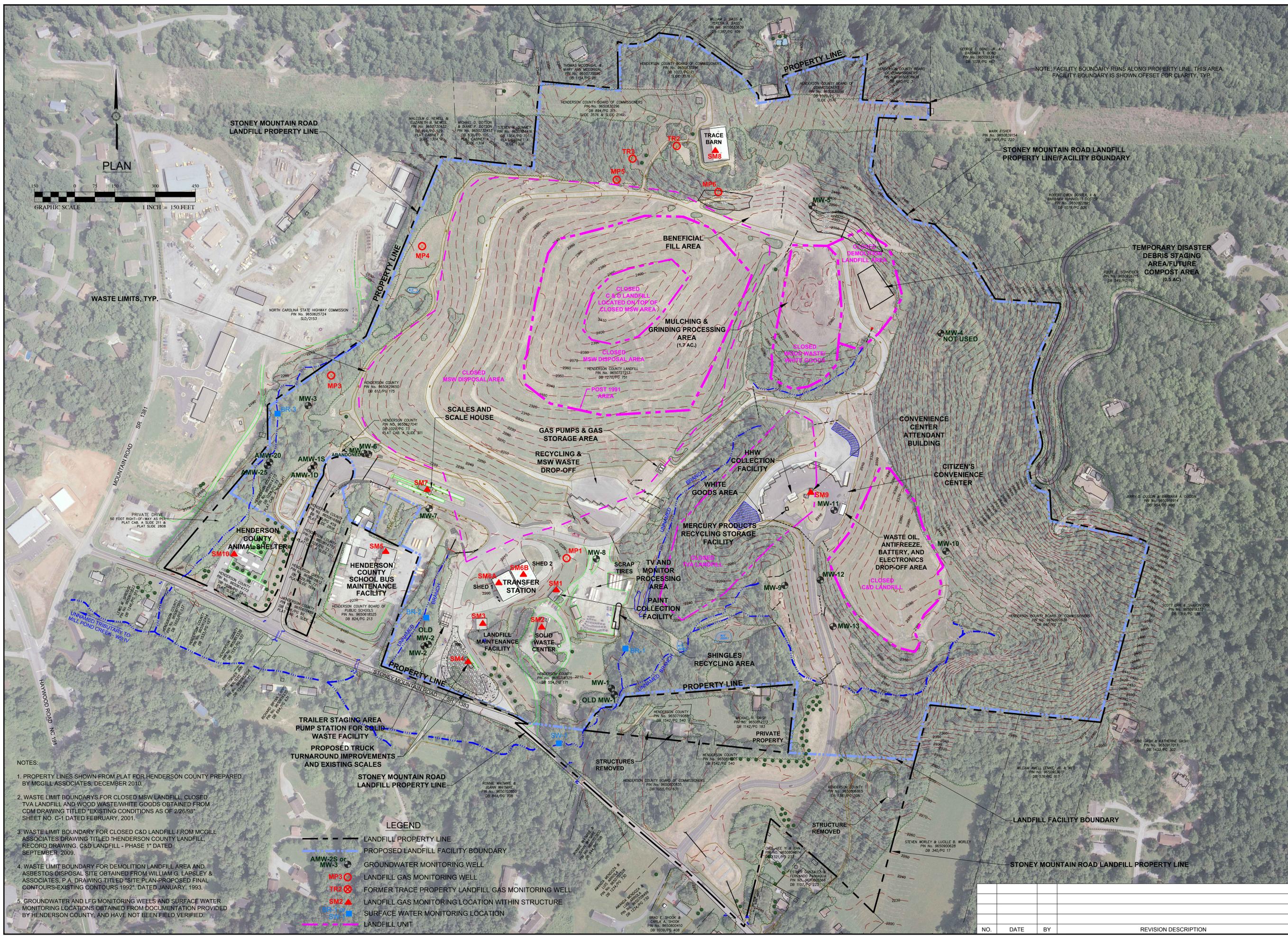


4/8/2015

**Project #** : 15010103029  
**Project Description** : ENLARGING 3 DOORS AT COMMERCIAL STORAGE BUILDING NEXT TO LANDFILL  
**Type & Use** :  
**Permit #** : 15150103030 **Issue Date** : 4/7/2015  
**PIN #** : 9650716325  
**Owner Name** : Henderson Co Stoney Mtn Activity Center  
**Occupant Name** : Henderson Co Stoney Mtn Activity Center  
**Property Address** : 802 Stoney Mountain Rd Hendersonville NC 28791  
**Directions** : 802 STONEY MOUNTAIN RD; 25N, left on Stoney Mountain Rd, right into transfer station, at old recycling center.  
**Contractor** : Henderson Co Stoney Mtn Activity Center  
**Type of occupancy** : Storage - S2 Inert Pigments  
**Notes** : \*\*CHANGE IN PERMIT ADDED ELECTRICAL 3-30-15\*\*ENLARGING 3 DOORS AT STORAGE BUILDING FOR PAINT NEXT TO LANDFILL...JP

**Appendix D. Henderson County Solid Waste Facilities Site Map**

C:\2017\13.00733 - Henderson County Solid Waste\Design\Solid Waste\Design\Facility Plan\13.00733-Facility Plan-Revise-3-15-16.dwg 3/15/2016 10:25 AM ADAM WALDRUP



PLAN



WASTE LIMITS, TYP.

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

- NOTES:
1. PROPERTY LINES SHOWN FROM PLAN FOR HENDERSON COUNTY PREPARED BY MCGILL ASSOCIATES, DECEMBER 2010.
  2. WASTE LIMIT BOUNDARIES FOR CLOSED MSW LANDFILL, CLOSED TYA 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 CLOSED C&D LANDFILL AREA AND ASBESTOS DISPOSAL SITE OBTAINED FROM WILLIAM G. LAPSLEY & 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.

TRAILER STAGING AREA  
PUMP STATION FOR SOLID  
WASTE FACILITY

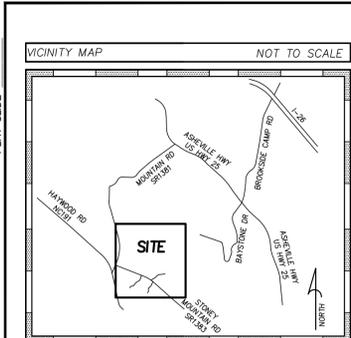
PROPOSED TRUCK  
TURNAROUND IMPROVEMENTS  
AND EXISTING SCALES

STONEY MOUNTAIN ROAD  
LANDFILL PROPERTY LINE

- LEGEND
- 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

**Appendix E. Boundary Plat of Henderson County Solid Waste Property**



**LEGEND**

- CM = CONCRETE MONUMENT
- ALUM DISC = ALUMINUM DISC FOUND
- NGS = NATIONAL GEODETIC SURVEY
- CP = CALCULATED POINT
- RFB = REBAR FOUND
- IPS = IRON PIN SET
- OTIFF = CRIMPED TOP IRON PIN FOUND
- OTIFF = OPEN TOP IRON PIN FOUND
- (C) = NC STATE PLANE GRID DISTANCE
- (H) = HORIZONTAL GROUND DISTANCE
- CORS = CONTINUOUSLY OPERATING REFERENCE STATION
- INDICATES LANDFILL FACILITY BOUNDARY
- INDICATES EXISTING RIGHT OF WAY
- INDICATES LINE NOT SURVEYED AT THIS TIME
- INDICATES INTERIOR BOUNDARY LINE
- INDICATES OVERHEAD ELECTRIC LINE
- INDICATES FENCE LINE
- INDICATES STREAM LOCATION FROM PHOTOGRAMMETRY
- INDICATES GRAVEL DRIVE
- INDICATES TREE LINE
- INDICATES BUILDING LOCATION FROM PHOTOGRAMMETRY

**BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE (H)
L1	S82°33'48"E	116.82'
L2	S36°45'48"E	90.18'
L3	S74°15'15"E	21.48'
L4	N82°01'55"E	115.54'
L5	N19°30'17"W	82.36'
L6	N73°08'01"E	250.47'
L7	N71°21'42"E	32.12'
L8	S83°24'48"W	171.79'
L9	S0°06'00"W	63.78'
L10	S70°42'42"W	66.39'
L11	S71°48'48"W	126.82'
L12	S29°48'59"E	113.37'
L13	S46°36'30"E	114.51'
L14	S41°38'27"E	8.29'
L15	S76°17'13"E	91.09'
L16	S22°03'38"W	17.51'
L17	S17°39'53"W	41.40'
L18	S24°19'10"W	121.68'
L19	S19°39'28"W	81.10'
L20	S13°01'05"E	133.68'
L21	S36°42'58"W	34.70'
L22	S37°09'59"E	107.92'
L23	S85°14'53"E	59.19'
L24	S45°32'28"W	5.83'
L25	N48°05'52"W	151.08'
L26	N48°51'47"W	177.25'
L27	S13°52'22"W	216.58'
L28	S17°49'43"W	164.76'
L29	S17°49'15"W	32.34'
L30	N45°37'25"W	149.89'
L31	N46°32'11"W	145.23'
L32	N50°04'32"W	154.36'
L33	N49°22'22"W	186.07'
L34	N48°35'14"W	187.38'
L35	N49°12'07"W	216.97'
L36	S83°42'35"E	49.36'
L37	N60°57'35"W	65.00'
L38	N68°42'55"W	142.60'
L39	N69°50'49"W	209.45'
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°55'26"W	75.80'
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	28.95'
L49	N67°44'12"W	23.16'
L50	N65°21'25"W	86.65'
L51	N63°12'08"W	153.54'
L52	N62°10'57"W	137.17'
L53	N63°25'00"W	116.30'
L54	N66°32'48"W	57.11'
L55	N68°40'12"W	28.44'
L56	N40°22'29"E	30.73'
L57	S40°22'29"E	476.04'
L58	S39°31'52"W	122.10'
L59	S0°30'51"E	147.83'
L60	S55°14'24"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°33'12"W	140.64'
L65	S5°20'15"W	318.23'
L66	N84°44'03"W	295.08'
L67	S81°51'41"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	N83°17'04"E	75.00'
L74	N53°17'04"E	41.00'
L75	N86°47'04"E	55.00'
L76	N31°22'09"E	40.94'
L77	N85°50'02"E	637.68'
L78	S61°39'39"W	25.00'
L79	N67°44'47"E	70.00'
L80	N83°34'33"W	39.97'
L80A	N83°52'20"W	60.01'
L81	S67°10'47"E	69.93'
L82	N41°41'03"E	141.49'
L83	N85°50'07"E	135.64'
L84	S67°10'47"E	69.97'

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
C7	2518.57'	52.96'	S68°51'28"E	52.96'
C8	2518.57'	220.72'	N65°44'39"W	220.65'
C9	2518.57'	38.76'	S62°47'34"E	38.76'
C10	530.12'	54.80'	N20°35'15"E	54.78'
C11	137.53'	24.12'	N28°34'22"E	24.09'
C12	25.00'	15.78'	N15°11'17"E	15.52'
C13	55.01'	237.16'	S59°03'01"E	91.75'
C14	137.53'	98.22'	N43°59'38"E	98.14'
C15	470.11'	48.60'	N20°35'15"E	48.58'
C16	32.01'	45.61'	N23°12'01"W	41.85'

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
C1	66.43'	49.40'	N87°20'22"W	48.27'
C2	236.61'	134.94'	N37°09'59"E	133.12'
C3	65.80'	57.11'	N11°50'47"E	55.33'
C4	65.74'	153.64'	N30°41'17"W	120.99'
C5	147.32'	165.40'	S78°09'53"W	156.85'

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
L85	N40°22'29"E	1.26'		
L86	S62°10'27"E	69.35'		
L87	N27°52'12"E	80.26'		
L88	N17°33'34"E	18.41'		
L89	N17°33'34"E	114.18'		
L90	N17°33'34"E	36.79'		
L91	N23°32'57"E	50.29'		
L92	N23°32'57"E	89.62'		
L93	N23°32'57"E	44.02'		
L94	N33°35'46"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°33'34"E	41.60'		
L99	N17°33'34"E	140.73'		
L100	N17°33'34"E	83.29'		
L101	S64°48'05"E	66.85'		
L102	S20°55'49"W	8.28'		
L103	S55°22'53"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	60.84'		
L108	S45°42'03"E	257.50'		

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
L109	N67°44'12"W	23.16'		
L110	N65°21'25"W	86.65'		
L111	N63°12'08"W	153.54'		
L112	N62°10'57"W	137.17'		
L113	N63°25'00"W	116.30'		
L114	N66°32'48"W	57.11'		
L115	N68°40'12"W	28.44'		
L116	N40°22'29"E	30.73'		
L117	S40°22'29"E	476.04'		
L118	S39°31'52"W	122.10'		
L119	S0°30'51"E	147.83'		
L120	S55°14'24"W	446.90'		

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
L121	N85°56'42"W	475.31'		
L201	N16°49'39"W	204.06'		
L202	N83°08'28"W	133.88'		
L203	N157°29'29"W	69.85'		
L204	N29°01'41"W	45.83'		
L205	N45°39'00"W	74.39'		
L206	S176°13'22"W	138.66'		
L207	S162°46'26"W	157.30'		
L208	S89°04'07"W	101.95'		
L209	S27°07'57"E	135.62'		
L210	N1°28'44"W	34.97'		
L211	N29°47'19"E	167.26'		
L212	N65°17'34"W	123.20'		
L213	S23°44'41"W	163.31'		
L214	N137°40'48"W	134.63'		
L215	N58°17'28"W	296.68'		

**INTERIOR LANDFILL FACILITY BOUNDARY LINE TABLE**

LINE	BEARING	GROUND DISTANCE
L200	N85°56'42"W	475.31'
L201	N16°49'39"W	204.06'
L202	N83°08'28"W	133.88'
L203	N157°29'29"W	69.85'
L204	N29°01'41"W	45.83'
L205	N45°39'00"W	74.39'
L206	S176°13'22"W	138.66'
L207	S162°46'26"W	157.30'
L208	S89°04'07"W	101.95'
L209	S27°07'57"E	135.62'
L210	N1°28'44"W	34.97'
L211	N29°47'19"E	167.26'
L212	N65°17'34"W	123.20'
L213	S23°44'41"W	163.31'
L214	N137°40'48"W	134.63'
L215	N58°17'28"W	296.68'

**LETTER #**

LETTER #	OWNER	PARCELS	DEED BOOK	PLAT SLIDE
A	HENDERSON COUNTY	950614773	DB 1029/PG 73	PLAT CAB. A SLIDE 211
B	HENDERSON COUNTY	950627041	DB 1029/PG 73	PLAT CAB. A SLIDE 211
C	HENDERSON COUNTY	950616886	DB 1019/PG 459	SLIDE 2808
D	HENDERSON COUNTY	950614773	DB 1029/PG 73	PLAT CAB. A SLIDE 211
E	HENDERSON COUNTY	950616612	DB 1029/PG 73	SLIDE 1694
F	HENDERSON COUNTY	950615489	DB 1006/PG 97	PLAT CAB. A SLIDE 211

**NOTES:**  
Field work completed: September 9, 2010  
Office work completed: October 5, 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 such 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. 95050830226, 95050727217, 95050623950, 95050627041, 95050639071, 95050616886, 9506014773, 95050616612, 9506015489, 95050716325, 95050800835, 95050806865 and 95050920038).

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

**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 Cabinet 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 C.S. 47-30 as amended. Witness my dated original seal and signature.

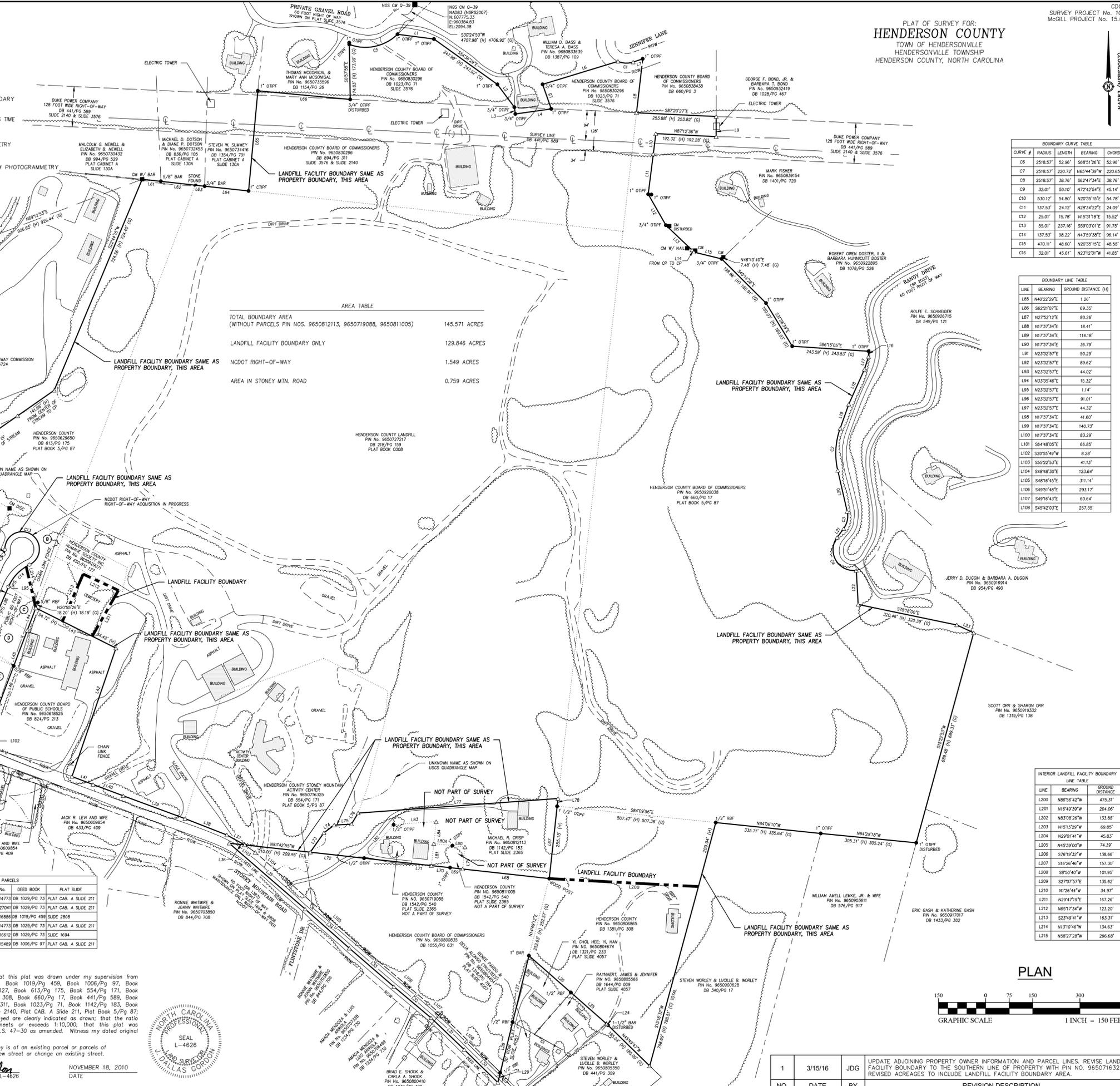
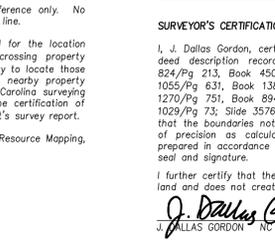
I further certify that the survey is of an existing parcel or parcels of land and does not create a new street or change an existing street.

J. Dallas Gordon  
NOVEMBER 18, 2010  
DATE

SEAL  
L-4626  
DILLAS GORDON  
LAND SURVEYOR  
NORTH CAROLINA

**AREA TABLE**

TOTAL BOUNDARY AREA (WITHOUT PARCELS PIN NOS. 9506012113, 95050719088, 9506011005)	145.571 ACRES
LANDFILL FACILITY BOUNDARY ONLY	129.846 ACRES
NCDOT RIGHT-OF-WAY	1.549 ACRES
AREA IN STONEY MTN. ROAD	0.759 ACRES



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

SURVEY PROJECT NO. 10-155  
MCGILL PROJECT NO. 15.00710



**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
C7	2518.57'	52.96'	S68°51'28"E	52.96'
C8	2518.57'	220.72'	N65°44'39"W	220.65'
C9	2518.57'	38.76'	S62°47'34"E	38.76'
C10	530.12'	54.80'	N20°35'15"E	54.78'
C11	137.53'	24.12'	N28°34'22"E	24.09'
C12	25.00'	15.78'	N15°11'17"E	15.52'
C13	55.01'	237.16'	S59°03'01"E	91.75'
C14	137.53'	98.22'	N43°59'38"E	98.14'
C15	470.11'	48.60'	N20°35'15"E	48.58'
C16	32.01'	45.61'	N23°12'01"W	41.85'

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
C1	66.43'	49.40'	N87°20'22"W	48.27'
C2	236.61'	134.94'	N37°09'59"E	133.12'
C3	65.80'	57.11'	N11°50'47"E	55.33'
C4	65.74'	153.64'	N30°41'17"W	120.99'
C5	147.32'	165.40'	S78°09'53"W	156.85'

**BOUNDARY CURVE TABLE**

CURVE #	RADIUS	LENGTH	BEARING	CHORD
L85	N40°22'29"E	1.26'		
L86	S62°10'27"E	69.35'		
L87	N27°52'12"E	80.26'		
L88	N17°33'34"E	18.41'		
L89	N17°33'34"E	114.18'		
L90	N17°33'34"E	36.79'		
L91	N23°32'57"E	50.29'		
L92	N23°32'57"E	89.62'		
L93	N23°			

# Appendix F. Daily Inspections Reports and Screening Reports

## HENDERSON COUNTY DAILY INSPECTION REPORT

DATE: \_\_\_\_\_

DAY: (CIRCLE ONE) MON TUE WED THUR FRI SAT

VEHICLE/EQUIPMEN: (CIRCLE ONE) REAR LOADER / FRONT LOADER / ROLL OFF / TRAILER

HAULER: \_\_\_\_\_

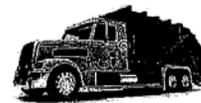
WSA NUMBER: GREEN: \_\_\_\_\_ RED: \_\_\_\_\_

FLEET NUMBER: \_\_\_\_\_ DRIVER: \_\_\_\_\_

LICENSE NUMBER: \_\_\_\_\_

LOCATION OF SORT: (CIRCLE ONE) STATION I / STATION II

FRONT OF LOAD	BACK OF LOAD
A	B
C	D



COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

COMPLETE FORM AND TURN IN AT THE END OF EACH WORKDAY

I VERIFY THAT ALL STATEMENTS AS LISTED ABOVE ARE ACCURATE AS THE RESULT OF AN INSPECTION CONDUCTED BY THE UNDERSIGNED, ON THE DATE AS INDICATED.

\_\_\_\_\_  
 SIGNATURE / TODAYS DATE

**HENDERSON COUNTY  
SCREENING REPORT / C&D**

DATE / TIME OF INSPECTION \_\_\_\_\_

INSPECTED BY (PLEASE PRINT) \_\_\_\_\_

NAME OF HAULER \_\_\_\_\_

TYPE OF WASTE \_\_\_\_\_

NET WEIGHT OF LOAD \_\_\_\_\_

OTHER INFORMATION \_\_\_\_\_

EXCLUDED WASTE	YES	NO	IF YES, HOW WAS WASTE HANDLED/ DISPOSED OF?
HARZARDOUS WASTE			
LIQUID WASTE			
PCB WASTE			
TIRES			
WHITE GOODS			
YARD WASTE			
USED MOTOR OIL			
ANTI-FREEZE			
ALUMINUM CANS (BULK)			
SHIPMENT OF LIGHTS CONTAINING MERCURY WEIGHING MORE THAN 220 LBS.			
OTHER (SPECIFY):			
WASTE REQUIRING SPECIAL ATTENTION			
ASBESTOS WASTE			
SLUDGES			
MEDICAL WASTE			
OTHER (SPECIFY):			
ADDITIONAL COMMENTS:			

**COMPLETE FORM AND TURN IN AT THE END OF EACH WORKDAY**

**I VERIFY THAT ALL STATEMENTS AS LISTED ABOVE ARE ACCURATE AS THE RESULT OF AN INSPECTION CONDUCTED BY THE UNDERSIGNED, ON THE DATE AS INDICATED.**

\_\_\_\_\_  
**SIGNATURE / TODAYS DATE**

**Appendix G. Vector Control Vendor Letter of Service Verification**

**PROMARK SPECIALTIES HENDERSONVILLE PEST CONTROL  
PO BOX 711 HENDERSONVILLE, NC 28793  
PHONE # (828) 692-1569  
FAX # (828) 698-3331**

July 2, 2015

Attn: Greg Wiggins  
Ref: Henderson County Solid Waste  
191 Transfer Station Drive  
Hendersonville, NC 28792

The following services are performed by Hendersonville Pest Control.

40 bait boxes are maintained on a monthly basis. This includes adding bait or changing out old bait blocks.

Pest control is performed on a monthly basis for the scale house. Other structures area sprayed upon request as needed.

Please feel free to contact us should you have any questions or concerns. As always, we appreciate your business and look forward to serving all your moisture and pest control needs.

Caleb Gordon, Technician  
828-243-7221

## Appendix H. RFP for Mulching/ Material Reduction

### HENDERSON COUNTY ENGINEERING

Memorandum To: Interested Bidders

From: Greg Wiggins  
Solid Waste Operations Manager

Subject: Request for Proposals  
Material Reduction at Solid Waste

Date: July 13, 2015



---

Henderson County Solid Waste Department requests proposals to remove brush and pallets from the facility on 191 Transfer Station Drive. The contractor will be allowed to grind brush and pallets on site prior to removal if needed. All locations receiving wood debris from Henderson County must be compliant with NCDENR regulations and approved by the County prior to any hauling activities. The proposal will be for one year from the due date with a possible one year extension option if preferred by Henderson County Solid Waste staff. Listed below are approximate tonnages of materials which will be weighed out when removed from the facility for an accurate total. The proposal should be quoted per ton of the combined totals.

- Brush (Land Clearing Debris)-800 Tons
- Pallets- 300 Tons

**Proposals are due:** Monday, July 27<sup>th</sup>, 2015 by 2:00 PM  
Henderson County Solid Waste (Scale House)  
Attention: Greg Wiggins  
191 Transfer Station Drive  
Hendersonville, NC 28791

**Detailed scope of work:**

- Furnish the necessary supervision , labor, tools, equipment and materials to complete the required work
- Install necessary safety fencing and barricades at project site
- Obtain required permits
- Restore all disturbed areas around the site
- Work to be scheduled during standard business hours unless approved otherwise

**The following information must be included in the proposal:**

- 1) Work Schedule for start and completion
- 2) Contractor's Licensure with North Carolina
- 3) See Henderson County Insurance Requirements posted under General Information at <http://ww2.hendersoncountync.org/rfp/index> for the following:
  - a. Insurance per Article 11

- 4) For Disadvantage Business Enterprise requirements, see Minority Business Participation Guidelines posted under General Information at <http://ww2.hendersoncountync.org/rfp/index>
- 5) Proposed Contract signed by bidder and ready for County's signature.

Henderson County reserves the right to reject any and / or all bids. Qualified contractors interested in bidding on the project should contact Greg Wiggins @ 828-301-7555

# **Appendix I. Non-hazardous Waste Collection Operations Plan Modifications,** **Part I**



**HENDERSON COUNTY ENGINEERING**  
1 Historic Courthouse Square, Suite 6  
Hendersonville, North Carolina 28792  
(828) 694-6526

**To: Larry Frost, Environmental Engineer**  
Permitting Branch, Solid Waste Section  
Division of Waste Management, NCDENR  
2090 US Highway 70, Swannanoa, NC 28778

**From:** Henderson County Solid Waste Division, Engineering Department  
**RE:** Non-hazardous Waste Collection Operations Plan Modifications, Part I

Mr. Frost:

May 28, 2015

This letter is to inform you of changes in the operations plan to permit # 4504T-TRANSFER-1998 regarding facilities and collection, handling, and storage of paint-related materials at the Henderson County Transfer Station, specifically latex/ acrylic paint and oil-based paint related materials.

The former "break room house," located behind the Stoney Mountain Activities Center on the Transfer Station property, 191 Transfer Station Drive, Hendersonville, NC 28791, was modified in April 2015 with two 4-foot doors and an exhaust fan. This site will serve as the new location for collecting, bulking, and storing of non-hazardous material (latex paint only). Paint will be bulked in 55-gallon DOT approved steel drums by trained Solid Waste staff and stored on-site until a safe capacity has been reached, at which time the paint will be shipped on an as-needed basis to our regular HHW vendor, 3RC.

Oil-based paint related materials will also be collected at this location but not bulked. Items will be stored in lined gaylords and palletized for shipping, also through 3RC. This includes but is not limited to: oil-based paints, sealants, strippers, thinners, lacquers.

With the implementation of this new collection and bulking at the break room house, all paint related materials incur a \$2 per gallon container fee for recycling through the Scale House so as to relieve the HHW events at the Convenience Center from processing fees and receipts. This fee is subject to change annually by approval of the Henderson County Board of Commissioners.

There are three primary factors for this operational change:

1. Collection of paint during HHW events at the Convenience Center causes long wait times for participants, thereby increasing the significance of safety operations for both the public and Solid Waste staff
2. No fees are collected at the Convenience Center at any other time per year except during HHW, causing increased wait times for participants for transactions to be completed
3. Collection space is limited during HHW at the Convenience Center without a covered, permanent structure for storing full paint gaylords, thus enabling, though unpermitted, citizens to leave HHW items of all kinds near exposed gaylords after HHW events

Solid Waste and Environmental Programs staff assessed the most recent HHW event (May 19) and have determined that all three afore mentioned issues will be resolved if storage and collection for all types of paint-related materials can take place on the Transfer Station side. All Solid Waste financial transactions take place systematically at the Scale House on the Transfer Station side. Removing one level of these transactions from the Convenience Center during HHW will save time and remove an unnecessary safety hazard for both staff and the public. Staff are HAZWOPER trained and are briefed monthly on safety and customer service operations.

For 2015 operations, all paint will be collected during the 3<sup>rd</sup> Tuesday from 8am until 2pm on the Transfer Station side. Times and dates of operations are subject to change at the discretion of the Solid Waste Director.

Additional modifications to the Henderson County Operations Plan, permit # 4504T-TRANSFER-1998, will be submitted by summer 2015 following the contract renewal for hauling and/or disposal of MSW from the Henderson County Transfer Station.

Please contact us with any questions. Thank you.



Rachel Hodge, Environmental Programs  
Coordinator  
Engineering Department  
[rhodge@hendersoncountync.org](mailto:rhodge@hendersoncountync.org)  
(828) 694-6524



Greg Wiggins, Operations Director  
Solid Waste & Cane Creek Sewer District  
[gwiggins@hendersoncountync.org](mailto:gwiggins@hendersoncountync.org)  
(828) 697-4505

## **Appendix I. Non-hazardous Waste Collection Operations Plan Modifications, Part II**



### **HENDERSON COUNTY ENGINEERING**

1 Historic Courthouse Square, Suite 6  
Hendersonville, North Carolina 28792  
(828) 694-6526

**To: Larry Frost, Environmental Engineer**  
Permitting Branch, Solid Waste Section  
Division of Waste Management, NCDENR  
2090 US Highway 70, Swannanoa, NC 28778

**From:** Henderson County Solid Waste Division, Engineering Department  
**RE:** Non-hazardous Waste Collection Operations Plan Modifications, Part II

Mr. Frost:

April 6, 2015

This letter is to inform you of changes in the operations plan to permit # 4504T-TRANSFER-1998, regarding facilities and handling of non-hazardous materials at Henderson County Transfer Station, specifically asphalt shingles recycling. Handle Safe Systems, LLC., is the approved vendor to accept and process the shingles. All material comes from licensed contractors and shingle suppliers from homes in Henderson County only. The Rogers Group processes the shingles for eventual road paving and other asphalt applications.

Collection of asphalt shingles for recycling began in October 2014 on the Transfer Station property near the tires recycling area following conversations with and verbal support from Andrea Keller with the Solid Waste Section, NC DENR - DWM. No facilities were modified for this program except for the addition of two 40-yard roll-off containers in the transfer station area. This area is appropriately marked with visible signage. All suppliers are required to bring a signed form and a tear-off sample of their loads to the weigh masters at the Scale House before being allowed to dump the shingles. Tear-off samples confirm that the loads are free of asbestos-containing materials. A Henderson County Solid Waste staff person meets each supplier at the marked location before dumping the shingles into the roll-off containers to ensure that the loads are clean and free of non-shingle debris, recycled materials, or trash. A copy of this form is attached and can be found online for suppliers to use readily.

Shingle loads are taken when the roll-off containers are filled to safe and appropriate capacity to Handle Safe Systems, LLC. in Asheville, NC. The frequency depends on the volume. Henderson County Solid Waste staff makes every effort to recover additional recyclable materials from these loads as they are dumped into the onsite roll-off containers.

Additional modifications to the Henderson County Operations Plan, permit # 4504T-TRANSFER-1998, will be submitted by summer 2015 following the contract renewal for hauling and/or disposal of MSW from the Henderson County Transfer Station.

Please contact us with any questions. Thank you.

Handwritten signature of Rachel Hodge in black ink.

Rachel Hodge, Environmental Programs Coordinator  
Engineering Department  
[rhodge@hendersoncountync.org](mailto:rhodge@hendersoncountync.org)  
(828) 694-6524

Handwritten signature of Greg Wiggins in black ink.

Greg Wiggins, Operations Director  
Solid Waste & Cane Creek Sewer District  
[gwiggins@hendersoncountync.org](mailto:gwiggins@hendersoncountync.org)  
(828) 697-4505

## **Appendix J. Household Hazardous Waste Operations Plan**

### **Household Hazardous Waste Operations Plan for Collection and Storage**

#### **1.0 Overview**

The purpose of this plan is to define a standard operations procedure for Henderson County (Permit # 45-04T) to operate an onsite, 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 OSHA 1910.120, Hazardous Waste Operations and Emergency Response (HAZWOPER) standard. This involves undergoing twenty four hours of hands-on and classroom training. A permanent facility was established in 2008 onsite at 265 Convenience Center Drive, Hendersonville, NC 28791. This facility accepts HHW only from residents of Henderson County, and may also accept HHW/ electronic waste from conditionally except small quantity generators (CESQG) in the future.

#### **2.0 Operations Procedures**

The Henderson County Solid Waste and/or Environmental Programs Divisions will establish an annual or per fiscal year schedule as approved by the County Engineer and/or Solid Waste Director. Dates and times of the HHW collection events may vary at the discretion of the Division Director or Program Manager. Generally, the HHW program will operate for a specified number of days and hours per year or per fiscal year. Prior to the events, Henderson County staff will notify area safety personnel of the event dates, hours, location, and other pertinent information so that appropriate agencies can be on standby should an emergency event occur.

Staff involved with the collection of HHW are properly trained Henderson County staff or other authorized/trained personnel. A Site Safety and/or Program Manager is designated before the event and this person is identified to the other staff who are working in or near the collection event. Communication information should be shared with all Henderson County staff and/or additional authorized/trained personnel before the collection event begins.

#### **3.0 Facility Preparation**

Before or on the day of the scheduled HHW collection event, designated Henderson County Solid Waste personnel should complete the following checklist:

- Program Manager or Henderson County staff supervisor to designate which HAZWOPER-trained staff to manage event and delegate particular jobs to those trained staff to perform during event
- Post event signs and other signage informational or directional signage (i.e.: no

- smoking, no pets, stay in your vehicle, etc.)
- Set up collection and testing tables and cover them in plastic
  - Place fire extinguishers under tables
  - Place the emergency air horn (evacuation signal) under or on table
  - Open storage building and inventory contents
  - Organize work area, i.e.: locate drums in a convenient area for processing and make sure they are visibly labeled; locate spill dry supplies such as secondary containment and oil dry
  - Make safety supplies available in a convenient area. Supplies include but are not limited to: gloves, Tyvek aprons or suits, safety glasses, eyewash, clean water, etc.
  - Conduct site safety meeting including a review of emergency facilities and procedures
  - Ensure that all other non-HHW event staff are aware of emergency/evacuation procedures

#### **4.0 Receiving Waste**

Henderson County Solid Waste Division retains discretion to ask that citizens self-unload their HHW materials onto a designated table set up within the boundaries of the collection event. Trained staff should monitor the unloading process so as to quickly identify unlabeled or leaking containers, or other potential hazards that could result in falls, slips, trips, exposure. For those unidentifiable materials or containers without labels, staff should discuss the contents of the container with the citizen or have the citizen fill out a special material ID form to better help categorize the waste. This procedure can change at the discretion of the Henderson County Solid Waste Director, County Engineer, or Program Manager should safety concerns or the need arise. Staff monitoring the unloading tables should 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 Site Safety or Program Manager immediately. Do not move these items prior to having the manager check them.

Personnel Protective Equipment (PPE) should be as follows:

- 1) Unloaders      Level D
- 2) Segregators    Level D with Level C available
- 3) 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. The following list identifies the typical PPE which would be utilized at HHW collection programs:

Persons Monitoring Waste Unloading from Cars or Pickup Trucks

- Tyvek suits/coveralls (heat dependent) or apron
- Safety glasses
- Chemical resistant and/or puncture resistant gloves
- Safety shoes/ boots 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 Segregating Waste from Vehicles to Processing Area

- Safety glasses
- Tyvek suits/coveralls (heat dependent) or apron
- Latex or non-latex gloves (higher level of more chemical resistant and/or puncture resistant gloves if necessary)
- Safety shoes/ boots

Persons Opening Containers for Testing

- Safety glasses (with goggles or full-face shield when necessary)
- Tyvek suits/coveralls (heat dependent) or apron
- Latex or non-latex gloves (higher level of more chemical resistant and/or puncture resistant gloves if necessary)
- Safety shoes/ boots

Persons Lab Packing Household Hazardous Waste

- Safety glasses (with goggles or full-face shield when necessary)
- Tyvek suits/coveralls (heat dependent) or apron
- Latex or non-latex gloves (higher level of more chemical resistant and/or puncture resistant gloves if necessary)
- Safety shoes/ boots

## **5.0 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 staff 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. Utilize the Hazardous Materials Compliance Guide, Code of Federal Regulations Titles 29, 40 and 49, and Safety Data Sheets (as needed) 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-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 test the 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.*
- *The alkali drum will contain products with a pH of 7-14 (such as oven cleaner and other household cleaners or strippers). It is important to test the 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 (or “Basics”) pH 8-14.”*
- *The North Carolina Department of Agriculture and Consumer Services (NCDA) (Pesticide Disposal Assistance Program, or PDAP) will take all pesticides, insecticides, rodenticides and lawn care products that have an EPA Registry number. Segregate these into liquids and solids.*
- *Reactives and Oxidizers will be handled as they are received in order to assure secondary containment (when necessary) and appropriate storage. Photo chemicals and swimming pool products usually fit into these categories.*
- *Aerosol cans should be placed into 55-gallon poly 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 poly drums labeled FLAMMABLE LOOSEPACK. These items may include and is not limited to touch-up paints, glues, caulks, epoxies, polishes, waxes, gasoline additives, inks, etc.*
- *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 onsite and be isolated in a container alone. If it is necessary for offsite analysis to be performed, contractor personnel will prepare samples for chemical analysis when appropriate; alternatively, additional field site testing may be performed onsite through authorized personnel.*

Partially-filled containers will remain onsite 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 cubic yard boxes.

## **6.0 Packing and Labeling**

The Project Manager, or other designated and properly trained staff or personnel, will assist with packing, labeling, transporting, placarding, manifesting and disposal.

Whether lab pack or bulk, filled and partially-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 when preparing for shipping. The generator's notification and certification will also be prepared as required under the land-ban regulations if applicable.

## **7.0 Storage and Accumulation**

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

As required for safety and environmental protection, the structure is:

- 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

In accordance with state requirements for storage, the date upon which each period of accumulation begins will be clearly marked and visible on each container.

Storage time may vary according to the volume of wastes received. A designated and authorized contractor will schedule removal of waste with designated Henderson County staff as necessary while complying with the applicable regulations and safety considerations.

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

Henderson County staff and/or 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.

Henderson County Solid Waste policy prohibits smoking or open flame on all solid waste properties. Areas in which ignitable materials are stored will require the use of explosion-proof equipment and lighting.

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
- 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: generate extreme heat or pressure, fire or explosion, or violent reaction
- Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health
- Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions
- Damage the structural integrity of the device or facility containing the wastes;
- 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
- No comingling, bulking, or combining of incompatible hazard classes

## **9.0 Manifesting and Transporting**

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

- Generators name and mailing address
- Generators 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

When transporting the waste you must use a licensed hazardous 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.

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. 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.

## **10.0 Unacceptable Waste**

### Radioactive Waste

Smoke detectors are the most likely household waste to contain radioactivity. Residents are advised by County employees to mail used smoke detectors back to the manufacturers.

### 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 Office will handle any small arms ammunition including rifle, shotgun, and handgun. For any military type explosives, the Sheriff's Office will be contacted immediately.

### Infectious Waste

The County will receive sharps if they are packaged in approved collection boxes, and will contract with an approved recycler or disposal 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.

## **11.0 Closure Plan**

If or when Henderson County decides to close the HHW facility and cease operations all wastes will be removed from the storage areas, packed in accordance with the receiving facility and DOT requirements, transported by an approved hazardous waste transporter to a permitted treatment, storage and disposal facility for appropriate disposal.

Once all waste have been removed and appropriately disposed the County will contact their designated Waste Management Specialist from NC DEQ for inspection.

**Appendix K. Safety Plan for Household Hazardous Waste Collection**

**Safety Plan  
for Henderson County  
Household Hazardous Waste Collection**

**Prepared in conjunction with: 3RC  
1401 S. MLK, Jr. Drive  
Winston-Salem, NC 27107**

**June 4, 2014**

**Project Site:** Henderson County Convenience Center  
**Location:** 265 Convenience Center Drive, Hendersonville, NC 28791  
**Facility Phone #:** (828) 697-4505  
**Project Manager:** Rachel Hodge or Greg Wiggins  
**Primary Contacts:** Environmental Programs Manager (828) 694-6524  
Solid Waste Operations Director (828) 697-4505

**Project Objectives:** Receive, characterize, segregate, package and ship wastes generated by residents during collection activities.

**Proposed Date of Work:** 1-day activity, 5 times per year, or scheduled as needed by Henderson County Solid Waste or Environmental Programs and approved by County Engineer

**H&S Plan Prepared By:** Michele Sakwa, President, 3RC

***Review and Approval:***

**Project Manager**  
**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Safety Manager**  
**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

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- B. Hazard Assessment
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### A. EMERGENCY PROCEDURES

#### **HENDERSON COUNTY, SAFETY, FIRE:**

EMS Supervisor	(828) 777-2083
Mountain Home Fire Dept. Station 1	(828) 692-8014
Rocky Hyder/Wally Hollis (Fire Marshal, EMS)	(828) 697-4728
Sheriff's Dept	(828) 697-4596
Park Ridge Hospital	(828) 684-8501
Pardee Hospital	(828) 696-1000
Michael Doll (Pardee Hospital)	<a href="mailto:Michael.doll@pardeehospital.org">Michael.doll@pardeehospital.org</a>
Michelle Reynolds (Pardee Hospital)	<a href="mailto:michelle.reynolds@pardeehospital.org">michelle.reynolds@pardeehospital.org</a>
Troy Wightman (Park Ridge Hospital)	<a href="mailto:troy.wightman@ahss.org">troy.wightman@ahss.org</a>
Treva Morgan (Park Ridge Hospital)	<a href="mailto:Treva.morgan@ahss.org">Treva.morgan@ahss.org</a>

#### **OPERATION PERSONNEL:**

Transfer Station	(828) 697-4514 or 697-4505
Greg Wiggins	(828) 301-7555
Joe Roberts	(828) 620-1353
Rachel Hodge	(912) 308-4663

#### **HAZWOPER TRAINERS & VENDORS**

Denese Ballew (Ballew Environmental)	(828) 734-1374
Michele Sakwa (3RC)	(704) 577-4337

#### **OTHER**

HC County Manager's Office	(828) 697-4809
WHKP Radio Station	(828) 693-9061
Jeremy Maciejewski, NC Dept. of Agricultural Pesticides	(919) 219-8142
	<a href="mailto:jeremy.maciejewski@ncagr.gov">jeremy.maciejewski@ncagr.gov</a>

#### **EMERGENCY ROUTE**

Evacuate citizens and staff from Citizen's Convenience Center, proceed to main gates and exit onto Stoney Mountain Road.

**Emergency Equipment Available:**

- First aid kit
- Poly-coated tyvek coveralls or apron (heat dependent)
- Latex and non-latex gloves
- Cotton gloves
- Spill pads, oil dry, shovel & broom
- Eyewash station
- Neutralizer (for corrosive burns)
- Hearing protection

**Reference Books:**

- Hazardous Materials Compliance Guide
- Code of Federal Regulations Titles 29, 40 and 49
- Safety Data Sheets (as needed)

**Communication Equipment:**

- Mobile and office phones

**Personnel On-Site:**

- See sign-in sheets during day-of collection events
- HAZWOPER-trained staff stationed where necessary

These procedures will be used by on-site personnel: The Project Manager will be notified of any onsite emergencies and will be responsible for insuring that appropriate procedures are followed. Prior to entry of the potential situation, personnel will don all appropriate personal protective equipment.

**Personal Injury:** Upon notification to the Project Manager, all site personnel will assist to remove the injured from the work area, if required. The Project Manager will determine the extent of the injury and the type of first aid required, if necessary. Contact will be made to call an ambulance, if a medical facility is required. If the injured has been exposed to hazardous material, decontamination will be implemented using all available equipment. Normal operations will resume if the incident does not affect the performance of other site personnel. If there is risk to others, personnel will be moved to a location that removes the risk. Activities will cease until all is corrected.

**PPE Failure:** If any personnel experience a failure of their personal protective equipment, that person shall immediately report to the Project Manager for PPE repair or replacement.

**Fire:** Personnel will attempt to extinguish any small or incipient fire following the steps below:

1. Pull the fire extinguisher from the safety area.
2. Hold canister up-right and pull ring.
3. Stand back 10 feet and aim the extinguisher at the base of the fire.
4. Squeeze lever and sweep side to side until the fire is extinguished.
5. Personnel will evacuate the area if the fire cannot be extinguished, at which time appropriate emergency personnel will be notified.

**Spills or Leaks:** Personnel will locate the source of the leak or spill and notify the Project Manager. The spilled material will be identified and, using the appropriate containment procedures, the spill will be cleaned up.

**Evacuation Routes:** Evacuation routes have been established for the site. Personnel will be trained in these routes. Evacuation will be conducted immediately, using air-horn or voice communication. Personnel will not re-enter the area until:

1. The emergency conditions have been arrested.
2. The hazards have been re-assessed.
3. The Site Safety Plan has been reviewed and modified, if necessary.
4. Site personnel have been informed of any changes in the plan.

**General First Aid:**

1. *Inhalation:* Move victim to fresh air and administer CPR if the victim is not breathing. Call 911, if necessary.
2. *Eye Contact:* Flush eye immediately with copious amount of water for at least 15 minutes, while holding eyelids open. Get medical attention promptly.
3. *Skin Contact:* Flush affected area with copious amount of water while removing contaminated clothing. Flush for 15 minutes if contact material is concentrated chemical. If irritation persists, get medical attention.
4. *Ingestion:* The appropriate MSDS or the Poison Control Center will be consulted before deciding to induce vomiting. If vomiting occurs uncontrollably, keep head below hips to prevent vomit from entering the lungs.
5. Never induce vomiting if the victim is unconscious.
6. Get medical attention as soon as possible.

**B. HAZARD ASSESSMENT**

The following hazards may be present during the HHW collection process:

- Rusted, unopened, or unsecured containers
- Traffic from cars entering and exiting the unloading line, as well as other vehicles using the center during the event for regular recycling
- Unlabeled or unclassified containers
- Pressurized containers
- Explosive or shock sensitive materials
- Weather extremes
- Radiation or bio-infectious material

A table of hazard assessment and means of protection per hazard is below.

Expected Hazards	Means of Protection
Skin / eye contact	Level D Protection
Inhalation	Full-face respirator
Back Injury	Use of drum cart Proper lifting techniques
Injection/cuts	Level D Protection
Slips, trips and falls	Good housekeeping
Weather exposure	Appropriate clothing, PPE and water breaks

Fingerprint Testing of Unknowns	Level C Protection
Shock Exposure	Do not pick up or unload any containers with visible “spider web” crystals in the liquid. Only handle materials that can be stabilized by the Project Manager.

### **C. PERSONAL PROTECTIVE EQUIPMENT**

The following PPE will be required of all personnel working during HHW operations:

- Safety glasses
- Steel-toe shoes
- Latex or non-latex gloves (or other appropriate material)
- Tyvek suit (heat dependent) or apron
- Safety vest

PPE may be upgraded should any potential hazards arise.

### **D. DECONTAMINATION PROCEDURES**

- 1) All gloves will be removed when any employee leaves the immediate work area. Tyvek apron or suit will be removed, as well.
- 2) Personnel will wash hands thoroughly before using the restroom, eating, or entering the office area.
- 3) All contaminated PPE and equipment will be disposed of properly.

### **E. SITE ASSESSMENT AND CONTROL**

Before beginning operations, the Project Manager will confirm the location of eye wash and clean water source or safety shower (if applicable), as well as fire extinguishers and air-horn.

Only those personnel with current HAZWOPER training can work at the event site (this excludes emergency personnel). Project boundaries will be established and “staff only” signs will be posted, where appropriate, in visible locations.

### **F. ORGANIZATION AND COORDINATION**

The Project Manager or the appointed staff will be responsible for procedure and safety implementation, segregation, classification, testing, packaging and disposal of all materials. The Project Manager, or appointed staff, is also the Site Safety Manager.

### **G. POTENTIAL HAZARDOUS MATERIALS ON SITE**

<b>Chemical Classification</b>	<b>Hazard Code</b>			
	<b>Toxicity</b>	<b>Reactivity</b>	<b>Flammable</b>	<b>Corrosive</b>
<b>Strong Inorganic Acids:</b> Acid solutions anhydrides, acid chlorides	3	1	1	4
<b>Strong Inorganic Bases:</b> Basic Solutions	3	2	1	4
<b>Flammable Liquids:</b> Organic Acids	3	1	3	1
<b>Flammable Liquids:</b> Organic Bases	3	1	3	1
<b>Combustible (liquids, solids)</b>	2	1	1	1
<b>Flammable Solids (organic, metallic)</b>	2	3	4	1
<b>Inorganic Oxidizers:</b> Nonflammable metals, metal compounds	3	4	3	1
<b>Inorganic Oxidizer, liquid:</b> inorganic oxidizer, corrosive	3	3	2	1
<b>Poison B, solid toxic (organic solids)</b>	4	2	1	1
<b>Poison B, liquid toxic (organic liquids)</b>	4	2	1	1
<b>Pesticides: poison, toxins (liquid)</b>	3	1	1	1
<b>Pesticides: poisons, toxins (solid)</b>	3	1	1	1
<b>Inorganic Salts:</b> chlorides, fluorides, sulfates, bisulfate	3	1	1	1
<b>Fibrous Materials:</b> Asbestos, burlap, cotton, excelsior, hay, lead dross, paper scrapes, sawdust	3	1	1	1
<b>Hazardous Waste (liquid or solid)</b>	3	1	1	1
<b>Compressed Gas (toxic)</b>	4	2	2	2
<b>Compressed Gas (flammable)</b>	1	2	4	1
<b>Radioactive (low level)</b>	2	1	1	1
<b>Shock Sensitive/ Explosive Compounds</b>	3	4	1	1