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

Mountain Environmental Group
1560 Pisgah Drive
Canton, North Carolina 28716

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

PREPARED BY: Denese Ballew.

PREPARATION DATE: January 31, 2008

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NAME _____ TITLE: Health and Safety

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

I. SITE HISTORY AND DESCRIPTION:

A. DESCRIPTION OF SITE:

The subject site is located at the Solid Waste Facility, which is located on the north side of Stoney Mountain Road in Mountain Home Township of Henderson County, North Carolina.

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

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

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

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

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

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B. ACTIVITIES PERFORMED ON SITE PRIOR TO FACILITY DEVELOPMENT:

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

C. TOPOGRAPHIC AND/OR UNUSUAL FEATURES:

(1)The project site is located on the north side of Stoney Mountain Road.

(2)The site is currently and has historically served as a municipal landfill, transfer station, and recycling complex.

D. RESULTS OF PREVIOUS SURVEYS OR ASSESSMENTS:

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

E. Constituents of Concern:

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

F. WASTE TYPES:

Waste generated by the HHW collection activities includes the following:

1. LIQUIDS:

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

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2. SOLIDS:

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

3. GASSES/VAPORS:

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

G. WASTE CHARACTERISTICS:

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

H. PHYSICAL HAZARDS:

1. Explosion/Fire Hazard

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

Diesel fuel is combustible (flash point 140° F, 60° C) and may pose a moderate fire risk. Auto ignition temperature for #2 diesel fuel is approximately 490° F.

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

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

4. Heat Stress

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

3. Cold Related Illness

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

4. Location Hazards

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

J. WEATHER CONDITIONS:

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

1. Ambient Temperatures:

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

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2. Special Weather Considerations:

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

II. SITE ORGANIZATION AND CONTROL:

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

1. Exclusion Zone:

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

2. Contamination Reduction Zone/Decontamination Corridor:

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

3. Support Zone:

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

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Access Control and Work Zones

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

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

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

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

III. PERSONNEL:

Personnel conducting operation activities will consist of:

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

V. EQUIPMENT:

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

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

VI. PROTECTION LEVELS:

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

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

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

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

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Personal Protective Equipment

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

Persons Removing Waste From Cars or Pickup Trucks

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

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

Persons Opening Containers

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

Persons Segregating Waste from Vehicles

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

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Persons Lab Packing Household Hazardous Waste

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

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

VIII. SAFETY EQUIPMENT:

Health and safety equipment will consist of:

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

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

- b. Fire extinguisher

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

- c. First aid kit

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

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IX. CONTINGENCY PLANS:

A. Local Sources of Assistance:

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

1. Hospitals:
 - Park Ridge Hospital
100 Hospital Drive
Hendersonville, North Carolina 28792
(828) 681-2300

 - Pardee Hospital
800 North Justice Street
Hendersonville, North Carolina 28791
(828) 696-1000

2. Ambulance: Henderson County EMS
 - 911
211 1st Avenue East
Hendersonville, North Carolina 28792
(828) 433-6609

3. Fire:
 - Mountain Home Volunteer Fire Department
(828) 879-9901

 - Henderson County Fire Marshall
Rocky Hyder or Wally Hollis
211 1st Avenue East
Hendersonville, North Carolina 28792
(828) 433-6609

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4. Local Emergency Management:

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

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

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

B. National or Regional Sources of Assistance

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

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

SITE AND VICINITY MAP
AERIAL PHOTOGRAPH
EMERGENCY RESPONSE PLAN

Henderson County Solid Waste
802 Stoney Mountain Road
Hendersonville, NC

Mountain Environmental Services, Inc.

Health and Safety Plan

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ATTACHMENT 2: Weather Related Hazards and Self Monitoring Protocol

1.0

HOT WEATHER OPERATIONS

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

HEAT CRAMPS

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

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

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

HEAT EXHAUSTION

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

- Weak pulse
- Rapid and usually shallow breathing

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

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

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

HEAT STROKE

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

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

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

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

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Safety Officer must:

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

Assure that frequent breaks are scheduled so overheating does not occur

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

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

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

HEAT STRESS MONITORING

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

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

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2.0

COLD WEATHER OPERATIONS

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

HYPOTHERMIA:

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

- Shivering
- Apathy
- Listlessness
- Sleepiness and unconsciousness

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

COLD WEATHER MONITORING

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

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

C. FROSTBITE:

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

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

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

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

Notes:

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Henderson County Household Hazardous Waste Facility Operations Plan

1.0 Introduction

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

2.0 Facility Preparation

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

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

3.0 Receiving Waste

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

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

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

Personal Protective Equipment

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

Persons Removing Waste from Cars or Pickup Trucks

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

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

Persons Opening containers

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

Persons Segregating Waste from Vehicles

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

Persons Lab Packing Household Hazardous Waste

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

4.0 Segregating Waste

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

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

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

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

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

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

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

5.0 Packing and Labeling

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

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

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

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

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

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

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

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

6.0 Storage and Accumulation

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

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

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

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

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

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

7.0 Provisions for Ignitable, Reactive, or Incompatible Wastes

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

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

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

Regarding incompatible wastes, the following special provisions apply:

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

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

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

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

The procedures to comply with these provisions depend upon:

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

8.0 Manifesting and Transporting

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

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

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

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

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

9.0 Unacceptable Waste

Radioactive Waste

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

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

Explosives

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

Infectious Waste

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

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

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

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

Facility Address: Henderson County Landfill
Same As Above

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

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

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

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

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

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

Contingency Plan Purpose and Implementation

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

Contingency Plan Contents

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

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

Facility Staffing and Emergency Responsibilities

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

Arrangements with Local Authorities

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

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

Contingency Plan Revisions

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

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

Emergency Response Materials and Equipment

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

Designation of Emergency Coordinator

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

Spill Response Equipment and Procedures

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

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

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

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

Fire/Explosion Response Procedures

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

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

Procedures for Non-Project-Related Disasters

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

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

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

Evacuation Plans

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

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

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

National or Regional Sources of Assistance

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

12. Carolina Poison Center

(800) 848-6946

Henderson County Household Hazardous Waste



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

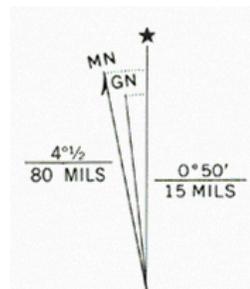
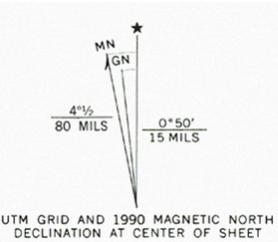
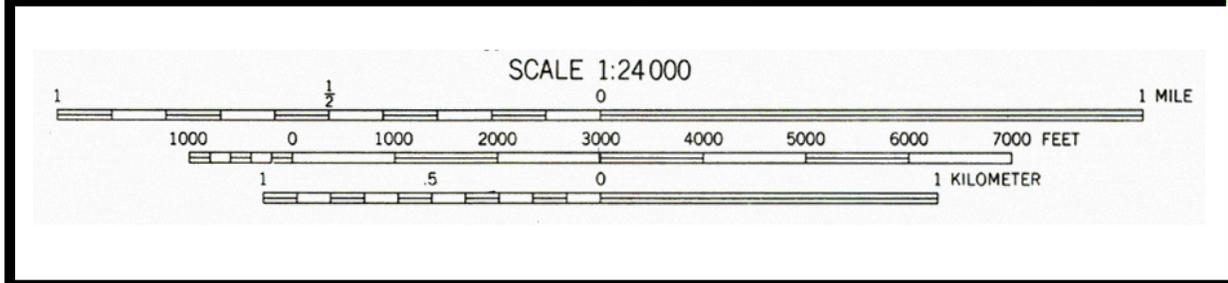
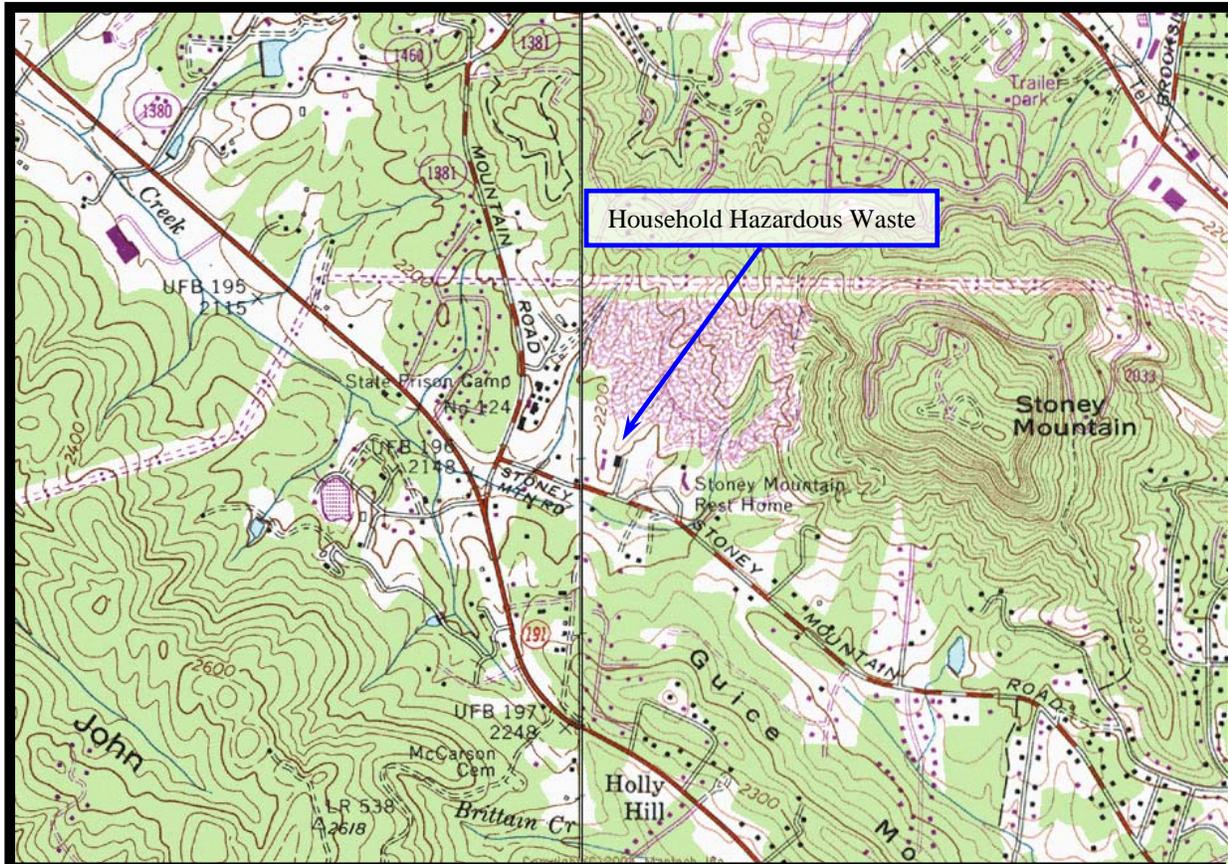


Figure 2
Orthophotograph from Henderson County Tax Office
Henderson County Household Hazardous Waste
Hendersonville, NC

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

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



HORSE SHOE, N. C.
 35082-C5-TF-024
 1965
 PHOTOREVISED 1991
 DMA 4454 I SE-SERIES V842

HENDERSONVILLE, N. C.
 35082-C4-TF-024
 1965
 PHOTOREVISED 1990
 DMA 4554 IV SW-SERIES V842

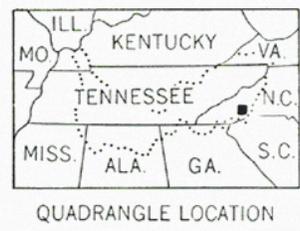


Figure 1
Site Vicinity Map
 Henderson County Household Hazardous Waste Facility
 Hendersonville, NC



**APPLICATION FOR
 HOUSEHOLD HAZARDOUS WASTE IDENTIFICATION NUMBER**

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

Temporary Event

Permanent Facility

OPERATOR/CONTRACTOR

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

TRANSPORTER

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

DISPOSER/RECYCLER

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

COLLECTION DETAILS

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

CERTIFICATION OF OPERATOR/CONTRACTOR:

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

Name MARLUS A. JONES PE Title DIRECTOR

Company COUNTY OF HENDERSON

Signature

M. J.

Date

5/20/00

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

Distribution: Mail completed original to the following address:

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

Contact: Bill Patrakis (919) 508-8512

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

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

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

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

SOLID WASTE SECTION USE ONLY

Date Received: _____

Date Approved: _____

HHW ID Number: NC __H_____

Chemical Incompatibility Matrix

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