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Attachment II

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Operational Plan for the Ashe County Permanent Household Hazardous Waste Facility

This plan describes the normal operating procedures for the Ashe County Permanent Household Hazardous Waste (HHW) Collection Facility. Additional procedures for emergency situations are contained in a separate Contingency Plan.

The Ashe County Permanent HHW Collection Facility is being established as part of a effort to more effectively manage HHW and to help prevent improper disposal.

The HHW collection facility will be open on a regular, year-round basis. As noted previously, this operational plan contains the specifications and procedures that pertain to the Ashe County Permanent HHW Collection Facility.

The Ashe County Permanent HHW Collection Facility will be located at the Bare Creek Convenience Center. The HHW facility will be constructed at the southern end of the site property near the existing Ashe County Multi-Material Drop-Off Facility. Limited waste collection (involving corrugated cardboard, garbage, white goods, lead-acid batteries, and used motor oil) is already being conducted at the Multi-Material facility.

Facility Staffing

The Ashe County Permanent HHW Collection Facility will be operated largely as a "turnkey" operation by personnel from Ashe County Environmental Services. The local government representatives will conduct the weekly inspections described later in this plan. Further information on facility staffing is provided in a subsequent section entitled Personnel and Duties.

User Eligibility

The Ashe County Permanent HHW Collection Facility is primarily intended to serve the residents who live within Ashe County. This will provide maximum convenience for residents of the Ashe County area and will help prevent improper disposal of HHW. Any wastes brought to the facility from households outside of the county area will be considered for acceptance on a case-by-case basis. Records will be kept concerning any such wastes, and these records will contain information on the types and quantities of wastes, their origin, and the decision regarding acceptance or rejection.

Only household wastes will be accepted at the facility. Businesses needing to dispose of hazardous wastes will be referred to vendors who offer "milk run" programs for picking up wastes at business locations.

Each time the collection facility is open, local government representatives will be present to help direct traffic, check for proof of residency, conduct a brief survey, and produce educational materials. The survey will be designed to determine the types, quantities, and sources of each user's wastes, and questions may also be added to solicit user comments on program features such as convenience and publicity. The educational materials that will be offered to users will include information on less hazardous alternative products and other HHW topics.

Screening and Collection of Wastes

Once eligibility has been established as described above, the users will be directed to proceed to the waste removal area and form a waiting line if needed. Local government representatives will direct the flow of traffic to ensure safe and efficient operations. The user at the front of the line will be directed to drive onto the concrete receiving apron and under the canopy, where wastes can be safely removed from the vehicle. The occupants of the vehicle will be asked to remain in the vehicle; if it is necessary to unlock the trunk for removal of wastes, contractor personnel will request the keys and accomplish this task. Personnel will maintain safe operations by immediately dealing with any leaking, damaged, unlabeled, or potentially shock sensitive or explosive materials.

The public education effort planned for this facility will inform potential users that the collection facility is designed to handle HHW from the following general categories: 1) yard and garden products; 2) automotive products; 3) paints and solvents; 4) household cleaning products; and 5) miscellaneous HHW. Because of difficulties in handling a few specific types of wastes (including explosives, radioactive materials, biologically active or infectious waste, and asbestos), the education effort will actively discourage users from bringing these materials. However, in the event that a misinformed citizen brings such wastes to the facility, local government representatives will consider taking the wastes anyway to avoid improper disposal. The decision regarding these wastes will be based upon established policies as well as the specific details of each case and also any advice from contractor

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personnel. As necessary, the transportation and disposal contractor will help find specialized vendors to remove any such wastes for treatment or disposal. Whenever wastes are rejected, the user will be given a waste rejection notice showing the reasons for nonacceptance and providing names of people to contact for further information concerning options for proper disposal.

Waste Identification and Packaging

As the wastes are received, personnel will perform initial waste identification and segregation. Some materials that can be managed by the local government representatives (such as latex paint, motor oil and other automotive fluids, and lead-acid and button batteries) may be segregated from the hazardous wastes at this time and handled according to local government protocols.

Onsite chemical analyses will be conducted in an attempt to identify any unknown wastes. If necessary, additional analyses will be conducted at an offsite laboratory. Such offsite analyses will occur as soon as possible. Personnel will prepare the samples using appropriate chain of custody and will send them to a laboratory for analysis. Meanwhile, the unknown waste material will remain onsite, isolated in a container by itself. Once the analytical results are obtained, the material will be scheduled for pick up and appropriately managed.

Personnel will conduct or directly supervise the packaging, document preparation, and transportation of the hazardous wastes collected at the facility. The contractor will arrange the recycling, treatment, or disposal of these wastes. Many of the wastes will probably require lab packing. Lab packing of materials may occur on the same day as collection activities, provided that time is available and adequate quantities of compatible materials are received. Otherwise, materials will be safely stored until the next scheduled work day. Additionally, partially filled (packed) containers may remain onsite until adequate amounts are collected and properly packaged for transport.

If pumping, pouring, or bulking of wastes is required, grounding and explosion-proof equipment will be used as needed. For both lab pack and bulk packaging, all containers will be of the Department of Transportation (DOT) specification, type, and size most appropriate for the specific waste type and planned treatment of disposal method. 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 85-gallon overpacks.

For any necessary lab packing, wastes will first be segregated according to DOT hazard class, then by chemical compatibility and by the acceptance criteria of specific waste recycling, treatment, or disposal facilities. An absorbent material such as vermiculite or Silk-wik 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 record 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 Environmental Protection Agency (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.

Accumulation Time

The storage building at the Ashe County Permanent HHW Collection Facility will be designed to accommodate temporary accumulation of several classes of hazardous materials. Personnel and local government representatives will be trained as appropriate concerning proper waste segregation and safe storage procedures.

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. Furthermore, while being stored onsite, all containers with accumulating hazardous wastes will be labeled or marked clearly with the words, "Hazardous Waste", unless the material is recyclable (e.g., used oil, latex paints, batteries) and is separated from other hazardous waste.

Time in storage may carry according to the volume of waste received. Removal of wastes by the contractor will be scheduled as necessary to minimize expense to the local government while still complying with applicable regulations and safety considerations. Wastes will not be stored longer than 180 days without written permission from the North Carolina DEHNR Division of Solid Waste Management.

Storage Building Specifications

The Ashe County Permanent HHW Collection Facility will be designed and constructed to ensure safe and efficient operation. According to state guidance concerning storage of ignitable and reactive wastes, the structure will be located at least 60 feet from the facility's property line. Furthermore, the storage building will be separated from other operational areas of the solid waste facility relative to other operational areas is shown on the enclosed site map

As required for proper safety and environmental protection, the structure will be: 1) designed to contain leaks and spills; 2) covered to exclude rain water; 3) secured to control access; and 4) constructed in accordance with all applicable National Fire Protection Association codes.

The HHW collection facility will consist of a single storage building with an attached concrete receiving apron plus canopy. Conceptual drawings showing the building floor plan and elevation are attached. Although building features may be altered as the engineering work progresses, preliminary facility specifications are noted on the enclosed drawings.

Access Control and Security

Access to the facility and chemical handling areas will be controlled to prevent unnecessary public exposure to potentially harmful substances. Areas where chemicals are handled or stored will be clearly marked using one or more of the following: warning tape, barriers, and caution signs. The signs will contain appropriate warnings such as "No Smoking," and "Authorized Personnel Only". In addition, during collection times, local government representatives will be stationed in strategic locations and will serve as checkpoint personnel to direct the flow of traffic and people.

The HHW storage building will be secured against unauthorized access by locked doors and by the six-foot high chainlink fence around the entire Multi-Material area. Furthermore, its location at the Ashe County site will provide an extra measure of safety due to the presence of personnel at nearby areas during normal operating hours. After these hours, when the site is closed, the entire area is secured by a locked entrance gate and perimeter fence. Additional night security is provided by sodium vapor lights that are automatically activated at sundown.

Hours of Operation

The HHW collection facility will initially be open for receipts of wastes 4 day's per week from 8am to 6pm. mon, thur, Fri, and Saturday. If there is a need to add more days per month or extend these hours to meet user demand, the NC DEHNR Division of Solid Waste Management will be notified in writing.

Personnel and Duties

The HHW collection facility will be staffed by well-trained, qualified personnel under the leadership of the Project Supervisor and Health and Safety Supervisor. The duties of these supervisors and also of local government personnel are described below.

Project Supervisor: The Project Supervisor will direct onsite operational efforts. This individual, assisted by the Health and Safety Supervisor, has primary responsibility for:

- assuring that all onsite contractor personnel and local government representatives have met the training requirements appropriate for their duties;
- assuring that onsite contractor personnel and local government representatives are aware of the provisions of the Contingency Plan;
- assuring that onsite contractor personnel and local government representatives are aware of the potential hazards associated with site operations;
- assuring that appropriate personal protective equipment is available and properly used;
- monitoring the safety performance of onsite contractor personnel and local government representatives;
- correcting any work practices or conditions that may result in injury or exposure to hazardous substances;
- preparing any accident/incident reports;
- implementing all aspects of the contractor's Injury and Illness Prevention Program as applicable to the project site.

Health and Safety Supervisor: The Health and Safety Supervisor or designee will be responsible for implementing the safety plan during site operations. The Health and Safety Supervisor has the authority to stop work for health and safety reasons. Other specific responsibilities include:

- verifying that onsite contractor personnel and local government representatives work in a safe manner according to the health and safety plan;
- establishing guidelines for wearing and decontaminating (if necessary) personal protective equipment,
- observing onsite contractor personnel and local government representatives for signs of exposure or stress,
- immediately reporting any unusual or unsafe conditions to the Project Supervisor;
- informing onsite contractor personnel and local government representatives of the proper procedure during an emergency;

- providing first aid if necessary;
- identifying any onsite contractor personnel or local government representatives having special medical problems;
- ensuring that any necessary monitoring equipment is properly maintained and in good operating order.

These two supervisors will direct the efforts of as many contractor personnel and local government representatives as required for safe and efficient operations.

Local Government Representatives: Local government representatives will be responsible for opening the site before each collection event and securing the site at the end of each event. As mentioned previously, local government representatives will also direct traffic, conduct surveys, determine user eligibility, and distribute educational materials.

The primary waste-related task that local government representatives plan to perform will be weekly inspections.

Training plan and qualifications of trainers

The training program is designed to enable appropriately trained personnel to receive and handle wastes in safe environmentally sound manner and to work in compliance with the methods and with applicable regulations. Personnel assigned to this project will complete the appropriate health and safety training in accordance with the items listed below. All onsite personnel will receive 8 hours training yearly under direct supervision of a trained , experienced supervisor. Local government representatives will be trained on site on handling hazardous wastes, spill management ,use of fire extinguishers, use of emergency equipment, general safe work practices, accident prevention, PPE for HHW handlers, daily inspection of storage containers, daily inspection of operational/emergency equipment, DOT standards for hazardous materials, identification of DOT chemical hazard classes, containerization of hazardous materials, labeling, marking, epa standards for hazardous wastes, storage and disposal, recordkeeping, chemical segregation, consolidation of materials into single container (bulking), container contents and other forms. Personnel will be trained fully before being assigned to the facility. Local government representatives will not work in unsupervised positions until they have received appropriate training .Onsite contractor personnel and local government representatives will be required to take part in a annual review of the initial training.as required , complete training records for the local government representatives(along with job description, job title, and other pertinent information) will be kept at the facility; training records for onsite contractor personnel will be kept at the onsite office.

Provisions for Ignitable, Reactive, or Incompatible Wastes

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 be special permission of the 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:

1. Incompatible wastes will not be placed in the same container;
2. Hazardous wastes will only be placed in new, unused containers or in containers cleaned and reconditioned by a licensed manufacturer (and labeled as such);
3. 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:

(a) generate extreme heat or pressure, fire or explosion, or violent reaction;

(b) produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

(c) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(d) damage the structural integrity of the device or facility containing the wastes; or

(e) threaten human health or the environment.

The procedures to comply with these provisions depend upon: 1) proper identification of waste materials as they are received, 2) segregated storage according to compatible hazard class, and 3) no commingling, bulking, or combining of incompatible hazard classes. Guidance will be provided by Attachment 2 from Policy Memorandum #15 (entitled Examples of Potentially Incompatible Waste) and other appropriate technical publications.

Operational/Emergency Equipment and Personal Protection Equipment

The HHW collection facility will contain the necessary equipment for protecting contractor personnel and local government representatives. The facility will also contain the equipment needed to implement the contingency plan. The facility will be equipped with an immediately available telephone from which emergency assistance could be summoned. Internal communications will be carried out by voice as the most practical method given the restricted size of the facility. A hand-held, pressurized air horn will also be available to signal an emergency situation.

Other equipment to be kept at the facility will include portable ABC dry chemical and CO fire extinguishers, spill control equipment including clay and/or inert absorbents, pads, booms, shovels, brooms, containers, and various commercial decontamination solutions.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment will be inspected weekly and maintained as necessary to ensure its presence and proper operation in case of emergency. Fire protection equipment will be tested according to manufacturer specifications. Results of all inspections will be receded on a customized checklist that will include inspection dates and a list of all systems and equipment to be inspected.

Personal Protection Equipment (PPE) will be used as appropriate to protect contractor personnel and local government representatives from spills, broken containers, and sharp objects. The level of PPE required for particular tasks is described in the following examples:

Persons Removing Waste from Cars -- Level II*:

- chemical-resistant (polyethylene-coated type) coveralls;
- safety glasses with side shields;
- chemical-resistant gloves with outer leather or other puncture-resistant gloves (optional);
- safety shoes.

* Depending on the substances being handled, a higher level of PPE (including respirators and goggles or face shield) might be required.

Persons Opening Containers and Bulking Waste -- Level II:

- chemical-resistant coveralls;
- full-face shield;
- safety glasses;
- polyurethane or other chemical-resistant safety boots;
- respirator with organic vapor cartridge and high-efficiency particulate air filter if necessary (as determined according to the waste being handled);
- chemical-resistant inner glove and outer puncture-resistant glove.

Persons Segregating Waste from Vehicles -- Level I:

- safety glasses (with splash goggles or full-face shield when necessary);
- white Tyvek with vinyl apron;
- chemical-resistant safety shoes/boots;
- respirator (as required);
- chemical-resistant inner glove and puncture-resistant outer glove.

Persons Sampling HHW -- Level II:

- full-face shield and safety glasses;
- chemical-resistant coveralls;
- chemical-resistant safety shoes/boots;
- respirator (as required);
- chemical-resistant inner glove and outer puncture-resistant glove.

Persons Lab Packing HHW -- Level I or II:

- safety glasses (with goggles or full-face shield when necessary);
- white Tyvek with vinyl apron or chemical resistant overall;
- chemical-resistant safety boot;
- respirator (as required);
- chemical-resistant inner glove and puncture-resistant outer glove.

[Note: Personnel (or appropriately trained local government representatives) handling or moving drums may require metatarsal safety shoes. Regular safety shoes may be substituted for chemical-resistant safety shoes when no chemical exposure hazard exists.]

Use and Management of Containers

Appropriate containers fitting DOT specifications will always be used for storing wastes at the Ashe County Permanent HHW Collection Facility. Personnel preparing wastes for storage will only use containers that are compatible with the wastes to be stored in them, so that containment ability is not impaired

All containers holding accumulated HHW will be checked at least weekly to ensure that they haven't been stored more than 180 days and also to ensure their integrity. These inspections, to be conducted by contractor personnel (or appropriately trained local government representatives), will be used to detect any leaks or deterioration caused by corrosion or other factors. Results of these inspections will be recorded. If a container holding hazardous waste is found to be in poor condition or if it begins to leak, contractor personnel (or appropriately trained local government representatives) will transfer the wastes from the defective container to one that is in good condition or will overpack the container in a suitable storage drum.

Personnel (or appropriately trained local government representatives) will also ensure that any containers holding hazardous waste will be kept closed during storage, except when it is necessary to add or remove waste. Caution will be taken in the movement of all containers to prevent them from being tipped over or punctured. Furthermore, the containers will not be opened, handled, or stored in a manner which may rupture them or cause them to leak.

Unobstructed aisle space will be maintained to allow movement of personnel, containers, and emergency equipment within the storage building and apron at all times.

Recycling of Wastes

HHW collected at this facility will be recycled or treated whenever economically practical, and incineration or landfilling will be used as a last resort. In keeping with this operating philosophy, it is currently anticipated that the following wastes might be collected for recycling or BTU recovery: motor oil and other automotive fluids, lead-acid batteries, nickel-cadmium batteries, latex paint, fuels and solvents, mercury (from fluorescent bulbs and other sources), and aerosol cans.

Transportation and Disposal

When the transportation and disposal contractor arrives at the HHW storage facility for a scheduled pickup, the contractor will ensure that all containers are properly packaged, labeled, documented, and manifested. Personnel will then load the containers onto a contractor vehicle and will transport them to a licensed facility for final treatment, recycling, or disposal.

Reporting and Documentation

Thorough and accurate records will be maintained to ensure the accurate tracking of hazardous materials from the generator to final disposal sites. Container Contents Sheets will detail each drum's contents and waste quantities. Additional records that will be generated to ensure accurate record keeping include the following:

- Drum Tracking Sheet (contractor's in-house form);
- Uniform Hazardous Waste Manifest;
- Contractor's Material Profile Sheet (for wastes in bulk, 5 gallons or more);
- Waste Certification/Notification (to meet requirements of land-ban requirements if applicable);
- TC Rule Certification/Rectification (to meet the TCLP Rule requirements if applicable);
- Certificates of Disposal.

Maintenance and Operation of the Facility

The HHW collection facility will be maintained and operated to promote personnel safety and to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. The appropriate provisions and procedures necessary to ensure safe and efficient operations have been stated in this plan.

The Ashe County Sheriff's Department will handle any small arms ammunition including rifle, shotgun and handgun. Ashe County Emergency Management can handle explosive materials that might be volatile such as ether. They will be notified of each collection event.

Infectious waste will not be accepted.