

Permit No.	Scan Date	DIN
9904-TP-2013	June 17, 2013	19139

RECEIVED
June 6, 2013
Solid Waste Section
Asheville Regional Office

OPERATIONS PLAN

WM Healthcare Solutions, Inc.

329 West Maple Street
Yadkinville, Yadkin County
North Carolina, 27055

May 31, 2013

Prepared by
WM Healthcare Solutions, Inc.
1001 Fannin Ste 4000
Houston, Texas 77002

www.wm.com



THINK GREEN.®

TABLE OF CONTENTS

- 3.1 General description
- 3.2 Acceptable Wastes
- 3.3 Service area
- 3.4 Quantity of waste managed
- 3.5 Site security & access control
- 3.6 Signage
- 3.7 Facilities to which untreated wastes is shipped
- 3.8 Operations of the Processing Facility
- 3.9 Equipment at the facility
- 3.10 Storage of material
- 3.11 Staffing
- 3.12 Surface water control
- 3.13 Approval of discharge by Town of Yadkinville
- 3.14 Maintenance of facility in sanitary condition
- 3.15 Litter and dust control
- 3.16 Fire prevention
- 3.17 Recordkeeping
- 3.18 Contingency planning



HEALTHCARE SOLUTIONS

SECTION 3.1 GENERAL DESCRIPTIONS

The facility operates in accordance with the rules and regulations set forth by the North Carolina Division of Waste Management and the Town of Yadkinville. The facility was engineered constructed and permitted for regulated medical waste treatment, transfer of medical and solid waste for appropriate treatment off site, and for handling reusable sharps containers.

The plant can operate 24-hrs a day, seven days a week. Office hours will be Monday through Friday from 8:00 AM to 4:00 PM.

SECTION 3.2 ACCEPTABLE WASTES

The facility accepts medical wastes defined by NCGS 130A-290(a)(17a) "Medical waste" means any solid waste which is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, but does not include any hazardous waste identified or listed pursuant to this Article, radioactive waste, household waste as defined in 40 Code of Federal Regulations 261.4(b)(1) in effect on 1 July 1989, or those substances excluded from the definition of "solid waste" in this section.

Types of Regulated Medical Waste to be accepted for treatment at the facility are defined in 15A NCAC 13B .1200. Pathological waste (as defined in 15A NCAC 13B .1200) will be stored and transported to a facility permitted to properly treat said waste.

The facility plans to accept and manage garbage as specified in 7CFR 330.400 Subpart Garbage and 9CFR 94.5 Regulations of certain garbage. Regulated garbage requirements are certified and enforced by the US Department of Agriculture's (USDA) Animal and Plant Health inspection Services (APHIS) and the US Department of Homeland Security's, US Customs and border Patrol (CBP). Once the authorization is received from USDA and CBP, the Compliance Agreement will be provided to NCDENR and this operations plan will be updated.

Haulers of waste to the facility have US Department of transportation (DOT) manifests signed by generators attesting that the waste is non-hazardous and packaged properly per DOT and state regulations. The facility does not accept hazardous or liquid waste.

SECTION 3.3: SERVICE AREA

The facility will be processing waste from Maryland, New York, New Jersey, North Carolina, Pennsylvania, Washington D.C., Virginia, Rhode Island and South Carolina.



HEALTHCARE SOLUTIONS

SECTION 3.4: QUANTITY OF WASTE MANAGED

The facility can operate 365 days per year at a capacity of 84 tons of waste per 24-hour period.

SECTION 3.5: SITE SECURITY AND ACCESS CONTROL

The building and associated property are monitored by one high-definition light amplification camera with the capacity to record and store 24-hours footage per day. Additionally buildings are secured by access-controlled doors and motion sensors.

SECTION 3.6: SIGNAGE

Signage is posted at the entrance displaying the facility name, type of waste accepted/permitted, operating hours, and emergency contact numbers as follows:

Name: WM Healthcare Solutions, Inc. – Permit No. 9904-TP-2013

MEDICAL WASTE TREATMENT FACILITY

Acceptable Waste Streams: Infection Waste/RMW, Pathological waste, Chemotherapeutic Waste and Sharps

Office Hours: M-F 8 AM to 4 PM

Emergency Contact #:

Howard Davenport
hdavenpo@wm.com
(252) 797-3849 office
(252) 217-0051 mobile

SECTION 3.7: ALTERNATE FACILITY FOR UNTREATED MEDICAL WASTE

Medical waste that cannot be treated at the Yadkinville facility will be transported to a WM Healthcare Solutions, Inc. processing facility located at 318 Bell Park Dr. Woodstock GA, (Avalon South LLC) permit number: 028-042P or an approved third-party vendor.



HEALTHCARE SOLUTIONS

SECTION 3.8: OPERATIONS

Regulated medical waste is transported to the facility in trucks and/or trailers by WMHS employees or by other licensed transporters. All waste is shipped in approved corrugated boxes, reusable containers and /or disposable containers that meet DOT requirements. The trucks and trailers back to the loading dock and the drivers come into the scale area with their manifests. The medical waste containers are off loaded at the dock by hand truck, forklift or conveyors or by rolling them off if, the container has wheels (such as sharps transporters and large reusable plastic containers) by employees.

Trained WMHS employees off load medical waste containers at the facility weighing each and the weight recorded on the accompanying manifest.

The waste containers are inspected and sorted as treatable and untreatable waste. The untreatable or bypass waste is loaded onto trailer positioned at the bay door for delivery to an approved site that can treat the bypass waste. A minimum of two trailers will be used in this bypass waste system so as not to violate the 7 days waste storage requirement. See 3.8 and 3.11.

Untreated waste and contaminated corrugated boxes are then placed in the autoclave treatment carts positioned at the dock edge and conveyed across the plant floor to the autoclave unit for processing. The reusable medical waste containers left in the dock are now empty and can be taken to the wash area for cleaning with an approved solution such as **Clorox Bleach EPA Reg#: 5813-1** (EPA List B- approved disinfectant). The containers are inspected for damage and sent for repairs if necessary. They are then positioned on the dock as units ready for outbound trucks.

Five autoclave carts filled with treatable medical waste are loaded onto the hydraulic lift that automatically rolls the carts to the sterilizer tube. The door is closed, the prescribed temperature and time are keyed and the unit is activated. At the end of the cycle, the door is open, the hydraulic ramp is raised, and the rear of the tube is raised to roll the five carts out. The ramp is lowered to the floor level and the treated carts are rolled off the ramp.

The treated waste contained in the autoclave carts is transferred to the compactor vessel utilizing a hydraulic dumper for shipment to:

1. East Carolina Environmental Regional Landfill, Aulander, NC - Permit No.: 08-03.
2. Yadkin County Landfill, Yadkinville, NC – Permit No.: 99-03-T

The carts are then wheeled back to the dock where they are refilled with untreated waste and the sterilization process is repeated.



THINK GREEN.®

HEALTHCARE SOLUTIONS

GENERAL REQUIREMENTS

- (a) Refrigeration at an ambient temperature between 35 and 45 degrees Fahrenheit shall be maintained for Regulated medical waste not treated within seven calendar days after shipment.
- (b) Regulated medical waste shall be stored prior to treatment for no more than seven calendar days after receipt.
- (c) Regulated medical waste shall be stored no longer than seven calendar days after treatment.
- (d) Only authorized personnel shall have access to areas used to store Regulated medical waste.
- (e) All areas used to store Regulated medical waste shall be kept clean. Neither carpets nor floor coverings with seams shall be used in storage areas. Vermin and insects shall be controlled.
- (f) Prior to treatment, all Regulated medical waste shall be confined to the storage area.
- (g) All floor drains shall discharge directly to an approved sanitary sewage system. Ventilation shall be provided and shall discharge so as not to create nuisance odors.
- (h) The Operations Plan shall be updated as necessary to ensure continued proper management of Regulated medical waste at the facility.
- (i) Records of Regulated medical waste shall be maintained for each shipment and shall include the information listed in this Paragraph. This information shall be maintained at the treatment facility for no less than three years.
 - (i) name and address of generator;
 - (ii) date received;
 - (iii) amount of waste received by number of packages (piece count) from each generator;
 - (iv) date treated;
 - (v) name and address of ultimate disposal facility.
- (j) Regulated medical waste treatment facilities that treat waste generated off-site shall submit to the Division an annual report, by August 1 of each year on a form prescribed and approved by the Division.



HEALTHCARE SOLUTIONS

SECTION 3.9: *EQUIPMENT AT THE FACILITY*

Two R.E Baker Autoclaves – Combined processing capacity = 84tons/day

Minimum sterilization requirements:

- (a) Steam under pressure shall be provided to maintain a minimum temperature of 250 degrees Fahrenheit for 45 minutes at 15 pounds per square inch of gauge pressure during each cycle; or other combinations of parameters that are shown to effectively treat the waste.
- (b) The steam sterilization unit shall be provided with a chart recorder which accurately records time and temperature of each cycle.
- (c) The steam sterilization unit shall be provided with a gauge which indicates the pressure of each cycle.
- (d) Monitoring under conditions of full loading for effectiveness of treatment shall be performed no less than once per week through the use of biological indicators or other methods approved by the Division.
- (e) Regulated medical waste may be disposed of until or unless monitoring as required does not confirm effectiveness.
- (f) A log of each test of effectiveness of treatment performed shall be maintained and shall include the type of indicator used, date, time, and result of test.

The sterilization units are electronically controlled and automatically record the cycle time and temperature to demonstrate treatment efficacy. Records will be maintained at the facility.

Two boilers and associated carts and hand tools are installed and in operation at the facility. These pieces of equipment have been inspected and approved by the State of North Carolina and the Manufacturer. Applicable permits and certification of inspection from the State and Manufacturer for the pressure vessel are available on site. These vessels are inspected annually. Maintenance of the equipment will follow the maintenance inspection frequency, service; replacement of parts and other requirements recommended by the manufacturer of the key equipment and verified using inspection sheets. Inspections will be on a daily, weekly, monthly or other schedule as recommended. Visual inspection of all equipment will be performed daily to insure proper working conditions. Any equipment repair or maintenance will be completed when inspected or on a schedule. Non-repairable equipment will be replaced. A schedule of maintenance requirement will be posted at the plant and the tasks will be part of the training of employees.



HEALTHCARE SOLUTIONS

SECTION 3.10: STORAGE OF MATERIAL

Materials waiting to be processed will be stored in enclosed containers. No material will be stored for more than 7 days without refrigeration. All regulated medical waste materials are processed under dated manifests that show date picked up from generator, date delivered, and date processed at plant. The maximum amount of stored waste material is 168,000 pounds or 24-hour of processing. Each autoclave can process approximately 3500 pounds per hour with a total of 7000 pounds (both autoclaves) per hour. This equates to 56,000 pounds per 8 hrs shift and 168,000 pounds for 3 shifts in a 24 hours period if plant operates at full scale.

SECTION 3.11: STAFFING

Shift staffing may include two (2) dockworkers and two (2) Autoclave operators. There will be a shift manager on-site during normal business hours. The manufacturer's operating manual will be kept on site and filed in the plant manager's office for reference. All employees will receive proper training as prescribed by the manual based on their respective job descriptions, safety procedures and practice, operations, maintenance, OSHA rules, including lock out tag out, blood borne pathogens, and tune-up and equipment maintenance.

Autoclave operators must undergo specific trainings including:

USDA compliance

Blood borne pathogens

Forklift Operations

Boiler Operation

Steam sterilization

Standard OSHA training

SECTION 3.12: SURFACE WATER CONTROL

No storm water permit is required.

SECTION 3.13: APPROVAL OF DISCHARGE BY TOWN OF YADKINVILLE

An industrial wastewater permit is not required for this operation. WMHS staff is working with the Town of Yadkinville to obtain a letter of agreement. Once received, the documentation will be forwarded to NCDENR.



HEALTHCARE SOLUTIONS

SECTION 3.14: MAINTENANCE OF FACILITY IN SANITARY CONDITIONS

Shift cleanup includes sweeping and washing waste processing and storage areas of the facility with the use of EPA list-B approved disinfectant.

SECTION 3.15: LITTER AND DUST CONTROL

WMHS staff will monitor the grounds of the facility daily. All transfer of open waste will be performed inside the building avoiding the escape of any flying debris.

SECTION 3.16: FIRE PREVENTION

The facility is equipped with a fire detection system, monitored 24hours a day from an offsite location. The Town of Yadkinville Fire Department is responsible for the area the facility is located. They have been provided with a key and access/alarm codes to the facility.

SECTION 3.17: RECORD KEEPING

Records of all process regulated medical waste are properly maintained in accord with the applicable rules and regulations of the state and Federal Agencies with jurisdiction over the facility. Permit copies, operation plan, SOP's and site drawings are maintained at the facility at all times.

Records of regulated medical waste shall be maintained for each shipment and kept for a minimum of three years. This information will include; name and address of generator, date waste was received, amount of waste received per generator, date treated and the name and address of final disposal facility. Chart recorder wheels showing time and temperature for each of the sterilizer cycles shall be maintained at the facility for three years. A log of each test for effectiveness of treatment performed weekly shall be maintained and shall include the type of indicator used, date, time and results of test. This test information shall be maintained at the facility for three years. An annual report on a form prescribed and approved by the division will be generated showing tonnage received at the facility by month and by county.



HEALTHCARE SOLUTIONS

SECTION 3.18: CONTINGENCY PLAN

WM Healthcare Solutions, Inc. has other permitted treatment facilities capable of backing up the Yadkinville facility in an event such need should occur. The processing systems at the facility are built independent from each other to prevent a total shutdown of the plant because of a malfunction. The boilers are powered by with natural gas or diesel.

A representative from NCDENR's Division of Waste Management will be notified of any plant shutdown, other than in the normal course of business or any major repair or similar event. Prior to re-opening, a representative from NCDENR's Division of Waste Management will be given the opportunity to perform a Pre-Operation Inspection.

In the unlikely event of a spill, the WMHS SOP's are posted at the dock, near the sterilizers, and in the trucks. Noise and odors will be minimized and possibly eliminated by implementing control measures which include piping the autoclave steam release down into the below ground expansion tanks. Additionally, once the waste arrives at the dock, it is processed with no delay. There is also a quarterly monitored vermin control box in place onsite to keep away rodent.

The facility had devised additional contingency related to items such as a Trigger Point, Post Shutdown Inspection and an attempt to harvest Useable Items from the waste stream.

The Trigger Point is based on an amount of waste backlogged at the plant after a full day of processing. WMHS trigger point is 110% of its daily throughput of 84 tons or 184,400 pounds. When this trigger point is met, waste must be diverted from WMHS Yadkinville, to an alternate processing facility until the amount of waste onsite is below the trigger point.



HEALTHCARE SOLUTIONS

WASTE MANAGEMENT, INC.
1001 Fannin, Suite 4000
Houston, TX 77002

May 31, 2013

Mr. Larry Frost
Environmental Engineer
NC Department of Environment and Natural Resources
Division of Waste Management - Solid Waste Section
2090 US Highway 70
Swannanoa, NC 28778

Re: WMHS Response to NCDENR Determination of Completeness and Technical Review
WM Healthcare Solutions – Medical Waste Treatment Facility
Yadkin County, DIN 19028

Dear Mr. Frost,

In response to the North Carolina Department of Environment and Natural Resources correspondence letter dated May 29, 2013, WM Healthcare Solutions, Inc. (WMHS) is providing an updated Operations Plan to address all deficiencies and/or modification requests noted.

Should you have any questions regarding this transmittal or require additional information, please do not hesitate to contact me via phone at (512) 825-9327 or email at jlewis13@wm.com.

Sincerely,



Julie K. Lewis
Manager of Environmental Protection
WM Healthcare Solutions, Inc.

Cc: Michael McInerney, WMHS
Jason Wrubel, WMHS



THINK GREEN®.