

## **PRELIMINARY DETERMINATION**

### **INITIAL PERMIT ISSUANCE**

MWT AL OPS, LLC  
4618 Airport Road  
Rainbow City, Alabama 35906  
Permit Number TRTS080421-2802

MWT AL OPS, LLC has submitted a permit application to the Alabama Department of Environmental Management (ADEM) for a proposed Medical Waste Treatment Facility (Permit Number TRTS080421-2802) to be located at 4618 Airport Road in Rainbow City, Etowah County, Alabama. On January 10, 2022, the Rainbow City Council granted local approval to MWT AL OPS, LLC to operate a new solid waste management facility for the treatment of medical waste. As indicated in the permit application, the medical waste treatment facility will utilize the approved treatment technology of pyrolysis, which is effective in waste minimization and produces no harmful emissions. MWT AL OPS, LLC proposes to treat on-site the following types of medical waste listed in its permit application: animal waste, bulk human blood, blood products, body fluids, microbiological waste, surgical waste, pathological waste, sharps, and other medical waste as defined by ADEM Admin. Code r. 335-17-1-.02. The proposed facility will have offices, a treatment area, and parking that will be surrounded by a fence and a locked gate.

The Assessment Section of the Environmental Services Branch has determined that the equipment and operations proposed by the company should be able to meet all applicable requirements of the ADEM Administrative Code Division 17 regulations for a medical waste treatment facility.

Program Contact:

Ms. Ashley Powell  
Assessment Section  
Land Division  
(334) 271-7703

# ADEM



ALABAMA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

## MEDICAL WASTE TREATMENT FACILITY PERMIT

PERMITTEE: MWT AL OPS, LLC

FACILITY NAME: MWT AL OPS, LLC

FACILITY LOCATION: 4618 Airport Road, Rainbow City, Alabama 35906

PERMIT NUMBER: TRTS 080421-2802

TREATMENT METHOD: Pyrolysis

**WASTES APPROVED  
FOR TREATMENT:**

All medical waste as defined in Rule 335-17-1-.02 of the ADEM Administrative Code and that is recommended by the equipment manufacturer.

*In accordance with and subject to the provisions of the Solid Wastes and Recyclable Materials Management Act, as amended, Code of Alabama 1975, §§22-27-1 to §§22-27-27, the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject to the conditions set forth in this permit, the Permittee is hereby authorized to treat the above-described medical wastes by the above-described treatment method at the above-described facility location.*

ISSUANCE DATE: Date???

EFFECTIVE DATE: Date???

EXPIRATION DATE: Date???

## **Part I – REPORTING REQUIREMENTS**

### **A. Reporting**

All reports, notifications, or other submissions, which are required by this permit should be sent by certified mail or given to:

Alabama Department of Environmental Management  
Land Division – Environmental Services Branch  
P. O. Box 301463  
Montgomery, AL 36130-1463

### **B. Definitions**

For purposes of this permit, terms used herein shall have the same meaning as those in ADEM Admin. Code chap. 335-17-1 unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

## **PART II – TREATMENT FACILITY MANAGEMENT REQUIREMENTS**

- A. The Permittee shall comply with the submitted medical waste management plan and the requirements of ADEM Admin. Code rs. 335-17-4-.01, 4-.02, 6-.01, 7-.01, and 7-.02. All agents and employees of the Permittee shall be familiar with the Permittee's medical waste management plan and the requirements of ADEM Admin. Code div. 335-17.
- B. Prior to any anticipated change or addition of the treatment method or the acceptance of any waste type not specified in this permit, the Permittee shall make a written application to the Director for modification of this permit. No action may be taken on such changes by the Permittee prior to the approval of the permit modification
- C. If, for any reason, the Permittee does not comply with or will be unable to comply with the provisions of this permit or the applicable requirements of Division 335-17 of the ADEM Administrative Code, the Permittee shall provide the Chief of the Land Division with the following information, in writing, within five days of becoming aware of such conditions:
  - 1. A descriptive account of the item(s) causing non-compliance.

2. The period of non-compliance, including dates and times, or, if not corrected, the anticipated time the non-compliance is expected to be corrected and steps being taken to reduce, eliminate, and prevent the recurrence of the non-complying item.
- D. The Permittee shall allow, at all reasonable times, representatives of the Division, upon presentation of credentials, to enter the Permittee's premises or any place where records are required to be kept for inspection to ensure compliance with the applicable regulations and the conditions of this permit. At all reasonable times, representatives of the Division shall be allowed access to and the right to copy all records required by Alabama's Solid Waste and Medical Waste Programs Regulations and the conditions of this permit. All inspection reports and other data collected shall be available for public inspection unless the Permittee makes a proper showing that such information should be considered confidential.

### **PART III – PERMIT ACTIONS**

A. Permit Revocation

The Alabama Department of Environmental Management may revoke any permit according to the procedures and for the causes listed in ADEM Admin. Code r. 335-13-5-.05.

B. Permit Severability

The provisions of this permit are severable and if any provisions of this permit, or the application of any provision of this permit to any circumstance, are held invalid, the application of such provision to the other circumstances and the remainder of this permit shall not be affected thereby.

C. Permit Modification

1. Permit modifications shall be required at least 90 days prior to anticipated change utilizing forms designated by the Division when the Permittee purposes to modify its operation(s) in any of the following ways:
  - a. The addition of any treatment method.
  - b. The types of wastes to be treated are changed.
2. The Permittee shall receive approval from the Department prior to implementing any modification.

D. Transfer of Permits

Permits are not transferable from one person to another except as provided by ADEM Admin. Code r. 335-13-5-.07.

**PART IV – EFFECT OF PERMIT**

- A. Issuance of this permit does not convey any property rights of any sort or any exclusive privilege.
- B. The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights or any infringement of Federal, State of Alabama, or local laws or regulations or preclude the institution of any legal action for violation of such laws or regulations.

**PART V – PROPERTY RIGHTS**

- A. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

**PART VI – STATE LAWS**

- A. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state laws or regulations.

**PART VII – ADDITIONAL REQUIREMENTS**

- A. Written certification that all medical waste has been treated before placing the waste in a designated location for transport to an approved solid waste disposal facility shall be submitted to the Department yearly.
- B. Each treatment unit shall be evaluated for effectiveness under full loading by an approved method at least once for every 40 hours of combined operation.
- C. Maintain a written log for each treatment unit noting the following for each cycle: the operating parameters; date; time and duration; operator's name; approximate weight or volume treated.
- D. Dates and results of calibration and maintenance of equipment utilized.

- E. All records shall be maintained for a period of at least three years from the date created or from the time contested by the Department and shall be available upon request for review by the Department.
- F. Prior to disposal all sharps, recognizable body parts, and medical labeling must be rendered unrecognizable prior to containment for shipment to a disposal facility or place of interment.
- G. Only approved technologies and equipment shall be utilized by the Permittee.
- H. All information submitted to the Department must be true, complete, and accurate.

**PART VIII – Permit Variance**

None.



**Medical Waste Treatment Permit  
Application**

Form 412 01/09 m4 with attachments

**Monarch Waste Technologies, LLC**



**David Cardenas, Principal/Co-Founder  
(972) 768-6885**

**Submitted: 6/1/2022**

## Table of Contents

<b>Front Cover</b>	<b>1</b>
<b>Table of Contents</b>	<b>2</b>
<b>Permit Application</b>	<b>3-4</b>
<b>Supplemental Information Attachments/Narratives for Applicable Sections</b>	
Section C: Treatment Method	
<i>Attachment A: Alternative Treatment Technology Approval</i>	5
Section D: Attachments	6
<i>Attachment B: Waste Management Plan</i>	7-30
<i>Attachment C: Applicable Fees</i>	30
<i>Attachment D: Equipment List</i>	31
<i>Attachment E: Waste Acceptance Protocol</i>	32-40
<i>Attachment F: Standard Operating Procedures</i>	41-50
<i>Attachment G: Mitigation Plan</i>	51-64
<i>Attachment H: Site Spillage Procedures</i>	65
<i>Attachment I: Health and Safety Plan</i>	66-74





# Medical Waste Treatment Permit Application

(Print or Type)

### A. Treatment Facility Identification:

Name of facility: MWT AL OPS, LLC

Contact person: David Cardenas

Title of contact person: Facility Operator/Owner

Mailing address: 8235 Douglas Avenue Suite 720

City: Dallas State: TX Zip Code: 75225

Business address: 8235 Douglas Avenue Suite 720

City: Dallas State: TX Zip Code: 75225

Business telephone number: ( 972 ) 768 - 6885

Emergency/after-hours number: ( 972 ) 768 - 6885

Has medical waste been previously treated at this site? Yes  No

If yes, what type of technology was utilized? N/A

What date did the last waste treatment occur? N/A

Name and mailing address of property owner if different from applicant:

Name of property owner: Veteran Environmental Services, LLC

Mailing address: 3495 Mountain View Dr.

City: Southside State: AL Zip Code: 35907

telephone number: ( 256 ) 504 9703

### B. Permit Status: (Check one)

First Application

Permit renewal: Permit No. \_\_\_\_\_

Expiration date of current permit: \_\_\_\_/\_\_\_\_/\_\_\_\_

Permit Modification: Provide a narrative description of the modifications sought, listing the Section(s) of the existing permit to be modified, and the rationale for the request to modify the permit.

**C. Treatment Method:**

1. Steam Sterilization

Cycle Operating Parameters: \_\_\_\_\_ Minutes; \_\_\_\_\_ ° F Temp; Pressure, \_\_\_\_\_ psi

2. Other Treatment Method: (Specify, include Letter of approval) *See Attachment A: Alternative Treatment Technology Approval*

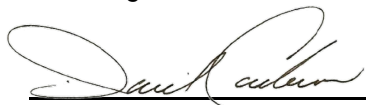
**D. Attachments:** (The application will not be reviewed unless all attachments are submitted)

1. Medical Waste Management Plan *See Attachment B: Waste Management Plan*
2. Applicable fees *See Attachment C: Applicable Fees*
3. A detailed floor plan of the facility showing all handling, storage and treatment equipment. *See Facility Layout and Site Map in Attachment B*
4. List equipment (including shredders) utilized in treatment of medical waste. Include model numbers, manufacturers, number of years in use, certifications, number of pieces, etc. (Attach sheets as necessary) *See Attachment D: Equipment List*

**E. Certification:** (To be signed by a responsible official)

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Signature: \_\_\_\_\_



Typed name: \_\_\_\_\_

David Cardenas

Official Title: \_\_\_\_\_

Managing Member

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

6/1/2022

Please submit two copies of each Application and attachments to:

Alabama Department of Environmental Management

(Mailing Address):

Environmental Services Branch

Land Division

P.O. Box 301463

Montgomery, AL 36130-1463

(Street Address):

Environmental Services Branch

Land Division

1400 Coliseum Boulevard

Montgomery, AL 36110-2059

Phone: 334-271-7984

Fax: 334-279-3050

Make all checks payable to the Alabama Department of Environmental Management

Attachment A: Alternative Treatment Technology Approval

**LANCE R. LEFLEUR**  
DIRECTOR

**Kay Ivey**  
GOVERNOR



Alabama Department of Environmental Management  
[adem.alabama.gov](http://adem.alabama.gov)

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700 ■ FAX (334) 271-7950

September 29, 2021

Bob Blom  
Veteran Environmental Services, LLC  
400 Broad Street  
Gadsden, AL 35901-3759

RE: Alternative Medical Waste Treatment Technology Approval

Dear Mr. Blom:

On August 3, 2021, the Department received Monarch Waste Technologies, LLC's (Monarch) request for approval of an alternative treatment method for medical waste, submitted on Monarch's behalf by Veteran Environmental Services, LLC (VES). With this request, Monarch has requested that the pyrolysis treatment method, with the utilization of the PyroMed 550™ Medical Waste Treatment System, be approved for the treatment of medical waste in Alabama.

The Department has completed its review of the documentation provided by VES and has determined pyrolysis to be an acceptable method for the treatment of medical waste, with the use of the PyroMed 550™ Medical Waste Treatment System, while operated within the design specifications. The system is approved for treatment of the following types of medical wastes: animal waste, bulk human blood, blood products, and body fluids; microbiological waste, surgical waste; pathological waste, sharps, and all other medical wastes as defined in ADEM Admin. Code r. 335-17-1-.02.

This approval is in accordance with the requirements of ADEM Admin. Code r. 335-17-6-.01(3)(a) through (g). Please note that this technology approval does not constitute issuance of a permit or permit modification approving the use of this technology at a specific facility.

Should you have any questions or need any additional information regarding this matter, please contact Ms. Shani Smith of my staff at (334) 271-7859.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen A. Cobb".

Stephen A. Cobb, Chief  
Land Division

SAC/sks

CC: David Cardenas, Monarch Waste Technologies, LLC  
Doug Carr, ADEM

A red, stylized stamp or watermark that reads "COPY" in a bold, sans-serif font.



# SECTION D

## Attachments

For administrative completeness, attachments include:

- Attachment B: Waste Management Plan
- Attachment C: Applicable Fees
- Attachment D: Equipment List
- Attachment E: Waste Acceptance Protocol
- Attachment F: Standard Operating Procedures
- Attachment G: Mitigation Plan
- Attachment H: Site Spillage Procedure
- Attachment I: Health and Safety Plan

**Attachment B: Waste  
Management Plan**

**MWT AL OPS, LLC**

**ALABAMA Facility**

**ALABAMA**

**MEDICAL WASTE MANAGEMENT PLAN**



MONARCH WASTE TECHNOLOGIES, LLC  
8235 DOUGLAS AVENUE #720  
DALLAS, TX 75225

MWT AL OPS, LLC  
8235 Douglas Ave Suite 720  
Dallas, TX 75225  
Revised September 2022

# Medical Waste Management Plan

## Abstract

The objective of this *Waste Management Plan* (WMP) is to describe the procedures and processes that govern operations at the facility located at 4618 Airport Road Rainbow City, Alabama 35906. This plan is not intended to be comprehensive, but rather it outlines: (1) the manner by which medical waste accepted by MWT AL OPS, LLC (“Monarch”) and is deemed appropriate for processing at the facility and determined to conform to the acceptable waste streams described herein; (2) the methods utilized by the facility to receive, unload, store, stage and process the medical waste; (3) the measures taken by the facility to comply with state regulatory requirements for emissions, Alabama’s rules and regulations for waste management, and Monarch’s own policies for proper management of medical waste. This facility is NOT a waste testing facility. It is a destruction facility. Therefore, this facility will not undertake sampling or testing of waste streams beyond basic standard radiological examination to validate safe handling, as all waste streams are pre-sorted by each generator and described on the manifest in accordance with the waste categories described on Table 1 herein. This plan was created in accordance with the standards set forth by the Alabama Department of Environmental Management standards and is supported by the information provided in Monarch’s *Waste Acceptance Protocol* (Attachment E), *Standard Operating Procedures* (Attachment F), and *Mitigation Plan* (Attachment G). This WMP will be amended as needed to adapt to the growth of the facility or changes in regulations.

# Medical Waste Management Plan

**Facility Owner: MWT AL OPS, LLC**

**Address: 4618 Airport Road**

**Rainbow City, Alabama 35906**

**Approval**

**October 2022**

**Facility Manager: MWT AL OPS, LLC**

\_\_\_\_\_

By: TBD

Its, Facility General Manager

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

**Facility Operator/Owner: MWT AL OPS, LLC**

\_\_\_\_\_

By: David Cardenas

Its, Managing Member

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

# Table of Contents

<b>1.0 PURPOSE OF THIS PLAN</b> .....	<b>11</b>
1.2 SCOPE OF THIS PLAN .....	11
1.3 OWNERSHIP .....	11
<b>2.0 RESPONSIBILITIES</b> .....	<b>11</b>
2.1 GENERATORS .....	11
2.2 MANAGER .....	12
2.3 MANAGER'S SCOPE .....	12
<b>3.0 CONTACT PERSONS</b> .....	<b>12</b>
3.1 PRIMARY CONTACT PERSON .....	12
3.2 BACKUP CONTACTS .....	12
3.3 EMERGENCY OR AFTER-HOUR CONTACTS .....	13
<b>4.0 FACILITY GENERATED WASTE</b> .....	<b>13</b>
4.1 WASTEWATER .....	13
4.2 OTHER WASTE .....	13
<b>5.0 MEDICAL WASTE</b> .....	<b>13-14</b>
5.1 ACCEPTABLE WASTE (Table 1) .....	14-15
5.2 PROHIBITED WASTE (Table 2) .....	16
5.3 CONTROLLED SUBSTANCES .....	17
<b>6.0 WASTE ACCEPTANCE: RECEIVING/UNLOADING</b> .....	<b>17-18</b>
6.1 STAGING AREAS .....	18
6.2 RADIATION MONITORING .....	18-20
<b>7.0 FACILITY/PYROLYSIS SYSTEM OPERATIONS</b> .....	<b>20</b>
7.1 OVERLOADING/BREAKDOWNS/SCHEDULED MAINTENANCE .....	20
7.2 PYROLYSIS STARTUP/CHARGING/OPERATING SEQUENCE .....	20-21
7.3 PYROLYSIS SHUTDOWN SEQUENCE .....	21
<b>8.0 RECORDKEEPING/REPORTING</b> .....	<b>21-22</b>
8.1 OPERATING RECORDS .....	22
8.2 FACILITY REPORTING.....	22
<b>9.0 SANITATION</b> .....	<b>22</b>
<b>10.0 PROFILING, WASTE CODE TRACKING, AND RESIDUE DISPOSITION</b> .....	<b>22</b>
10.1 WASTE CODE TRACKING AT THE FACILITY .....	23
10.2 RESIDUE DISPOSITION .....	23-24
<b>11.0 DEFINITIONS</b> .....	<b>24-25</b>



## **1.0 PURPOSE OF THIS PLAN**

This plan describes how medical waste is received and processed at the facility. It delineates all measures taken by the facility to comply with the regulations set forth by the Alabama Department of Environmental Management (ADEM) and applicable Environmental Protection Agency (EPA) regulations for the receiving, handling, and safe processing of medical waste. This plan also highlights Monarch's efforts to reduce emissions, with the aim of protecting the community of Gadsden, its natural resources, and its neighboring environment.

### **1.1 SCOPE OF THIS PLAN**

This plan describes all activities related to the receiving, handling, and processing of medical waste that occur at the facility. This plan also identifies specific categories of waste items that the facility will NOT accept.

### **1.2 OWNERSHIP**

The operator and manager of the facility—MWT AL OPS, LLC—owns this plan. MWT AL OPS, LLC is a subsidiary of parent company Monarch Waste Technologies, LLC, located in Dallas, Texas.

## **2.0 RESPONSIBILITIES**

The adherence to protocols described in this plan is the responsibility of the manager. These protocols apply to all personnel who transport, receive, handle, or process medical waste and/or operate the pyrolysis system within the facility.

### **2.1 GENERATORS**

Monarch shall require that all generators review an agreement detailing Monarch's *Waste Acceptance Protocol*. This protocol outlines acceptance criteria for the treatment, processing, and temporary storage of medical waste; describes the mandatory training requirements for generator personnel in waste segregation; and details which categories of waste the facility will not accept along with all relevant waste rejection procedures.

When Monarch enters into a new contract with a generator, the manager will review the generator's policies and procedures, specifically the employee training procedures. The manager will verify that these procedures comply with Monarch's *Waste Acceptance Protocol* (WAP) as well as federal and state regulations prior to engaging in contractual arrangements or receiving medical waste. After contracts have been signed and waste acceptance commences, any errors in segregation of medical waste will immediately be documented and brought to the attention of the generator. Subsequent corrective procedures will be reviewed with and implemented by generator staff to avoid future issues.

## **2.2 MANAGER**

The manager will ensure that shift supervisors, other managers, and all personnel working in the facility receive the required training on pyrolysis processing and are competent in practices for managing medical waste streams according to state regulations. The manager will certify that his or her staff is aware of the contents of this plan.

## **2.3 MANAGER'S SCOPE**

The manager will certify that the information contained in this plan is correct and complete and will update this plan as necessary. The manager will maintain all treatment and tracking records of applicable medical waste streams outlined in this plan for five years. All records will be kept at the facility and any of the following documents will be made ready for inspection, upon request by ADEM:

- (a) Manifest records for all incoming medical waste received and rejected
- (b) Treatment operating records
- (c) Inspection records

This plan includes, but is not limited to:

- (a) Processing and reviewing the medical waste management plans for waste haulers and generators where the medical waste originated.
- (b) Conducting an evaluation, inspection, or records review for each waste hauler and/or generator.
- (c) Inspecting medical waste transporters or generators in response to complaints or emergency incidents, or as part of an investigation or evaluation of the implementation of the Monarch's WAP.
- (d) Taking enforcement action for the suspension or revocation of medical waste generating activities of a generator or a transporter when necessary.
- (e) Reporting any conditions and/or recommending the civil or criminal prosecution of violations that could jeopardize the operations of Monarch and/or ADEM.

## **3.0 CONTACT PERSONS**

### **3.1 PRIMARY CONTACT PERSON**

David Cardenas, Owner/Member (Phone: 972-768-6885)

### **3.2 BACKUP CONTACTS**

Bob Blom, Project Manager (Phone: 256-504-9703)

### **3.3 EMERGENCY OR AFTER-HOURS CONTACT**

In the event of any emergency or perceived emergency, call 911.

This will put the person in contact with the Alabama emergency help line.

## **4.0 FACILITY GENERATED WASTE**

This facility does not manage source-separated or recyclable materials. Waste generated at the facility will be stored in a manner that does not create a nuisance or environmental harm.

### **4.1 WASTEWATER**

The facility does not discharge wastewater liquids generated by its processing activities—i.e., all wastewater liquids are contained and recycled within the facility’s pyrolysis system. This system is closed-loop, thereby preventing any wastewater residuals from contaminating surface or ground water. Discharge—including wastewater resulting from washing containers and/or sanitizing the systems during operations—is directed into a self-contained, sealed drain system within the facility. This self-contained drain line connects to sealed plastic drums with automatic pumps that direct the residuals back into the unit for further processing. All bathrooms and/or other discharge points within the facility not associated with the pyrolysis system are connected to the public sewer system.

### **4.2 OTHER WASTE**

Other waste materials generated in the office, bathroom, or outside areas shall remain in sealed containers or bags. This waste is kept in a designated area next to the shredder which is separate from the medical waste storage and staging area within the facility. Control of odors, vectors, and windblown waste from the outdoor storage of pyrolytic carbon char is maintained by securing the carbon char dumpster with a tarp or comparable material and emptying it on a regular basis.

## **5.0 MEDICAL WASTE**

All medical waste received, stored, kept, staged, processed, and/or destroyed will be treated in a manner that does not create a nuisance to humans or the environment. All medical waste materials will remain within the sealed containers or bags in which they arrived. They will then be placed in appropriate designated areas prior to processing in the pyrolysis system. All medical waste processing is conducted inside the facility.

Odors, vectors, and other volatized chemicals inside and outside of the facility will be maintained by the daily processing of waste; the performance of pest control services on the interior and exterior of the facility by a third-party service; and by the nature of the closed-loop design of the

pyrolysis system. Ventilation systems inside the facility circulate air, while mechanical roof vents draw in fresh air.

Untreated medical waste will be temporarily staged on-site next to the shredder in a 5'x5' marked area and kept at an ambient temperature prior to daily processing. All medical waste will remain in designated leak-proof containers to prevent spillage. The governing regulatory standards outlining time and temperature guidelines for medical waste storage and destruction will be rigorously followed. After processing, the medical waste will be rendered an inert carbon char which will then be secured inside a sealed container before being transferred to an on-site dumpster. All carbon char will be periodically tested, then taken to Republic Services Sand Valley Subtitle D Landfill (3345 Co Rd 209, Collinsville, AL 35961; Permit No. 25-04) as dictated by the test results. All spent sodium bicarbonate and activated carbon sorbent resulting from the process—including the residuals from the ceramic filtration system—will be tested as well before being taken to the landfill. The testing of these residuals will be performed via Toxicity Characteristic Leaching Procedure (TCLP) and documented accordingly by the operator, manager, or shift supervisor.

#### **5.1 ACCEPTABLE WASTE**

The facility is limited to receiving, storing, staging, processing, and destroying categories of medical waste outlined in Table 1 (“Acceptable Waste Categories”). The facility will accept infectious waste as defined by ADEM Administrative Code, Division 17.

**TABLE 1**  
**ACCEPTABLE WASTE CATEGORIES**

CATEGORY	MONARCH CODE	DEFINITION 40 CFR S 60.51.c, 60.50 c(f), and 62.14490.
<b>Medical Waste, Infectious Waste, Hospital Waste, and Sharps</b>	RB	Waste material generated in the diagnosis, treatment, or immunization of humans or animals, in research pertaining thereto, or in the production or testing of biologicals that include: 1) Cultures and stocks; 2) Human blood and blood products, as well as any containers, equipment, or articles contaminated by blood products; 3) Sharps, needles, syringes, blades, needles with attached tubing, and contaminated disposable surgical instruments; 4) Isolation waste; 5) Unused sharps; 6) Body fluids; 7) Medical and laboratory glassware including sliding, pipettes, blood tubes, blood vials, and contaminated broken glass; 8) Biologicals and infectious agents.
<b>Chemotherapeutic Waste</b>	Chemo	Waste material resulting from the production or use of antineoplastic agents (i.e., created for the purpose of halting or reversing the growth of malignant cells). This waste category includes any chemotherapy-related waste items, such as gowns, gloves, masks, barriers, IV tubing, empty bags and bottles, new or used needles and syringes, empty drug vials, spill kits, and other items generated in the preparation and administration of an antineoplastic drug.
<b>Non-Hazardous Pharmaceutical</b>	RCRA Empty	Non-hazardous pharmaceutical waste—"RCRA Empty," meaning the contents within a container are less than 3% residual by volume.
<b>Controlled Substances</b>	CS	Controlled substances in compliance with DEA regulations, other law enforcement seizures, and take-back or mail-back programs as they may apply.
<b>Pathological and Animal Waste</b>	Path	Tissues consisting of unrecognizable human or animal remains, anatomical parts or tissue, the bags and containers used to collect and transport the waste material, and animal bedding.

## 5.2 PROHIBITED WASTE

The following waste items will **NOT** be accepted at the facility.

<b>TABLE 2</b> <b>UNACCEPTABLE WASTE CATEGORIES</b>		
CATEGORY	MONARCH CODE	DESCRIPTION OF INSPECTION / REFUSAL PROTOCOL
<b>High Level Radioactive Waste</b>	NA-HAZ	All containers will undergo radiation inspections using a digital monitor manufactured by Ludlum Measurements. Any container reflecting a level above the regulatory limits of 2x background will be rejected for treatment. All such conditions shall be documented and reported.
<b>RCRA Bulk and Chemo Bulk</b>	NA-HAZ	If any manifest has any items containing bulk products (more than 3% by volume stated on manifest), these items will be rejected for treatment. All such conditions shall be documented and reported.
<b>Hazardous Waste</b>	NA-HAZ	If any manifest contains hazardous waste items of the following (including but not limited to), they will be rejected for treatment: solvent, paint, paint thinner, compressed gas cylinders/canisters, aerosol cans, glass thermometers, and blood pressure manometers containing mercury and chemicals including but not limited to formaldehyde (formalin more than 10% buffered), acids, alcohols, and waste oil. All such conditions shall be documented and reported.
<b>Human Remains</b>	NA	If a manifest contains any of the following items, or if our staff suspects any such items are being delivered to the facility for processing, then they will be rejected: cadavers, bodies, and fetuses. All such conditions shall be documented and reported.
<b>Improper Packaging</b>	NA	If any manifest contains items that are packaged improperly (e.g., leaking or damaged containers), these items will be rejected. All such conditions shall be documented and reported.

### **5.3 CONTROLLED SUBSTANCES**

This facility will be commissioned by the Drug Enforcement Administration (DEA) to destroy controlled substances. The processing of controlled substances will be conducted separately from other waste runs and will be scheduled in advance to ensure the facility is closed to other generators at that time. In compliance with 21 CFR S 1317, individual containers of controlled substances will not be analyzed, sampled, or opened once they are received by the facility. As such, only designated Monarch personnel will be assigned to accept the DEA shipments and operate the pyrolysis system for these scheduled runs. All controlled substances will be received in accordance with the protocols outlined in Section 6.0 of this plan—including the standard radioactivity screening protocols detailed in Section 6.2.

All containers will be marked with an identifying number. All controlled substances delivered for a scheduled run will be marked and destroyed during that run prior to any other processing that day. All controlled substances will be checked against the manifest and waste tracking log in the designated staging area prior to final destruction in the pyrolysis system. Monarch may receive controlled substances from DEA registered generators or directly from the ultimate user as defined by the DEA. Application is presently being prepared for DEA licensing.

### **6.0 WASTE ACCEPTANCE: RECEIVING / UNLOADING**

The receiving, inspection, and unloading of waste will be confined to the designated dock area at the facility. Prior to unloading, each pallet or container will be inspected for compromised packaging, leaking, or damage. Such pallets or containers will not be accepted if they are damaged or leaking; any repackaging must be approved by the customer. Once accepted, each pallet or container will be weighed at the point of entry to the facility, registered within the facility's internal tracking system, and labeled or marked with an ID number. An attendant will be present at the facility to monitor all activities related to the receiving and unloading of medical waste. The manager or operator shall organize and manage the following items:

- (1) Navigation guidance: Monarch customers, generators, and transporters will receive a map containing directions to the facility.
- (2) Arrival instructions: All customers, generators, and transporters will be instructed to stop outside the premises and call the manager before entering the property. Once the manager is notified, an employee from the facility shall direct the incoming medical waste load to the facility.
- (3) Signage: Appropriate signs will be maintained to indicate the designated stopping point from which point drivers must call for further instructions and where the vehicles are to unload at the facility. The facility is not required to accept any medical waste that the operator or general manager determine unacceptable. This right of refusal guarantees

the facility's full and continuous compliance with this plan and avoids conflict with ADEM and federal regulations.

- (4) Writ of Unacceptable Medical Waste: If unacceptable medical waste is identified it will be refused, documented, and returned to its generator of origin for proper handling.

The unloading of medical waste in unauthorized areas is prohibited. The manager or shift supervisor shall ensure that any medical waste inadvertently deposited in an unauthorized area will be removed immediately and managed appropriately. All such instances will be documented and reported to the manager and owner.

### **6.1 STAGING AREAS**

All medical waste will be stored, staged, and kept separately in designated areas within the facility.

### **6.2 RADIATION MONITORING**

Monarch staff shall inspect each load of medical waste before it is unloaded so that high level radioactive waste is not inadvertently accepted by the facility.

(1) Equipment location:

- a. Monarch shall use a hand-held radiation detector to identify any waste that contains unacceptable levels of radioactive waste. This would apply for all waste measuring above normal or acceptable levels for handling and processing safely.
- b. Prior to working in the loading area, each operator will be trained in how to pass the detectors at an appropriate speed to ensure the sensor will detect any radiation.
- c. Operators will also be trained on reading the Color CODE procedures.
  - i. CODE GREEN: Below 20,000 counts per minute and below 0.016 mR/hr. This waste can be safely unloaded and processed.
  - ii. CODE YELLOW: Greater than 20,000 counts per minute but less than 6.9 mR/hr. This waste is not acceptable and must stay on the truck.
  - iii. CODE RED alarms occur at any readings above 6.9mR/hr. This waste is not acceptable and stay on the truck.
  - iv. Incident(s) reports for all alarms over 20,000 cpm, including false alarms shall be reported.

(2) Radiation Alarm Procedures:

- a. Alarm activated: Immediately stop all unloading operations. Do not handle or unload any more waste containers.
- b. Clear immediate area: Contact your supervisor or the emergency response coordinator and inform them of the situation.



- c. Perform a recheck for false alarms utilizing survey meter settings: Set the survey meter to the most sensitive setting and approach the area with caution. Watch the meter reading while approaching the area. If CODE YELLOW or RED status is continuing to activate while reinspecting the incoming waste in the truck, stop the survey procedure and implement the CODE RED procedure to refuse the waste.
- d. Record meter readings: Fill in the alarm report information as it becomes available and is possible to do so in a safe manner.
- e. Notify transporter or generator of waste: For all CODE YELLOW and CODE RED alarms.
  - i. For CODE YELLOW OR RED conditions contact AL State EOC Communication Center: Phone number 205-280-2310 or 800-843-0699 to notify. If contact is not established, call the Alabama Radiation Control Duty Officer at 334-324-0076 followed by the Radiation Control Office at 334-290-6244 or 800-582-1866.
  - j. File report: Send a copy to the Alabama Radiation Control program within 5 days.
  - k. Radiation limits: No individual shall be allowed to receive a dose of radiation in excess of 10 millirem in one year unless the individual wears a radiation dosimeter monitor whenever radioactive material is present. A monitored individual may receive no more than 100 millirem in one year. The radiation dose received by all individuals exposed to radiation shall be determined either through measurements from a radiation dosimeter or by calculation. This information must be documented and kept on file. If the dose is to be calculated, it shall be determined as a product of the radiation exposure rate that the individual was exposed to multiplied by the amount of time that the individual remained in the proximity of the radiation source.

(3) Radiation Alarm Checklist:

- a. Follow the “Radiation Alarm Procedures” (Attachment D) and complete the “Monarch Radiation Incident Report” for each alarm occurrence (Attachment C).

(4) Evacuation Procedure:

- a. If evacuation is necessary, the manager will notify all plant personnel to leave the building. The Emergency Coordinator will coordinate all emergency responses involving high levels of radiation. ALL personnel should exit the building through the nearest exit door as indicated by the facility layout drawing. Following building evacuation, ALL personnel will convene at the parking lot in front of the Transfer Station building (east side) at a safe distance and wait for further instructions.
- c. The Emergency Coordinator will assess the situation. If warranted, he/she will be responsible for clearing out personnel, cordoning off the area, and notifying relevant emergency response organizations.

- d. The Emergency Coordinator will monitor the situation and communicate an "all clear" return to area notice.
- e. Safe and reasonable methods will be used by the Emergency Coordinator at all times.
- f. The Emergency Coordinator will notify Monarch management regarding the problem and necessary action taken.
- g. Upon proper resolution of a code situation, the Emergency Coordinator will check all response alarms and equipment to ensure they are in good working condition.

## **7.0 FACILITY / PYROLYSIS SYSTEM OPERATIONS**

The facility's operating hours are 24 hours/day Monday through Saturday. The manager may conduct maintenance, housekeeping, and waste hauling between the hours of 5:00 a.m. and 9:00 p.m., Monday through Friday or on weekends. In addition to the requirements of this subsection, the management may adopt alternative operating hours on up to five days per calendar year to accommodate special occasions, special purpose events, holidays, or other special occurrences. The manager may modify operating hours to extend or shorten hours into weekends to address a disaster, emergency, or other unforeseen circumstance that could result in the disruption of waste services.

### **7.1 OVERLOADING / BREAKDOWNS / SCHEDULED MAINTENANCE**

The design capacity of the pyrolysis system is 550 pounds per hour of decomposable waste. This figure does not account for glass and metals, which would raise limits to 1100 pounds per hour. Monarch will take practicable measures to ensure that the pyrolysis system is routinely operational and medical waste is stored properly and processed efficiently. There are 24 scheduled shutdowns each calendar year for proper maintenance. If the pyrolysis system should breakdown, experience an overload, or require a planned maintenance or forced shutdown, the manager or shift supervisor will:

- (1) Ensure there is sufficient storage space for all medical waste received prior to the shutdown.
- (2) Ensure that the medical waste within the facility is stored for no more than seven days and at temperatures not exceeding 45 degrees Fahrenheit (that meet state requirements).
- (3) Ensure that no additional medical waste is delivered during the shutdown by delaying or diverting shipments to alternative facilities.

### **7.2 PYROLYSIS STARTUP / CHARGING / OPERATING SEQUENCE**

The following sequence will outline the operator's standard procedure for startup, charging, and operating the pyrolysis system.

- 1) Prior to loading or charging the pyrolysis system with the medical waste, the operator shall view the main control panel screen to ensure that:
  - a) The pyrolysis system has reached its safe startup operating minimum temperatures setting.
  - b) The pyrolysis system has achieved negative pressure and all components are functioning properly.
  - c) The initial startup sequence is complete and the pyrolysis system has achieved an anaerobic internal environment.
- 2) Once the pyrolysis system is ready to operate, the operator is clear to start loading and charging the system with medical waste.
- 3) The operator shall load medical waste into the shredder hopper to commence processing.
- 4) The operator shall log the time, variety, and weight of each medical waste container as it is loaded into the hopper. The operator will also record any issues that arise along with measures taken to resolve such issues.
- 5) The operator, in conjunction with the supervisor, will ensure that the proper balance of BTU feed stock “waste fuel” is being fed into the system so the pyrolysis system can maintain the set operating temperatures during processing.
- 6) If the internal temperatures begin to drop, the operator will be given an audible or visual indicator via the programmable logic controller (PLC) and will immediately commence processing of high-level BTU fuel to arrest falling temperatures. Once the system returns to stable operating temperatures, the operator can resume charging the pyrolysis system.

### **7.3 PYROLYSIS SHUTDOWN SEQUENCE**

The following sequence will outline the operator’s standard procedure for the shutdown sequence of the pyrolysis system.

- 1) The operator will stop loading medical waste into the hopper.
- 2) The operator will view the main control panel screen and take the following measures:
  - a) Set the cycle timer for 60 minutes so that any medical waste remaining in the pyrolysis system will be completely destroyed.
  - b) Place the pyrolysis system into auto shutdown mode.
  - c) Ensure all shift documentation is complete.
  - d) Prepare the area for the following shift.

## **8.0 RECORDKEEPING / REPORTING**

The following section outlines the facility’s recordkeeping, notifications, and reporting procedures that are required under federal regulations regarding the facility operations, the

operator's activities, the pyrolysis system's performance, and the responsibility of the manager to ensure such reports and notifications are properly executed.

### **8.1 OPERATING RECORDS**

- 1) The operator(s) of the pyrolysis system shall document all medical waste processed in the pyrolysis system. This documentation includes time, weight, identification codes, any problems encountered, and steps taken to address said problems.
- 2) The operator(s), manager, or supervisors shall record all scheduled and unscheduled shutdowns, mechanical issues responsible for forced shutdown mode, and any condition that might present a safety hazard.
- 3) The manager or shift supervisors shall monitor the PLC at all times. Should any set points go out of range, waste processing will stop and the event will be immediately reported to the manager. Waste processing will not resume until the cause of any deviation is investigated and a solution is achieved.

### **8.2 FACILITY REPORTING**

- 1) The manager shall ensure all shift supervisors and operators maintain accurate records and that all required notifications outlined in ADEM Administrative Code are filed in a timely manner.
- 2) The owners and manager shall maintain records at the facility and make them available for inspection by authorized parties for 3 years.

## **9.0 SANITATION**

- 1) The facility shall maintain potable water and sanitary facilities for all employees and visitors.
- 2) The facility will be swept after every shift and sanitized as required.
- 3) As outlined in sections 4.1 and 4.2 of this WMP, all wastewater will be collected and recycled into the pyrolysis
- 4) system. Facility floors will be mopped as needed with sanitation solutions.

## **10.0 PROFILING, WASTE CODE TRACKING, AND RESIDUE DISPOSITION**

This section of the WMP addresses how waste is profiled at the facility, from approval to destruction. Additionally, this section will cover the characterization of the pyrolysis system's byproducts, which satisfy regulations designating the final placement of all treated residues in an approved landfill. This section's contents cover the waste management process chronologically from waste receipt to outbound manifest.

### **10.1 PROFILING AND WASTE CODE TRACKING AT THE FACILITY**

- (1) Customer completes a waste profile and submits to Monarch for review. Upon approval, the customer will be assigned a profile number.
- (2) The generator will assign waste codes (types) to all medical waste listed on the manifest. When the medical waste arrives at the facility, Monarch personnel will ensure the generator's assigned codes on the manifest correspond to Monarch data files for that generator. Monarch personnel will also ensure unacceptable medical waste is not included in the shipment.
- (3) Monarch personnel will complete a receiving log that includes the customer's profile number, the generator's name, and the date and time the waste was received. Each individual pallet/container will be assigned and labeled with a distinct ID number. The container ID number will be recorded on the receiving log along with the container's assigned waste code, weight, radiation level scan results, and any other pertinent information. The generator's manifest is attached to the receiving log and then emailed to the administrative office for filing, billing, and destruction record data.
- (4) Waste is tracked around the clock daily. The operation manager will assign the daily destruction schedule for all categories of medical waste to be destroyed.
- (5) As medical waste containers are loaded into the pyrolysis system for processing, the operator notes the time, date, and container ID number on the platform destruction record. The facility certifies the destruction (COD) of medical waste.

### **10.2 RESIDUE DISPOSITION**

The operator will ensure the pyrolytic carbon char resulting from medical waste destruction is properly maintained and disposed by following the procedure outlined below.

- (1) The operator will disengage the airlock knife gate to release the pyrolytic carbon char container. This will ensure that negative pressure is maintained within the pyrolysis system during change out.
- (2) The operator will roll the container of pyrolytic carbon char to the covered carbon char storage dumpster located outside the facility. The operator will open the covered lid, tip the carbon char container into the carbon char storage dumpster, replace the covered lid, roll the carbon char container back to the airlock knife gate, and reengage the airlock knife gate to achieve an airtight seal.
- (3) Once the pyrolytic carbon char storage dumpster is full and completely cooled, it is tipped into sealed shipping containers approved by waste management.
- (4) Each load of pyrolytic carbon char and/or dry scrubber residue will have its own outbound manifest and certifications. They will be shipped off-site for final disposal at Republic

Services Sand Valley Subtitle D Landfill (3345 Co Rd 209, Collinsville, AL 35961; Permit No. 25-04).

- (5) Comprehensive measures will be taken to ensure environmental protocols are maintained to state and/or federal standards, thus minimizing future liabilities and risks for our customers and business. All pyrolytic carbon char residues will be tested for TCLP metals, and if they fall within acceptable limits will be sent to Republic Services Sand Valley Subtitle D Landfill (3345 Co Rd 209, Collinsville, AL 35961; Permit No. 25-04). All residues that exceed TCLP requirements will be sent to an alternate landfill facility for hazardous waste. All outbound shipments of residues will be facilitated by a licensed third-party company under the direction of the Facility Manager, who will maintain required shipment documentation. Sampling logs shall be maintained and provided to authorities upon request.

## 11.0 DEFINITIONS

**“ADEM”** means Alabama Department of Environmental Management

**"Container"** means the rigid structure in which the medical waste is placed prior to transporting for purposes of storage or treatment.

**“Charging”** means loading the hopper with medical waste and starting the pyrolysis system.

**“Facility”** means the facility located at 4618 Airport Road Rainbow City, Alabama 35906 including all land and structures, and other appurtenances or improvements on the land associated with the handling and storage of the waste and housing of the pyrolysis systems that process and destroy the medical waste.

**“Generator(s)”** means a hospital or other facility that generates or creates medical waste.

**“General manager”** means the person in charge of the day-to-day activities at the facility who all employees report to.

**"Medical waste bag"** means a disposable red bag marked with the international biohazard symbol and the word "Biohazardous Waste", which is impervious to moisture and has a strength sufficient to preclude ripping, tearing, or bursting under normal conditions of usage and handling of the waste filled bag. A biohazard bag shall be constructed of material with sufficient single thickness strength to pass the 165-gram dropped dart impact resistant test as prescribed by Standard D 1709-85 of the American Society for Testing and Materials and certified by the bag manufacturer.

**"Medical waste"** means a solid waste or combination of solid wastes which because of its infectious characteristics may either cause, or significantly contribute to, an increase in mortality

or an increase in serious irreversible or incapacitating reversible illness, or pose a substantial present hazard or potential hazard to human health or the environment when improperly treated, stored, transported, disposed, or otherwise manage. Refer to Table 1 for all acceptable waste categories.

**“Monarch”** means MWT AL Ops, LLC

**“Offsite”** means any location which is outside the facility boundaries.

**“Onsite”** means any location within the boundaries of the facility.

**“Operator(s)”** means the person or persons that are trained to operate the pyrolysis systems.

**“Other waste”** means waste that is generated or kept in the facility’s office or bathroom areas and is not classified as medical waste.

**“Pyrolysis system(s)”** means the PyroMed 550 waste destruction system complete with all inherent ancillary equipment.

**“Prohibited waste”** means specific waste items that the facility will not accept.

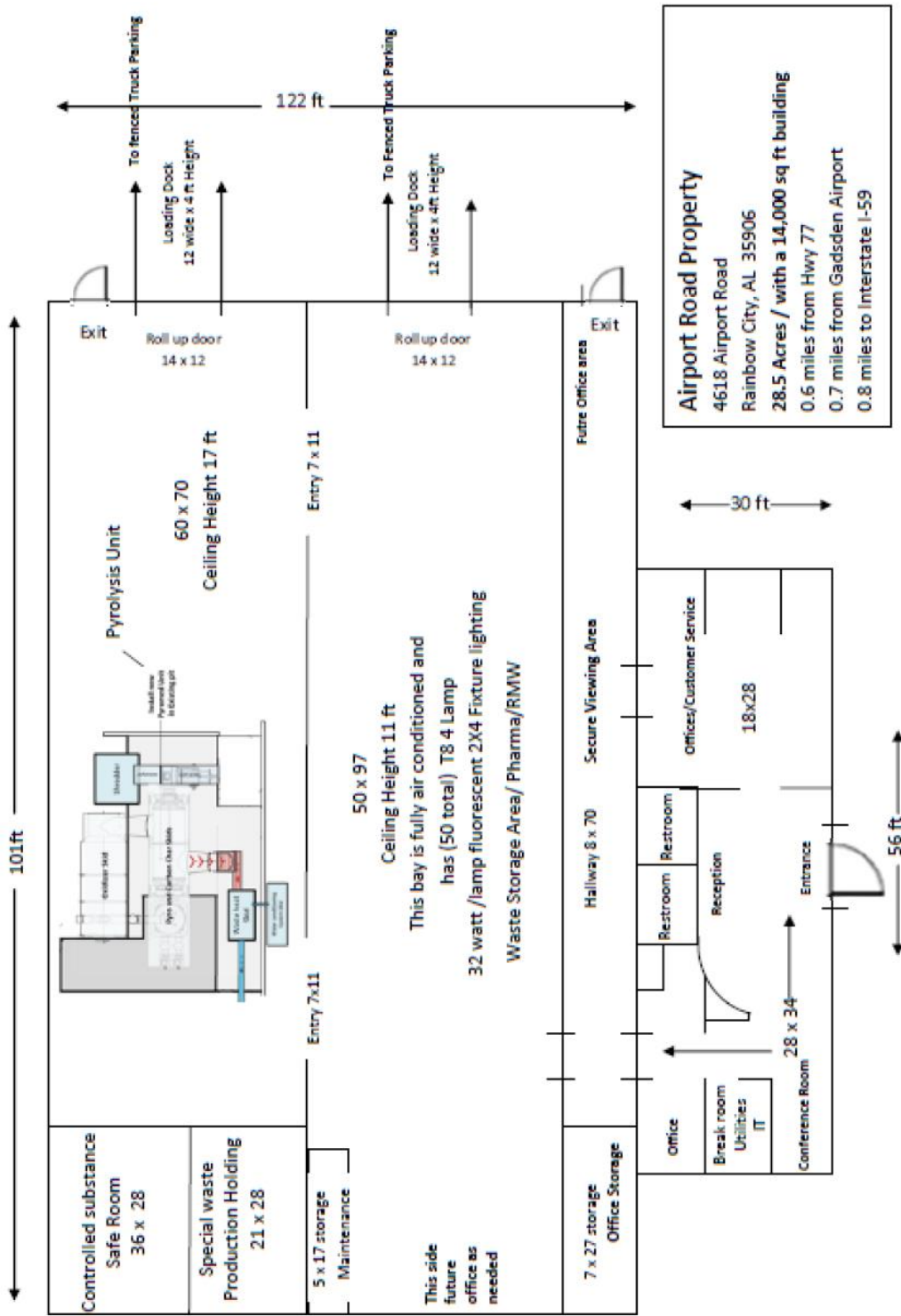
**“Sharps container”** means a rigid, puncture-resistant container which, when sealed, is leak resistant and cannot be reopened without great difficulty.

**“Sharps waste”** means any device having acute rigid corners, edges, or protuberances capable of cutting or piercing, including but not limited to any of the following: (a) Hypodermic needles, hypodermic needles with syringes, blades, needles with attached tubing, Pasteur pipettes, etc. (b) Broken glass items.

**“Storage / Stored”** means to hold or keep medical waste within the facility.

**“Transporter(s)”** means the person or company who physically transports the medical waste from the generator or transfer station to the facility.

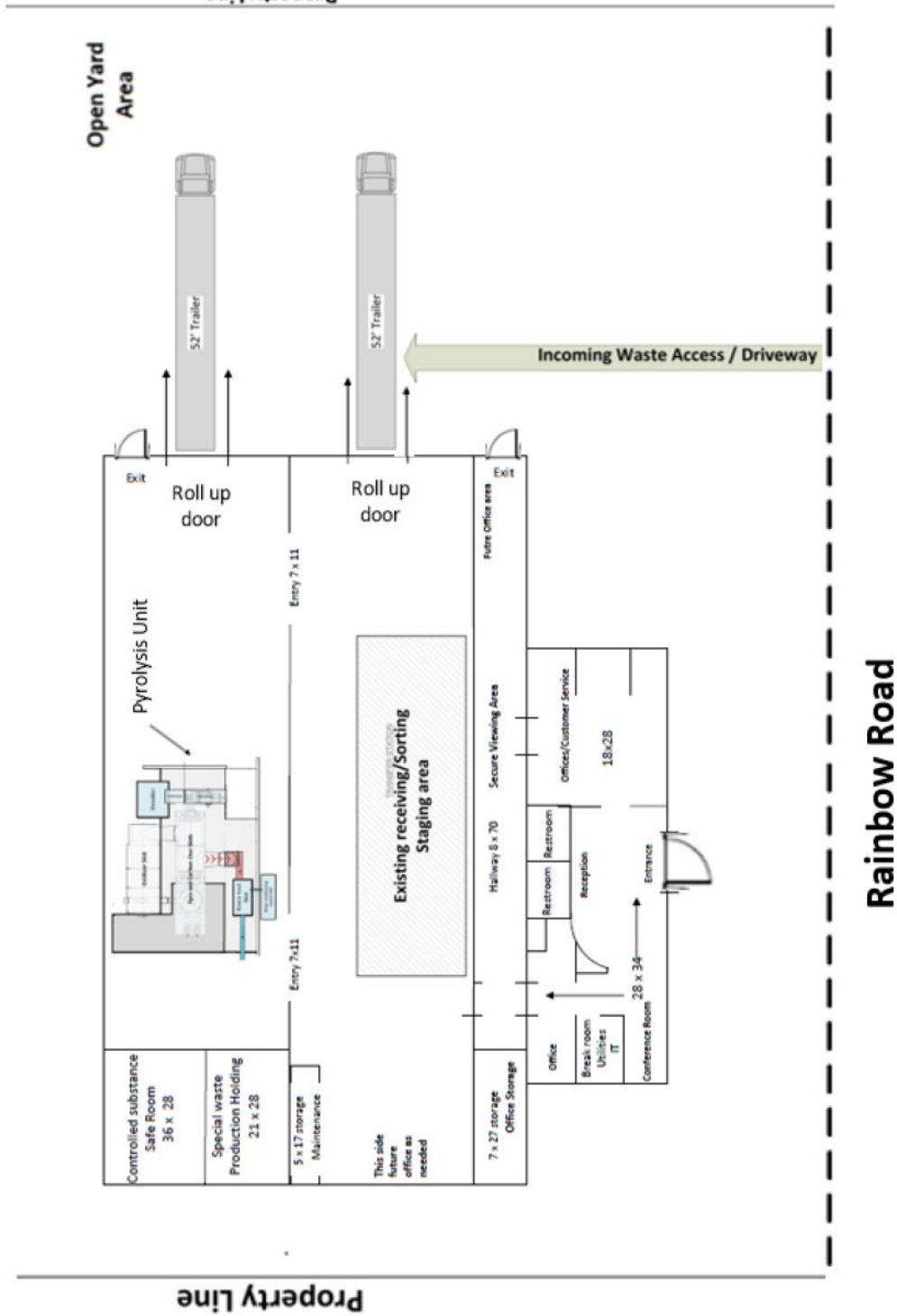
# FACILITY LAYOUT (ATTACHMENT A)



**Airport Road Property**  
 4618 Airport Road  
 Rainbow City, AL 35906  
 28.5 Acres / with a 14,000 sq ft building  
 0.6 miles from Hwy 77  
 0.7 miles from Gadsden Airport  
 0.8 miles to Interstate I-59



# SITE MAP (ATTACHMENT B)



# RADIATION INCIDENT REPORT (ATTACHMENT C)

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Operator: \_\_\_\_\_

Generator Information Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, and Zip Code: \_\_\_\_\_

Description of Package    \_\_\_ Boxed    \_\_\_ Reusable Container    \_\_\_ Other

\_\_\_\_\_  
\_\_\_\_\_  
Radiation Level

Chart Recorder: \_\_\_\_\_ mR/hr

Wall Mounted Ludlum 375: \_\_\_\_\_ cpm

Portable Ludlum Model 3: \_\_\_\_\_ mR/hr

CODE GREEN: Below 0.2 mR/hr

- A. Dispose of waste normally
- B. No report to be filed.

CODE YELLOW: Between 0.02 and 25 mR/hr

- A. Refuse incoming waste – Do not unload
- B. Contact Transporter or Generator
- C. Contact Alabama Office of Radiation Control (334) 290-6244
- D. File Report

CODE RED: Above 25 mR/hr

- A. Refuse incoming waste – Do not unload
- B. Evacuate building
- E. Contact Transporter or Generator
- C. Contact Alabama Office of Radiation Control (334) 290-6244
- D. File Report

Operator Signature and Date: \_\_\_\_\_

# RADIATION ALARM CHECKLIST (ATTACHMENT D)

1. Follow the radiation Alarm Procedures and complete the Monarch Radiation Incident Report for each occurrence.
2. For Code Yellow or Red Alarms, complete this checklist.
3. Contact Generator, inform them that they will be notified if they are required to transport the waste to another facility.
4. Request the Generator get a DOT Exemption 11406 REV Shipment Approval Form from the Alabama Dept. of Health at (334) 290-6244. This is required to transport the radioactive waste to another facility.
5. Before transport, use the portable radiation meter to record the following information:

- A. Background radiation level \_\_\_\_\_ m/Hr
- B. Radiation level at contact (or known distance) \_\_\_\_\_ m/Hr
- C. Radiation level through vehicle. \_\_\_\_\_ m/Hr
- D. Date and time of measurement \_\_\_\_\_
- E. Person recording measurements \_\_\_\_\_

6. File Monarch Radiation Alarm Incident Report and a copy of this checklist to:

ADPH  
Alabama Office of Radiation Control  
Administrative Annex, Suite C  
P.O. Box 303017  
Montgomery, AL 36130-3017  
Phone: (334) 290-6244  
Fax: (334) 285-9342

Prepared by \_\_\_\_\_ Date \_\_\_\_\_  
Reviewed by \_\_\_\_\_ Date \_\_\_\_\_

**Attachment C:  
Placeholder for Fees**



## Attachment D: Equipment List

The following table includes all relevant equipment utilized at the facility.

<b>Type of Equipment</b>	<b>Maximum Rated Capacity</b>	<b>Make</b>	<b>Model</b>	<b>Serial Number</b>	<b>Number of Years in use</b>	<b>Equipment ID Number</b>
<b>PyroMed™ 550</b>	550 lbs/hr	PyroMed	PM-550	PM550-18-AQ01	5	PM1100
<b>PLC Unit</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	5	PU1100
<b>Enclosed Ref Room/Unit</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	5	SD1100
<b>Pyrotube/Muffle Furnace</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	5	PMF1100
<b>Carbon Char Vessel</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	5	CCV1100
<b>Oxidizer</b>	2 seconds	Not Applicable	Not Applicable	Not Applicable	5	O1100
<b>Pyrolytic Carbon Char Container</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	5	PCCC1100
<b>Waste Heat Recovery Boiler (no heat)</b>	4.1 M BTU/hr	Superior	MPWHB	TBD	5	WHRB1100
<b>Knifegate Feed System</b>	100 gallons	Not Applicable	Not Applicable	Not Applicable	5	KS1100
<b>Heat Exchanger</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	5	HE1100
<b>Dry Filter-Emissions Clean Up</b>	7500 Am <sup>3</sup> /hr	Glosume	HTMC600	TBD	5	DFECU1100
<b>Dosing Unit (automatic)</b>	1000 kg	Not Applicable	Not Applicable	Not Applicable	5	DU1100
<b>Spent Reagent Collection Container (IEU)</b>	Not Applicable	Not Applicable	Not Applicable	Not Applicable	5	SRCC1100
<b>Shredder</b>	1500 lbs/hr	Vecoplan	VAZ 1600 S XL MW	TBD	5	S1100
<b>Container Washing Unit on Rollers</b>	20/minute	Not Applicable	Not Applicable	Not Applicable	5	AP1100



Phone: (972) 768-6885  
Email: davidc@monarchwastetechnologies.com  
Website: <http://monarchwastetechnologies.com/>  
4618 Airport Road Rainbow City, Alabama 35906

## Attachment E: Waste Acceptance Protocol

### Monarch Waste Technologies Confidential Information

The information contained in these documents is confidential, privileged and only for the information of the intended recipient. It may not be used, published, or redistributed without the prior written consent of Monarch Waste Technologies, LLC.

Received and Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Title: \_\_\_\_\_

Customer Facility: \_\_\_\_\_

Customer Address: \_\_\_\_\_

Customer Contact Information: \_\_\_\_\_

#### Instructions:

1. Read protocol information.
2. Sign page 1 and detach from rest of protocol.
3. Retain protocol for your file and references.
4. Return completed (page 1 only) to Monarch via email above.

### WASTE ACCEPTANCE PROTOCOL

1. Accepted Waste by Monarch – waste receiving capabilities, requirements, approved containers
2. Non-Conforming Waste not accepted by Monarch – waste rejection procedures and measures for controlling prohibited waste
  3. Segregation and Packaging of Medical Waste
  4. Labeling and Marking of Medical Waste Containers
  5. Disposal vs. Reusable containers- Decontamination
    6. Staging of Medical Waste
    7. Tracking Documents for Medical Waste
    8. Transportation of Medical Waste
    9. Treatment of Medical Waste



## **Waste Accepted by Monarch Waste Technologies**

A certification of destruction (COD) will be made and given to the generator along with an invoice for regulated medical waste decomposition that was processed within the facility.

The processing facility will accept infectious waste as defined and regulated under ADEM. The facility will receive the following waste:

- 1) Medical, Infectious, and Hospital Waste
  - a) Waste generated in the diagnosis, treatment, and care of humans and animals from facilities, research labs, preparation, and administration of chemotherapy agents and/or the production of pharmaceutical drugs.
  - b) Waste generated in the diagnosis, treatment, or immunization of humans or animals, in research pertaining thereto, or in the production or testing of biologicals that include:
    - i. Cultures and stocks
    - ii. Human blood and blood products, as well as any containers, equipment, or articles contaminated by blood products
    - iii. Sharps, needles, syringes, blades, needles with attached tubing, contaminated disposable surgical instruments
    - iv. Surgical specimens/tissues, tissues, extracted fluids (pathological waste excluding preservative agents)
    - v. Isolation wastes
    - vi. Unused sharps
    - vii. Body fluids
    - viii. Medical waste contaminated with excretions, exudates, secretions, bodily fluids—including but not limited to isolation waste
    - ix. Medical and laboratory glassware including sliding, pipettes, blood tubes, blood vials, and contaminated broken glass
    - x. Biologicals and infectious agents
- 2) Chemotherapeutic and Pathological Waste
  - a) Waste material resulting from the production or use of antineoplastic agents (i.e., created for the purpose of halting or reversing the growth of malignant cells).
  - b) This waste category includes any chemotherapy-related waste items, such as gowns, gloves, masks, barriers, IV tubing, empty bags and bottles, new or used needles and syringes, empty drug vials, spill kits, and other items generated in the preparation and administration of an antineoplastic drug.
- 3) Medical Record/Confidential Documents
  - a) Medical records and confidential documents exceeding required storage
- 4) Non-Hazardous Pharmaceutical
  - a) Non-Hazardous Pharmaceutical Waste (“RCRA empty,” meaning contents within container is less than 3% residual by volume)
  - b) Waste including controlled substances, prescription drug and over-the-counter (OTC) medications
  - c) Raw product, containers, equipment and articles use for production or manufacturing of pharmaceutical products
- 5) Controlled Substances

- a) Controlled substances in compliance with DEA regulations, other law enforcement seizures, and take-back or mail-back programs as they may apply.

### **Waste Receiving Capabilities**

The facility will receive a maximum of 6 tons of waste for processing within a 24-hour period; nothing will be staged within the facility beyond what the unit can process within 7 days. Pharmaceuticals can be held for up to 12 months based on analysis verification, energy economics, and management for destruction by DEA, DOJ, and other law enforcement requirements.

### **Waste Requirements**

All medical waste received, stored, kept, staged, processed, and/or destroyed will be treated in a manner that does not create a nuisance to humans or the environment. All medical waste materials will remain within the sealed containers or bags in which they arrived. They will then be placed in appropriate designated areas prior to processing in the pyrolysis system. All medical waste processing is conducted inside the facility.

Odors, vectors, and other volatilized chemicals inside and outside of the facility will be maintained by the daily processing of waste; the performance of pest control services on the interior and exterior of the facility by a third-party service; and by the nature of the closed-loop design of the pyrolysis system. Ventilation systems inside the facility circulate air, while mechanical roof vents draw in fresh air.

Untreated medical waste will be temporarily staged on-site next to the shredder in a 5'x5' marked area and kept at an ambient temperature prior to daily processing. All medical waste will remain in designated leak-proof containers to prevent spillage. The governing regulatory standards outlining time and temperature guidelines for medical waste storage and destruction will be rigorously followed. After processing, the medical waste will be rendered an inert carbon char which will then be secured inside a sealed container before being transferred to an on-site dumpster. All carbon char will be periodically tested, then taken to Republic Services Sand Valley Subtitle D Landfill (3345 Co Rd 209, Collinsville, AL 35961; Permit No. 25-04) as dictated by the test results. All spent sodium bicarbonate and activated carbon sorbent resulting from the process—including the residuals from the ceramic filtration system—will be tested as well before being taken to the landfill. The testing of these residuals will be performed via Toxicity Characteristic Leaching Procedure (TCLP) and documented accordingly by the operator, manager, or shift supervisor.

### **Approved Containers**

All solid waste containing medical wastes will be stored in covered or closed containers that are leak proof, durable, and designed for safe handling and easy cleaning. Reusable containers will be maintained in a clean condition. All containers that are emptied manually will be capable of being serviced without the collector coming into physical contact with the waste. Containers that are mechanically handled will be designed to prevent spillage or leakage during storage, handling, and transport.



## **Waste Not Accepted by Monarch Waste Technologies**

The processing facility will not receive the following waste:

- 1) High Radioactive Waste
  - UNDER NO CIRCUMSTANCES will Monarch accept any high level radioactive waste. All containers will be inspected by means of radiation monitoring. Any container reflecting a level above regulatory limits will be rejected.
- 2) RCRA Bulk
  - Will not accept “RCRA Bulk,” meaning more than 3% in liquid by volume.
- 3) Chemo Bulk Waste
  - Will not accept hazardous chemo bulk.
- 4) Hazardous Waste—including but not limited to:
  - Solvent, paint, paint thinner
  - Drums or other containers with RCRA hazard warning sign
  - Batteries
  - Glass thermometers and blood pressure manometers containing mercury
  - Chemicals including but not limited to formaldehyde (AKA formalin more than 10% buffered), acids, alcohols, and waste oil.
    - In order to comply with state and federal regulations, all hazardous waste must be managed by a licensed hazardous waste contractor. Monarch does not receive or process hazardous waste which includes preservative agents, solvents, and other chemical waste. Monarch has partner referrals and vendors to offer service for hazardous waste disposal.
- 5) Human Remains
  - Monarch policy is to not process recognizable human remains—i.e. cadavers, bodies and or fetuses. Monarch will not under any circumstances receive recognizable tissues.
- 6) Compressed gas cylinders, canisters, and aerosol cans
- 7) Improperly packaged, leaking, or damaged containers

### **Waste Rejection Procedures**

Any unacceptable waste materials discovered while receiving materials into Monarch’s Alabama facility will be rejected and returned to the generator. A report explaining the rejection process will be completed and returned with the unacceptable materials.

### **Measures for Controlling Prohibited Waste**

Procedures to detect and control the receipt of prohibited waste include:

- 1) Completing a waste/product profile for approval.
- 2) Informing all facility transporters and generators of waste that cannot be accepted:
  - Posting signs at the facility entrance listing prohibited waste.
  - Providing generators with a written waste acceptance protocol list of accepted and prohibited waste.
- 3) Informing all drivers of incoming waste hauling vehicles that have indicated they will deliver waste to the facility.
- 4) Facility personnel training and activities
  - Training for appropriate facility personnel responsible for inspecting or observing incoming loads to recognize accepted and prohibited waste.
  - Inspections of incoming loads in accordance with procedures described in this section.
  - Visual inspections will be conducted throughout normal operations.
  - Maintaining records of all inspections performed.

Facility personnel will be trained to identify DOT approved transportation vehicles, medical waste streams, in addition to prohibited waste. At a minimum, the shipping and receiving attendant and equipment operators will be trained in inspection procedures for prohibited waste. The personnel will be trained both on the job by their supervisors and through classes organized by Monarch. Records of employee training on prohibited waste control procedures will be maintained in the facility operating record. The personnel will be trained to observe for the potential indications of prohibited waste:

- Improper labels
- DOT hazard placards or markings
- Liquids
- Powders or dusts
- Odors or chemical fumes
- Bright or unusual colored waste
- Improper containers
- Radiation

If facility personnel identify any of the above indications with an incoming load, that load will be directed to an area out of the flow of traffic and the personnel will further assess the load. If it is determined the load may or does contain prohibited waste, the load will be rejected and either directed back to the generator or redirected to an appropriate facility. All shipping and receiving employees will be diligent in looking for trucks bringing in regulated medical waste loads from potential sources that can contain prohibited waste.

### **Segregation and Packaging of Acceptable Waste**

Acceptance of waste shall be determined prior to the destruction process. Once verified that it complies with Monarch Waste acceptance parameters, Monarch staff will weigh and establish that there is no radioactivity. Waste will then enter the processing procedures.

### **Staging Area**

- 1) All medical waste shall be stored, staged, and kept separately in the designated areas within the facility. These designated areas shall be marked by clearly visible signs. The *Facility and Site Plan* will mark where each type of waste category will be held and stored until staging for processing.
- 2) Staged area(s) for source-separated waste delivered to the facility from the generators and transporters will be stored separate from the solid waste storage areas. The control of odors and vectors from waste in the staging area shall be maintained always.

### **Staging of Medical Waste**

- 1) Monarch is not a staging facility for any type of waste and will not hold any contents longer than allowed within state and federal regulations.
- 2) Medical waste collected should be maintained in the facility in the designated accumulation area, which is secured from all unauthorized persons, marked with signs, and protected from animals, rodents, insects, and natural elements.

### **Containment of Medical Waste Prior to Monarch Collections**

Medical waste containers are to be supplied by the generator and must meet the requirement outlined for each type of waste. Monarch will not accept any waste that is not contained properly or is mislabeled.

### **Segregation and Containment Specific Treatment Requirements**

- 1) Our pyrolysis system allows us to intake Chemotherapy waste, pathological waste (defined as: human organs, body parts, and surgical specimens), contaminated parts/tissues, and other biohazardous waste/sharps.
- 2) Packages containing pathological or chemotherapy waste must be labeled as to their contents to assure the waste is processed and staged properly.
- 3) To ensure safe handling, provision of proper treatment, and appropriate cleanup techniques are followed in the event of a spill, Monarch requires that all chemotherapy waste be segregated from medical waste and labeled as such. In the event the chemotherapy waste is mixed with other medical waste the entire contents of that container must be labeled as chemotherapy waste.
- 4) Pathological waste will be processed in the unit. Monarch requires that all generators to identify these containers. In addition, pathological waste must be segregated from any preservative liquids prior to being packaged for Monarch.

### **Medical Records**

Medical Records should be contained in sturdy, well secured/taped cardboard boxes or reusable containers prior to collection.

### **Controlled Substances**

This facility will be inspected to be authorized by the DEA to destroy controlled substances. In compliance with DEA and other law enforcement regulations, individual containers of controlled substances will not be analyzed, sampled, or opened in accordance with 21 CFR S 1317. All controlled substances destruction runs shall be scheduled separately from all other waste runs in advance, so the facility shall be closed to all other incoming waste customers. Only designated Monarch personnel will be assigned to accept and maintain control of the scheduled shipments and operate the systems for these scheduled runs. All waste must be accounted for again at the designated staging area prior to depositing the waste into the system. Monarch will receive controlled substances from the DEA registered generators or directly from the ultimate user as defined by the DEA. Container contents will be checked and verified to match applicable DEA forms. Discrepancies in quantities, waste type or individual unit count will be subject to specific DEA notification and resolution requirements. The containers will be unloaded, weighed, logged, marked, and placed in the proper area at the time of acceptance. The load will be placed into a destruction cycle as soon as possible and directly fed into the unit. All waste delivered on that scheduled run must be fully destroyed that day before any other waste runs are scheduled as the facility is not permitted or capable at this time for securing or storing this kind of waste.

### **Labeling and Marking of Medical Waste Bags and Containers**

#### **Biohazard Bags**

In accordance with Alabama DOT, at a minimum, bags must be red in color or any other color labeled with the international biohazard symbol and with the word "BIOHAZARD."

### Sharps Containers

In accordance with Alabama DOT, at a minimum, labeling with the international biohazard symbol and the word “BIOHAZARD” and “SHARPS” must be placed on the clear or red puncture resistant containers.

### Secondary Containers

Secondary containers must be approved through Monarch. The generator must have the proper labeling for the contents in accordance with federal and Alabama DOT regulations.

## **Disposable vs. Reusable Waste Containers**

### Disposable Boxes/Plastic

These containers are to be processed through the unit along with waste contained within.

### Disposable Sharps Containers

These containers are to be processed through the unit along with waste contained within. The container will not change the process nor hinder the destruction process.

### Reusable Plastic Tubs and Lids

Used containers and lids are decontaminated with EPA-approved sanitizing methods prior to delivery to the generator. Used sanitizer solution will go into bulk holding for the Pyrolysis feed.

## **Tracking Documents for Medical Waste**

### Recordkeeping/Reporting

The following section will outline the required recordkeeping, notifications and reporting in conjunction with the Federal regulations regarding the facility operations, the operator’s activities, the pyrolysis system performance, and the responsibility of the manager to ensure such reports and notifications are properly executed.

### Operating Records

- 1) The operator(s) of the pyrolysis system shall document, manually or otherwise, all waste items that are loaded and processed through the pyrolysis system. This would include time, weight, codes which can describe the waste and any notable issues that may be encountered such as shredder jams, spills, deviations (if any), and steps taken to solve whatever issues that occur in the process.
- 2) The operator(s), manager, and supervisors shall also keep records on all scheduled and unscheduled shutdowns, mechanical issues that would cause the system to go into an unexpected, forced shutdown mode, and any condition that might cause a safety health risk to themselves or others.
- 3) The manager or shift supervisors shall review the emissions data reports on an hourly basis while the pyrolysis system is operating via the CEMS unit PLC in the office or on their mobile device. Any emissions that exceed the limits are to be reported immediately to the manager. The manager will direct the actions of the supervisor or the operator to stop the charging of the medical waste until the issue can be determined and fixed. All such occurrences, if any, shall be documented and reported to the state and US EPA accordingly.

### Facility Reporting

- 1) The manager shall be responsible to make sure all shift supervisors and operators are keeping accurate records.
- 2) The owners and manager shall maintain all such records on file at the facility for inspection to authorized parties.

### Monarch Requirements

- 1) All waste transported from the generation facility/person for treatment must be accompanied by a tracking document.
- 2) Tracking document must include at a minimum the following information:
  - Name, address, and telephone number of transporter
  - Type and quantity of medical waste transported
  - Generator name, address, and telephone number
- 3) A signed copy of the tracking documents will be provided to the customer at the time of waste collection.
- 4) The tracking documents will be in the custody of the transporter for the duration of transportation to Monarch facility.
- 5) Documentation will be given back to generator including a detailed receipt of processed waste and a copy of the certification of destruction.
- 6) Monarch will maintain signed copies of all tracking documents for a set minimum time period in accordance with state and federal regulations.

## **Transportation of Medical Waste**

### Permitted Vehicles

Monarch will only allow permitted vehicles for medical waste transport to the processing facility and is regulated by federal, local, and state regulations.

### Drivers' Responsibility/Authority

- 1) Drivers may reject any containers that do not meet acceptable waste specifications in accordance with regulations or Monarch Waste Plan and Protocol. Improper labels, leakage, bulging, damaged containers and improper packaging are some of the causes for rejection of medical waste containers.
- 2) Containers may be subject to an off-specification charge to generator for repackaging and special handling if such is required.
- 3) Drivers will be held to the same standards upheld by Monarch.

### Emergency Spill Response

- 1) Transportation vehicles are equipped with emergency spill kits and drivers are trained in emergency spill response procedures.
- 2) Spill Response Plan covers procedures and prevention.

## **Treatment of Waste**

### Processing Facility

Monarch processing facility operates in compliance with applicable federal, local, and state laws.

### Treatment Methods/Parameters

- 1) Medical waste will be placed in the unit through the encased hopper/shredder, waste drops to sealed screw conveyor system, and a radial plug seal is created within conveyor to ensure an airtight seal during operations. The waste proceeds forward to the knife gate air lock system which is hydraulically synchronized to further ensure an airtight seal. Waste is transferred within the retort tube using a hydraulic ram feed. Using pyrolysis to treat waste within sealed airless chamber reducing waste into an inert pyrolytic carbon char.

- 2) RCRA empty, in some cases, will be placed directly within the knife gate air lock system which is hydraulically synchronized to further ensure an airtight seal. Waste is transferred into the retort tube using a hydraulic ram feed. Pyrolysis processing occurs within a sealed airless chamber, reducing the waste into a pyrolytic carbon char.

**Attachment F:  
Standard Operating Procedures**



Revised 06/01/22

## Table of Contents

<b>Cover Page.....</b>	<b>41</b>
<b>Table of Contents.....</b>	<b>42</b>
<b>Standard Operating Procedures.....</b>	<b>43</b>
Abstract.....	43
Location .....	43
Background .....	43
Training Requirements .....	43-44
Recordkeeping and Reporting Requirements .....	44
Facility Reporting .....	45
<b>Fire Protection Plan.....</b>	<b>46</b>
Procedures in the Event of a Fire .....	46
Fire Fighting Methods.....	46
Fire Equipment.....	46
Fire Protection Training .....	46
<b>Access Control .....</b>	<b>47</b>
Facility Security .....	47
Vehicle Access.....	47
Unloading of Waste .....	47
Spill Prevention and Control .....	47-48
Facility Operating Hours .....	48
Facility Signage.....	48
Control of Windblown Material and Litter .....	48
Facility Access Roads.....	48
Overloading and Breakdown .....	48-49
Backup Provision.....	49
Sanitation.....	49
Facility Generated Waste .....	49
Water Management .....	49-50
Ventilation and Air Pollution Control .....	50
Health and Safety.....	50
Disease Vector Control .....	50
Salvaging and Scavenging .....	50



# Standard Operating Procedures

## Abstract

The *Standard Operating Procedures (SOP)* contains information about how Monarch Waste Technologies will conduct operations at the facility. It is not intended to be a comprehensive operating manual—rather, it provides the general instructions used by facility management and personnel to operate the facility in compliance with the rules and regulations set forth by the EPA and ADEM.

## Location

The facility is located at 4618 Airport Road, Rainbow City, Alabama 35906.

## Background

Monarch Waste Technologies, LLC, controls the exclusive global fabrication and operating rights to its pyrolysis systems. The company's vision is to develop and apply a proven technology for the purpose of medical waste destruction, offering a cleaner alternative to traditional autoclave and incineration processes. Monarch will organize these efforts by establishing "microsite" locations that process medical waste closer to the waste's origin, thereby reducing both monetary and environmental costs.

## Training Requirements

Personnel training records will be upheld in compliance with EPA and Alabama state regulations.

The owner or operator will ensure that the facility manager/supervisor is knowledgeable and trained in the proper operation of a medical waste facility. The manager/supervisor will maintain all licenses and permits necessary for facility operations. The manager will ensure that all personnel are proficient in operating the system in accordance with the standards outlined by this document.

The personnel training program will be directed by trained waste management professionals. It will include instruction in facility procedures as well as any relevant contingency plan implementation. New hires will receive a comprehensive overview of all aspects of the facility operations, including any information that is necessary to protect the health and welfare of the new employee (specifically, the *Site Spillage Procedures, Mitigation Plan, and Health and Safety Plan* that follow this document). Following the initial job training, employee education will continue through formal training sessions (to occur monthly), informal on-the-job training, and annual review sessions that revisit the company's training materials.

Training sessions will be scheduled to allow facility operations to be uninterrupted. Records of personnel attending each training session and the topics covered will be maintained at the facility. Topics for training can vary based on job descriptions but will be conducted annually for the following:

### A) Training Outline

- First Aid
- CPR
- DOT
- HIPAA
- Hazcom
- Hazmat

- Blood borne pathogen
- Respiratory
- PPE
- SWANA/NMED (operation training)
- Lockout/tag out
- Pinch Point
- Heavy lift/proper lifting
- Fall protection
- Job Hazard
- Accident/Incident Report and investigation
- Spill Containment and cleanup
- Eye wash/shower
- Fire Extinguisher
- Boiler Training
- Water treatment
- Pyromed 550
- Shipping and Receiving
- Forklift

Facility personnel are subject to take part in an annual and/or monthly review of their initial training. A written description of the type and amount of introductory and continued training provided to each employee will be maintained in the facility operating record.

### **Recordkeeping and Reporting Requirements**

The following section will outline the required recordkeeping, notifications, and reporting in compliance with federal regulations regarding facility operations, operator activities, and the pyrolysis system's performance. It is the responsibility of the manager to ensure such reports and notifications are properly executed.

- (1) The operator(s) of the pyrolysis system will document—manually or otherwise—all waste items that are loaded and processed through the pyrolysis system. These records are to include times, weights, descriptive codes, and any notable issues that may be encountered (e.g. shredder jams, spills) as well as steps taken to resolve such issues.
- (2) The manager and/or supervisor will also maintain records of all scheduled and unscheduled shutdowns, mechanical issues that would cause the system to go into forced shutdown mode, and any condition that might jeopardize the health and safety health of a facility employee.
- (3) The tracking of medical waste is regulated and governed by the EPA and ADEM. The term “cradle to the grave” will be applied to Monarch’s waste tracking procedures, meaning that waste is tracked from when it is generated to the point of disposal.
- (4) The transportation company is required to collect a detailed waste manifest from the generator and present it at time of delivery. Monarch will receive this manifest and enter it into the facility records. After processing the waste, a certificate of destruction (COD) will be created and then filed. The final date and-time of disposal for processed waste will then be recorded and documented on the COD.

**Facility Reporting**

- (1) The manager will be responsible for ensuring all shift supervisors and operators are keeping accurate records and filing them in a timely manner (within seven working days, with the exception of analytical data, which will be filed on receipt).
- (2) The owners and manager will maintain all such records at the facility for the purpose of inspection by the authorized parties for 5 years.

The following records will be kept, maintained, and filed as part of the facility operating record. Logbooks and schedules may be used.

- Training records
- Incident reports
- Injury reports
- Spill logs
- Manifests
- Certificates of destruction
- Written logs or other means of documentation related to the operation, testing, and maintenance of the treatment units

Other documents not listed will be recorded if applicable to operations.

## Fire Protection Plan

The building is equipped with a wet sprinkler system that is current on inspection status.

### Procedures in the Event of a Fire

Staff will take the following steps if a fire is discovered:

- Contact the Local Fire Department by calling 911 if applicable.
- Alert other facility personnel.
- Assess extent of fire, possibilities for the fire to spread, and alternatives for extinguishing the fire.
- If it appears that the fire can be safely fought with available firefighting devices until arrival of the Local Fire Department, attempt to contain or extinguish the fire.
- Upon arrival of Local Fire Department personnel, direct them to the fire and provide assistance as appropriate.
- Do not attempt to fight the fire alone. Do not attempt to fight the fire without adequate personal protective equipment. Be familiar with the use and limitations of firefighting equipment available onsite.
- If it appears that the fire cannot be safely fought evacuate the facility to the designated (safe zone) off site locations and facilitate the local fire department as needed.

### Fire Fighting Methods

Firefighting methods for burning solid waste include smothering the waste, separating burning material from other waste, or spraying with water if available. Small fires might be controlled with hand-held extinguishers.

If a fire occurs on a vehicle or piece of equipment, the equipment operator will bring the vehicle or equipment to a safe stop. If safety of personnel will allow, the vehicle will be parked away from fuel supplies, uncovered solid wastes, and other vehicles. The engine will be shut off and the brake engaged to prevent movement of the vehicle or piece of equipment.

### Fire Equipment

The facility will be equipped with fire extinguishers of a type, size, location, and number as recommended by the local fire department Gadsden City Fire Prevention Department. Each fire extinguisher will be fully charged and ready for use at all times. Each extinguisher will be inspected on a monthly and annual basis and recharged as necessary. A qualified service company is scheduled to perform these inspections, and all extinguishers will display a current inspection tag. Inspection and recharging will be performed following each use. The receiving facility and vehicles will be equipped with fully charged fire extinguishers at all times in accordance to Alabama DOT requirements.

### Fire Protection Training

Training of on-site personnel in firefighting techniques, fire prevention, response, and the fire protection aspects of the SOP will be provided, by established professionals.

Personnel will be familiar with the use and limitations of firefighting equipment available onsite. Records of this training will be included in the operating record for the facility.

## Access Control

### Facility Security

The facility is a fully closed facility. Security cameras are continuously monitoring the facility. Chain link fencing with wire top and security gate access will secure the building areas. Unauthorized personnel are prohibited from entering. All doors and entrance points are under locked access 24/7. Scheduled appointments will be required before visiting the facility. Visitor log is implemented at facility and all visiting guests must sign-in and out.

Public access will be controlled to minimize unauthorized vehicular traffic, unauthorized and illegal dumping, and public exposure to hazards associated with unscheduled facility visits.

### Vehicle Access

Only vehicles authorized by the manager, personnel vehicles, and authorized haul vehicles will have access beyond the facility entrance. Signage will provide direction to customers and transporters on entry points and how to arrange for escorted building entry.

Vehicles transporting medical waste arriving at the facility will be directed to an unloading area by on-site personnel, signage, and cell phone commands. Operations will be conducted in a manner that allows for prompt receipt, manifest verification, and safe and efficient unloading of waste. All deliveries must be scheduled in advance.

### Unloading of Waste

The unloading of waste in unauthorized areas is prohibited. Any waste deposited in an unauthorized area will be removed immediately and managed properly. A trained receiving employee will be present at the entrance at all times during operating hours to monitor all incoming loads of regulated medical waste and will direct containers to storage and staging to the appropriate area.

Shipping department and equipment operators will handle and monitor the incoming waste. These personnel will be familiar with the rules and regulations governing the various types of waste that can or cannot be accepted into the facility. The facility is not required to accept any waste that may cause problems in maintaining continuous operations.

Certain wastes are prohibited from management at the facility. Prohibited wastes are described in the *Waste Acceptance Protocol*. The unloading of prohibited wastes at the facility will not be allowed. The operator will take necessary steps to ensure compliance. Personnel have the authority and responsibility to reject unauthorized loads after consultation with the General Manager. If a waste container is rejected, it will be given back to the transporter for delivery back to the generator. The generator will be notified by the facility manager. Facility personnel will keep vigilant watch for compliance with operating requirements.

### Spill Prevention and Control

The facility complies with regulations set forth by OSHA, DEA, DOT, EPA and ADEM for handling regulated medical waste. Storage, staging, and processing areas will be designed to control and contain spilled and contaminated liquids from leaving the facility premises. The facility has an approved spill containment and cleanup kit. The facility will use EPA-approved disinfection procedures and chemicals for cleanup. In the event of potential hazards spills, Monarch will respond to incidents by involving necessary parties or agencies as needed.

Monarch provides all employees with necessary training in spill prevention as well as contingency training in the event of spills within the facility. Spill prevention and controls is outlined within the mitigation plan and continual training will be provided to all employees.

### **Facility Operating Hours**

The facility is authorized to accept waste and operate during the following timeframes:

- The regular waste acceptance hours will be 24 hours a day, 6 days a week.
- Normal hours of operation will be 24 hours a day, 6 days a week

In addition, the facility will include alternative operating hours and is subject to closure to accommodate special occasions, special purpose events, holidays, or other special occurrences.

When warranted, the facility manager/supervisor will allow additional temporary operating hours to address disaster or other emergency situations, or other unforeseen circumstances (such as traffic delays or adverse weather) that could result in the disruption of waste management services in the area. In addition to the waste acceptance and operating hours, other non-waste management activities including administrative and maintenance activities may occur 24 hours per day, 6 days per week.

### **Facility Signage**

A conspicuous sign measuring a minimum of four by four feet will be maintained at the entrance to the facility. All lettering will measure at least three inches in height, ensuring that the sign can be read from the facility entrance. Signs prohibiting smoking will be posted throughout the facility.

### **Control of Windblown Material and Litter**

Windblown material and litter will be controlled through several methods, including but not limited to:

- Enforcement of proper unloading procedures
- Adequate staffing
- Informing transporters in advance that all vehicles hauling waste must either be enclosed or effectively secure their loads by other means to prevent blowing or spilling

### **Facility Access Roads**

The facility will abide by the following aspects regarding facility access roads:

- Access and on-site roadways will be regraded and maintained to minimize depressions, ruts, and potholes.
- Haul roads and access roads will be constructed with appropriate materials to provide all-weather access to the designated unloading areas

### **Overloading and Breakdown**

The design capacity of the Pyrolysis System is 550 pounds per hour. The facility will not accumulate waste in quantities that exceed more than 7 days of its processing limit to make sure that the creation of odors, insect breeding, or harborage of other vectors do not occur. There are several measures employed by Monarch on a regular basis to ensure that the pyrolysis system is operating properly. The facility will undergo 24 scheduled shutdowns per year for proper maintenance. If at any time the pyrolysis system breaks down, experiences an overload, or is scheduled for a planned maintenance shutdown, the manager or shift supervisor will:

- (1) Provide sufficient storage capacity for incoming medical waste to allow sufficient time to repair equipment malfunctions and or shutdowns.

- (2) Provide adequate steps to ensure any medical waste stored within the facility for greater than 48 hours is placed in an enclosed refrigerated trailer outside the facility for the duration of the repairs.
- (3) Ensure that no additional medical waste is being delivered and or stockpiled by delaying shipments or diverting all future incoming medical waste shipments to alternative facilities.

### **Backup Provision**

In the event of equipment repairs or during equipment maintenance periods, the facility will direct all scheduled medical waste shipments to other Monarch facilities.

### **Sanitation**

- (1) All working surfaces that come into contact with waste will be washed down after completion of processing. Processing areas that operate on a continuous basis will be swept and washed down as needed.
- (2) The facility will maintain potable water and sanitary facilities for all employees and visitors.
- (3) The facility will be swept daily after every shift and washed down and sanitized at least twice per week.
- (4) Wash waters are not allowed to accumulate within the facility at any time in order to prevent the creation of odors or attraction to vectors.
- (5) All wash waters will be collected and disposed of in an authorized manner by being recycled back into the pyrolysis system. Mopping is conducted for floor cleaning. Spills are cleaned with a 10% sodium hypochlorite solution. Spilled material is disinfected and discharged into the recycling system along with any wastewater from general cleaning operations.

### **Facility-Generated Waste**

Non-regulated office trash waste materials generated within the office, bathroom, or outside areas will remain in sealed containers or bags and deposited into the system as needed. This waste is kept in a designated area next to the shredder which is separate from the medical waste staging and storage areas. Control of odors, vectors, and windblown waste from the outside dumpster storage area will be maintained by keeping it covered at all times and dumping its contents on a regular basis.

Under no circumstances will the facility generate or transport hazardous waste to or from the facility. The grey and black wastewater that comes out of the facility will be typical wastewater into the sewer. Process system water is minimal and will be captured and recycled within the facility. The processed pyrolytic carbon char output of the pyrolysis unit is sampled and tested periodically to verify inert conditions as non-hazardous.

As part of Monarch's *Mitigation Plan* for spill control, sodium bicarbonate biproduct will be used if a spill occurs as outlined in the *Mitigation Plan*. The sodium bicarbonate will also be used as an absorbent material for any incoming waste with high liquid contents.

### **Water Management**

The facility will not discharge wastewater liquids that result from processing activities within the facility. All wastewater liquids are collected, contained, and recycled into the pyrolysis system. Monarch has designed the facility to ensure that no discharged wastewater residuals ever touch surface water or groundwater outside the facility or ever connect to other discharge drains; the pyrolysis system is truly closed-loop. All bathrooms and other discharge points within the facility not associated with the pyrolysis system are separately connected to the public sewer system to ensure that all residuals from

the process remain separate. This includes all wastewater resulting from cleaning and washing the containers and sanitizing the systems during operations, as this wastewater discharges directly into a self-contained, sealed drain system within the facility. This self-contained drain line is a part of the PyroMed system's closed-loop design, which is connected to a sealed container with a built-in pump that quickly pumps the residuals to a drum for further processing using a non-organic absorbent material. Each time this drum is recycled through the process, all relevant details (including the volume of liquid residuals, the amount of sodium bicarbonate absorbent added, and the time of re-processing) will be documented.

#### **Ventilation and Air Pollution Control**

The facility and constructed air pollution abatement devices are designed to achieve mass reduction of air pollutions. All liquid waste and solid waste will be stored in odor-retaining containers. The facility is designed and operated to provide adequate ventilation for odor control and employee safety.

All air pollution emission capture and abatement equipment or equivalent technology will be properly maintained and operated during the facility operation. Cleaning and maintenance of the abatement equipment will be performed as recommended by the manufacturer and/or under the supervision of manufacturer as necessary so that the equipment efficiency can be adequately maintained.

#### **Health and Safety**

Facility personnel will be trained in the appropriate sections of the facility's health and safety plan. The facility is fitted with a wash down shower and eye wash station for use during emergencies.

#### **Disease Vector Control**

The operator will control vectors such as rodents, flies, and mosquitoes through proper daily facility operations. If necessary, a licensed professional will apply pesticides for control of vectors to ensure that proper chemicals are used and that they are properly applied.

#### **Salvaging and Scavenging**

Salvaged materials will be considered as potential recyclable materials and may be stored in a designated collection area. Salvaged items will be recycled often enough to prevent an excessive accumulation of the material at the facility.



**Attachment G:  
Mitigation Plan**



**Final Approved Version revised 6/9/21**

- 1. Introduction**
  - A) Location
  - B) Company
  - C) Company Contact Information
  
- 2. Waste and Description**
  - A) Waste Overview
  - B) Waste Type and Description
  
- 3. Process Overview**
  - A) Pyrolysis Definition
  
- 4. Potential Hazards, Precautions and Actions**
  - A) Fire
  - B) Spills
  - C) Electrical
  - D) Water and Boiler
  - E) Air
  
- 5. Emergency Response Plan**
  - A) Potential Hazards
  - B) Immediate Precautions
  - C) Incident Reporting
  - D) Emergency Response
  - E) First Aid
  
- 6. Tracking Requirements**
  - A) Tracking Waste Background
  - B) Waste Tracking
  
- 7. Container Cleaning**
  - A) Container Clean Up
  
- 8. Transport Vehicles and Security**
  - A) Transport Vehicles
  - B) Security

**9. Training Program Outline**

A) Training Outline

**10. Incident Report Form**

A) Incident Report Document

**11. Spill Containment Kit**

A) Spill Kit Contents

**12. Emergency Response and Supporting Agencies**

**13. Sources**

## 1) Introduction

### A) Location

The facility is located at 4618 Airport Road, Rainbow City, Alabama 35906.

### B) Company

Monarch Waste Technologies, LLC, controls the exclusive global fabrication and operating rights to its pyrolysis systems. The company's vision is to develop and apply a proven technology for the purpose of medical waste destruction, offering a cleaner alternative to traditional autoclave and incineration processes. Monarch will organize these efforts by establishing "microsite" locations that process medical waste closer to the waste's origin, thereby reducing both monetary and environmental costs.

### C) Company Contact Information

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## 2) Waste and Description

### A) Waste Overview

Proper waste management is an essential part of society's public and environmental health. The Resource Conservation and Recovery Act (RCRA), passed in 1976, created the framework for America's hazardous and non-hazardous waste management programs. Materials regulated by RCRA are known as "solid waste". Only materials that meet the definition of solid waste under the RCRA can be classified as medical waste, which are subject to additional regulations. The EPA developed detailed regulations that define what materials qualify as solid wastes and bio-hazardous wastes. Understanding the definition of a solid waste is an important first step in the process the EPA set up for generators of medical waste to follow when determining if the waste they generate is a regulated medical waste.

### B) Waste Type and Description

Monarch will process the following types of waste:

- 1) Medical, Infectious, and Hospital Waste
  - a) Waste that is generated in the diagnosis, treatment, and care of humans and animals from facilities and research labs; the preparation and administration of chemotherapy agents; and in the production of pharmaceutical drugs.

- b) Waste material generated in the diagnosis, treatment, or immunization of humans or animals, in research pertaining thereto, or in the production or testing of biologicals that include:
  - i. Cultures and stocks
  - ii. Human blood and blood products, as well as any containers, equipment, or articles contaminated by blood products
  - iii. Sharps, needles, syringes, blades, needles with attached tubing, contaminated disposable surgical instruments
  - iv. Surgical specimens/tissues, tissues, extracted fluids (pathological waste excluding preservative agents)
  - v. Isolation wastes
  - vi. Unused sharps
  - vii. Body fluids
  - viii. Medical waste contaminated with excretions, exudates, secretions, and bodily fluids—including but not limited to isolation waste
  - ix. Medical and laboratory glassware including sliding, pipettes, blood tubes, blood vials, and contaminated broken glass
  - x. Biologicals and Infectious agents
- 2) Chemotherapeutic and Pathological Waste
  - a) Includes but is not limited to gowns, gloves, masks, barriers, IV tubing, empty bags/bottles, needles and syringes, empty drug vials, spill kits and other items generated in the preparation and administration of antineoplastic drug.
  - b) Waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.
- 3) Medical Record/Confidential Documents
  - a) Medical records and confidential documents exceeding required storage
- 4) Non-Hazardous Pharmaceutical
  - a) Non-Hazardous Pharmaceutical Waste (RCRA empty meaning contents within container is less than 3% residual by volume).
- 5) Controlled Substances
  - a) Waste that includes controlled substances, prescription drugs, and over-the-counter (OTC) medications.
  - b) Any controlled substances in compliance with DEA regulations, other law enforcement seizures, and take-back or mail-back programs as they may apply.

### **3) Process Overview**

#### **A) Pyrolysis Definition**

Pyrolysis is defined as the decomposition of material using an external indirect heat in an oxygen free environment. This process is endothermic, in that it requires heat input to achieve the process. Utilizing moderately low temperatures, the waste slowly roasts as it absorbs the heat and decomposes within a sealed airless chamber. This allows the volatile organic compounds to boil off in the form of gas which can later be oxidized in a more controlled manner. The waste material is subjected to

these elevated temperatures and combustion gases in excess of 900°C which makes the formation of harmful emissions, such as Dioxins and Furans, impossible. This unique difference allows the PyroMed™ 550 to stand apart from conventional incineration and autoclave systems and operates well under the Title V EPA regulations.

#### **4) Potential Hazards**

##### **A) Fire**

To reduce fire risk, Monarch will work with fire prevention companies to place fire extinguishers and have them routinely inspected by the vendor. The Gadsden City Fire Department will do routine inspections on the facility according to their protocols.

##### **B) Spills**

The facility will comply with OSHA, EPA, and ADEM regulations for handling medical waste. Monarch will provide all employees with necessary training in spill prevention. In the event of a spill within the facility, approved spills containment measures and cleanup kits will be utilized. The facility will use EPA-approved disinfection and chemicals for cleanup. The facility will work closely with ADEM and other relevant parties or agencies in the event of potential spills that may occur. Alabama DOT requires all drivers transporting waste to have a spill kit and training to combat any potential hazards during transit.

##### **C) Electrical**

In the event of the loss of electrical power, the system will automatically enter emergency shutdown. The facility will have acting power packs to keep the electrical panel operational for a safe shutdown. The facility will potentially be supplying electrical power via a steam-driven generator.

##### **D) Water and Heat Exchanger**

The unit is a closed-loop system. There is no contact between water and waste. The water used is treated prior to entering the facility and treated once again before entering the system. The only water exiting the facility is non-hazardous, standard wastewater. All liquids resulting from the handling process or sanitation of the system is collected in a 50-gallon holding tank and then pumped directly back into system for final destruction.

The heat exchanger system has multiple sensors that ensure safe operation. The facility has trained operators on site to monitor and operate the system. In the event the heat exchanger operations go outside of the operating parameters, the system will open a bypass damper so heat is no longer introduced to the heat exchanger and a safe shutdown of the system can begin.

**E) Air**

The unit is designed with air in mind. The unit processes harmful gases in the oxidizer section at 2100°F. The gases are contained in this chamber for a minimum of two seconds, meeting EPA standards, to ensure the complete destruction of hazardous compounds. We have one of the first ceramic filtration systems in the US. This filtration system is designed to filter remaining hazardous compounds and withstand heat.

## **5) Emergency Response Plan**

**A) Potential Hazards**

- (1) Inhalation or contact may cause infection, disease, or death
- (2) Burns, cuts, slips, trips, and falls
- (3) Heat exchanger failure
- (4) Fire
  - (a) The reusable containers are fire resistant: U.L.94 HB Material High Density Polyethylene
  - (b) Some of the waste material may burn but not ignite readily
  - (c) Unit failure
  - (d) Heat exchanger failure
    - (i) Immediate Methods for Handling Fires**
      1. Small fires occurring within facility—use the fire extinguishers located at multiple points around the building.
      2. Small fires occurring during transit—use the appropriate fire extinguishers provided with the transportation vehicle.
      3. Large fires occurring within the facility—evacuate the facility and meet at designated (safe zone) location off premises then call 911.

**(5) Spills**

**(a) Spill Response Procedures**

- (i) Biohazardous Medical Waste/Chemical Spill: If a person has direct contact with untreated biohazardous medical waste/chemicals, first remove any contaminated clothing and thoroughly wash the area with germicidal soap.
- (ii) Prior to conducting the following cleanup procedures, employees must utilize the following PPE: Tyvek suit, impermeable gloves, and safety glasses or face shield.

**(b) Surfaces Coming in Contact with Spills**

- (i) Employee(s) must inform the appropriate supervisor as soon as possible and rope off the spill area.
- (ii) The employee(s) cleaning up the spill must wear approved PPE.
- (iii) Prepare an appropriate container for cleanup.
- (iv) Initially, shovel the solid portion of the spilled material into the previously prepared containers.
- (v) Spray the contaminated area with EPA-approved spray.

- (vi) Spread provided absorbent on the contaminated area and wait at least 10 minutes.
- (vii) Shovel the absorbent and any other contaminated items into the container and continue until no visible contamination remains.
- (viii) Once again, spray the area previously covered by spill with the EPA-approved disinfectant.
- (ix) Spray any tools that may have come into contact with the biohazard medical waste during cleanup.
- (x) Remove and place all disposable PPE in the container.
- (xi) Seal and label container as “spill cleanup.”
- (xii) Segregate the “spill cleanup” container from any other loaded waste, to avoid mixing the contents with manifested waste contents.
- (xiii) If off site, load all containers onto the transportation vehicle and ensure they are properly secured.
- (xiv) Then follow the previously stated cleanup procedures.
- (xv) Generate a tracking document for any additions or subtractions to the total quantity of waste caused by the spill response activity.
- (xvi) The supervisor must complete the incident report.

#### **B) Immediate Precautions**

- (1) Assess the extent of the incident and/or spill
- (2) Isolate unauthorized personnel from incident and/or spill
- (3) If applicable, stop leakage from container(s), by using absorbent, or additional liners and additional polyvinyl container as needed.
- (4) Contain spill within appropriate area, using absorbent and supplied rags as needed

#### **C) Incident Reporting**

- (1) The incident will be reported to the employee’s supervisor as soon as possible.
- (2) Employees will be trained in proper incident reporting.
- (3) Gather the relevant data and complete the incident report
- (4) Upon the receipt of the complete incident report the supervisor may report to further agencies.

#### **D) Emergency Response**

- (1) Call 911
- (2) Call Monarch Waste Technologies (972)768-6885 for offsite incidents
- (3) If applicable, call the Center for Disease Control (404) 633-5313 for CDC recommendations
- (4) Call other agencies depending on the nature and the scope of the spill or incident
- (5) Contact supervisor to get additional instructions

#### **E) First Aid**



- (1) Check area and move victim if needed to a safe area
- (2) Call 911
- (3) If the victim is not in immediate danger, treat as needed
- (4) In the event of contact with biohazardous medical waste, immediately flush skin and or eyes with sufficient amount of water
- (5) In the event of contact of contaminates with the eyes, immediately begin rendering first aid and flush the eyes for 20 consecutive minutes in order to prevent further injury. Once that has been completed the victim shall be immediately report to the nearest medical facility
  - a. Ensure that medical personnel are aware of the material(s) involved, and precautions to protect themselves.

## **6) Tracking Requirements**

### **A) Tracking Waste Background**

The tracking of medical waste is regulated and governed by the EPA and further at the local level by ADEM. The “cradle to the grave” phrase is used when talking about tracking waste and means that waste is tracked from when it is generated to the point of disposal.

### **B) Waste Tracking**

The transportation company is required to have a detailed manifest of waste from the generator. We will receive this manifest and enter it into our records. After processing the waste, a certificate of destruction will be created and filed. The final place of disposal for processed waste will then be recorded and documented.

## **7) Container Cleaning**

### **A) Container Clean Up**

Medical waste containers have two main categories: reusable and non-reusable. All reusable medical waste containers, after emptying, are cleaned using EPA approved methods, disinfectants, and chemicals. The containers will then be shipped out for reuse. The non-reusable containers will be processed within the system.

## **8) Transport Vehicles And Security**

### **A) Transport Vehicles**

All transporting vehicles are to meet the standards outlined by Alabama DOT. They must have or haul a fully enclosed, leak-proof cargo compartment consisting of a floor, sides, and a roof that are made of a non-porous material impervious to biohazardous medical waste and physically separated from the driver’s compartment. Vehicles are padlocked and secured when biohazardous medical waste cargo is not in the process of loading or unloading. A standard combination lock will be used to secure the enclosed area of the vehicle to secure the load. The

transporters shall ensure that the locking mechanisms are in proper working order prior to leaving the shipping location.

## **B) Security**

The facility is a fully closed facility. Security cameras are continuously monitoring the facility. Facility regulations prohibit unauthorized personnel from entering. Scheduling and appointments will be required before visiting the facility. A visitor log is implemented at the facility and all visiting guests must sign in and out.

## **9) Training outline**

### **A) Training Outline**

- First Aid
- CPR
- HIPAA
- Hazcom
- Hazmat
- Blood borne pathogen
- Respiratory
- PPE
- SWANA (operation training)
- Lockout/tag out
- Pinch point
- Heavy lift/proper lifting
- Fall protection
- Job hazard
- Accident/incident report and investigation
- Spill containment and cleanup
- Eye wash/shower
- Fire extinguisher
- Boiler Trainer
- Water treatment
- Pyromed 550
- Shipping and receiving
- Forklift

## **10) Incident Report Document**

### **A) Incident Report Document**

## Incident Report Template

REPORTED BY: \_\_\_\_\_ DATE OF REPORT: \_\_\_\_\_  
TITLE / ROLE: \_\_\_\_\_ INCIDENT NO.: \_\_\_\_\_

### INCIDENT INFORMATION

INCIDENT TYPE: \_\_\_\_\_ DATE OF INCIDENT: \_\_\_\_\_  
LOCATION: \_\_\_\_\_  
CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_  
SPECIFIC AREA OF LOCATION (if applicable): \_\_\_\_\_

### INCIDENT DESCRIPTION

### NAME / ROLE / CONTACT OF PARTIES INVOLVED

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

### NAME / ROLE / CONTACT OF WITNESSES

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

POLICE REPORT FILED?: \_\_\_\_\_ PRECINCT: \_\_\_\_\_  
REPORTING OFFICER: \_\_\_\_\_ PHONE: \_\_\_\_\_

### FOLLOW UP ACTION

SUPERVISOR NAME: \_\_\_\_\_ SUPERVISOR SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## **11) Spill Containment Kit**

### **A) Safety Data Sheet**

## **Safety Data Sheet**

### **When a Spill Occurs**

#### **1. Assess the Risk**

Determine the nature and substance of the spill.

#### **2. Select Personal Protection (PPE)**

Select the proper clothing and gear to safely respond to the spill. If you cannot identify the spilled substance, always treat it as highly toxic.

#### **3. Contain the Spill**

Use socks, dikes, and/or booms to contain the spill and keep it from spreading or contaminating water sources.

#### **4. Stop Product Flow**

Act quickly to stop the source of spilled material, if possible.

#### **5. Absorb Contained Fluids**

Place absorbent pads, pillows, socks, and booms directly on the spilled material.

#### **6. Dispose and Decontaminate**

Dispose of contaminated material in compliance with local, state and federal regulations. Decontaminate the site, personnel, and all equipment.

#### **7. Complete Final Reports**

Complete all notification documents, medical exposure reports, and paperwork associated with the spill incident.

#### **8. Restock Materials**

Replace absorbent materials, salvage drums, and safety equipment that were used in the clean-up process.

## B) Spill Kit Contents

- Oil-Only Spill Kit: (for Oil Only, does not absorb water)
  - 55 Gallon Oil-Only Spill Kit with Lever Lock Ring
    - 55 Gallon Drum
    - Gallon Jug ENSORB
    - (50) Oil-Only Absorbent Pads
    - Medium Oil-Only Socks
    - Disposal bags and ties
    - Pair nitrile gloves
    - Pair of goggles
    - Emergency Response Guide
    - Instruction sheet and SDS
- Universal Spill Kit: (for Oils, Water, Coolants, Solvents, & More)
  - 55 Gallon Universal Spill Kit with Lever Lock Ring
    - 55 Gallon Drum
    - Gallon Jug ENSORB
    - (50) Universal Absorbent Pads
    - Medium Universal Socks
    - Disposal bags and ties
    - Pair nitrile gloves
    - Pair of goggles
    - Emergency Response Guide
    - Instruction sheet and SDS
- Aggressive Spill Kit: (for Acids, Bases & Unknown Liquids)
  - 55 Gallon Aggressive Spill Kit with Lever Lock Ring
    - (1) 55 Gallon Drum
    - (1) Gallon Jug ENSORB
    - (50) Aggressive Absorbent Pads
    - (4) Medium Aggressive Socks
    - (6) Disposal bags and ties
    - (1) Pair nitrile gloves
    - (1) Pair of goggles
    - (1) Emergency Response Guide
    - (1) Instruction sheet and SDS

## 12) Emergency Response and Supporting Agencies

### Alabama Department of Environmental Management

Director, Lance LeFleur

334-271-7700

1400 Coliseum Boulevard

Montgomery, AL 36110

**City of Rainbow City Fire Department**  
911 / Office of City Hall 256-442-2511  
3700 Rainbow Dr  
Rainbow City, AL 35906

**Homeland Security**  
334-517-2815

**Monarch Waste Technologies**  
Founder, David Cardenas  
972-768-6885

**Monarch Waste Technologies**  
Project Manager, Bob Blom  
256-504-9703

### **13) Sources**

<http://monarchwastetechnologies.com/>

<http://www.biomedicalwastesolutions.com/medical-waste-disposal/>

<https://www.epa.gov/hw/criteria-definition-solid-waste-and-solid-and-hazardous-waste-exclusions>

# Attachment H: Site Spillage Procedures



**WARNING: DO NOT DEAL WITH SPILL UNLESS THE FOLLOWING PROCEDURES HAVE BEEN INITIATED.**

- A. Make sure that correct PPE clothing is worn at all times.**
- B. Make sure that the drains are clear of any obstructions.**
- C. Cordon off the area.**
- D. Switch off any nearby mains supply, if applicable.**

## **Spillage Procedure:**

- 1 Instruct immediate supervisor that spillage has occurred.
- 2 Clear up the spillage as quickly and safely as possible.
- 3 Isolate liquid spillages with a ring absorbent material.
- 4 Spray spill with appropriate approved solution.
- 5 Shovel contaminated absorbent material into an impermeable container (e.g., heavy duty plastic bag or appropriate container).
- 6 Notify all relevant personnel that a spillage clean-up is in progress and the expected downtime.
- 7 Once area has been cleaned and all spillage material contained, spray spillage area with appropriate approved solution for final disinfectant.
- 8 All material from spillage must be contained in suitable containers and placed into the secure waste storage area for disposal.
- 9 Consult with the plant manager for advice on correct disposal method of the spillage clean up material.
- 10 A record of the spillage must be recorded in the incident report, if applicable, where an investigation may follow should the manager feel this necessary.

**Attachment I:**  
**Health and Safety Policy**





## Table of Contents

- I. Objective
- II. Policy
- III. Applicability
- IV. Implementation
- V. Administration
- VI. Reporting Injuries
- VII. Notifications
- VIII. Basic Safety Rules
- IX. Enforcement of Safety Policy
- X. Attachments
  - A. Safety Meeting Report
  - B. Employee Acknowledgment
  - C. Notice of Injury Form
  - D. Riverview Regional Medical Center

# Monarch Waste Technologies

## Health and Safety Policy

### I. OBJECTIVE

The *Health and Safety Policy* of Monarch Waste Technologies is designed to comply with the Standards of the Occupational Safety and Health Administration, and to endeavor to maintain a safe and injury/illness free workplace.

Compliance with the following *Health and Safety Policy* and all items contained therein is mandatory for all employees of the company.

### II. POLICY

It is company policy that accident prevention be a prime concern of all employees. This includes the safety and well-being of our employees, subcontractors, and customers, as well as the prevention of wasteful, inefficient operations, and damage to property and equipment.

### III. APPLICABILITY

This *Health and Safety Policy* applies to all employees of Monarch Waste Technologies, regardless of position within the company. The Safety Rules contained herein apply to all subcontractors and anyone who is on a company project site.

Every employee is expected to comply with the *Health and Safety Policy*, as well as OSHA Health and Safety Standards.

### IV. IMPLEMENTATION

This *Health and Safety Policy* supports six fundamental means of maximum employee involvement:

- A. Management commitment to safety.
- B. Weekly toolbox safety meetings at all jobsites.
- C. Effective job safety training for all categories of employees.
- D. Job hazard analysis provided to all employees.
- E. Audio and/or visual safety presentations given at job sites.
- F. Various incentive awards for exemplary safety performance.

The facility manager and operator will meet at least once a month to evaluate all areas of safety and make recommendations to the company president.

## **V. ADMINISTRATION**

The *Health and Safety Policy* will be carried out according to guidelines established and published in this and other related procedures. Specific instructions and assistance will be provided by the corporate office as requested. Each supervisor will be responsible for meeting all of the requirements of the *Health and Safety Policy*, and for maintaining an effective accident prevention effort within his or her area of responsibility. Each supervisor must also ensure that all accidents are thoroughly investigated and reported to the facility manager on the same day of the occurrence.

## **VI. REPORTING OF INJURIES**

All employees will be held accountable for filling out a "Notice of Injury Form" immediately after an injury occurs, even if medical treatment is not required. (Notice must be made at or near the time of the injury and on the same day of the injury.) Employees must report the injury to their supervisor/leadman/foreman/superintendent/project manager, etc. A casual mentioning of the injury will not be sufficient. Employees must let their supervisor know:

- A. How they think they hurt themselves.
- B. What they were doing at the time.
- C. Who they were working with at the time.
- D. When and where it happened.
- E. Other pertinent information that will aid in the investigation of the incident.

Failure to report an injury immediately (meaning at or near the time of the injury and on the same day of the injury) is a violation of the *Health and Safety Policy*, and they may result in immediate termination, in accordance with company policy.

## **VII. NOTIFICATIONS**

- A. In Case of Serious Injury or Death

After the injured has been taken to Riverview Regional Medical Center, the leadman/foreman/supervisor shall notify the main office and facility manager as soon as possible. Statements from witnesses shall be taken. Statements are to be signed by witnesses and should include the time and date. Photographs of the area where the incident occurred and any other relevant items are to be taken. The completed accident report form will be sent to the main office.

- B. In Case of Inspection by OSHA Inspector

The leadman/foreman/supervisor must notify the facility manager that an OSHA Inspector is on the jobsite. It is the responsibility of all employees to make the inspector's visit on the jobsite as pleasant and timely as possible.

#### **VIII. BASIC SAFETY RULES**

- A. Compliance with applicable federal, state, county, city, client, and company safety rules and regulations is a condition of employment.
- B. All injuries, regardless of how minor, must be reported to your supervisor and the Safety Office immediately. An employee who fails to fill out a "Notice Of Injury Form" and send it to the Safety Office can be issued a safety violation notice and may be subject to termination, in accordance with company policy. In the event of an accident involving personal injury or damage to property, all persons involved in any way will be required to submit to drug testing.
- C. Full PPE will be worn by employees when they enter the facility at all times.
- D. Drinking water containers are to be used for drinking water and ice only. Tampering with or placing items such as drinks in the water cooler will result in immediate termination. The "common drinking cup" is not allowed. Only disposable cups will be used.
- E. Report all unsafe conditions and near accidents to the facility manager so corrective action can be taken.

#### **IX. ENFORCEMENT OF HEALTH AND SAFETY POLICY**

Safety violation notice(s) shall be issued to any employee, subcontractor, or anyone on the jobsite violating the safety rules or regulations by the facility manager.

- A. Any violation of safety rules can result in suspension or immediate termination.
- B. Any employee receiving three (3) written general violations within a six (6) month period shall be terminated.
- C. Issuance of a safety violation notice for failure to use fall protection or for failure to report a job injury (at the time of the injury) may result in immediate termination, in accordance with company policy.

It is understood that Monarch Waste Technologies is not restricting itself to the above rules and regulations. Additional rules and regulations as dictated by the job will be issued and posted as needed.



ATTACHMENT B

**EMPLOYEE ACKNOWLEDGMENT**

I state that I have attended the safety orientation and have read and received a copy of the Monarch Waste Technologies safety rules and regulations.

I further state that I understand these rules and acknowledge that compliance with the safety rules and regulations is a condition of employment. If I violate the safety rules or fail to report an injury to my supervisor immediately, I understand that I am subject to termination, in accordance with company policy.

\_\_\_\_\_  
EMPLOYEE SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
**Responsible Person** SIGNATURE

\_\_\_\_\_  
DATE

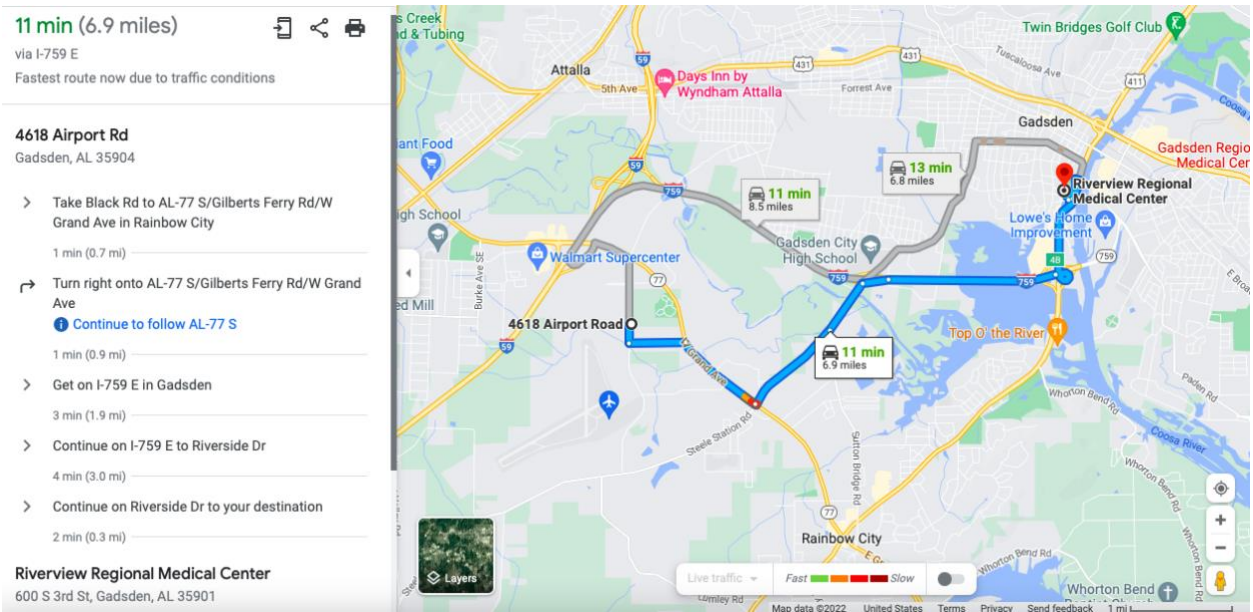
cc: Supervisor

ATTACHMENT C





# RIVERVIEW REGIONAL MEDICAL CENTER DIRECTIONS AND CONTACT



Contact: (256) 543-5200