BEFORE THE WASHINGTON UTILITIES
AND TRANSPORTATION COMMISSION

In the Matter of the Petition of STERICYCLE OF WASHINGTON, INC., For an Order Suspending Tariff Filing and Initiating an Adjudicatory Proceeding concerning the Abandonment of Authority Under G-237 and Proposed Biomedical Waste Collection and Transportation Services of Waste Management of Washington, Inc., dba WM Healthcare Solutions (G-237)	Docket No. TG-110553 DECLARATION OF JEFF NORTON IN SUPPORT OF WASTE MANAGEMENT OF WASHINGTON, INC.'S OPPOSITION TO STERICYCLE'S MOTION FOR SUMMARY DETERMINATION

I, Jeff Norton, declare as follows:

1. I am an Account Development Manager for Waste Management of Washington, Inc. and I make declaration on personal knowledge.

2. My role at Waste Management is to develop solutions for Healthcare Facilities and the different waste they generate. I work with facilities to help maintain compliance and safe handling procedures for their wastes while increasing their sustainability and reducing their environmental impact. Biomedical Waste is one of the waste streams that I work with the most because of my knowledge and background with this particular waste stream and because of the complexities around this waste stream. Over the past 10 months, I have also been working with

SUMMIT LAW GROUP PLLC
315 FIFTH AVENUE SOUTH, SUITE 1000
SEATTLE, WASHINGTON 98104-2682
Telephone: (206) 676-7000
Fax: (206) 676-7001

our operations team to set up a biomedical waste program that is in line with the generators expectations.

3. In the twelve-month period prior to Stericycle's Complaint, Waste Management has been holding itself out to provide biomedical waste collection services. I myself, as well as other Waste Management employees, have been soliciting customers and negotiating contracts.

4. To prepare for collecting biomedical waste, Waste Management addressed the operational prerequisite of having processing capacity first. In June, 2010, the company pursued and ultimately obtained approval from the jurisdictional health department to treat biomedical waste at the Seattle autoclave facility.

5. Waste Management made arrangements with the Covanta Waste to Entergy incinerator in Brooks, Oregon, to process residual chemotherapy waste and pathological waste that are not allowed to be autoclaved, and that are segregated by customers in specially marked containers. In late 2010, Waste Management set up a partnership with a major medical device company to reuse plastics derived from recycling plastics from sharps containers and medical devices generated at medical facilities.

6. For processing, Waste Management also has two directly owned backup facilities for autoclaving the medical waste - Vernon, California and Reno, Nevada. The company also owns an incinerator in Texas as a backup for waste that is not permitted to be autoclaved.

7. As part of the permitting for Waste Management's new Seattle facility, the company prepared an Operations Plan that was the subject of review and comment by both the King County Health Department and the Department of Ecology. The Operations Plan comports with the regulations administered by the WUTC as well.

8. In March 2010, Waste Management obtained licenses for the collection vehicles from the King County Department of Public Health.

9. In terms of collection, Waste Management has for some time been collecting medical waste from cruise ships that dock in Seattle, along with other international waste that

SUMMIT LAW GROUP PLLC
315 FIFTH AVENUE SOUTH, SUITE 1000
SEATTLE, WASHINGTON 98104-2682
Telephone: (206) 676-7000
Fax: (206) 676-7001

must be treated. It also has been operating a sharps recycling program which encompasses a fully recycled option for medical sharps and the sharps containers. The process is a combination of treating the medical waste, grinding, reclaiming the plastics and metals, supplying the metals to a metal recycler and the plastic is pelletized and goes directly to a manufacturer to be made back into sharps containers. The program currently reclaims about 70-80% . This program is available as a part of an overall recycling program designed for healthcare facilities.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

DATED this 26th day of May, 2011, at _____, California.

_____

Jeff Norton

SUMMIT LAW GROUP PLLC
315 FIFTH AVENUE SOUTH, SUITE 1000
SEATTLE, WASHINGTON 98104-2682
Telephone: (206) 676-7000
Fax: (206) 676-7001

EXHIBIT 1

WM Healthcare Solutions, Inc. (WMHS)
Biomedical Waste Operating Plan

For

Waste Management of Washington, Inc.
Seattle Biomedical Waste Treatment Facility
149 SW Kenyon Street, Seattle, WA 98108

December, 2010

WASTE MANAGEMENT
Think Green.®

Biomedical Waste Operating Plan
Table of Contents

Executive Officer Endorsement Letter

WM Healthcare Solutions, Inc. (WMHS)
Biomedical Waste Operating Plan for

Waste Management of Washington, Inc.
Seattle Biomedical Waste Treatment Facility

Address: 149 SW Kenyon St.
Seattle, WA 98108

1. Waste Accepted

Seattle Biomedical Waste Treatment Facility (the Facility) accepts the following types of wastes for treatment and/or transfer:

a) Pathological and TraceChemotherapy:

- "Pathological waste" is waste human source biopsy materials, tissues, and anatomical parts that emanate from surgery, obstetrical procedures, and autopsy. "Pathological waste" does not include teeth, human corpses, remains, and anatomical parts that are intended for interment or cremation.
- "Cultures and stocks" are wastes infectious to humans and includes specimen cultures, cultures and stocks of etiologic agents, wastes from production of biologicals and serums, discarded live and attenuated vaccines, and laboratory waste that has come into contact with cultures and stocks of etiologic agents or blood specimens. Such waste includes but is not limited to culture dishes, blood
- Specimen tubes, and devices used to transfer, inoculate, and mix cultures.
- This waste includes animal waste exposed to pathogens and trace chemotherapy.

b) Medical Waste:

- "Human blood and blood products" is discarded waste human blood and blood components, and materials containing free-flowing blood and blood products.
- "Animal waste" is waste animal carcasses, body parts, and bedding of animals that are known to be infected with, or that have been inoculated with, human pathogenic microorganisms infectious to humans.

c) Sharps:

"Sharps waste" is all hypodermic needles, syringes with needles attached, IV tubing with needles attached, scalpel blades, and lancets that have been removed from the original sterile package.

d) Non-hazardous Pharmaceuticals:

- **"Non-hazardous Pharmaceuticals" are Non-RCRA only pharmaceuticals including controlled substances prescription drugs and over the counter (OTC) medications.**
- **Non-RCRA Pharmaceuticals exempted under the Conditional Exclusion.**

All accepted waste will be properly packaged and labeled for the facility. All waste accepted for the facility is in accordance with the Waste Acceptance Protocol (Appendix D). Waste material received at the facility not meeting the specified medical waste acceptance guidelines will be refrigerated and return to the customer. Customers, as part of the on-boarding, will get training and education. The Plant Manager contacts customers to interface on operational issues that arise from improper packaging, improper materials etc. All biomedical waste received at the facility will have a four part waste tracking document (Appendix B).

2. Sources of Waste:

Biomedical waste generators includes without limitation, the following: general acute care hospitals, skilled nursing facility or convalescent hospitals, intermediate care facilities, in-patient care facilities for the developmentally disabled, chronic dialysis clinics, community clinics, health maintenance organizations, surgical clinics, urgent care clinics, acute psychiatric hospitals, laboratories, medical buildings, physicians' offices and clinics, veterinary offices and clinics, dental offices and clinics, funeral homes, or other similar facilities.

Only biomedical wastes meeting the Facility's Waste Acceptance Protocol will be accepted.

3. Waste Transportation/Containment/Storage/Transfer/Treatment Operation:

The following matrix summarizes methods/procedures for Containment, Storage, Transfer, Treatment and Disposal for wastes accepted by the Facility:

THIS SECTION IS INTENTIONALLY LEFT BLANK

Waste Type	Containment	Storage	Treatment	Post-Treatment Waste Handling (Prior to Disposal)	Disposal
Pathological and Trace Chemotherapy	Sealed, leak-proof, labeled plastic bags or containers collected in Over-pack Containers provided by the Facility. Over-packs are: plastic reusable boxes/drums; cardboard boxes; or fiber drums.	Refrigerated trailer, until treatment. Collected waste is transported to the Facility and consolidated in the trailer. When full, the trailer is hauled to the treatment facility. Maximum Hold Time: 90 days.	Incineration	Residual waste from the incinerator is collected into bins. Full bins are loaded on a truck and hauled to the landfill	Landfill (Residuals)
Biomedical Waste(excluding Pathological, Chemotherapy, and Non-hazardous Pharmaceuticals)		Over-packs transported to the Facility that are not immediately loaded into the sterilizer are placed in the designated "Untreated BMW Storage Area" location identified on the Floor Plan (Figure 2). Maximum Hold Time:15 days (Unrefrigerated); 90 days (Refrigerated)	Steam Sterilization	Waste is hauled to Eastmont TS, comingled with MSW and compacted, then loaded into intermodal containers for rail transport to the landfill.	Landfill
Sharps	Sealed, rigid, puncture-proof, labeled containers collected in over-pack containers provided by the Facility. Over-packs are: Reusable plastic pails, bins, boxes or drums; or cardboard boxes or fiber drums.	Over-packs transported to the Facility that are not immediately loaded into the sterilizer are placed in a designated Pretreatment Holding Area. Maximum Hold Time:15 days (Unrefrigerated); 90 days (Refrigerated)	Steam Sterilization		Landfill

Waste Type	Containment	Storage	Treatment	Post-Treatment Waste Handling (Prior to Disposal)	Disposal
Non-hazardous Pharmaceuticals	Sealed, leak-proof, labeled containers.	Collected waste is transported to the Facility and consolidated in the trailer. When full, the trailer is hauled to the treatment facility. Maximum Hold Time: 90 days.	Incineration	Residual waste from the incinerator is collected into bins. Full bins are loaded on a truck and hauled to the landfill	Landfill (Residual)

The following paragraphs detail specific methods/procedures for the above elements.

a. Transportation: Waste will be transported to/from the site in approved registered vehicles owned and operated by the Facility.

Vehicles will be equipped with emergency spill kits containing spill mitigation supplies and clean up equipment. Drivers will be trained in emergency spill response procedures and Bloodborne Pathogens. All transported waste will be properly segregated and contained in leak-proof, rigid containers. Waste will be transported in accordance with local, state, and federal requirements.

In the event of a spill/leak, the vehicle will be decontaminated using an EPA approved disinfectant and the leaking container will be properly labeled and placed in a leak proof over-pack container.

The Facility will maintain a vehicle fleet with design/construction features that meet the following requirements:

1) Vehicles used to transport waste will be similar to a panel-side truck (or step van) having a fully enclosed, leak proof container or vehicle compartment;
2) Vehicle containers or compartments used to transport waste will be durable and easily cleanable;
3) Vehicles shall be identified on each side with the name or trademark of Waste Management; and
4) All vehicles will be properly licensed and permitted.

Additionally, the following operational requirements will be followed:

1) Vehicles shall be cleaned frequently on the wash pad directly next to the treatment building to prevent rodent/vector and odor nuisances;
2) All wastewater from vehicle cleaning shall be disposed of in a sanitary sewer system unless otherwise authorized;
3) Biomedical waste shall be delivered for treatment only to the treatment facility; and,
4) Surfaces of biomedical waste collection/transportation vehicles that have contacted spilled or leaked biomedical waste shall be decontaminated.

Incoming Pathological, Chemotherapy, and Non-hazardous Pharmaceutical biomedical waste transported to the Facility will be placed in a refrigerated storage trailer staged on site. When fully

loaded, trailers will be hauled to a permitted biomedical incinerator owned and operated by Waste Management (or other non-WM permitted incinerator) to treat this waste. The Facility will maintain a trailer fleet with design/construction features that meet the following requirements:

1) Trailer bodies to store/transport waste will be refrigerated, fully enclosed, and have leak proof container or vehicle compartment;
2) Trailer containers or compartments used to store/transport waste will be durable and easily cleanable;
3) Trailers shall be identified on each side with the name or trademark of Waste Management; and
4) All trailers (and cabs) will be properly licensed and permitted.

Additionally, the following operational requirements will be followed for trailers storing/hauling waste incineration-designated waste:

1) Trailers shall be cleaned frequently on the wash pad next to the treatment building to prevent rodent/vector and odor nuisances;
2) All wastewater from vehicle cleaning shall be disposed of in a sanitary sewer system unless otherwise authorized;
3) Biomedical waste shall not be transported in the same vehicle with other waste or medical specimens unless the biomedical waste is contained in a separate, fully enclosed leak proof container within the trailer compartment.
4) Biomedical waste shall be delivered for treatment only to the incineration treatment facility; and,
5) Surfaces of biomedical waste collection/transportation vehicles that have contacted spilled or leaked biomedical waste shall be decontaminated.

Transportation records documenting all hauling activity of biomedical waste to/from the Facility shall be kept for a period of at least three (3) years, and they shall be available to the health officer upon request.

All waste transported to the facility must be accompanied by an approved medical waste tracking document. An example of an approved medical waste tracking document can be found in Appendix B.

The tracking document will include the following information:

1. Name, address, registration number and telephone number of the waste hauler.

2. Type and quantity of medical waste transported.
3. Generator name, address, and phone number.
4. Name, address, and telephone number of the treatment facility.
5. Authorized signature from the treatment facility.
6. Dates the waste is collected or removed from the generator, dates the waste was deposited and accepted at the Facility.

Methods for Loading and Unloading Waste

Loading Untreated Waste: Only waste meeting the Facility Waste Acceptance Protocol will be loaded. Containers holding accepted waste will be transferred into the transport vehicle by hand, push cart, pallet-jack, or other means. Transport vehicles will have powered rear platforms (e.g., Tommy-Lift gate) to allow containers to be easily and safely elevated from pickup locations into the vehicle. Loaded containers will placed inside the vehicle in a secure manner so that contents cannot shift/fall during transport.

Unloading Untreated Waste: Loaded waste will be hauled to the Facility after pickup. Waste requiring incineration treatment (pathological, chemotherapy and non-hazardous pharmaceuticals) will be directly transferred from the transport vehicle into the refrigerated storage trailer at the Facility. All other loaded waste will be transferred from the transport vehicle into the Facility and either: 1) Put directly into a treatment unit (autoclave unit or grinder/processor unit for medical waste and sharps, respectively); or 2) Placed in the designated Untreated Medical Waste Storage Area until it can be loaded into the treatment unit.

Unloading Treated Waste: Waste treated in the autoclave will be directly transferred from the autoclave into an onsite compactor unit. When full, the compactor will be hauled to the transfer station to be emptied. Ground Sharps treated in the grinder-processor unit will either be: 1) Collected in a Gaylord box for recycling. [Filled boxes will be sealed and then put in a dedicated onsite storage trailer. When full, the trailer will transport the treated sharps material to a recycler]; or 2) Collected in a bin and dumped into the onsite compactor unit.

b. Containment: Biomedical waste, except for sharps, shall be contained in disposable leakproof plastic bags having a strength to prevent ripping, tearing, breaking or bursting under normal conditions of use. The plastic bags shall be appropriately marked by the generator as containing biomedical waste. The outside of each container must be marked with a water-resistant label displaying the

international biohazard symbol, or the words "Biomedical Waste" or other words that clearly denote the presence of biomedical waste. WM offers customers specially marked plastic bags to use for this purpose, or the generator can obtain appropriate bags from other sources.

The plastic bags shall be secured in over-pack containers to prevent leakage or expulsion during storage, handling and transport. Over-packs will be rigid and leak-proof, and may consist of: reusable plastic boxes, lined cardboard-fiber drums, metal or plastic bins, pails, and other containers designed to hold medical waste. Over-pack containers shall be conspicuously marked with a water-resistant label displaying the international biohazard symbol, or the words "Biomedical Waste" or other words that clearly denote the presence of biomedical waste. Secured contained waste will not be mixed with other materials, and access to it will be limited to personnel authorized by WM to handle it.

Reusable containers:
Reusable containers for biomedical waste storage, handling or transport shall be thoroughly washed and decontaminated with an EPA approved anti-microbial and disinfectant. Containers will be washed each time they are used unless they have been protected from contamination by disposable liners, bags or other devices. A Reusable Container Washing/Decon Procedure is contained in Appendix C.

When necessary, reusable containers will be washed at the Facility wash pad area with an EPA approved chemical disinfectant. The chemical concentration and contact time will be used as recommended by the manufacturer. Personnel will wear appropriate PPE including but not limited to safety glasses, gloves, gown or apron, etc. when rinsing contaminated containers to minimize exposure to chemicals and contaminants. The level of PPE will be determined by the level of exposure.

Employees are trained and follow the Reusable Container Washing/Decon Procedure. Rinse water will be disposed into the sanitary sewer system by Discharge Authorization issued to WM by King County Industrial Waste Program. MSDS's will be maintained for all chemicals used at the Facility.

Sharps shall be contained in leakproof, rigid, puncture resistant, break resistant containers which are labeled and tightly lidded during storage, handling and transport(The outside of each container must be marked with a water-resistant label displaying the

international biohazard symbol, or the words "Biomedical Waste" or other words that clearly denote the presence of biomedical waste. WM offers customers specially marked Sharps Containers to use for this purpose, or the generator can obtain appropriate containers from other sources.

Sharps containers shall be secured in over-pack containers to prevent leakage or expulsion during storage, handling and transport. Over-packs will be rigid and leak-proof, and may consist of: reusable plastic boxes, lined cardboard-fiber drums, metal or plastic bins, pails, and other containers designed to hold medical waste. Over-pack containers shall be conspicuously marked with a water-resistant label displaying the international biohazard symbol, or the words "Biomedical Waste" or other words that clearly denote the presence of biomedical waste. Reusable containers used to over-pack sharps containers will be washed and decontaminated as described above.

At the time of pickup, the driver will review the waste load to be picked up to determine if materials are adequately contained and marked. If the load (or portion of a load) is inadequately contained (or marked), the driver will notify the customer the load (or portion) is not acceptable. The customer can: 1) Immediately address noted deficiencies so that the inadequate load (or portion) can be accepted for transport; or 2) Retain the load, address noted deficiencies and reschedule a pick-up. In either case, the driver will note load conditions accordingly on the Medical Waste Tracking Document.

c. Storage: Waste will be stored on site for no more than 15 days, unless it is refrigerated below 32F (waste shall be stored in a non-putrescent state using refrigeration when necessary).

To track onsite waste storage time, dates are placed on containers upon pick-up. In addition, medical waste tracking documents are monitored to ensure that waste storage times do not exceed 15 days. If waste storage requires more than 15 days, the waste will be refrigerated below 32F. The maximum time that refrigerated waste will remain stored onsite is 90 days.

Pathological waste will be transferred directly from the transportation vehicle into a refrigerated unit (trailer or cooler) for storage until shipment to an incinerator for treatment.

The following table summarizes waste storage at the facility.

Storage Area	Location	For Storage Of	Maximum Storage Time Wastes will remain in the Storage Area
Untreated BMW Storage Area	Dedicated area inside the BMW Treatment Building	Untreated Biomedical Waste (excluding Pathological, Chemotherapy, and Non-hazardous Pharmaceuticals) and untreated Sharps.	15 days
Refrigerated Storage (below 32 degrees F) Container or box-truck (Dedicated)	Staged, Outside Treatment Building	Untreated Pathological, Chemotherapy, and Non-hazardous Pharmaceuticals	90 days
Refrigerated Storage Container (below 32 degrees F) or box truck (Dedicated, separate from the refrigerated container or box truck that is used to store BWM held for incineration treatment)	If needed, staged, Outside Treatment Building	Untreated Biomedical Waste (excluding Pathological, Chemotherapy, and Non-hazardous Pharmaceuticals) and untreated Sharps.	90 days
Treated Sharps Container	Staged, Outside Treatment Building	Treated Sharps	15 days, or until the container is full to haul

On site storage area(s) shall be kept locked and accessible only to authorized personnel at all times. The storage area shall be conspicuously marked with a sign twelve inches by twelve inches (12" x 12") with the words "Biomedical Waste" and the international biohazard symbol.

Storage of biomedical waste shall be in locked trailers or box trucks (outside) or within the treatment building (storage locations are identified on Figure 2; Treatment Facility Floor Plan (Appendix A). The storage area will be protected from animals, rain and wind; does not provide a breeding place or a food source for insects or rodents; and is accessible by authorized personnel. Personnel authorized to enter a storage area are the Facility Manager and technicians trained to manage and operate the treatment operations.

The storage area shall be constructed of finished, impermeable, cleanable materials and be easily maintained in a sanitary condition. Trailers and box trucks interior surfaces (walls, ceilings and floors) will typically be constructed of metal, plastic, fiberglass, or other solid-type surface. Building (interior) storage area surfaces will be constructed of concrete

(floors) and metal, plastic, fiberglass, or other solid-type surface (for side walls and ceiling). Exterior storage areas will be located adjacent to the Treatment Facility. Interior storage areas will be in designated area(s) adjacent to the autoclave. Storage locations are identified on Treatment Facility Floor Diagram (Appendix A).

A spill kit will be located at interior and exterior storage area sites (Spill kit locations are indicated on Figures 1 & 2; Appendix A). Spill kits will contain the following contents: Granulated absorbent material (e.g., floor-dry), plastic bags, shovel; broom, dust pan, liquid disinfectant and PPE (rubber gloves, face shield, and Tyvek suit (incl. booties).

Biomedical waste shall be segregated from other waste by separate containment from other waste at the point of origin. All biomedical waste and sharps will be secured and stored in over-packs, as described in paragraph (b) above. Accumulated untreated material needed to be stored for treatment at the Facility will be kept at a minimum by maximizing batch sizes to optimize treatment through-put efficiency. Treatment operations will be adjusted accordingly to effectively handle/process incoming untreated material.

d. Treatment: The site will utilize an autoclave, "Steam sterilization", by sterilizing biomedical waste with use of saturated steam within a pressure vessel at temperatures sufficient to kill all microbiological agents in the waste as determined by biological and chemical indicator monitoring requirements.

Biomedical waste as defined in Section 1 shall be treated prior to disposal by one or more of the following methods:

1. Cultures and stocks of etiologic agents and associated biologicals: steam sterilization,

2. Biomedical waste: steam sterilization

3. Sharps: steam sterilization and grinder unit,

4. Pathological waste: incineration, at the Waste Management incinerator or other contracted incinerator.

5. Human blood and body fluids: steam sterilization,

6. Wastes that have come into contact with human body fluids from patients diagnosed with pathogenic organisms: steam sterilization,

7. Animal waste exposed to pathogens in research: at the Waste Management incinerator or other contracted incinerator,

8. Wastes with trace chemotherapy: at the Waste Management incinerator or other contracted incinerator.

The steam sterilizer used at the Facility was manufactured by the Turbo Machine Company located in Lansdale, PA. In June, 2005 the unit was upgraded and enlarged by Chemithon Constructors of Seattle, WA to treat international waste at the Port of Seattle from planes and ships arriving from overseas. Alterations consisted of increasing the design capacity of the unit to handle 20 cubic yards of waste material per batch. Written Operating Procedures, performance information and details for the steam sterilizers are contained in Appendix G.

Material is loaded into the sterilizer through a large rear opening door. After loading, the sterilizer rear door is sealed shut and connected to an electric steam boiler for the actual sterilization process. The contents are then sterilized using steam by heating and holding the contents at or above 212F for a minimum of 30 minutes. A temperature record of each sterilizing cycle is created (paper-chart recording) and maintained in the Facility operating record file.

The sterilizer and boiler plant are permitted and registered with the City of Seattle. Operators are certified to run all equipment. Inspections and checks are performed daily on system equipment to ensure proper operation and detect any conditions requiring unscheduled maintenance or repairs. Routine maintenance is performed on the system.

Following is routine inspection/maintenance activities and schedule for the boiler and steam sterilizer:

1) Visually inspect boiler and autoclave; Inspect boiler water levels and check for water leaks; Check steam lines to sterilizer; Check sterilizer door seals; Sign boiler log-in sheet each day boiler is fired (Daily);
2) Blow down boiler; inspect boiler safety auto-shut down (Daily);
3) Disconnect UV sensor on boiler to cause auto shut-down feature (Weekly);
4) Check pH level of boiler water makeup tank (Weekly);
5) Inspect safety relief valves (Monthly);
6) Check boiler igniter probe (Monthly);
7) Pressure Vessel Inspection on Boiler and Sterilizer (Conducted by City of Seattle, Annually); and,

8) Facility & Truck Inspection Checklist (Monthly)

Untreated biomedical waste streams designated above for incinerator treatment will be transported in an approved vehicle by an approved/permitted hauler to either Waste Management's Resource Recovery & Recycling Center (WMRRC), located at 7505 State Highway 65, Chambers County, Anahuac, TX 77514 or another approved incinerator for treatment such as Convanta Marion, Inc., located at 4850 Brooklake Road, NE, Brooks, OR 97305.

WMRRC is the Southwest's largest incendiary unit serving large industries, government agencies, small business and individuals. This facility meets all federal, state and local permit requirements. Destruction services are performed efficiently and supervised carefully by highly trained technicians whose capabilities meet or exceed standards set by the American Society of Mechanical Engineers. WMRRC is permitted to treat the following types of biomedical wastes: Regulated Medical Waste (Bio-hazardous); DEA/Regulated Substances; Non-hazardous Pharmaceuticals; Non-hazardous Industrial Waste; Pathology Waste; Chemotherapy Waste (Trace Concentrations); and sharps.

4. Operation: Accepted waste is treated by one of two treatment operations, depending on waste type. Non-sharps waste will be treated by steam sterilization in the Facility autoclave unit; Sharps are steam-treated, and then ground into unrecognizable pieces in a self-contained processing unit. These operational treatment processes are described below in detail. Facility employees are required to wear designated PPE when performing work operations and activities. A PPE matrix is contained in Appendix F.

a. Steam Sterilization Treatment (for Non-Sharps): The Facility uses one steam sterilization for treatment. The autoclave will process approximately one ton of medical waste per hour of operation. A maximum of 16 tons per day of biomedical waste will be processed at the facility.

Approximately 92 to 95% of the waste is plastic, metal and paper materials. Approximately 5% to 8% are liquids with a density if 5 to 7 pounds per cubic foot.

The Facility does not accept for treatment RCRA hazardous materials, radioactive materials, universal wastes or other special wastes from healthcare facilities. Special wastes are solid wastes that require special handling and generally are collected, processed recycled and/or disposed of separately from other wastes. All containers

will be screened at the facility for radioactive materials. All customers will be informed of these restrictions.

Waste destined for steam sterilization treatment will be transferred either directly from the transportation vehicle to the autoclave for treatment, or be stored (as described in 3.c) for the next treatment cycle if the autoclave is in use. Once treated, the waste will be hauled to Waste Management Eastmont Transfer station (or other approved transfer facility), then compacted and transported to be disposed at the Waste Management Columbia Ridge Landfill & Recycling Center, a permitted solid waste landfill in Arlington, Oregon.

All waste will be processed using steam sterilization in the autoclave at a minimum temperature of 250°F and 32 psi for 30 minutes.

Verification of waste treatment will be documented from continuous monitoring of the internal temperature and recording pressure of the autoclave chamber to achieve and maintain the proper treatment temperature of 250°F and 32 psi for 30 minutes or longer, depending on the quantity and compaction of the load.

As a back-up heat-sensitive tape will be used for each load that is processed to indicate that the load has undergone the steam sterilization process. If the load has undergone proper steam sterilization, the indicator tape changes colors.

In addition, routine maintenance will be performed on all critical equipment in accordance with the manufacturers' specifications. Efficiency verification assessments will be performed every 40 hours of operation using the indicator organism Bacillus stearothermophilis.

Periodic test verification records will be maintained on site for review by health officials.

All thermometers used in the process will be calibrated annually.

Condensation from the autoclave will be discharged to the sanitary sewer system.

Any rinse wash from normal cleaning of the autoclave will be discharged into the sanitary sewer.

Waste material received at the facility not meeting the Waste Acceptance Protocol guidelines will be refrigerated and return to the customer.

b. Sharps Treatment: Sharps may be segregated as a part of a recycling program to recover the plastics that can be recycled but are treated via steam sterilization prior to recycling. If a generator chooses this recycling program the sharps containers are segregated in specific containers marked 'sharps only' and then processed through the Red Bag Solutions unit. For hospital and other healthcare providers who generate "sharps waste" and segregate these wastes from other waste material, WM will manage these materials through a separate process. The segregated "sharps waste" will be processed though a separate system that grinds the waste and utilizes steam pressure and superheated water to treat the waste and render it unrecognizable. At the end of each cycle the ground sharps will be discharged into a container. Full containers will be shipped for recycling or hauled to Waste Management Eastmont Transfer station, then compacted and transported to be disposed at the Waste Management Columbia Ridge Landfill & Recycling Center, a permitted solid waste landfill in Arlington, Oregon.

The sharps processing unit equipment described above utilizes patented technology to treat and grind material with a proprietary cutting system. It is manufactured by Red Bag Solutions. The unit measures approximately 9.5 feet in length by 7.25 feet high by 4 feet wide and weighs approximately 3,500 pounds. An accompanying filter-separator, utilized to de-water the processed solids, measures 3 feet by 2 feet and weighs an additional 350 pounds. By exposing sharps waste to superheated water and steam (272°F / 133°C) and simultaneously employing a proprietary cutting system, the unit renders infectious medical waste non-infectious, non-hazardous, and non-recognizable. Sharps processed through the unit can be disposed as ordinary solid waste. A temperature and time record is recorded by the unit for each processed batch to document treatment performance. Manufacturer information for the sharps processor unit is contained in Appendix H.

Condensation from the sterilizer-grinder unit will be discharged to the sanitary sewer system.

c. Audit Procedures for Critical Equipment Used to Process/Treat Biomedical Waste and Sharps: Routine maintenance will be performed on all critical equipment in accordance with the manufacturers' specifications. All thermometers used in the process will be calibrated annually. Maintenance documentation will be retained for a period of at least three (3) years in the Facility Operating Records File (FORF), and shall be available to the health officer upon request.

Efficiency verification assessments for treatment used to treat biomedical waste and sharps will be performed every 40 hours of operation using the indicator organism Bacillus stearothermophilis. As a back up heat-sensitive tape will be used for each load that is processed to indicate that the load has undergone the steam sterilization process. Audit documentation will be retained for a period of at least three (3) years in the FORF, and shall be available to the health officer upon request.

5. Contingency Plan and Emergency Procedures
In the event of an emergency such as fire, spill, or explosion the operator should contact the following agencies:

- **Public Health Seattle and King County - 206-263-8495**
- **Department of Ecology - 425-649-7000**

In addition to the information in this section, emergency procedures and information is contained in the Facility Emergency Action Plan located in Appendix I.

a. Back-up Facilities: Following is a matrix identifying alternate treatment, transfer and disposal back-up facilities that will be utilized in the event that primary facilities identified below become inoperable, unreachable or unavailable and cannot be used within an appropriate amount of time.

		Primary	Back-up for Primary
Treatment	Medical Waste Not Requiring Incinerator Treatment	Seattle BMW Treatment Facility 149 SW Kenyon St. Seattle, WA 98108 Solid Waste Permit: PR0080378	WM Refuse Inc. Medical Waste 1390 E. Commercial Row Reno, NV 89512 Solid Waste Permit: WM940004
	Medical Waste Requiring Incinerator Treatment	WM Resource Recovery & Recycling Center 7505 State Highway 65 Anahuac, TX 77514 Solid Waste Permit: 2239A	Covanta Marion, Inc. 4850 Brooklake Road, NE Brooks, OR 97305 Solid Waste Permit:#364

Transfer	WM- Eastmont Transfer Station 7201 W. Marginal Way Seattle, WA 98106 Solid Waste Permit: PR0015734	King County Bow Lake Transfer Station 18800 Orillia Rd. S Tukwila, WA 98188 Solid Waste Permit: PR0015729
Treated Medical Waste (Solid Waste) Disposal	WM Columbia Ridge Landfill & Recycling Center 18177 Cedar Springs Lane Arlington, OR 97812 Solid Waste Permit: #1472	WM Greater Wenatchee Landfill, 191 Webb Road East Wenatchee, WA 98802 Solid Waste Permit: Combined Operating Permit for Municipal Solid Waste Landfilling and Solid Waste Handling Facility Air Operating Permit: 04AQ-C007

b. Fire Procedures

1) Small fires will be contained with the use of a small fire extinguisher.

2) Stop any operating equipment immediately.

3) De-energize electricity to the equipment at the main breaker.

4) If the fire cannot be control sound the building alarms, evacuate and call 911.

5) Consider any damaged containers as untreated and prepare for processing.

c. Spill Response: All spills and/or biological events occurring during transport, processing or treatment will be assessed by internal staff to determine if outside resources are required for cleanup purposes. Trained internal staff will respond to spills of less than 200 gallons. Spills exceeding this threshold will require external response. For these events, WM will contact a certified third-party spill responder to provide necessary cleanup.

In the event of a spill/leak, the vehicle will be decontaminated using an EPA approved disinfectant and the leaking container will be properly labeled and placed in a leak proof over-pack.

A spill kit will be located at interior and exterior storage area sites (Spill kit locations are indicated on Figures 1 and 2; Appendix A). Spill kits will contain the following contents: Granulated absorbent material (e.g., floor-dry), plastic bags, shovel; broom, dust pan, liquid disinfectant and PPE (rubber gloves, face shield, and Tyvek suit (incl. booties).

1. Liquid Spill Procedures

1) Immediately cover the spill with an absorbent material.

2) Use only a registered EPA anti-bacterial disinfectant for clean up of biomedical liquid spills.

3) Wear appropriate personal protective equipment, disposable gloves, gown, eye protection and shoe covers if necessary.

4) Clean up materials should be processed in the autoclave.

5) Any clean up wash water will be discharged to the sanitary sewer drain.

2. Dry Spill Procedures

1) Wear appropriate personal protective equipment, disposable gloves, gown, eyewear and shoe covers as necessary.

2) Immediately repackage the material in appropriate container for processing.

3) The old container should be treated immediately.

4) Any wash water should be discharged to the sanitary sewer drain.

d. Explosion

1) Explosive material is not accepted for treatment.

2) Any explosion will be treated as an emergency, notify 911 and sound the building alarm.

3) Electrical service should be de-energized.

e. Equipment Failure

1) If there is an equipment failure, material in the autoclave will remain and the steam cycle will be repeated. If the steam cycle cannot be repeated the material will be removed from the autoclave and repackaged as biomedical waste for transport to a back up facility.

2) Any wash water used will be discharged to the sanitary sewer drain.

f. Spill Containment Equipment

1) Commercial biomedical waste spill kits containing approved personal protective equipment, liquid absorbent, and disinfectant.

2) Only EPA approved anti-microbial disinfectants maybe used to clean up spills.

3) Grease and other lubricants will be cleaned with dry clean.

4) Wash water will be discharged to the sanitary sewer.

6. Supervision and Staffing

1) Supervision of the biomedical waste operation will be under personnel trained in the operation of the facility.

2) Number of staff will be dependent on the operation. However, there will be at least one supervisor and a plant worker on site during any operating times. Following is a list of key personnel and their areas of responsibility:

Title	Responsibility	Phone Number
Administrator	Coordination of facility activities, BMP implementation, training, monitoring, facility inspection, and reporting	206.505.9163
Plant Manager	Coordinates Facility operations; schedules work activities; Provides training/education to workers/customers on Facility	TBD

Title	Responsibility	Phone Number
	biomedical waste operations and acceptance requirements; Interfaces with Customers on operational issues that arise from improper packaging, improper materials etc.	
Plant Lead	Operates treatment equipment at Facility; directs Plant Worker job duties	TBD
Plant Worker	Performs maintenance, storage and disposal of maintenance supplies, spill prevention and response, and program support; Operates treatment equipment at Facility.	TBD
Driver	Collects and hauls untreated biomedical waste to Facility; hauls treated biomedical waste to transfer station.	TBD
Environmental Manager	Provides support to the Facility operations for regulatory compliance matters; Leads permitting activities and coordinates regulatory reporting activities.	360.801.5239

3) All Facility employees are required to participate in a new employee medical surveillance program. All employees will have annual medical surveillance evaluations.

7. Training Program

Training will be administered in accordance with the site specific Training Matrix (See Appendix E). Each employee involved in the operations at the facility will be required to undergo a minimum of 32 hours of training. Training will be administered initially and annually thereafter as required by the applicable local, state, and federal regulations as well as internal corporate requirements. Driver certification is required and will be maintained in accordance with DOT regulations. Training records will be maintained at the facility for three years.

Biomedical Waste Treatment Operations personnel receive comprehensive training covering safety and this Operation Plan. Training is mandatory for new employees before starting duties, then annually thereafter for Blood-Borne Pathogen and PPE. DOT training is done once every two years. Training topics covered include: Blood-borne Pathogens/Facility Exposure Control Plan, Hazard Communication, Waste Acceptance, DOT requirements, Emergency Management and Housekeeping Practices.

All personnel on site will be trained. Training includes processing and mechanical operations, emergency preparedness, safety training and OSHA compliance, injury prevention, personal protective equipment, bloodborne pathogens.

All employees will have annual refresher training and annual medical surveillance evaluations.

At a minimum there will be monthly safety meetings for all staff.

8. Recordkeeping:

All record will be maintained on site for a minimum of three years unless otherwise required by law.

This Biomedical waste management plan will be reviewed annually and is available for inspection at the request of the health officer.