



Regulated Medical  
Waste Service



# Considerations for Using On-Site Treatment of Regulated Medical Waste

WHITE PAPER

We protect what matters.



# Introduction

Generators of medical waste are responsible for packaging and labeling regulated medical waste (RMW) for transport and disposal. RMW includes waste generated in the diagnosis, treatment, or immunization of human beings or animals. RMW is also known as biohazardous waste or infectious waste, which is contaminated by blood, body fluids or other potentially infectious materials or other infectious agents which also includes sharps waste, such as contaminated needles and syringes. Some healthcare facilities choose to treat their RMW on-site and this white paper provides guidance and practical tips to help your organization determine if using a contracted RMW disposal provider, or on-site treatment of RMW is right for you.

## Complex, Changing Regulatory Requirements

Healthcare facility leaders must comply with ever-increasing federal, state and local requirements for managing medical waste from various regulatory and accrediting authorities to avoid fines and potential damage to their reputations. This requires the constant monitoring of all regulatory agencies and when necessary, updating procedures, processes and standards of work which can be an extremely time-consuming activity for staff.

Without the help of a qualified partner with extensive experience in RMW management, your facility must anticipate changes that could impact your hospital and understand the nuances of compliance issues to help your facility be prepared for inspections and audits. When your treated medical waste goes to a local landfill, it will be essential that all regulatory requirements are met in order to avoid sending improperly treated waste to a landfill and incurring rejection or possible fines.

## Ongoing Maintenance & Compliance Management

Operating on-site treatment technology creates additional responsibilities for staff that can be time consuming as well. These responsibilities may include:

- Maintaining standard written operating procedures, including but not limited to, time, temperature, pressure, type of waste, pattern of loading, water content and maximum load quantity
- Obtain appropriate operating permits
- Ensure proper treatment of the waste
- Keep record of temperature & monitor thermometers during each complete cycle to ensure the attainment of a minimum temperature and length of treatment time has been reached. This ensures that disinfection of the entire load has been achieved.
- Calibrate thermometers at a minimum annually
- Perform spore testing (usually monthly)
- Maintenance and records of the above procedures for at least three (3) years
- Manage on-site inspections
- Treat the waste through multiple treatment cycles per day

Staff will need to be trained (and retrained for turnover) on how to operate and maintain the unit. You will also need to have procedures and storage plans in the event your on-site treatment technology breaks down.



# Minimizing Risk

It's important to remember that your hospital has responsibility for medical waste until it is treated and eventually disposed of, whether in a landfill or incinerated. A RMW disposal provider can guide you through this process and can help minimize risk and impact on the environment. Some RMW disposal partners have sustainability initiatives that reduce waste going to landfills. For example, some providers send the treated medical waste to a Waste to Energy facility where it produces electricity and/or heat directly through combustion, or produces a combustible fuel commodity, such as methane, methanol, ethanol or synthetic fuels.

Additionally, staff should understand that unused pharmaceuticals, bulk or trace chemotherapy waste and pathological waste are to be separated from red bag waste for proper treatment, such as incineration (required in some states) to avoid entry of additional chemicals into waterways.



**If you partner with a disposal provider who understands applicable regulations, they can offer a full range of services to help your organization comply with applicable regulatory requirements.**

Considerations also need to be given for employee health and safety. If on-site treatment technology is used, staff may be exposed: to an increase in needle stick injuries from handling the waste pre and post treatment, steam burns, chemical exposure, back injuries, etc. Down time, workman's compensation and poor morale are all potential consequences.

## Investment & Ongoing Management Costs

Obtaining on-site treatment technology can require substantial capital investments and long-term costs to maintain the equipment. Monthly utility costs must also be taken into consideration to run the technology. Proper autoclave treatment requires high heat for up to 1 hour each treatment cycle. Maintaining high heat and pressure to properly kill blood borne pathogens requires a substantial amount of utilities, specifically natural gas and water. It is not unusual for a hospital's gas costs to be well over \$3,000 per month to operate their on-site treatment unit.

Treating medical waste through steam sterilization can result in an unpleasant odor that is noticed by both patients and staff. Masking this odor can be challenging and expensive.

## Final Word

Balancing the pros and cons of having a third party contractor, or on-site treatment of your RMW is a decision that shouldn't be taken lightly. We hope this white paper encourages you to consider all the factors that affect this decision and will lead you to make the right choice for treating your RMW.

