



Medical waste includes wastes generated in a health care setting in the diagnosis, treatment, immunization, or care of humans or animals; generated in autopsy or necropsy; generated during preparation of a body for cremation or interment; generated in research pertaining to the production or testing of microbiologicals; generated in research using human or animal pathogens; or related to accident, suicide, or other physical trauma. “Health care setting” is used in a broad context and does not necessarily mean that these wastes are generated in a medical facility or clinic. Wastes presumed to be medical waste include certain radioactive wastes, blood and body fluids, potentially infectious waste, pathological waste, non-RCRA Subtitle C (hazardous waste) waste pharmaceuticals and vaccines, sharps, trauma scene waste, and any additional waste determined to pose a sufficient risk of infectiousness as established by the Colorado Department of Public Health and Environment (the Department) on a case-by-case basis. It also includes any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill or release of medical waste. Medical waste does not include wastes generated from routine facility maintenance or cleaning activities not involving a spill or release of medical waste or medical waste generated in the home.

### **What is a Medical Waste Generator?**

A medical waste generator is a person whose act or process produces medical waste. When used in this context, “person” includes an individual, partnership, private or municipal corporation, firm, board of metropolitan district or other sanitation district, or other association of persons. Medical waste generators include hospitals, clinics (such as medical, dental, and veterinary), surgery centers, dialysis centers, blood banks, long term care facilities, hospices, funeral homes, laboratories (such as clinical, diagnostic, pathological, veterinary, and biomedical research), pharmacies, body art establishments<sup>1</sup>, acupuncture facilities, trauma scene cleanup sites, facilities holding shot clinics or health fairs, and pet shops. Although the majority of medical waste is generated at health care facilities, wastes meeting one or more of the medical waste category descriptions can be generated at other types of facilities. “Facility” is used in a broad context and does not necessarily mean that these wastes are generated in a hospital or clinic.

As a medical waste generator you are responsible for the proper management and disposal of medical waste that is generated at your facility. You must identify the types and categories of medical waste, where in your facility medical waste is generated, properly contain, label, store, and package medical waste, and ensure that medical waste is properly treated and disposed. You must also determine if the waste is subject to other regulatory requirements. This information must be included in your on-site medical waste management plan.

#### *Exemption*

Household medical waste is exempt from the requirements outlined in this guidance. Due to the potential risks associated with handling household medical waste, separate guidance has been

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<sup>1</sup> “Body art establishment” means any location, whether temporary or permanent, where the practice of physical body adornment by establishments or artists utilizing, but not limited to, the techniques of body piercing, tattooing, branding, sculpting, and scarification are performed (6 CCR 1010-22 Rules and Regulations for Body Art Establishments).

developed to establish best management practices. Information regarding household medical waste management is available at [www.cdphe.state.co.us/hm/medicalwaste](http://www.cdphe.state.co.us/hm/medicalwaste).

## **Segregation, Containment, Labeling, and Storage**

### *Segregation*

Identification and segregation of medical waste from other wastes at the point of generation ensures that only those wastes that need special treatment, handling, and disposal receive it. Waste that is properly segregated at the point of generation can reduce worker exposure and may result in a cost savings for your facility as less waste is treated or disposed of as medical waste. Due to workplace safety considerations, once ordinary solid waste and medical waste have been mixed they cannot be separated. Additional information regarding medical waste identification is available in the “Medical Waste Identification Compliance Bulletin” available from the Department’s website.

In general, medical wastes should be segregated by the type of treatment and disposal appropriate for the waste. If wastes destined for different types of treatment are placed in similar types of bags or containers (e.g., color coded bags or containers), you should have a system in place to identify the planned type of treatment and what is allowable in each bag or container. Bags and containers used to contain medical waste must meet applicable United States Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standards, 29 CFR 1910.1030 and/or United States Department of Transportation (US DOT) Division 6.2 Infectious Substances (49 CFR Parts 171-180) containment and labeling requirements.

- Blood and body fluids and some semi-solid pathological waste - If it is deemed acceptable by your domestic wastewater treatment facility, blood and body fluids and some semi-solid pathological wastes may be discharged into a sanitary sewer system that provides secondary treatment or into a primary treatment sewage system. Facilities that are on individual sewage disposal systems (septic tanks) should not dispose of this type of waste in this manner. If not immediately disposed of down the drain to be treated at a domestic wastewater treatment facility, place containerized blood or body fluids into a designated bag or container for proper disposal or treatment to render the medical waste non-infectious.
- Potentially infectious waste including trauma scene waste – Place into a designated bag or container for proper treatment to render the medical waste non-infectious.
- Pathological waste consisting of recognizable human body parts or limbs – Place into a designated bag or container for cremation, interment, or incineration of the remains.
- Other pathological waste – Place into a designated bag or container for proper treatment to render the medical waste non-infectious.
- Radioactive medical waste – Place into a designated bag or container suitable for the medical waste type and that meets the provisions of Part 4 of the Rules and Regulations Pertaining to Radiation Control 6 CCR 1007-1 for decay-in-storage or for disposal as radioactive waste at a radioactive waste disposal facility.
- Sharps – Place in a designated sharps container for proper treatment to render the medical waste non-infectious.
- Trace chemotherapy waste – Place in a designated bag or container for disposal by incineration.
- Waste pharmaceuticals – Medical waste generators must evaluate each pharmaceutical that has expired or is otherwise wasted to determine whether it is regulated as a hazardous waste, a controlled substance, or a solid waste. Hazardous waste pharmaceuticals have specified management and disposal requirements under Colorado’s Hazardous Waste Regulations (6 CCR 1007-3). Waste pharmaceuticals that contain controlled substances are regulated by the United States Drug Enforcement Administration (DEA) and have specific requirements under

the Controlled Substances Act (Title 21 Chapter 13 Subchapter I Part B (USC)). Waste pharmaceuticals that are not regulated as controlled substances or hazardous wastes are regulated as solid waste under Colorado's solid waste regulations (6 CCR 1007-2).

Segregate United States Drug Enforcement Administration (US DEA) controlled substances from non-US DEA controlled substances. Place US DEA controlled substances in a designated container for proper disposal under 21 CFR 1307.21. Segregate hazardous waste pharmaceuticals from non-hazardous waste pharmaceuticals. Place hazardous waste pharmaceuticals in a designated container for management and disposal as hazardous waste. Place non-hazardous waste pharmaceuticals in a designated container to send to a reverse distributor or mail-back service for proper disposal, send for disposal by incineration, or send to a solid waste landfill specifically approved to accept it.

Note that some facilities may choose not to segregate their waste pharmaceuticals. In that case, all of the co-mingled waste pharmaceuticals must be managed under the stricter regulatory program requirements. If, for example, you co-mingle your hazardous waste pharmaceuticals with your non-hazardous waste pharmaceuticals, then all of the waste pharmaceuticals must be managed as hazardous waste. You may save money on upfront training and on-site waste management costs, but you will likely spend more on disposal costs.

A variety of methods can be used to ensure medical waste is properly segregated. Your staff should be provided with hands on training on how to segregate medical waste that is generated at your facility and examples of the types of waste that should not be included in the medical waste stream (e.g., hazardous waste, ordinary solid waste such as office waste, food waste, wrappers and containers, and personal protective equipment that are not contaminated with a transmissible infectious agent potentially capable of causing disease or injury). Strategically placing medical waste receptacles in only those areas of your facility where a specific medical waste stream is generated can assist in reducing the amount of ordinary solid waste being placed in medical waste receptacles. Also, the use of posters and signage indicating what waste is appropriate or inappropriate to place in a medical waste receptacle will help staff with the correct placement of medical waste.

#### *Containment and Labeling of Medical Waste Not Regulated Under OSHA's Bloodborne Pathogens Standard – Trace Chemotherapy Waste and Non-Hazardous Waste Pharmaceuticals*

Trace chemotherapy waste and non-hazardous waste pharmaceuticals should be stored in bags and containers that have sufficient strength to contain the waste and prevent leakage. The bag or container should be labeled with information regarding the contents (e.g. "Trace Chemotherapy Waste" or "Non-hazardous Pharmaceutical Waste"). Bags or containers holding medical waste requiring incineration (e.g. trace chemotherapy waste) should also be labeled with this information (e.g., "Incineration Only" or "Incineration Waste"). To prevent the release of contents, the bag or container should be closed when full or after it is done accepting waste. Non-hazardous waste pharmaceutical containers should have some type of locking mechanism or be stored in a secured area to prevent unauthorized access.

Other federal requirements may apply to trace chemotherapy waste and non-hazardous waste pharmaceuticals, such as:

- OSHA's Hazard Communication Standard (29 CFR 1910.1200) for wastes that may present a health hazard to employees.
- US DEA requirements for non-hazardous waste pharmaceuticals that are controlled substances (21 CFR Parts 1300 – 1399).

## *Containment and Labeling of Medical Waste Regulated Under OSHA's Bloodborne Pathogens Standard – Blood and Body Fluids, Potentially Infectious Waste, Pathological Waste, and Sharps*

### Containment

Medical waste that is regulated under OSHA's Bloodborne Pathogen Standard must be appropriately contained and properly labeled in accordance with 29 CFR 1910.1030. These wastes must be stored in bags or containers that are designed to store the type of medical waste put into it. Bags used to contain medical waste generated at your facility must prevent leakage and have sufficient strength to prevent ripping, tearing, or bursting under normal conditions of use and handling. Bags must be tied off or taped closed when full or done accepting medical waste. During waste generation and storage, bags should be provided with secondary containment to prevent tipping or release of bag contents. Secondary containment is required if the outside of the storage bag is contaminated or if the waste material in the storage bag could puncture the bag. Secondary containment should consist of a disposable or reusable rigid or semi-rigid container that prevents leakage and can be closed after waste has been added to the bag. Reusable secondary containment containers should be cleaned and disinfected after each use. Glass containers should not be used as medical waste storage containers.

Sharps waste must be accumulated, stored and disposed of in a container that is rigid, leakproof, puncture resistant and closable, consistent with the requirements under OSHA's Bloodborne Pathogens Standard. It is recommended that sharps containers manufactured for the sole purpose of sharps containment be used. Sharps containers must to be located in areas where sharps waste is generated. To prevent needlestick injuries, containers must never be completely filled or filled past the full line indicated on the sharps container (usually two-thirds to three-fourths full). Sharps containers must be taped closed or tightly lidded when they are no longer in use and ready for disposal.

Radioactive medical waste that will decay-in-storage must be contained in a proper container suitable for the medical waste type, labeled with the biohazard label, and meet Colorado Rules and Regulations Pertaining to Radiation Control 6 CCR 1007-1 Part 4 requirements.

### Labeling

Bags and containers of potentially infectious waste, blood and body fluids, pathological waste, and sharps waste must be labeled in accordance with OSHA's Bloodborne Pathogens Standard. The label must contain the word "Biohazard" and the universal biohazard symbol and the label should be legible and in good condition. The background of the label must be fluorescent orange or orange-red and the universal biohazard symbol and "Biohazard" lettering must be of a contrasting color. Secondary containment containers must also be properly labeled. Although OSHA allows the use of red bags or containers to be used as a substitute for the use of a biohazard label, the Department strongly suggests labeling this type of bag or container with the word "Biohazard" or with the contents of the bag or container (e.g., "Sharps Waste") and the universal biohazard symbol.

### *On-Site Storage of Medical Waste*

Medical waste generators are allowed to temporarily accumulate and store their own medical waste for on-site treatment or shipment off-site to a commercial medical waste treatment or disposal facility without obtaining a Certificate of Designation (permit) from the local governing body having jurisdiction if they meet certain time and container requirements.

### Storage Area

All medical waste must be maintained and stored in a way that will not produce nuisance conditions. An area in your facility should be designated for the storage of medical waste while it is waiting for on-site or off-site treatment and disposal. Medical waste should not be stored in the area where

generated once the bag or container is full or is removed from service for any reason. The storage period begins when the bag, container, or sharps container is full, has been tied off, closed or sealed, and/or is no longer being used to collect medical waste. The waste should be moved to the designated medical waste storage area or treated on-site generally within 24 hours of being taken out of service.

The designated medical waste storage area can be located inside or outside, but the storage area should comply with the following:

- The storage area should be a secured, enclosed structure or storage unit that is inaccessible to animals and unauthorized personnel. Inside storage areas may require ventilation if nuisance conditions arise.
- The storage area should be constructed with smooth, easily cleanable non-porous materials that are impervious to liquids and resistant to corrosion by disinfection agents and hot water. Floors should have adequate drainage and be free of standing water. Carpet and floor coverings that have cracks or gaps should not be used in the storage area.
- The storage area should be secured to prevent unauthorized access. Warning signs, on or adjacent to the exterior door(s), should be marked with the international biohazard symbol (if the medical waste is subject to OSHA's Bloodborne Pathogens Standard) and the words "Caution – Medical Waste Storage Area – Unauthorized Persons Keep Out." Signs should be legible with lettering at least 2 inches tall.
- Medical supplies and substances for human consumption should not be kept in the storage area.

#### Storage Area Time Limits

Putrescible medical waste includes blood and body fluids, pathological waste, and any other type of medical waste that contains organic matter capable of decomposing and attracting insects or rodents or causing nuisance conditions like odors. Putrescible medical waste that is not refrigerated, frozen, or treated on-site may be stored on-site for no more than 30 days as long as the waste is packaged to meet all OSHA and US DOT requirements prior to being placed in storage. If packaged waste is discovered to be leaking, it must immediately be overpacked in a new container that meets OSHA and US DOT requirements. Medical waste that is packaged to meet all OSHA and US DOT requirements and is kept refrigerated (45°F degrees or less) or frozen may be stored on-site for no more than 90 days. Refrigeration and freezer units may range in size from household-type to commercial walk-in units, depending on the amount of medical waste generated and stored on-site.

On-site storage of non-putrescible medical waste, including sealed sharps containers, sealed non-hazardous waste pharmaceutical containers, and trace chemotherapy waste, may not exceed 90 days. These wastes must be packaged in containers that are taken out of service, are in good condition and secured to prevent unauthorized access.

Medical waste that causes nuisance conditions should be immediately refrigerated, frozen or treated on-site, or transported off-site for treatment and disposal. For transport off-site, "immediately" is interpreted to be within 48 hours. You should address alternative waste handling provisions for medical wastes causing nuisance conditions in your medical waste management plan.

Your facility should use some type of tracking mechanism to keep track of the type and amount of medical waste generated and stored. This could include retaining medical waste manifests or shipping papers, maintaining a tracking log, or placing a tag or sticker directly on each medical waste bag or container with the date the medical waste bag or container was tied off, closed, or sealed and removed from service.

## Treatment and Disposal

### *Packaging Medical Waste, Including Trace Chemotherapy and Non-hazardous Waste Pharmaceuticals, for Off-site Transport*

Medical waste that will be transported off-site for treatment and disposal must meet United States Department of Transportation (US DOT) requirements (49 CFR Parts 171-180) applicable to the waste type. Medical waste generators who prepare and offer medical waste for shipment must comply with US DOT packaging, marking, labeling, placarding, shipping paper, security plan, and training requirements. Non-hazardous waste pharmaceuticals that are US DEA controlled substances must also meet US DEA requirements (21 CFR Parts 1300 – 1399).

Generators of medical waste that utilize medical waste mail-back services must ensure that the medical waste is packaged according to United States Postal Service (USPS) requirements. Since the mail-back service must be specifically authorized by the USPS to mail medical waste and sharps medical waste, they should provide the appropriate receptacles, packaging, labeling and marking materials, and documentation to mail the package. You must ensure that you follow all of the directions provided by the mail-back service provider. *Additional information regarding transport of medical waste is available in the Medical Waste Transporters Compliance Bulletin ([www.cdphe.state.co.us/hm/mwtransport.pdf](http://www.cdphe.state.co.us/hm/mwtransport.pdf)).*

### *On-Site Treatment and Disposal of Infectious Waste*

You can elect to treat your infectious medical wastes yourself to render the waste noninfectious without having to obtain a Certificate of Designation, or send the waste offsite to an approved commercial medical waste treatment facility. The Department does not pre-approve or recommend treatment methods, but instead leaves it up to you to determine what is the most appropriate and effective treatment method for your medical waste.

If treating your waste on-site, you are responsible for demonstrating the treatment technology's effectiveness through testing and use of biological indicators and/or parametric monitoring to confirm that the medical waste has been treated appropriately. Infectious wastes must be treated to achieve a level of at least a 6 Log<sub>10</sub> reduction (i.e., a 99.9999% reduction) in the concentration of the biological indicator *Mycobacterium phlei* or *Mycobacterium bovis* AND a 4 Log<sub>10</sub> reduction (i.e., a 99.99% reduction) in the level of biological indicator *Bacillus stearothermophilus*, *Bacillus subtilis* or *Bacillus atrophaeus* endospores. Some treatment technologies may combine different methods or may include grinding or shredding of the waste to improve treatment efficiency, but in all cases the treated waste must be rendered non-infectious.

Generators conducting on-site treatment of their infectious waste must have written standard operating procedures for implementation of the method, written verification testing procedures including the use of biological indicators and/or parametric monitoring to confirm that an acceptable level of biological inactivation is achieved, an operator training plan, an emergency response plan, a contingency plan for spills or loss of containment, and provisions for alternative waste handling and treatment in the event of equipment breakdown. This information must be included in your medical waste management plan. You must also maintain written operating records including the type and quantity of waste treated and maintenance records appropriate for the type of technology used.

The most common on-site medical waste treatment method is steam disinfection (autoclave). Although rare, generators can incinerate their medical waste provided the facility has the proper permits (e.g., solid waste, air pollution). Other medical waste treatment methods include chemical disinfection, thermal inactivation, irradiation, and gas/vapor sterilization. These treatment techniques

may require licensing or permitting from other regulatory programs including, but not limited to, the Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division Radiation Control Program, Air Pollution Control Division, Water Quality Control Division, and local governmental agencies. Encapsulation, solidification, and/or compaction of medical waste, including sharps waste, without rendering the waste non-infectious are not adequate forms of treatment for infectious wastes.

Medical waste that has been treated to achieve an acceptable level of biological inactivation is considered to have been rendered non-infectious and may be discharged into the sanitary sewer system or disposed of with other non-infectious solid wastes, as appropriate. Sewer disposal may require that you obtain approval from your wastewater treatment facility or the pretreatment authority in charge of your wastewater discharge prior to disposing of fluids or waste to the sewer. Pretreatment (e.g., disinfection or sterilization) may also be required. If you are on an individual sewage disposal system (septic tank), you should not dispose of waste in this manner.

Treated medical waste that is sent to a solid waste disposal facility must be clearly identified as treated medical waste, or you must provide written notice to your solid waste transporter and disposal facility that your ordinary solid waste also includes treated medical waste. Your operating and monitoring records can often be used to document to the sewer authority, transporter and/or disposal facility that your medical waste has been successfully rendered non-infectious.

Untreated medical waste from non-household sources may not be disposed of in a solid waste disposal facility unless the disposal facility has an approved Engineering Design and Operations plan that specifically allows these wastes. Contact the Department at [comments.hmwmd@state.co.us](mailto:comments.hmwmd@state.co.us) if you have questions regarding approved disposal facilities for untreated medical waste.

Medical waste consisting of recognizable human anatomical remains must be disposed of by interment, cremation, incineration or other method consistent with the Mortuary Science Code (Title 12 Article 54 Parts 1 – 4), or by acceptance by a representative of the State Anatomical Board (5 CCR 1006-1).

#### *Treatment and Disposal of Waste Pharmaceuticals and Trace Chemotherapy Waste*

Waste pharmaceuticals regulated as controlled substances must be disposed of per DEA regulations (21 CFR 1307.21) or may be sent to a reverse distributor as long as the reverse distributor is a DEA registrant (21 CFR 1307.11). The Department considers hazardous waste pharmaceuticals that are returned to a reverse distributor to be a waste and not a commodity. Therefore, pharmaceuticals that meet the definition of hazardous waste must be managed as a hazardous waste and generally cannot be returned to a reverse distributor. In cases where a waste pharmaceutical meets the definition of a hazardous waste and is also regulated as a controlled substance by the DEA, the Department does allow the pharmaceutical to be sent to a DEA-registered reverse distributor.

The local DEA Special Agent in Charge may instruct you to destroy controlled substances on-site, witnessed by two health care professionals. In the past, this often meant disposal down the drain. The U.S. EPA and the Department strongly discourage the practice of sewer disposal for pharmaceuticals. The preferred alternative is to transfer control of the waste pharmaceutical to a DEA registrant that is specifically approved to manage these wastes. The Special Agent in Charge may also authorize landfill disposal for non-hazardous waste pharmaceuticals following specified protocols.

Waste pharmaceuticals that are not regulated as controlled substances or hazardous wastes are regulated as solid wastes. These wastes may be sent to a reverse distributor or sent to a pharmaceutical

mail-back service for proper disposal, treated to encapsulate or solidify the waste at an approved medical waste treatment facility prior to disposal, incinerated at an approved solid or hazardous waste incinerator, or must be disposed of in an approved solid waste disposal site that has an approved Engineering Design and Operations Plan that specifically allows these wastes.

Trace chemotherapy waste must be disposed of in an approved solid waste disposal site that has an approved Engineering Design and Operations Plant that specifically allows this waste, or may be incinerated at an approved solid or hazardous waste incinerator.

Contact the Department at [comments.hmwmnd@state.co.us](mailto:comments.hmwmnd@state.co.us) if you have questions regarding approved disposal facilities for untreated medical waste. Biological inactivation technologies (e.g., autoclaving) are ineffective in treating waste pharmaceuticals and trace chemotherapy wastes.

### *Treatment and Disposal of Radioactive Medical Waste*

If you use radionuclides for medical purposes, you are required to obtain a radioactive materials license issued by the Department under the Rules and Regulations Pertaining to Radiation Control (6 CCR 1007-1). As a radioactive materials licensee, you may be able to hold the radioactive medical waste for decay-in-storage under the provisions of 6 CCR 1007-1 Section 7.29 until the radioactivity cannot be distinguished from background levels as described in the regulations. If these requirements are met, you may then manage the waste as medical waste without regard for its radioactivity. Wastes contaminated with radioactive material should not be put into a standard medical waste container unless or until the radioactivity has decayed to background levels. If decay-in-storage is not an option, the waste must be managed as radioactive waste.

### **On-site Medical Waste Management Plan**

Each medical waste generator is required to develop and implement an on-site medical waste management plan for each facility. The medical waste management plan must be specific to the type of medical waste generated by your facility and contain the following:

- Designation of medical waste.
- Provisions for the handling, treatment, and disposal of medical waste.
- A contingency plan for spills or loss of containment.
- Staff training.
- Designation of a person responsible for plan implementation.

If you have already prepared a Bloodborne Pathogens - Exposure Control Plan and/or developed a Hazard Communication Program in accordance with OSHA requirements, amendments to that plan or program to also contain the above elements may fulfill the medical waste plan requirements.

### *Designation of Medical Waste*

Proper management of medical waste first begins with the identification of the types of medical waste that are generated at your facility. As a waste generator you are responsible for determining if your waste is regulated as medical waste, hazardous waste, radioactive waste, or ordinary solid waste; and if it is subject to other federal, state, and local statutes, regulations, and policies. You must determine the categories of medical waste generated and where each category of medical waste is generated in your facility. This information must be included in the plan. Categories of medical waste that must be considered include radioactive medical waste, blood and body fluids, potentially infectious waste, pathological waste, pharmaceutical waste, sharps, trauma scene waste, and any additional waste determined to pose a sufficient risk of infectiousness as established by the Department on a case-by-

case basis. These categories are discussed in detail in the “Medical Waste Identification Compliance Bulletin.”

### *Medical Waste Handling, Treatment, and Disposal Provisions*

This section of the plan must describe how each medical waste category is handled in your facility and how it will be treated and disposed. Information regarding how medical waste is segregated, contained, packaged, labeled, transported, stored, and treated (on or off-site) for disposal needs to be included. Provisions for alternative waste handling or disposal during periods when your facility is not in operation, in the event of equipment breakdowns, and in cases where the generator’s medical waste cannot be treated on-site or sent off-site for treatment and disposal must also be considered and addressed. If medical waste is not treated on-site for disposal, then the plan must indicate the medical waste treatment facility and medical waste transporter (if not self-transporting) that will be used. Discharge of blood and body fluids or semi-solid pathological waste into a sanitary sewer system or alternate waste disposal methods, such as using a commercial sharps, medical waste, and/or waste pharmaceutical mail-back program, would also need to be addressed in the plan.

### *Contingency Planning*

You must have a plan to respond to a medical waste spill or loss of containment in order to minimize hazards to human health and the environment. The plan should address:

- Cleanup procedures you will follow to contain and cleanup spills or releases of medical waste.
- Use of a spill-kit and a list of supplies (e.g., absorbent materials, medical waste bags and containers, disinfectant) and personal protective equipment (e.g., disposable gloves, face mask, goggles, apron) available in the spill-kit.
- Proper disposal of used absorbent materials and personal protective equipment.
- Cleanup and disinfection of the contaminated area.
- Spill reporting requirements.
  - Spills or releases that may impact the environment or present a clear and imminent public health hazard should be reported to the Colorado Department of Public Health and Environment’s 24-hour spill reporting hotline at 1-877-518-5608 and to the local emergency response authorities where the spill or release occurred. Many spills or releases are required to be reported to federal agencies such as OSHA or the CDC. Such spills or releases do not have to also be reported to the Colorado Department of Public Health and Environment or local emergency response authorities unless there is a clear and imminent public health hazard.
  - Spills or releases to the sanitary sewer must also be reported to your local wastewater treatment facility.

Employees with job responsibilities involving any aspect of medical waste generation or management should be familiar with this plan and trained in medical waste spill or release response. Staff training and familiarity with the plan will result in a more timely execution of the contingency plan that can minimize the impact of the spill or release.

### *Staff Training*

Medical waste training is necessary to educate employees about the proper management of medical waste generated at your facility. Your medical waste management plan must address what medical waste training will be provided to employees. The type and amount of training will depend on the employee’s job roles and responsibilities. In general, any employee that generates medical waste, places medical waste in containers or bags, works in an area where medical waste is generated or stored, prepares medical waste for off-site transport, self-transport medical waste, treats medical

waste on-site, and/or is involved with medical waste recordkeeping should receive training. This training plan may also include or reference federal requirements, such as OSHA and US DOT requirements. Examples of topics that should be included in your medical waste training program include:

- Medical waste identification.
- Medical waste segregation, containment, and labeling.
- Proper storage of medical waste.
- Preparation and packaging of medical waste for off-site transport.
- On-site treatment of medical waste.
- Medical waste spill or release containment and cleanup procedures.
- Other federal medical waste requirements (e.g., OSHA's Bloodborne Pathogens (29 CFR 1910.1030), Hazard Communication (29 CFR 1910.1030) and Personal Protective Equipment (29 CFR 1910 Subpart I) Standards; US DOT's Division 6.2 Infectious Substances requirements and the Materials of Trade exception (49 CFR Parts 171-180)).

Medical waste training should be given to employees at a frequency that ensures that staff are consistently demonstrating proper management and handling of medical waste. Training should be given whenever an employee starts a new position with job responsibilities involving some aspect of medical waste generation or management, when a new medical waste stream is generated at the facility, or when a new medical waste procedure is implemented at the facility. It is recommended that all facility personnel with job duties related to medical waste management receive annual refresher training and additional training when a new medical waste procedure is implemented.

#### *Designation of a Person Responsible for Plan Implementation*

At least one employee at your facility must be designated with the responsibility of implementing the medical waste management plan. Alternate employees should also be selected in case the designated individual is unavailable (e.g., due to vacation, illness, etc.). The designated individual and alternate(s) should have a strong knowledge of the plan and be able to communicate to other employees the importance of this plan, which employees are affected by the plan, and what is expected from staff to implement plan components.

#### *Recordkeeping*

A copy of your facility's medical waste management plan must be maintained at your facility. The plan should be reviewed annually and updated whenever changes related to medical waste generation or handling occur. Unless requested by the Department, a copy of this plan does not have to be submitted to the Department. However, this plan must be available upon request to the medical waste transporter, medical waste treatment facility, and to the Department. It is recommended that you keep records to show how certain aspects of the plan are being implemented. Any records related to medical waste (e.g., medical waste accumulation logs, shipping papers or manifests, on-site treatment logs, training rosters) should be kept for at least three years.

#### **For more information please contact:**

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Hazardous Materials and Waste Management Division  
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Denver, Colorado 80246-1530

Customer Technical Assistance Line:  
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