



MUNICIPALITY OF ANCHORAGE



Solid Waste Services Department

MEDICAL WASTE DISPOSAL POLICY

EFFECTIVE DATE: January 31, 1991

REVISED DATE: November 1, 2013

I. AUTHORITY TO ESTABLISH DISPOSAL POLICY:

The authority by which the Municipality of Anchorage, Solid Waste Services (SWS) Department establishes disposal policies and procedures and conducts disposal operations is contained within Anchorage Municipal Code (AMC 26.80) and the State of Alaska Administrative Code (18 AAC 60, Solid Waste Management Regulations as amended through September 5, 2010) and Solid Waste Disposal Operating Permit SW1A001-11 issued by State of Alaska Department of Environmental Conservation (ADEC) dated September 28, 2006; or most current versions.

II. PURPOSE:

The purpose of the **MEDICAL WASTE DISPOSAL POLICY** is to protect SWS' workers, the public and the environment from exposure to pathogens which could cause diseases. Indiscriminate disposal of potentially infectious wastes in garbage may expose refuse workers to diseases. Since package integrity cannot be ensured during collection and land filling, loss of containment may result in releasing infectious wastes into the environment, endangering the SWS' workers, the public and the environment itself.

III. APPLICABILITY:

This policy applies to any private or public medical, dental or veterinary clinic, office, laboratory, hospital or other facility or service within the Municipality of Anchorage which generates, collects or processes medical waste with the intent of disposing the waste at the Anchorage Regional Landfill (ARL). Specific medical wastes generated from within the private home environment by the individual homeowner or by a commercial in-home health care service are addressed separately in Section VII of this policy. Only waste material that is generated within the Municipality of Anchorage is accepted for disposal at the ARL. Medical waste material that has been generated outside of the Municipality of Anchorage, and processed within the Municipality, may on a case by case basis, and as determined by the Medical Waste Project Administrator (907-428-1064, Fax 907-428-1697, e-mail wws@mun.org), be accepted at the ARL. A processor, who desires to process medical waste generated outside the Municipality of Anchorage with the intent to dispose of the processed waste in the ARL, must contact SWS at the above number before proceeding.

IV. GENERAL POLICY:

Medical wastes shall not be disposed of at the ARL until they have been **EFFECTIVELY TREATED**, that is, rendered biologically harmless in accordance with acceptable treatment practices as described in this policy or current industry standards and methods and the wastes do not pose other hazards subject to Municipal, State or Federal laws or regulations. Effectively treated medical wastes will be disposed of only at the ARL, located at the Glenn Highway and Hiland Road. No medical waste, except that which is generated by the individual homeowner within the private home environment, will be accepted at the SWS Central Transfer Station, located at 1111 East 56th Avenue in Anchorage, or the Girdwood Transfer Station, located on

Ruane Road in Girdwood.

V. DEFINITIONS:

For the purpose of this policy, SWS embraces the definition of MEDICAL WASTE as defined in Alaska Administrative Code 18 AAC 60.990(78)

" 'medical waste' means laboratory waste consisting of discarded cultures and stocks of infectious agents and associated microbiologicals; pathological wastes; selected isolation wastes; used and unused discarded sharps; animal waste; human blood, or blood products; and other wastes defined as 'regulated waste' in 29 CFR 1910.1030(b)"

"REGULATED WASTE" is defined by Code of Federal Regulation 29 CFR 1910.1030(b) as:

"liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials."

In addition to materials specifically defined as medical waste by 18 AAC 60 or regulated waste as defined by 29 CFR 1910.1030, this policy applies to the following as defined in 18 AAC 60.990.

Definitions:

(9) **ANIMAL WASTES:** *Discarded material originating from an animal inoculated with an infectious agent during research, production of biologicals, or pharmaceutical testing; includes the carcass, body parts, blood, and bedding of any animal known to have been in contact with an infectious agent ;*

(22) **BLOOD AND BLOOD PRODUCTS:** *Discarded waste containing human blood and blood components, including serum and plasma, and materials containing free-flowing blood and blood components;*

(33) **CULTURES AND STOCKS:** *Discarded cultures and stocks of infectious agents and associated microbiologicals, including human and animal cell cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, waste from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, or mix cultures of infectious agents;*

(89) **PATHOLOGICAL WASTES:** *Discarded pathological waste, including human tissues, organs, and body parts removed during surgery, autopsy, or other medical procedures;*

(118) **SELECTED ISOLATION WASTE:** *Discarded waste material that is contaminated with excretions, exudates, and secretions from patients with highly communicable diseases, and that is treated in isolation, includes blood and blood components, and sharps; and*

(122) **SHARPS:** *Discarded implements or parts of equipment used in animal or human patient care, medical research, or industrial laboratories, including hypodermic needles; syringes, Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, broken or unbroken glassware that has been in contact with an infectious agent, slides, cover slips, and unused, discarded implements or parts of equipment.*

VI. ACCEPTABLE TREATMENT METHODS OF MEDICAL WASTE:

An acceptable treatment method is any technique or process designed to change the biological character or composition of medical waste so that it is no longer infectious or otherwise biologically hazardous. The most commonly accepted treatment methods are

incineration and active steam sterilization. Use of other treatment methods, including chemical disinfection, microwave radiation sterilization and thermal inactivation, are either quite specific or unique in their applications and as such will require case-by-case prior review and written approval by SWS before such treated waste will be accepted for disposal at the ARL. Regardless of the method of sterilizing used, it is important for the treatment operator to be fully aware that successful sterilizing treatment requires a thorough understanding that conditions for sterilization vary with load type and operating conditions.

A. INCINERATION is the process of burning the medical waste at high temperatures in a controlled environment to convert the combustible materials to noncombustible residue or ash. Incinerators which are properly designed, constructed, maintained and operated can be used for processing all medical waste categories. For the purpose of this policy the definition of a medical waste incinerator, as defined by 18 AAC 60.990 shall be:

(79) "medical waste incinerator" means:

(A) a two-chambered incinerator that holds waste for at least one second at temperatures at or above 1700°F in the secondary chamber, and operates at 1200° or more in the primary chamber; or

(B) a thermal oxidation unit approved by the department.

B. ACTIVE STEAM STERILIZATION is the process of subjecting medical wastes to the pressures and temperatures of saturated steam inside a pressure vessel (autoclave, retort or steam sterilizer). Temperatures are maintained at the manufacturer's designed levels and time, in order to kill infectious pathogens in the waste. It is the generator's responsibility to ensure the sterilization process is operated according to accepted or manufacturer's procedures. Solid Waste Services will **not** accept the use of active steam sterilization as a means of treating the following waste categories:

1. Pathological waste;
2. Chemical waste, including chemotherapeutic wastes; or
3. Hazardous wastes.

Active steam sterilization is an acceptable means of treating sharps, sharps containers, laboratory cultures and specimens and their containers, tubes, blood and body fluid containers & dishes/slides provided these items remain completely sealed within an approved autoclave treatment bag, treatment process such as melt down of the item or other approved method but before disposal at the Anchorage Regional Landfill. The methods of rendering these items non recognizable after having been sterilized can vary. For example, encasing the sterilized items within a hardened plaster or polymer resin mixture, processing of sterilized items by grinding system, incineration or containment within steam sterilization waste packaging are all acceptable methods of making these items non recognizable for disposal at the ARL. If the waste generator has other means of achieving this objective, SWS requests the generator submit documentation of the methodology for SWS review and approval prior to use for disposal.

C. APPROVED ALTERNATIVE TREATMENT METHOD FOR LIQUID BIOMEDICAL WASTE: PREMICE™ TREATMENT SYSTEM (PTS)

The use of the Premicide™ Treatment System (PTS), such as Isolyser LTST™ is approved for the treatment of liquid biomedical wastes only prior to disposal at the Anchorage Regional Landfill. This approval for use is contingent on the following:

1. This system is to be used for the on-site treatment of liquid biomedical wastes. It is not to be used to treat any non-liquid wastes, pathological wastes (recognizable human tissues), chemotherapy wastes, or radioactive wastes.
2. Free liquids must not be present in waste treated with the PTS. If free liquids are present after processing, the waste is considered to be untreated waste.
3. The liquid biomedical wastes treated with the PTS must be kept on-site as per manufacturer's instructions or for **a minimum** of 12 hours after treatment to achieve the appropriate Log-Kill prior to disposal at the Anchorage Regional Landfill.

Liquid biomedical waste once treated with PTS becomes a solid and will be considered as solid waste. It should not be contained in "red" or "orange" bio-hazard bags and should not bear the bio-hazard symbol (or otherwise be identified as bio-hazardous waste). Further it will be labeled with the date of treatment as "Treated Medical Waste". Liquid biomedical waste once treated with PTS will be disposed of ONLY at the ARL.

VII. PACKAGING OF TREATED MEDICAL WASTES FOR DISPOSAL:

A. No medical waste may be disposed of in the ARL unless the waste has been effectively treated, rendered noninfectious and properly packaged for disposal per Alaska Solid Waste management regulations 18 AAC 60:

18 AAC 60.030. Medical waste.

(a) A person shall manage medical waste in a way that prevents the spread of disease.

(b) The owner or operator of a permitted municipal solid waste landfill facility or industrial solid waste monofill may accept medical waste that has been treated according to the manufacturer's instructions

(1) in an autoclave;

(2) by a decontamination process other than an autoclave; or

(3) in a medical waste incinerator.

B. The residue or ash from incinerated medical waste shall be contained in leak-proof, fully enclosed and tightly lidded or sealed containers. Loose residue and ash will not be accepted or disposed in the ARL. This restriction is to prevent ash from being blown about the landfill and to reduce the fire potential of disposing "hot" residue and ash.

C. The medical waste to be sterilized by active steam autoclaving shall be processed in opaque polyethylene disposable autoclave bags of a minimum 3 mil thickness. The bags shall have heat sensitive markings that change color when exposed to a sterilization temperature for a given time period. The markings will be easily and clearly discernible. Unless specifically approved for such use by the sterilization unit's manufacturer, compactors, grinders or similar devices may not be used to reduce the volume of medical waste before the waste is to be rendered noninfectious by steam sterilization.

D. No medical waste, except that which is generated from within the private home by the individual home owner, will be accepted at the Central or Girdwood Transfer Stations. The generator of effectively treated medical waste is ultimately responsible for ensuring it will be disposed of at the ARL. The waste will be transported in a leak proof, tightly sealed, fully enclosed container; the container will **NOT** be taken to the Central or Girdwood Transfer Stations for off loading.

VIII. DISPOSAL PROCEDURES FOR MEDICAL WASTES AT THE ANCHORAGE REGIONAL

LANDFILL

A. Upon arriving at ARL, haulers of wastes from a medical facility will announce to the ARL Scale house Attendant the following information:

1. The name of the medical facility that generated the waste; and
2. The general content of the hauler's load, i.e., treated medical waste, or general municipal solid waste.

B. Failure to comply with the disposal procedures (above) will result in the load being refused disposal privileges at the ARL.

C. Special Medical Waste Compliance Requirements - Waste Generator Shall:

1. Provide monthly operational reports and yearly operational inspection certifications (from Manufacturer or authorized service provider) to SWS Medical Waste Coordinator using e-mail and PDF format. Information detailing number of waste loads sterilized and verification of function within operation parameters (including temperature, pressure and other operations as indicated by manufacturer) are requirements to be included within monthly reporting and yearly certifications documents. All monthly reports to SWS Medical Waste Coordinator are due by the 15th of each calendar month and will be considered as non-reporting if not received by the last day of each calendar month. Yearly certifications by manufacturer or designee shall be received by SWS Medical Waste Coordinator by the last day of each calendar year and will be considered a non report if certification is not received by December 31 of applicable calendar year.
2. Direct Bury Requirements – Medical waste loads hauled to the Anchorage Regional Landfill shall be disposed of by the “direct bury” method of waste disposal. A special handling fee of \$140.00 shall be charged per load over and above standard waste disposal fees for all medical waste loads hauled to the ARL site.
3. Scheduled disposal of Medical waste loads at the Anchorage Regional Landfill – Medical Waste loads brought to the ARL for disposal will only be accepted on Monday, Wednesday and Friday between the hours of 9:00am to 1:00pm without the prior written approval of the SWS Medical Waste Coordinator or SWS Director. In the event of an emergency or other unforeseen event, contact the SWS Director at 343-6276 for additional information and authorization.
4. Non compliance with Active Steam Sterilization Special Provisions – Medical Waste Generators or Haulers that do not comply with the provisions of these Special Compliance Requirements shall be required to submit a Written Corrective Action to the SWS Medical Waste Coordinator for approval prior to disposal of additional medical wastes at the ARL site. Failure to comply with special waste disposal provisions may also result in a suspension of approval to dispose of waste for up to 30 days per event.

IX. MEDICAL WASTES GENERATED WITHIN THE PRIVATE HOME:

A. Medical wastes generated within the private home are not specifically addressed by the applicable regulatory agencies. It is not the intent of this policy to attempt to regulate all medical wastes generated from within the private home environment. The individual home owner or the assisted living support provider who generates in the home environment certain medical wastes is, however, responsible to ensure that waste is properly handled, containerized and, if required, effectively treated prior to disposal. The wastes of primary interest are sharps, such as lancets, syringes and needles used in the home to control diabetes, allergies or any other medical conditions; home care medical wastes associated with infectious diseases; and medical wastes generated from in-home health care which is provided by a commercial service.

B. Used and unused sharps discarded by the individual home owner should be disposed in an appropriate sharps container that is puncture resistant, leak proof and able to be tightly sealed to

prevent the sharps from spilling. Sharps collector containers suitable for home use are available from most medical supplies outlets in Anchorage. No sharps should be thrown directly into the household garbage; they should first be properly containerized or effectively treated. Incineration services for this purpose are available to the Anchorage home owner. Information about these services is available from the person's private physician, the local telephone book, as well as the local and state health departments.

C. Medical wastes generated as a result of providing home care of persons with infectious diseases such as hepatitis B, hepatitis C or positive HIV should not be discarded into the household garbage. These wastes should be sealed in leak proof plastic containers and transported to an incineration service to be effectively treated. As with household generated sharps, incineration services for this purpose are also available to the Anchorage home owner.

D. Medical wastes generated through a commercial in-home health care service should not be discarded into the household garbage. The entity providing the in-home health care service is responsible for the effective treatment and proper disposal of any medical wastes generated from that service.

X. OTHER REQUIREMENTS:

A. Solid Waste Services Department points of contact are:

1. Solid Waste Services Administration - Telephone: 343-6262, FAX: 561-1357,
E-mail to: wwsws@muni.org
2. Disposal fees & procedures questions are to be referred to Customer Service:
343-6250.
3. Anchorage Regional Landfill Superintendent- Telephone 428-0864 or 428-1027,
FAX 428-1697.
4. Medical Waste Coordinator - Telephone 428-1064 or 529-5153, FAX 428-1697,
E-mail to: ChristiansenSB@muni.org

B. All other requirements applicable for solid waste disposal - covered loads, hours, fees, etc. shall apply.

XI. REVIEW REQUIREMENT:

A. Solid Waste Services recognizes that (at a minimum) a yearly review of this Policy and Procedure shall occur during the 1st calendar month of each year and include:

1. A review of accident, injury and near miss logs from previous year.
2. Whenever new processes, equipment or hazards are identified and introduced into the workplace.
3. Regular consultation with the SWS Medical Waste Working Group as indicated by meeting schedule out lined below.
4. A yearly update of contact information for all members of the SWS Medical Waste Working Group is attached.

B. This Medical Waste Disposal Policy and Procedures document was developed and put into place as a performance based guideline for the safe disposal of medical waste at the Anchorage

Regional landfill. SWS recognizes that conditions may arise that would adversely impact the safety of our employees and site users. SWS reserves the right to put in place revisions to the policy or procedure when conditions arise that affect site safety, as a way of protecting the health and safety of employees, site users and the public.