

# WYOMING LEGISLATIVE SERVICE OFFICE

# **Research Memorandum**

# STATE REGULATION OF MEAT PROCESSING PLANT ANIMAL MORTALITY WASTE COMPOSTING AND LAND APPLICATION

By Donna Shippen, Senior Research Analyst May 2023

The Joint Agriculture, State and Public Lands and Water Resources Committee requested LSO to research Wyoming and surrounding state regulations regarding meat processing plant animal mortality waste composting and finished compost land application.

#### **EXECUTIVE SUMMARY**

Wyoming and six of seven surrounding states allow the composting of animal mortality waste under state solid waste management statutes and regulations. States vary in their regulatory requirements regarding compost facility permitting and oversight of facility design and operation. Wyoming DEQ Solid Waste rules require composting facilities covering one acre or more and composting more than 50 animals at one time to be permitted as solid waste management facilities. Three states (Colorado, Idaho, Montana) require composting facilities to submit design and operation plans to the state solid waste regulatory agency for review and approval.

Wyoming and the six surrounding states that allow composting of animal mortality waste also allow finished compost to be land applied as a soil amendment. Wyoming and Nebraska do not regulate finished compost land application. Colorado and Montana require land application operations to meet regulatory standards for compost material composition. North Dakota and South Dakota require land application operations to submit nutrient management plans for regulatory agency approval. Idaho composting regulatory guidance advises that finished compost may be subject to Idaho Plant and Soil Amendment act registration requirements.

#### WYOMING

The Wyoming Solid Waste Management Act authorizes the Department of Environmental Quality to promulgate rules, standards and permit systems for solid waste management facilities. <sup>1</sup> The Act

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<sup>&</sup>lt;sup>1</sup> W.S. § 35-11-503.

defines a "solid waste management facility" as a facility for the transfer, treatment, processing, storage or disposal of solid waste.<sup>2</sup> "Solid waste" is defined as garbage and other discarded solid materials, including solid waste materials from industrial, commercial, and agricultural operations and community activities. The definition excludes agricultural materials recycled in the production of agricultural commodities, unless the materials are disposed of at a solid waste management facility.<sup>3</sup>

Current Department Solid Waste Management Rules regulate animal mortality waste as municipal solid waste, which is defined as "solid waste resulting from or incidental to residential, community, trade or business activities, including garbage, rubbish, dead animals, abandoned automobiles and all other solid waste other than construction and demolition, industrial or hazardous waste.<sup>4</sup>

# **DEQ Authorized Animal Mortality Waste Disposal Options**<sup>5</sup>

In July 2022, the Department issued Solid Waste Guideline #27 summarizing animal mortality waste management options authorized by the Department. As municipal solid waste, dead animal waste must be managed by facilities permitted by the Department of Environmental Quality unless one of two exemptions apply:

- Lands and facilities owned by a person engaged in farming or ranching and used to dispose of solid waste generated incidental to the farming or ranching operation; <sup>6</sup> or
- De minimus composting operations that cover an area no larger than one acre, compost no more than 50 animals at any given time, and allow Department access for inspection.

All other animal mortality waste management must occur at a permitted facility. Permitted waste disposal options include:

- Burial at a permitted municipal solid waste facility;
- Disposal at a permitted waste transfer station;
- Composting and burial at a permitted construction and demolition facility;
- Composting at a permitted low hazard/low volume facility (if the compost area is no larger than two acres);
- Composting at a permitted full-size fixed transfer, treatment, and storage facility (if the compost area is larger than two acres);
- Incineration at a permitted facility; or
- Rendering.

<sup>&</sup>lt;sup>2</sup> W.S. § 35-11-103(d)(ii).

<sup>&</sup>lt;sup>3</sup> W.S. § 35-11-103(d)(i).

<sup>&</sup>lt;sup>4</sup> DEQ Solid Waste Management Rules, Ch. 1, Section 1 (b)(li) (effective 9/27/2021).

<sup>&</sup>lt;sup>5</sup> DEQ Solid and Hazardous Waste Division, Solid Waste Guideline #27, Dead Animal Management (July 11, 2022).

<sup>&</sup>lt;sup>6</sup> W.S. 35-1-103(d)(ii)(e).

Guideline #27 states there are currently no rendering facilities based in Wyoming but there are rendering companies that serve concentrated animal feeding operations in the State.

# **DEQ** Composting Guidelines<sup>7</sup>

In March 2006, the Department of Environmental Quality and the Department of Agriculture issued Solid Waste Guideline #17, Guidance for Composting Animal Mortalities at Farms, Ranches and Exempt Animal Feeding Operation Facilities. Although the Guideline states the information is intended only for farms, ranches and animal feeding operation facilities that are exempt from Department of Environmental Quality solid waste management permitting requirements, subsequent Department communications with LSO clarified the guidance document applies to both exempt and permitted composting facilities and provides recommended best practices rather than regulatory requirements.<sup>8</sup>

Guideline #17 provides recommendations for composting facility location, design, construction and operation, and use of composted material. Two possible uses of composted animal mortality waste are provided: (a) use as an amendment for additional composting operations, or (b) land application as a soil amendment for plant growth. The Guideline provides brief, general recommendations for compost application, including testing of composted material and the soil to which it will be applied and application at agronomic rates for the crop being grown.

The Department of Environmental Quality reports that, to date, the Department has not received a request from a meat processor or a solid waste management facility to land apply completely composted animal mortality waste.

# **DEQ Composting Seminars**<sup>9</sup>

In May 2023, the Department of Environmental Quality hosted three Dead Animal Compost Seminars around the state for meat processing plants and other agricultural producers. The seminars were taught by University of Wyoming Cooperative Extension Agent Caitlin Youngquist and held in Moorcroft, Torrington and Cody.

<sup>&</sup>lt;sup>7</sup> Wyoming Department of Environmental Quality and Wyoming Department of Agriculture, Solid Waste Guideline # 17, Guidance for Composting Animal Mortalities at Farms, Ranches and Exempt Animal Feeding Operation Facilities (May 7, 2006).

<sup>&</sup>lt;sup>8</sup>Personal communication from Suzanne Engels, DEQ Solid Waste Administrator to Donna Shippen (May 8, 2023); Suzanne Engels, Administrator, Solid and Hazardous Waste Division, Department of Environmental Quality, Memorandum to Donna Shippen, LSO (May 10, 2023).

<sup>&</sup>lt;sup>9</sup> Personal communication from Suzanne Engels, DEQ Solid Waste Administrator to Donna Shippen (May 8, 2023).

# SURROUNDING STATES

#### COLORADO

Colorado regulates animal mortality waste as solid waste under the Solid Wastes Disposal Sites and Facilities Act. <sup>10</sup> The Act authorizes the Colorado Department of Public Health and Environment to promulgate regulations for solid waste disposal. <sup>11</sup> Operations disposing of solid waste on one's own property are exempt from permitting requirements but must comply with solid waste rules. <sup>12</sup>

The Colorado Department of Public Health and Environment regulations include requirements for composting activities. <sup>13</sup> Under the Department regulations, both permitted and exempt composting facilities must submit an engineering, design and operations plan to the Department for review and approval. <sup>14</sup> The plan must include provisions for access control, odor management, surface water control and groundwater monitoring, compost processing times and temperatures to reduce pathogens and vector attraction, compost sampling and testing, and record keeping and reporting. <sup>15</sup>

The Colorado Department of Public Health and Environment regulations further require that finished compost sold or distributed for off-site use meet specified standards for biological and inorganic content. Facilities composting to create soil amendments may request Department approval of alternative testing requirements but the alternative testing must include an agronomic evaluation with examples of application rates for specific crop types. 17

#### IDAHO

Idaho regulates animal mortality waste from meat processing plants as industrial solid waste under the Idaho Solid Waste Facilities Act. <sup>18</sup> The Act authorizes the Idaho Department of Environmental Quality to establish rules for the certification of solid waste facilities. Under Department rules, a composting facility managing animal mortality waste would be classified as either a Tier II or Tier III solid waste facility based on the type of waste and the size of the facility. <sup>19</sup> Tier II and Tier III facilities must obtain Idaho DEQ approval for site and design criteria and local health district approval for the facility's operating plan and odor management plan. <sup>20</sup>

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<sup>10</sup> CRS Title 30, Article 20, Part 1.
<sup>11</sup> Id.
<sup>12</sup> CRS § 30-20-102(3).
<sup>13</sup> 6 CCR 1007-2, Part 1, Section 14.
<sup>14</sup> 6 CCR 1007-2, Part 1, Section 14.1.1.
<sup>15</sup> 6 CCR 1007.2, Part 1, Section 14.3 through 14.4.
<sup>16</sup> 6 CCR 1007.2, Part 1, Section 14.6.
<sup>17</sup> Id.
<sup>18</sup> Idaho Code § 39-7403(22).
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 <sup>&</sup>lt;sup>19</sup> IDAPA § 58.01.06.
 <sup>20</sup> Idaho Department of Environmental Quality, Processing (Composting) Facility Guidance and Checklists for Tier II and Tier III Processing Facilities (July 2013).

The Idaho Department of Environmental Quality has developed regulatory guidance and checklists for solid waste composting facilities.<sup>21</sup> The guidance includes an overview of composting methods, Tier II and Tier III facility regulatory requirements, and recommendations for odor management and finished compost testing. The guidance references the Idaho Department of Agriculture rules governing dead animal movement and disposal<sup>22</sup> and states that composting dead animals may need Department of Agriculture and Department of Environmental Quality approval.<sup>23</sup>

The Department of Environmental Quality composting guidance also recommends that anyone commercially producing compost to be used as a soil or plant amendment contact the Idaho Department of Agriculture to determine if the compost should be registered as required by the Idaho Soil and Plant Amendment Act of 2001.<sup>24</sup>

#### MONTANA<sup>25</sup>

The Montana Solid Waste Management Act categorizes animal mortality waste as solid waste subject to regulation by the Montana Department of Environmental Quality.<sup>26</sup> Montana DEQ regulations require facilities that compost animal processing by-products and animal mortalities, other than on-site barn and farm waste, to apply for an animal mortality compost facility license.<sup>27</sup> The application must include an operation and maintenance plan, closure plan, type of composting process used, and the final use of the finished compost.

Montana DEQ regulations require all compost facilities to employ a low permeability work pad to ensure surface water and ground water protection and meet specified location requirements. The compost facility must maintain records regarding the type and amount of feedstocks and bulking agents, ground or surface water quality monitoring data, compost analytical data, operational monitoring data, and windrow or pile aeration data, and must submit an annual report to the Department.

Montana DEQ regulations also require licensed compost facilities to sample and analyze compost materials on a quarterly, semiannual, or annual basis depending on the size of the facility, and verify the finished compost meets minimum standards.<sup>28</sup> Animal mortality compost facilities must meet standards for:

<sup>&</sup>lt;sup>21</sup> *Id*.

<sup>&</sup>lt;sup>22</sup> IDAPA § 02.04.17.

<sup>&</sup>lt;sup>23</sup> Idaho Department of Environmental Quality, Processing (Composting) Facility Guidance and Checklists for Tier II and Tier III Processing Facilities (July 2013).

<sup>&</sup>lt;sup>24</sup> Id.

<sup>&</sup>lt;sup>25</sup> MTDEQ Solid Waste Management Rule 17.50.17, Compost License and Operation Standards.

<sup>&</sup>lt;sup>26</sup> MCA § 75-10-203(11)(a).

<sup>&</sup>lt;sup>27</sup> MTDEQ Solid Waste Management Rule 17.50.1708.

<sup>&</sup>lt;sup>28</sup> MTDEQ Solid Waste Management Rule 17.50.1716.

- Pathogen density, including fecal coliform and salmonella bacteria density;
- Compost properties, including pH, moisture content, organic matter content, soluble salt concentration, particle size, physical contaminants, CO2 evolution rate, and nutrient content; and
- Residual herbicides.

The Montana DEQ stated their composting regulations and guidance are largely based on composting best practices provided by the Cornell University Waste Management Institute.<sup>29</sup> Under the Montana DEQ regulations, composted animal mortality waste that meets specified compost property and residual herbicide standards may be used as potting soil, applied to the soil surface as mulch, or incorporated into soil as a soil amendment or fertilizer.<sup>30</sup>

The Montana DEQ reported there are currently five to six animal mortality waste composting facilities in the State and the Department anticipates applications from two additional facilities in Summer 2023.<sup>31</sup>

## Nebraska<sup>32</sup>

Nebraska regulates solid waste under the State's Integrated Waste Management Act. <sup>33</sup> Under the Act, the Nebraska Department of Environment and Energy promulgated rules for solid waste processing that include composting. <sup>34</sup> Solid waste processing facilities that process less than 1000 cubic yards of solid waste per year are considered "partial exception" facilities, which are exempt from permitting requirements but must comply with specified operating criteria, including litter and disease vector control and prevention of surface water discharge. <sup>35</sup>

The Department of Environment and Energy is not aware of any Nebraska meat processing plants that compost animal mortality waste. The Department stated Nebraska's large meat processing plants typically manage their waste by rendering, shifting the waste to a pet food manufacturing facility, or landfill disposal. The Department is not aware of any small meat processors who compost animal mortality waste but surmises that small facilities would fall under the "partial exception" compost facility regulations.

<sup>&</sup>lt;sup>29</sup> Personal communication with Brady Christensen, Montana DEQ to Donna Shippen (May 9, 2023) (explaining the Cornell Waste Management Institute is a program in the Cornell University College of Agriculture and Life Sciences, School of Integrative Plant Science, Soil and Crop Sciences Section, serving the public through research, outreach, training, and technical assistance, with a focus on organic residues), <a href="https://cwmi.css.cornell.edu/about.htm">https://cwmi.css.cornell.edu/about.htm</a>.

<sup>&</sup>lt;sup>30</sup> MTDEQ Solid Waste Management Rule 17.50.1716.

<sup>&</sup>lt;sup>31</sup> Personal communication with Brady Christensen, Montana DEQ (May 9, 2023).

<sup>&</sup>lt;sup>32</sup> Personal communication with Erik Waiss, Nebraska Department of Environment and Energy (May 22, 2023).

<sup>&</sup>lt;sup>33</sup> R.R.S. Neb. 13-2001 through 13-2043.

<sup>&</sup>lt;sup>34</sup> 132 Neb. Admin. Code, Ch. 6.

<sup>&</sup>lt;sup>35</sup> 132 Neb. Admin. Code, Ch. 8, § 003.

The Department of Environment and Energy stated Department regulations allow for the land application of finished animal mortality waste compost as a soil amendment. If the Department were to receive a complaint regarding application of incompletely finished waste, e.g., visible bones or body parts, the Department would act on the complaint and advise the compost facility the waste must be completely composted prior to land application. If the compost facility were producing the finished compost as a commercial product, the facility would have to apply to the Nebraska Department of Agriculture for a license to manufacture or distribute commercial fertilizer or soil conditioners.

#### NORTH DAKOTA<sup>36</sup>

North Dakota regulates animal mortality waste under the State's solid waste statutes and regulations. North Dakota classifies animal mortality waste or "butcher waste" as agricultural waste. The North Dakota Department of Environmental Quality Solid Waste Program Rules define agricultural waste as "solid waste derived from the production and processing of crops and livestock such as manure, spoiled grain, grain screenings, undigested rumen material, livestock carcasses, fertilizer, and fertilizer containers, but does not include pesticide waste or pesticide containers."<sup>37</sup>

Animal mortality waste that is composted is further classified by North Dakota Department of Environmental regulations as recycled agricultural material. The Department's Solid Waste Program Rules define recycled agricultural material as "agricultural waste generated by a farming operation or agricultural processing operation that is recycled or applied to soils as a nutrient or as a fertilizer at appropriate agronomic rates, or that is left in place on soils during harvesting, grazing, or other similar agricultural activities." As recycled agricultural material, composted butcher waste from individual meat processing plants and butcher shops is subject to Department solid waste regulation but exempt from solid waste management permitting requirements. However, composting facilities that accept animal mortality waste from multiple sources must apply for a solid waste management permit.<sup>39</sup>

North Dakota meat processing plants or butcher shops who wish to spread composted butcher waste must file a nutrient management plan with the Department of Environmental Quality Solid Waste Program. The Plan must:

• Describe the method and schedule by which recycled agricultural materials are recycled or applied to the land at appropriate agronomic rates as nutrients or fertilizers; and

<sup>&</sup>lt;sup>36</sup> NDDEQ Solid Waste Program Rules, Article 33.1-20; personal communication with Diana Trussell, North Dakota DEQ Solid Waste Program Manager to Donna (May 9, 2023).

<sup>&</sup>lt;sup>37</sup> NDDEQ Solid Waste Program Rule 33.1-20-01.1-03.3.

<sup>&</sup>lt;sup>38</sup> NDDEQ Solid Waste Program Rule 33.1-20-01.1-03.69.

<sup>&</sup>lt;sup>39</sup> NDDEQ Division of Waste Management Guideline 32 – Composting Poultry and Other Dead Animals (March 2023) provides guidance about the composting facility permit application process, https://deq.nd.gov/Publications/WM/Guideline32CompostingPoultryAndOtherDeadAnimals.pdf.

• Address water pollution, odor, and other relevant environmental and public health problems. 40

The Department of Environmental Quality Solid Waste Program has developed comprehensive guidelines for nutrient management plans that address land application management methods, including location controls, compost waste analysis, soil analysis, land application loading rates and land application methods.<sup>41</sup>

Nutrient management plans must be reviewed and approved by the Department of Environmental Quality's Solid Waste Program. <sup>42</sup> Following approval, plan operators must submit an annual report to the Solid Waste Program. The Department typically does not inspect nutrient management plan operations unless complaints are received.

The North Dakota Department of Environmental Quality reports the practice of composting and land application of butcher waste is becoming more common since the loss of the State's only renderer several years ago. The Department estimates there are approximately six butcher waste composting operations in the State currently. The Department of Environmental Quality relies on information from the State Department of Agriculture regarding butcher waste management issues. When the Department of Agriculture performs meat processing plant and butcher shop inspections, inspectors will notify the Department of Environmental Quality regarding any concerns about improper butcher waste disposal.

## SOUTH DAKOTA 43

The South Dakota Animal Industry Board regulates the disposal of animal carcasses in the State as part of the Board's statutory responsibility to protect the health of livestock, prevent domestic animal disease transmission, and inspect and regulate livestock auction sale yards and rendering plants. <sup>44</sup> Board rules require animal carcasses to be disposed of within 36 hours by burning, burial, composting or rendering. <sup>45</sup>

In the past, the Animal Industry Board required permitting for animal mortality waste composting and compliance with prescriptive regulations. As more information on composting best practices became widely available from the U.S. Department of Agriculture and university agricultural

<sup>&</sup>lt;sup>40</sup> NDDEQ Solid Waste Program Rule 33.1-20-01.1-03.57.

<sup>&</sup>lt;sup>41</sup> NDDEQ, Division of Waste Management Guideline 30 – Nutrient Management Plans for Agricultural Processing (Updated March 2023),

https://deq.nd.gov/Publications/WM/Guideline 30 Nutrient Management Plans For Agricultural Processing Facilities.pdf.

<sup>&</sup>lt;sup>42</sup> NDDEQ Solid Waste Program Rule 33.1-20-01.1-03.57.

<sup>&</sup>lt;sup>43</sup> Personal communication with Todd Tedrow, South Dakota Animal Industry Board (May 10, 2023).

<sup>&</sup>lt;sup>44</sup> SDCL § 40-3-9

<sup>&</sup>lt;sup>45</sup> South Dakota Animal Industry Board Administrative Rule 12.68.03.05.

research programs, including South Dakota State University, the Board decided to eliminate the composting permitting requirements in 2017. Currently, the Board does not require a permit for animal mortality waste composting. If a complaint is received about a composting operation, the Board will respond by visiting the site and providing education in best practices.

Land application of compost is regulated by the South Dakota Department of Agriculture and Natural Resources. If a compost facility wishes to apply the finished compost as a soil amendment, the facility must apply to the Department for a general permit and submit a nutrient management plan for review and approval.<sup>46</sup> The nutrient management plan must be developed by a qualified soil scientist, county extension agent, or consultant and must consider such things as nutrient value of the waste and waste characteristics, waste volumes, site soil characteristics, loading rates, application methods, nutrient uptake, soil monitoring and wintertime operation.<sup>47</sup>

#### **UTAH**

Utah Department of Environmental Quality regulations require dead animals to be managed and disposed of in a manner that minimizes odors and the attraction, harborage, or propagation of insects, rodents, birds, or animals. <sup>48</sup> Dead animals may be disposed of at a permitted landfill. <sup>49</sup> According to a Department representative, Department composting regulations do not allow for the composting of animal mortality waste. <sup>50</sup>

See **Appendix A** for a summary of state regulations regarding animal mortality waste composting and land application.

<sup>&</sup>lt;sup>46</sup> South Dakota Department of Agriculture and Natural Resources, Land Application General Permit GPLA 23-03

<sup>&</sup>lt;sup>48</sup> Utah DEQ Waste Management and Radiation Control Rule R315-315-6.

<sup>49</sup> Id.

<sup>&</sup>lt;sup>50</sup> Personal communication with Wade Hess, Utah DEQ (May 9, 2023).

# Appendix A

STATE	Regulatory Agencies	Composting of Animal Mortality Waste Regulatory Requirements	Finished Compost Land Application Allowed?	Land Application Regulatory Requirements
Colorado	Department of Public Health and Environment (DPHE)	Operations disposing of own waste on own property exempt from permitting but must comply with solid waste regulations. Both exempt and permitted composting operations must submit engineering, design and operations plan to Department for approval.	Yes	Finished compost sold or distributed for off-site use must meet specified DPHE standards for biological and inorganic content.
Idaho	Composting: Department of Environmental Quality (DEQ) and local health district  Land application: Department of Agriculture	Composting facilities must obtain DEQ approval for site and design criteria and local health district approval for operating and odor management plan.	Yes	Finished compost to be used as a soil amendment may need to be registered per the ID Soil and Plant Amendment Act.
Montana	Department of Environmental Quality (DEQ)	Animal mortality composting license required. License application must include operation and maintenance plan, closure plan, and intended use of finished compost. Quarterly, semi-annual or annual compost sampling and reporting required, depending upon size of facility.	Yes	Finished compost must meet specified compost property and residual herbicide standards.
Nebraska	Department of Environment and Energy (DEE)	Composting facilities that compost less than 1000 cubic yards of waste per year are exempt from permitting requirements but must meet specified operating criteria	Yes	No regulatory requirements for land application.

# Appendix A

STATE	Regulatory Agencies	Composting of Animal Mortality Waste Regulatory Requirements	Finished Compost Land Application Allowed?	Land Application Regulatory Requirements
North Dakota	Department of Environmental Quality (DEQ)	Individual meat processing plant composting operations exempt from DEQ permitting requirements; composting facilities accepting animal mortality waste from multiple sources must be permitted.	Yes	To land apply finished compost, must submit Nutrient Management Plan for DEQ approval.
South Dakota	Composting: Animal Industry Board (AIB)  Land application: Department of Agriculture and Natural Resources (DANR)	No regulation or permitting of animal mortality waste composting facilities since 2017. State law requires disposal of dead animals within 36 hours.	Yes	To land apply finished compost, must apply to DANR for a permit and submit Nutrient Management Plan for DANR approval.
Utah	Department of Environmental Quality (DEQ)	DEQ regulations do not allow for composting of animal mortality waste.	N/A	N/A
Wyoming	Department of Environmental Quality (DEQ)	Composting facilities over 1 acre in size or that compost more than 50 animals at a time must obtain a DEQ solid waste permit.	Yes	No regulatory requirements for land application.

# Wyoming Administrative Rules

# Environmental Quality, Dept. of

# Solid Waste Management

Chapter 1: General Provisions

Effective Date: 09/27/2021 to Current

Rule Type: Current Rules & Regulations

Reference Number: 020.0009.1.09272021

#### **CHAPTER 1**

#### **GENERAL PROVISIONS**

#### Section 1. In General.

- (a) This Chapter is promulgated pursuant to the Wyoming Environmental Quality Act, specifically Wyoming Statute (W.S.) § 35-11-503.
- (b) Definitions: In addition to the definitions in the Wyoming Environmental Quality Act, for the purpose of these rules and unless the context otherwise requires:
- (i) "Act" means the Wyoming Environmental Quality Act, W.S. §§ 35-11-101 et seq.
- (ii) "Active life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities.
- (iii) "Active portion" means that part of a facility or unit that has received or is receiving wastes and that has not been closed or reclaimed.
- (iv) "Applicant" means that person, as defined in the Act, submitting an application to the Administrator for a permit for a solid waste management facility, who shall be:
  - (A) For a city owned facility, the city;
  - (B) For a county owned facility, the county;
- (C) For a facility owned by any other public entity, that public entity;
  - (D) For an individual, the individual;
  - (E) For a corporation, the corporation; and
- (F) For a sole proprietorship or partnership, the partnership or proprietorship.
- (v) "Aquifer" means, in relation to all solid waste facilities except municipal solid waste landfills, a geologic formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs. For municipal solid waste landfills, "aquifer" means an underground geologic formation:
  - (A) Which has boundaries that may be ascertained or reasonably

inferred;

- (B) In which water stands, flows, or percolates;
- (C) Which is capable of yielding to wells or springs significant quantities of groundwater that may be put to beneficial use; and
- (D) Which is capable of yielding to wells or springs which produce a sustainable volume of more than one-half gallon of water per minute.
- (vi) "Asbestos-containing solid wastes" or "asbestos" means solid wastes containing greater than one percent by weight asbestos in any of the asbestiform varieties of: chrysotile (serpentine), amosite (cummingtonite, grunerite), crocidolite (riebeckite), anthophyllite, actinolite, or tremolite, and which may be considered friable asbestos.
- (vii) "Buffer zone" means that portion of the solid waste management facility which is not used for waste management activities but is reserved for the placement and operation of monitoring equipment or for preventing public access during specific waste disposal events, such as the disposal of friable asbestos. The fire lane may be within the buffer zone.
- (viii) "Cell" means compacted solid wastes that are enclosed by natural soil or other cover material within a trench, unit, or area-fill in a land disposal facility.
- (ix) "Cease Disposal" for the purposes of the Cease and Transfer Program created pursuant to W.S. §§ 35-11-528 through 532, means ceasing disposal of municipal solid waste.
- (x) "Clean fill" means fill consisting solely of uncontaminated natural soil and rock, hardened asphalt rubble, bricks, and concrete rubble.
- (xi) "Clean wood" means untreated wood which has not been painted, stained, or sealed. Clean wood does not include treated railroad ties, treated posts, paper, or construction/demolition wastes containing non-wood materials.
- (xii) "Closed facility" means a regulated facility at which operations have been properly terminated in accord with an approved facility closure plan on file with the Solid and Hazardous Waste Division or the Water Quality Division and complying with all applicable rules and requirements concerning its stabilization.
- (xiii) "Closure" in the context of a facility means the act of securing and stabilizing a regulated facility pursuant to the requirements of these rules. Closure of an individual unit means securing and stabilizing an individual unit of a facility, including the construction of final cover over disposal units that have reached their permitted capacity and may also be referred to as intermediate or phased reclamation.

- (xiv) "Closure period" means the period of time during which a facility is completing closure. The closure period begins when the facility ceases receipt of wastes. The closure period ends when the Administrator approves certification from a registered professional engineer confirming that the provisions of the closure plan have been carried out and that the facility has been closed in compliance with the closure standards specified in these rules.
- (xv) "Commercial solid waste management facility" means any facility receiving a monthly average greater than 500 short tons per day of unprocessed household refuse or mixed household and industrial refuse for management or disposal excluding lands and facilities subject to W.S. § 35-11-402(a)(xiii).
- (xvi) "Complete application" means a permit application that the Administrator has determined to contain all the information required to be submitted by the rules, in sufficient detail to allow a technical review of the information to commence.
- (xvii) "Constituent" when used in the context of groundwater monitoring, generally means inorganic substances and organic compounds that may be found in groundwater and in particular the constituents that must be monitored in groundwater samples collected under the applicable chapter of the Solid Waste Rules and Regulations.
- (xviii) "Construction/demolition landfill" means a solid waste management facility that accepts only inert construction waste, demolition waste, street sweepings, brush, or other material specifically approved by the Administrator. This excludes garbage, liquids, sludges, friable asbestos, and hazardous or toxic wastes.
- (xix) "Construction/demolition waste" includes but is not limited to stone, clean and treated wood, concrete, asphaltic concrete, cinder blocks, brick, plaster and metal or other material specifically approved by the Administrator.
- (xx) "Container" means any portable device in which a material is stored, transported, treated, disposed of or otherwise handled.
- (xxi) "Corrective action" means all actions necessary to eliminate the public health threat or environmental threat from a release to the environment of pollutants from an operating or closed regulated facility and to restore the environmental conditions as required.
- (xxii) "Cover material" means soil or other suitable material that is used to cover compacted solid wastes in a land disposal facility.
- (xxiii) "Decommissioning" means removing all liquids and accumulated sludges, and cleaning a storage tank for its intended reuse or disposal.
- (xxiv) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste material into or on any land or water so that such waste material or any constituent thereof may enter the environment or be emitted into the air or

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discharged into any waters, including groundwaters.

- (xxv) "Existing facility" means any facility that was receiving solid wastes on or before September 13, 1989.
- (xxvi) "Existing unit" means any municipal solid waste landfill unit receiving solid waste as of October 9, 1993.

(xxvii) "Facility" means the total contiguous area described in the permit application and which is occupied by any solid waste management area, unit, site, process, or system and the operation thereof including, but not limited to, equipment, buildings, solid waste treatment, storage, transfer, processing, and disposal areas, buffer zones, monitor well systems, fire lanes, working area litter and access fences, systems for the remediation of releases to the environment, and perimeter access control fences. The term "facility" does not include contiguous or noncontiguous lands which may be owned or leased by the applicant which are not disturbed by solid waste management operations and which are external to the contiguous area occupied by the solid waste management area, unit, site, process, or system.

(xxviii)"Farming and ranching operation" means agricultural operations whose principal function is the growing of crops and the raising of livestock, but does not include large concentrated animal feeding operations as defined by the Water Quality Rules, Chapter 2, Appendix G.

- (xxix) "Final cover" means cover material that is used to completely cover the top of a land disposal facility or unit, including, but not limited to, compacted soils, drainage layers, synthetic membranes, soil-cement admixtures, and topsoils.
- (xxx) "Fire lane" means an area which does not contain combustible materials, including vegetation, and which can be utilized to provide access to firefighting equipment.

(xxxi)"Floodplain" means low land and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands that are inundated by the 100-year flood.

(xxxii)"Friable asbestos" means asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure, and includes previously nonfriable asbestos after such previously nonfriable asbestos becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

(xxxiii)"Garbage" means any putrescible solid or semi-solid animal or vegetable waste material resulting from the handling, preparation, cooking, serving and consumption of food.

(xxxiv)"Green waste" means organic plant materials, such as yard trimmings,

grass clippings, house and garden plants, tree trimmings, and brush. Green waste does not include other putrescible waste including, but not limited to food waste, animal waste, and manure.

(xxxv)"Groundwater" means, in relation to all solid waste facilities except municipal solid waste landfills, water below the land surface in a saturated zone of soil or rock. For municipal solid waste landfills, "groundwater" means any water, including hot water and geothermal steam, under the surface of the land or the bed of any stream, lake, reservoir or other body of surface water, including water that has been exposed to the surface by an excavation such as a pit which:

- (A) Stands, flows or percolates; and
- (B) Is capable of being produced to the ground surface in sufficient quantity to be put to beneficial use.

(xxxvi)"Incineration" means the controlled process by which combustible solid wastes are burned and altered to noncombustible gases and other residues. A solid waste incineration facility is considered to be a solid waste management facility.

(xxxvii) "Incorporated city or town" shall mean a "first class city" or a "town" as defined in W.S. § 15-1-101(a).

(xxxviii) "Industrial landfill" means a solid waste management facility utilizing an engineered method of land disposal primarily for industrial solid waste.

(xxxix)"Industrial solid waste" means solid waste resulting from, or incidental to, any process of industry, manufacturing, mining or development of any agricultural or natural resources.

- (xl) "Irrevocable letter of credit" means a negotiated financial instrument that is used to pay a beneficiary issued by a banking institution to guarantee payment.
- (xli) "Landfill" means a solid waste management facility for the land burial of solid wastes, utilizing an engineered method of controls to avoid creating a hazard to the public health, the environment, plants, or animals.
- (xlii) "Lateral expansion" of a facility means the horizontal enlargement of the boundaries of a solid waste management facility. Lateral expansion of a disposal unit means the horizontal enlargement of the permitted waste boundaries of a disposal unit.
- (xliii) "Liabilities" means obligations to transfer assets or provide services to other entities in the future as a result of past transactions including off-balance sheet liabilities.
  - (xliv) "Lower explosive limit" means the lowest percent by volume of a

mixture of explosive gases in air that will propagate a flame at 25° Celsius and atmospheric pressure.

- (xlv) "Low hazard or low volume treatment, processing, storage, and transfer facility" means a solid waste management facility which accepts only solid wastes as described in this subsection. This provision does not apply to facilities whose owner or operator simultaneously owns or operates more than one such solid waste management facility within one mile of each other.
  - (A) Mobile transfer, treatment, and storage facilities.
- (B) Clean wood waste storage facilities: Facilities storing clean wood waste in storage piles with a combined base surface area larger than 10,000 square feet or containing greater than 100,000 cubic feet of clean wood waste. So long as clean wood waste at such facilities is stored no less than 100 feet from off-site structures, storm water is properly managed, and the pile does not create a public or private nuisance.
- (C) Solid waste transfer, treatment, storage, and processing facilities: Solid waste transfer, treatment, storage, and processing facilities receiving fifty cubic yards or less of solid waste per day and occupying no more than ten acres, including a twenty-foot buffer zone within a fenced facility boundary, which individually or in combination manage no more than the specified types and quantities of the following wastes:
- (I) Paper, cardboard, plastic, aluminum cans, glass, and metal, or other nonputrescible municipal solid wastes which may be specifically authorized by the Administrator, for the primary purposes of transfer to a recycling facility or beneficial reuse in a manner approved by the Administrator. This provision applies to the sorting, shredding, grinding, crushing, baling, and storage of these wastes, except CRTs as noted below, prior to transfer to a recycling facility or approved beneficial reuse site; and
  - (II) 5,000 gallons of used oil; and
  - (III) 5,000 gallons of used antifreeze; and
- (IV) 1,000 scrap tires stored in compliance with standards in Chapter 8 of these rules, if the scrap tires are stored to be recycled, reclaimed, reused, or are destined for disposal at a permitted facility; and
  - (V) Green waste and clean wood waste storage piles, and
- (VI) Compost piles for green waste and manure operated in a manner that does not create odors, constitute a nuisance, or attract vectors; and
- (VII) Household hazardous waste collected no more frequently than quarterly collection days, provided that the household hazardous waste collected is removed from the site and transported to a permitted facility within thirty days of

receipt; and

(VIII) 50 cubic yards of electronic waste, other than CRTs, stored in containers; and

- (IX) 50 cubic yards of CRTs stored intact in containers and kept whole without any shredding, grinding, crushing, or baling; and
- (X) 500 lead acid batteries, if the batteries are stored in an upright position and are not leaking, for the purpose of transfer to a recycling facility; and
- (XI) 100 cubic yards of construction and demolition waste stored in containers; and
- (XII) 150 cubic yards of mixed solid wastes stored in containers and animal mortality managed in mixed municipal solid waste or separate containers.
- (D) Commercially operated used oil management facilities: Used oil collection centers, aggregation points, transfer facilities, processors, re-refiners, burners, and used oil fuel marketers that store greater than 10,000 gallons of used oil to be recycled or burned for energy recovery, subject to the used oil management requirements contained in the Wyoming Hazardous Waste Rules and Regulations.
- (E) Facilities storing waste, other than construction/demolition waste, for transfer to a recycling facility: Facilities occupying no more than ten acres and used only for the transfer, treatment, and storage of less than 500 short tons received per day of paper, cardboard, plastic, aluminum cans, glass, metal, clean wood, and other nonputrescible municipal solid wastes which may be specifically authorized by the Administrator, for the primary purposes of transfer to a recycling facility or beneficial reuse in a manner approved by the Administrator. This provision applies to the sorting, shredding, grinding, crushing, baling, and storage of these wastes prior to transfer to a recycling facility or approved beneficial reuse site. This provision does not apply to facilities that manage scrap tires or CRTs.
- (F) Facilities storing construction/demolition waste for transfer to a recycling facility: Facilities occupying no more than ten acres and used only for the transfer, treatment, and storage of less than 500 short tons received per day of construction/demolition waste authorized by the Administrator, for the primary purposes of transfer to a recycling facility or beneficial reuse in a manner approved by the Administrator. This provision applies to the sorting, shredding, grinding, crushing, baling, and storage of these wastes prior to transfer to a recycling facility or approved beneficial reuse site. This provision applies only if all waste management activities occur either indoors or outdoors in containers. This provision does not apply to scrap tire or electronic waste management facilities.

- (G) Facilities not considered low hazard or low volume: Transfer, treatment, storage, and processing facilities managing wastes or materials having or exhibiting one or more of the following criteria or characteristics are not low hazard and low volume waste management facilities. Exceptions may be granted by the Administrator based on consideration of concentration and volumes of wastes to be managed:
- (I) Toxicity, Carcinogenicity, Ignitability, Flammability, Explosivity, Instability, Corrosivity, Incompatibility;
  - (II) Special wastes as defined in this subsection;
  - (III) Medical/infectious wastes, PCB-containing wastes;
- (IV) Excluded hazardous wastes as defined in 40 CFR part 261, or the Department's Hazardous Waste Rules;
- (V) Wastes that have the potential to create odor, vector, dust, or other nuisances; or
- (VI) Wastes that in the evaluation of the Administrator have a significant potential to impact public health or the environment, unless the operator of a proposed facility can demonstrate by submittal of a waste analysis and characterization plan that the waste treatment, processing, storage, or transfer activity can be considered a low hazard and low volume waste management activity consistent with the Act.
- (xlvi) "Major Change" means a change to any solid waste management facility location, design or construction, or to any operating, monitoring, closure or post-closure activities, involving one or more of the following items:
- (A) The total permitted volumetric capacity of the facility is to be increased by more than five percent;
- (B) The effectiveness of any liner, leachate collection or detection system, gas detection or migration system, or pollution control or treatment system may be reduced; or
- (C) The facility modification will, in the judgment of the Administrator, be likely to alter the fundamental nature of the facility's activities.
- (xlvii) "Mixed household and industrial refuse" means any mixture of municipal solid wastes, industrial solid wastes, or sludge.
- (xlviii) "Mixed solid waste" means municipal solid waste and industrial solid waste.
  - (xlix) "Mobile transfer, treatment and storage facility" means a facility

which is mobilized to conduct transfer, treatment or storage of a solid waste at or near the point of generation.

- (l) "Monitoring" means all procedures and techniques used to systematically collect, analyze and inspect data on operational parameters of the facility or on the quality of the air, groundwater, surface water and soil.
- (li) "Municipal solid waste" means solid waste resulting from or incidental to residential, community, trade or business activities, including garbage, rubbish, dead animals, abandoned automobiles and all other solid waste other than construction and demolition, industrial or hazardous waste.
- (lii) "Municipal solid waste landfill" (MSWLF) means a solid waste management facility for the land burial of municipal solid waste that utilizes an engineered method of controls to avoid creating a hazard to the public health, the environment, plants, or animals.
- (liii) "Municipal solid waste landfill unit" means a discrete area of land or an excavation that receives municipal solid waste and that is not a land application unit, surface impoundment, injection well, or waste pile. A MSWLF unit may also receive other types of Resource Conservation and Recovery Act Subtitle D waste such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Such a landfill unit may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion of an existing MSWLF unit. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.
- (liv) "Net worth" means total assets minus total liabilities including on and off-balance sheet liabilities.
  - (lv) "New facility" means:
- (A) Any facility that did not receive solid waste on or before September 13, 1989; or
- (B) Any modification or lateral expansion of an original permit boundary for the purpose of increasing capacity or site life by more than five percent. An incidental facility boundary enlargement for the development of, but not limited to fire lanes, buffer zones, surface water diversion systems, and monitoring systems which are not in conflict with local zoning, land use, or land ownership is not considered to be a new facility.
- (lvi) "New municipal solid waste landfill unit" means any municipal solid waste landfill unit that did not receive waste prior to October 9, 1993.
- (lvii) "Occupied dwelling house" means a permanent building or fixed mobile home that is currently being used on a permanent or temporary basis for human

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habitation.

- (lviii) "100-year floodplain" means an area where a flood has a one-percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period.
- (lix) "On-site decommissioning" means decommissioning performed within a facility's property boundary.
- (lx) "Open burning" means uncontrolled burning of solid waste in the open.
- (lxi) "Open dump" means an uncontrolled solid waste management facility at which solid wastes are placed on the land in such a manner that they present a real or potential hazard to public health and the environment. Open dump includes any solid waste management facility subject to the permitting requirements of these rules which does not have a current, valid permit.
- (lxii) "Operator" means the applicant who has been granted a permit, who may manage and operate the solid waste management facility or who may hire another person, who shall be known as the solid waste manager, for these responsibilities.
- (lxiii) "Petroleum-contaminated soils" means solid waste consisting of any natural or manmade soil or rock material into which petroleum product has been added, excluding hardened asphalt rubble.
- (lxiv) "Petroleum product" means any crude oil or any liquid petroleum fraction including but not limited to gasoline, diesel fuels, and used and unused motor oils.
- (lxv) "Pile" means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.
- (lxvi) "Plans" means maps, specifications, drawings and narrative description, prepared to describe the solid waste management facility and its operation.
- (lxvii) "Population" when used in the context of statistical evaluations of groundwater data, means the total set of all possible concentration measurements for any given constituent.
- (lxviii) "Post-closure period" means the period of time during which a closed facility is maintained and monitored. The post-closure period begins when the Administrator approves certification from a registered professional engineer confirming that the provisions of the closure plan have been carried out and that the facility has been closed in compliance with the closure standards specified in these rules
  - (lxix) "Principal officer" means an officer described in the bylaws of a

corporation or appointed by the board of directors in accordance with the bylaws who serves at least at the level of vice president.

(lxx) "Private industrial solid waste disposal facility" means any industrial solid waste disposal facility used solely for the disposal of solid waste generated by the owner of the facility where wastes are not transported over public roadways for delivery to the facility and access by persons other than employees of the facility owner is restricted.

(lxxi)"Processing plant" means a solid waste management facility used or designed to transfer, shred, grind, bale, compost, salvage, separate, reclaim or provide other treatment of solid wastes.

(lxxii) "Recycling facility" means a facility where used or waste materials are processed or broken down into raw materials which are then used to make or produce new items or products.

(lxxiii) "Release" includes, but is not limited to, any spilling, leaking, pumping, pouring, emptying, emitting, discharging, dumping, addition, escaping, leaching, or unauthorized disposal of any oil or hazardous substance which enters, or threatens to enter, waters of the state.

(lxxiv) "Routine cover" means cover material that is applied to the top and side slopes of compacted solid wastes at the end of each operating day.

(lxxv) "Salvaging" means the controlled removal by the operator or his or her agent of solid waste from a solid waste management facility for the purpose of reuse.

(lxxvi)"Sanitary landfill" means a municipal solid waste landfill.

(lxxvii)"Scavenging" means the removal by persons other than the operator or his agent of solid wastes from any solid waste management facility.

(lxxviii)"Scrap tire" means a tire that is no longer used for its original purpose.

(lxxix)"Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in hard rock, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years.

(lxxx)"Self-bond" means an indemnity agreement in a sum certain made payable to the State, with or without separate surety. The indemnity agreement is signed by the operator and, if applicable, the operator's ultimate parent guarantor.

(lxxxi)"Silviculture waste" means any wood wastes generated during the management and development of forests. This includes but is not limited to all wood wastes that are generated during the operation of a sawmill.

(lxxxii)"Sludge" means the accumulated semisolid mixture of solid wastes and water, oils, or other liquids.

(lxxxiii)"Solid waste manager" means any person designated by the applicant who has primary responsibility for the daily management and operation of the solid waste management facility.

(lxxxiv)"Solid waste management unit" means a contiguous area of land on or in which solid waste is placed, or the largest area in which there is significant likelihood of mixing solid waste constituents in the same area of a solid waste management facility. Examples of solid waste management units include a surface impoundment at a solid waste management facility, a waste pile, a land treatment area, a municipal, construction/demolition, or industrial landfill unit, an incinerator, a tank and its associated piping and underlying containment systems at a solid waste management facility and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

(lxxxv)"Solid waste petroleum storage tank" means any underground or aboveground storage tank that has been taken out of service and which contained any petroleum substance, including but not limited to motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

(lxxxvi)"Special wastes" are those wastes which require special handling as described in Chapter 8 of these rules.

(lxxxvii)"Storage" means the holding of solid waste for a temporary period, at the end of which time the solid waste is treated, disposed of, or stored elsewhere.

(lxxxviii)"Storage facility" means any facility that stores solid waste for a temporary period, at the end of which time the solid waste is treated, disposed, or stored elsewhere.

(lxxxix)"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments include, but are not limited to holding, storage, settling, and aeration pits, ponds and lagoons.

- (xc) "Tangible net worth" means net worth minus intangibles such as goodwill, patents or royalties.
- (xci) "Tank" means a stationary device designed to contain an accumulation of waste that is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) that provide structural support and integrity.

- (xcii) "Topsoil" means all surface soil usually including the organic layer in which plants have most of their roots, or in the case where no topsoil is present, the top six inches of in-place native material.
- (xciii) "Transfer of waste" means the temporary holding of solid waste pending transportation of the solid waste for treatment, storage, or disposal.
- (xciv) "Transfer facility" means any solid waste transportation related facility including loading docks, parking areas, storage areas and ancillary features.
- (xcv) "Treatment" means any method, technique, or process designed to change the physical, chemical, or biological character or composition of any solid waste so as to recover energy or material resources from the waste or so as to render it safer to transport, store, or dispose of, or to make it amenable for recovery, use, or storage, or for reduction in volume. Treatment includes but is not limited to baling, chipping, composting, distilling, incinerating, processing, reconditioning, recovering, recycling, re-refining, reclaiming, and shredding.
- (xcvi) "Treatment facility" means any facility that treats solid waste. Types of treatment facilities include but are not limited to solid waste incinerators, tire shredding/chipping facilities, tire pyrolysis plants, solid waste shredding or baling facilities, drum and barrel reconditioning/recycling facilities, composting facilities, and facilities used to distill, re-refine, recover, recycle, or incinerate used antifreeze, oils or solvents.
- (xcvii) "Ultimate parent guarantor" means an entity not controlled by any other entity and is the topmost responsible entity which owns or controls the operator and is the guarantor for a self-bond.
- (xcviii)"Unprocessed household refuse" means municipal solid wastes which have not been treated, processed, or recycled at a facility subject to the requirements of these rules.
- (xcix) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.
- (c) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically connected with this aquifer within the facility's property boundary.
- (ci) "Used antifreeze" means any antifreeze that has been used and new antifreeze which has not been used for its intended purpose but is being discarded.

- (cii) "Used oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and new oil which has not been used for its intended purpose but is being discarded. Used oil does not include animal or vegetable oil.
- (ciii) "Used tire" means a tire that cannot be described as new, but which is structurally intact and, for passenger tires, has a tread depth greater than two thirty-seconds (2/32) of an inch. A used tire can be mounted on a vehicle's rim without repair.
- (civ) "Vadose zone" means the unsaturated zone between the land surface and the water table.
- (cv) "Vector" means a carrier capable of transmitting a pathogen from one organism to another, including flies, mosquitoes, skunks, or rodents.
- (cvi) "Waste management unit boundary" for the purpose of establishing a relevant point of compliance for municipal solid waste landfills, "waste management unit boundary" means a vertical surface located at the hydraulically downgradient limit of the municipal solid waste landfill unit. This vertical surface extends down to the uppermost aquifer.
- (cvii) "Waste pile" means any noncontainerized accumulation of solid waste used for treatment or storage of solid waste.
- (cviii) "Water table" means the seasonally high surface of groundwater which is subject to atmospheric pressure in an unconfined aquifer. Water table does not mean the piezometric surface of a confined aquifer.
- (cix) "Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs and similar areas.
- (cx) "Working face" means that portion of the land disposal site where solid wastes are being deposited and are being spread and compacted prior to the placement of cover materials.
  - (c) Permit required for new and existing facilities:
- (i) A permit or a one-time or emergency disposal authorization is required for the location, construction, operation or closure of any new or existing solid waste management facility. All facilities shall be located, designed, constructed, operated and closed in accordance with the permit or disposal authorization issued by the Director or Administrator.
  - (ii) A permit or disposal authorization may not be required for the

facilities or activities specified in subsection (f) of this section.

- (iii) Any facility that is regulated under more than one Chapter of these rules can apply for and receive a single solid waste management permit if the operator demonstrates compliance with each applicable Chapter.
  - (d) Recordkeeping, monitoring and reporting requirements:
- (i) Operators of any solid waste management facility will be required to establish and maintain monitoring equipment or methods, sample effluent discharges or emissions, or provide such other information as may be reasonably required and specified by the Administrator.
- (ii) All records required by these rules shall be maintained by the operator of the facility for a minimum of three years from the date of recording, except for those records required to be kept through the life and post-closure period of the facility as specified in these rules. All records shall be available for inspection and copying by Department personnel during reasonable business hours. Copies of these records shall be submitted to the Administrator when requested.
  - (e) The following acts are prohibited:
    - (i) Open dumping;
- (ii) Scavenging and animal feeding at active solid waste management facilities;
- (iii) Dumping bulk liquid wastes at solid waste management facilities unless specifically authorized by the Administrator;
- (iv) Dumping hazardous wastes (other than hazardous wastes generated by residential households and conditionally exempt small quantity waste generators) in any facility other than a facility authorized as a hazardous waste disposal facility by these rules unless specifically authorized by the Administrator;
- (v) Open burning of any wastes not exempted in subsection (f) of this section; and
- (vi) Speculative accumulation of solid wastes at a facility intended for use as a solid waste management facility without a permit.
- (f) Exemptions: The Administrator may exempt the following from a permit or any requirement to obtain a waste management authorization under these rules, provided that persons engaged in such activities may be required to supply information to the Administrator which demonstrates that the act, practice, or facility is exempt, and shall allow entry of Department inspectors for purposes of verification of such information:

- (i) Auto salvage yards and scrap metal dealers: Baling of used motor vehicles or scrap metals, and operation of metal smelters regulated by the Air Quality Division and storage for sale or reuse of used motor vehicles, motor vehicle parts, or scrap metals at auto salvage yards or scrap metal dealers as authorized under W.S. § 31-13-114, provided that for used oil, used antifreeze, tires, and lead acid batteries the following storage accumulation limits are not exceeded:
- (A) 1,000 scrap tires, excluding any scrap tires remaining on wheels attached to vehicles;
  - (B) 1,000 gallons of used motor oil;
- (C) 1,200 used lead acid batteries, excluding any used lead acid batteries remaining in vehicles, if the batteries are being stored in an upright position and are not leaking, for the purpose of being transferred to a recycling facility; and
- (D) 500 gallons of used antifreeze, if the antifreeze is being stored to be recycled, and the owner or operator only stores used antifreeze they generate or receive from do-it-yourself antifreeze changers or other similar sources.
- (ii) Single family units or households: The collection, storage and disposal of household wastes generated by a single family unit or household on their own property in such a manner that does not create a health hazard, public or private nuisance, or detriment to the environment.
- (iii) Clean fill: The disposal or beneficial use of clean fill in such a manner that does not create a health hazard, public or private nuisance or detriment to the environment.
- (iv) Clean wood waste storage facilities: Facilities storing clean wood waste in storage piles with a base surface area no larger than 10,000 square feet containing no greater than 100,000 cubic feet of clean wood waste. Clean wood waste at such facilities shall be stored no less than 100 feet from off-site structures, and the pile shall not create a public or private nuisance.
- (v) De minimis waste management activities: The management of solid wastes, which in the judgement of the Administrator, constitute de minimis quantities which are managed in a manner that does not create a health hazard, public or private nuisance, or detriment to the environment.
- (vi) Retail business facilities: Retail business facilities which have fewer than 1,000 scrap tires on the premises at any one time.
- (vii) Facilities that store lead acid batteries: A retail business facility or a solid waste storage or transfer facility used only for the storage or transfer of no more than

1,200 used lead acid batteries for the purpose of transfer to a recycling facility, if the batteries are stored in an upright position and are not leaking.

- (viii) Commercially operated used oil management facilities: Used oil collection centers, aggregation points, transfer facilities, processors, re- refiners, burners, and used oil fuel marketers that store no more than 10,000 gallons of used oil to be recycled or burned for energy recovery, provided the storage tanks are properly labeled, and subject to the used oil management requirements contained in the Wyoming Hazardous Waste Rules.
- (ix) Used oil generators: Used oil generators subject to the used oil management requirements contained in the Wyoming Hazardous Waste Rules.
- (x) Facilities storing waste, other than construction/demolition waste, for transfer to a recycling facility: A solid waste storage, treatment, or transfer facility occupying no more than five acres and used only for the storage, treatment, or transfer of paper, cardboard, plastic, aluminum cans, glass, metal, clean wood, construction/demolition waste, and other nonputrescible municipal solid wastes, for the primary purposes of transfer to a recycling facility or beneficial reuse in a manner approved by the Administrator. Unless all waste management occurs indoors, the facility shall maintain a twenty-foot buffer zone/fire lane separating waste from a fenced facility boundary. This exemption applies to the sorting, shredding, grinding, crushing, baling and storage of these wastes prior to transfer to a recycling facility or approved beneficial reuse site. This exemption does not apply to facilities that manage scrap tires, CRTs, or that decommission petroleum storage tanks.
- (xi) Facilities storing construction/demolition waste for transfer to a recycling facility: A solid waste storage, treatment, or transfer facility occupying no more than one acre and used only for the storage, treatment, or transfer of construction/demolition waste for the primary purposes of transfer to a recycling facility or beneficial reuse in a manner approved by the Administrator. Unless all waste management occurs indoors, the facility shall maintain a twenty-foot buffer zone/fire lane separating waste from a fenced facility boundary. This exemption applies to the sorting, shredding, grinding, crushing, baling, and storage of these wastes prior to transfer to a recycling facility or approved beneficial reuse site. This exemption does not apply to facilities that manage scrap tires, electronic waste, or that decommission petroleum storage tanks.
- (xii) Solid waste transfer, treatment, storage, and processing facilities: Solid waste transfer, treatment, storage, and processing facilities receiving twenty cubic yards or less of solid waste per day and occupying no more than five acres, including a twenty-foot buffer zone within a fenced facility boundary, which individually or in combination manage no more than the quantities of wastes specified in this subsection. This exemption does not apply to facilities whose owner or operator simultaneously owns or operates more than one transfer facility within one mile of each other.
  - (A) 50 cubic yards of mixed solid wastes stored in containers;
  - (B) 50 cubic yards of construction and demolition waste stored in

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containers;

- (C) Green waste and clean wood waste storage or compost piles;
- (D) Compost piles for green waste and manure operated in a manner that does not create odors, constitute a nuisance, or attract vectors;
- (E) 500 scrap tires stored in a manner that prevents fires and vector habitat;
- (F) 20 cubic yards of electronic waste, except CRTs, stored in containers for shipment to a recycling facility;
- (G) 20 cubic yards of CRTs stored intact in containers and kept whole without any shredding, grinding, crushing, or baling. Devices containing CRTs, such as televisions and computer monitors, may be disassembled, but the CRTs shall remain intact. If inadvertently broken, CRTs must be promptly containerized for proper management;
  - (H) 1,000 gallons of used oil;
- (I) 1,000 gallons of used antifreeze, if the used antifreeze is stored to be recycled, reclaimed, or reused;
- (J) 250 used lead acid batteries, if the batteries are stored in an upright position and are not leaking, for the purpose of transfer to a recycling facility;
- (K) 150 cubic yards of paper, cardboard, plastic, aluminum cans, glass, and metal, or other nonputrescible municipal solid wastes which may be specifically authorized by the Administrator, for the primary purposes of transfer to a recycling facility or beneficial reuse in a manner approved by the Administrator. This provision applies to the sorting, shredding, grinding, crushing, baling, and storage of these wastes prior to transfer to a recycling facility or approved beneficial reuse site; and
- (L) Household hazardous waste collected no more frequently than semiannual collection days, provided that the household hazardous waste collected is removed from the site and transported to a permitted facility within thirty days.
- (xiii) Vehicle service and maintenance facilities: In addition to used oil stored pursuant to this subsection, used antifreeze storage tanks located at vehicle service facilities, provided the storage tanks are properly labeled, have a used antifreeze storage capacity of no more than 500 gallons, and are used only to contain used antifreeze that the owner or operator generates or receives from do-it-yourself antifreeze changes.
- (xiv) Medical waste management facilities: Medical waste storage units, incinerators, autoclaves, or other treatment devices, used to store or treat only medical wastes

which are generated by the owner or operator of the medical facility or by doctor's offices, medical clinics, dental offices and other medical waste generators within the county or local area where the medical waste storage units, incinerators, autoclaves, or other treatment devices are located.

- (xv) Beneficial use: The reuse of wastes in a manner which is both beneficial and protective of human health and the environment, and conducted in a manner approved by the Administrator.
- (xvi) Household hazardous waste collection events: -The collection of household hazardous waste on no more than a quarterly basis by the operator of a permitted solid waste facility or by a person at a site where landowner consent has been obtained. Collected household hazardous waste must be removed from the collection site within thirty days and transported to a permitted facility for proper management.
- (xvii) An exemption or solid waste management permit are not required for facilities which are not solid waste facilities as defined by W.S. § 35-11-103(d)(ii).

#### (g) Inspections:

- (i) No permit, authorization or exemption shall be issued unless the owner of the facility provides written authorization for the Department's authorized representative, upon the presentation of credentials and other documents as may be required by law, to access and enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of a permit, authorization or exemption; have access to and copy, at reasonable times, any records that must be kept under the conditions of any permit, authorization or exemption; inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the Act; and collect resource data, sample or monitor at reasonable times, for the purposes of ensuring compliance or as otherwise authorized by the appropriate rules of the Department, any substances or parameters at any location.
- (ii) Inspections shall be conducted at the discretion of the Administrator and may consist of:
  - (A) Pre-application inspections;
  - (B) Preconstruction inspections;
  - (C) Construction inspections;
  - (D) Closure, post-closure, and annual operational compliance

inspections; and

(E) Routine or complaint-related inspections.

- (iii) The operator shall allow Department personnel entry to the facility for the purpose of inspection. Department personnel shall not be required to provide advance notice or a waiver of liability as a condition of entry to any facility for the purpose of conducting any solid waste management facility compliance inspection.
- (iv) The Administrator shall provide copies of all inspection reports to the operator following completion of the inspection.
- (v) The inspection requirements for municipal solid waste landfills with lifetime permits are in Chapter 2 of these rules.
- (vi) Following any inspection by Department personnel, the operator will be notified in writing of any deficiencies within forty-five days from the date of the inspection unless the Department is waiting to receive additional information from the operator.
- (h) Financial assurance: No permit or permit amendment shall be issued for any regulated facility unless the operator provides financial assurance, in accordance with Chapter 7 of these rules, that ensures there are adequate sources of funds to provide for closure, post-closure, and corrective action.

# **Section 2.** Permit Application Procedure.

- (a) Application requirements: Each application for a solid waste management facility permit shall contain information adequate to demonstrate compliance with the minimum standards for location, design and construction, operating, monitoring, closure and post-closure as specified in the applicable chapter of these rules. Permit application procedures are set out in W.S. § 35-11-502, except general permit procedures for closure of municipal solid waste landfills with less than thirty acres of municipal solid waste disposal area, which are set forth in Section 2(h) of this Chapter.
- (b) Permit application format: For all permit applications, amendments, transfers, and one-time or emergency waste management authorizations, shall be submitted in a format approved by the Administrator. The information in the application shall be presented in an order that conforms to the order set forth in the applicable sections of these rules, unless the Administrator approves an alternate format for the organization of the application.
- (i) For permit amendments, the application shall include a description of the amendment sought, including additional plates or drawings as necessary to completely describe the proposed amendment.
- (ii) For resubmittal of permit applications or submittal of supplemental information, the applicant shall have the option to submit copies of only the updated and revised portion of the application, if the revised and updated pages and drawings are appropriately numbered and dated to facilitate incorporation into the previous permit

document and the revisions are clearly identified using strikethrough and underline presentation of words unless the Administrator approves an alternate format.

- (c) Public notice and comment: Each application for a new, renewal, or closure permit shall be submitted for public notice and comment as follows:
- (i) Upon receipt of notification that the application has been determined to be complete, the applicant shall comply with the following requirements:
- (A) Within fifteen days of being notified that the application is complete:
- (I) Provide written notice to landowners with property located within a half mile of the site, using certified, return receipt requested mail for disposal facilities and first-class mail for other solid waste management facilities;
- (II) Provide written notice to each member of the interested parties mailing list maintained by the Administrator, the mayor of each city or town within fifty miles of the proposed facility and to the county commission and any solid waste district for the county in which the potential facility is located, using first-class mail;
- (III) Cause a written notice to be published once a week for two consecutive weeks in a newspaper of general circulation within the county where the applicant plans to locate the facility; and
- (IV) Specific text for the written notice shall be provided to the applicant by the Administrator. The notice shall contain information about the permit application including the identity of the applicant, the proposed facility location and size, the wastes types intended for management, the method of waste management, and the operating life. The notice shall identify the last date for filing comments on the application;
- (B) Provide the Administrator with documentation that the notice requirements of subsection (c)(i)(A) of this section have been followed. Documentation shall consist of copies of return receipt cards, publisher's affidavits and other documentation, as appropriate; and
- (C) The public comment period shall begin on the first date of publication and shall end at 5:00 pm on the thirtieth day following the last date of publication.
- (D) The Administrator may, at his or her discretion, conduct a public hearing on the application submission.
- (ii) For each new, renewal, or closure permit application or any application for a major change, the Administrator shall issue a proposed permit following completion of the Administrator's permit analysis, unless the permit is denied pursuant to

Section 4 of this Chapter. Upon receipt of a proposed permit, the applicant shall comply with the following requirements:

#### (A) Within fifteen days of receiving a proposed permit:

- (I) Provide written notice to landowners with property located within a half mile of the site, the mayor of each city or town within fifty miles of the proposed facility, the local county commission and any solid waste district for the county in which the potential facility is located, using certified, return receipt requested mail for disposal facilities and first-class mail for other solid waste management facilities;
- (II) Provide written notice to each member of the interested parties mailing list maintained by the Administrator using first-class mail;
- (III) Cause a written notice to be published once a week for two consecutive weeks in a newspaper of general circulation within the county where the applicant plans to locate the facility; and
- (IV) Specific text for the written notice shall be provided to the applicant by the Administrator. The notice shall contain information about the permit application including the identity of the applicant, the proposed facility location and size, the wastes types intended for management, the method of waste management, the operating life, and the Administrator's findings. The notice shall identify the period for filing objections to the application;
- (B) Provide the Administrator with documentation that the notice and filing requirements of subsection (c)(ii)(A) of this section have been followed. Documentation shall consist of copies of return receipt cards, and publisher's affidavits or affidavits of personal delivery as appropriate.
- (C) The public comment period shall begin on the first date of publication and shall end at 5:00 pm on the thirtieth day following the last date of publication.
- (D) Any interested person may submit written objections no later than 5:00 pm Mountain Time on the last day of the public comment period. If substantial written objections are received by the Director, a public hearing will be held in accordance with W.S. § 35-11-502(k).

#### (d) Permit renewal applications:

- (i) In addition to the following requirements, permit renewal applications are subject to the application procedures set forth in W.S. § 35-11-502 and subsections (a), (b), and (c) of this section.
  - (ii) The operator subject to solid waste management facility permit

requirements shall provide the Administrator with a renewal application. The permit renewal application shall contain the information specified in the relevant chapter(s) of these rules and be submitted in accordance with the time frames specified.

(iii) Except for municipal solid waste landfills with lifetime permits, issued under Chapter 2 of these rules shall submit a permit renewal application no less than twelve months prior to the expiration of said permit unless a closure permit application has been submitted. Municipal solid waste landfills with lifetime permits shall submit a renewal application no later than three years prior to the expiration of the lifetime municipal solid waste landfill permit. The renewal application shall contain the information specified in the applicable chapter of these rules.

## (e) Closure permit applications:

- (i) In addition to the following requirements, closure permit applications are subject to the application procedures set forth in W.S. § 35-11-502 and subsections (a), (b), and (c) of this section.
- (ii) The operator shall provide the Administrator with a closure permit application if required by the applicable chapter of these rules in accordance with the time frames specified therein.
- (iii) Anticipated closure: The operator of a facility with a valid permit shall submit a closure permit application to the Administrator no less than twelve months prior to the anticipated facility closure.
- (iv) Unanticipated closure: In the event any solid waste management facility ceases operation, as determined by nonreceipt of solid wastes for any continuous nine month period or any continuous one year period for landfarm facilities or petroleum-contaminated soils land treatment facilities, the facility operator shall provide written notification to the Administrator no later than thirty days after the end of such nine month (or one year) period. This notification shall be accompanied by a closure permit application unless the Administrator approves interim measures with delayed final closure for good cause upon application by the operator.
- (f) Variance application procedure for location standards specified in W.S. § 35-11-502(c):
- (i) For solid waste disposal facilities which do not meet the location standards specified in paragraphs (i) through (iv) of W.S. § 35-11-502(c), the applicant may apply to the Director for a variance from the standards by submitting a written variance application. The variance application shall contain the following information:
- (A) For proposed facilities which do not meet the location standards for proximity to towns, schools or any occupied dwelling house in W.S. § 35-11-502(c)(i) or (ii), the applicant shall:

- (I) Present an analysis of additional traffic which would result from the proposed facility, and demonstrate that additional traffic caused by operation of a disposal facility will not pose a safety threat to the public;
- (II) Demonstrate that the operation of the proposed facility will not present odor, dust, litter, insect, noise, health (human and animal) or aesthetic problems, and will not present a public nuisance by its proximity to the town, schools or dwellings. This demonstration may be made through analysis of the facility design and operation practices; and
- (III) Provide design features and monitoring specifications used to preclude methane migration from affecting any buildings within one mile of the proposed facility, if the facility is used for the disposal of wastes which may form methane as a decomposition product.
- (B) For proposed facilities which do not meet the location standard for proximity to, and visual screening from, state or federal highways in W.S. § 35-11-502(c)-(iii), the applicant shall provide information describing how the design and operation of the facility will minimize visual impacts to the highway(s).
- (C) For proposed facilities, excluding incinerators, which do not meet the location standard for proximity to water wells in W.S. § 35-11-502(c)(iv), the applicant shall provide:
- (I) A detailed description of the site's geologic and hydrologic characteristics, supported by data from on-site soil borings and groundwater monitoring wells;
- (II) A detailed description of the proposed facility's containment system (cap and liner systems) and surface water diversion structures;
- (III) A detailed description of the groundwater monitoring program (including location of wells, sampling frequency and sampling parameters) which would be instituted when the facility begins operations; and
- (IV) An analysis of the potential for contaminants which may leak from the disposal facility to adversely affect the nearby water well(s). This analysis may be in the form of contaminant transport modeling results, an evaluation of hydrologic conditions or aquifer properties, or other applicable information.
- (D) In addition to the other information requested in this subsection, all variance applications made under this subsection shall be accompanied by the following information:
  - (I) The proposed size of the facility;

- (II) The name, address and telephone number of the applicant;
  - (III) The legal description of the property;
- (IV) A detailed description of the facility which includes information on the amount, rate (tons per day), type (including chemical analyses if other than household refuse) and source of incoming wastes, a narrative describing the facility operating procedures, and the estimated site capacity and site life;
- (V) The names and addresses of the property owners of all lands within one mile of the proposed facility boundary;
- (VI) A USGS topographic map (scale of 1:24,000 or 1: 62,500) which shows the boundaries of the proposed landfill site or other suitable topographic map may be submitted if a 1:24,000 map is unavailable; and
- (VII) Information sufficient to evaluate the conditions specified in paragraph (i)(ii) of this section.
- (ii) In granting any variance as provided by this paragraph, the Director shall issue written findings that the variance will not injure or threaten to injure the public health, safety, or welfare. The Director shall only make such a finding if the evidence presented in the application and obtained at a public hearing demonstrates that:
- (A) There are no available alternative locations which meet the location standards to meet the disposal needs of the applicant, within a reasonable distance of the boundary of the service area of the facility;
- (B) It is not possible to use existing facilities owned by another person within a reasonable distance of the boundary of the service area of the facility; and
- (C) Special or unique conditions or circumstances apply to the applicant and justify granting the variance.
- (iii) In granting any variance the Director shall condition the variance such that it applies only to the facility described in the application. Changes to the facility size, type or source of waste, rate at which waste is received, or any other aspect of the facility may render the variance invalid as determined by the Director.
- (iv) The Administrator shall review the variance application within ninety days of the receipt of the application. If the application is incomplete or technically inadequate, the Administrator shall so advise and state in writing to the applicant the information required. Additional information submitted in response to any deficiency notification shall be reviewed by the Administrator within ninety days.

- (v) If the application is complete and technically adequate the Administrator shall provide draft findings and recommendations to the Director and the applicant. The draft findings shall state whether or not the Administrator has found that the variance will not injure or threaten to injure the public health, safety or welfare and the basis for the draft findings.
- (vi) Unless a delay is requested by the applicant, the Director shall schedule a public hearing on the draft findings within forty-five days. Notice of the hearing shall be published at least thirty days prior to the date of the hearing. Notice shall be published once a week for two consecutive weeks in a paper of general circulation within the county where the facility is located. The notice shall contain the identity of the applicant, summary information on the variance application, the location where the public can view copies of the application and the Administrator's review, the Administrator's draft decision regarding granting or denying the variance application, and the date, time and location of the hearing.
- (vii) A public comment period shall begin on the first date of publication and shall end at the conclusion of the hearing. The Director shall make a final decision regarding the variance within sixty days from the date of the hearing.
- (g) Permit application procedures for low hazard or low volume treatment, processing, storage, and transfer facilities:
- (i) The Administrator shall conduct a completeness and technical review of each application submittal within thirty days of receipt of the application. If the Administrator deems the application incomplete or technically inadequate, the Administrator shall so advise and state in writing to the applicant the information required.
- (ii) Public notice for low hazard or low volume facilities: For each new low hazard or low volume treatment, processing, storage, and transfer facility permit application or application for a major amendment to an existing facility permit, the Administrator shall issue a proposed permit following completion of the Administrator's permit analysis, unless the permit is denied pursuant to Section 4 of this Chapter. Upon receipt of a proposed permit the applicant shall within fifteen days:
- (A) Cause a written notice to be published once a week for two consecutive weeks. If the facility is mobile, notice shall be published in a newspaper of general circulation within the state. If the facility is not mobile, notice shall be published in a newspaper of general circulation within the county where the applicant plans to locate the facility. Specific text of the notice shall be provided to the applicant by the Administrator. The notice shall contain information about the permit application including the identity of the applicant, the proposed facility service area, location, if not mobile, size, the waste types intended for management, the method of waste management, the operating life, and the Administrator's findings. The notice shall identify the period for filing objections to the application;

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- (B) If a fixed facility, notify adjacent landowners by first-class mail; and
- (C) Provide the Administrator documentation that the notice requirements of this subsection have been followed, including copies of the publisher's affidavits and sworn statement.
- (iii) The public comment period shall begin on the first date of publication and shall end at 5:00 pm on the thirtieth day following the last day of publication of the notice.
- (iv) Any interested person may submit written objections no later than 5:00 pm on the last day of the public comment period. If substantial written objections are received by the Director within the public comment period a public hearing will be held in accordance with W.S. § 35-11-502(k).
- (v) Low hazard or low volume permit issuance: If documentation has been received that the public notice requirements of this section have been met and no substantial objections are received, the Director shall issue an operating permit or within thirty days.
- (vi) The operator of a facility with a valid operating permit issued under this subsection, shall submit a permit renewal application no later than 180 days prior to the expiration of said permit unless a closure permit application has been submitted. The renewal application shall contain the information specified in the applicable chapter of these rules.
  - (h) General Closure Permit for Municipal Solid Waste Landfills:
- (i) A general closure permit shall apply to the closure and post-closure activities for municipal solid waste landfills with less than thirty acres of municipal solid waste disposal area.
- (ii) Notice of intent for coverage under a general permit shall be made on forms provided by the Department which require a signature of agreement by the applicant to abide by all conditions of the permit.
  - (iii) All activities shall meet the standards of Chapter 2 of these rules.
- (iv) All notice of intent for coverage forms shall be prepared under the supervision of a professional engineer licensed in the State of Wyoming. All notice of intent for coverage forms shall be stamped, signed and dated by a professional engineer. In addition, all portions of the notice of intent for coverage which require geological services or work shall be stamped, signed and dated by a professional geologist licensed in the State of Wyoming.
  - (v) All notices of intent for coverage under a general permit shall be

processed as follows:

- (A) The Administrator shall review each notice of intent or resubmittal within sixty days from the date the notice of intent or resubmittal is received.
- (B) The Administrator may request additional information if it is determined that the information is inadequate to satisfy the requirements of these rules.
- (C) The Department shall issue an Authorization of Coverage within thirty days of finding that the notice of intent or resubmittal is complete.
- (D) No closure or post-closure activities shall commence until a written Authorization of Coverage under the general closure permit has been received from the Department.
- (vi) Authorizations of Coverage for municipal solid waste landfills shall be issued through the end of the post-closure period specified in Chapter 2 of these rules and shall be extended until the Administrator determines, upon petition by the operator accompanied by submission of relevant information, that the facility has been adequately stabilized in a manner protective of human health and the environment. Petitions to terminate the post-closure period shall include certification from a Wyoming licensed professional engineer that post-closure care has been completed in compliance with the approved post-closure plan and in a manner protective of human health and the environment. No renewals of Authorizations of Coverage shall be required.
- (vii) The general permit shall be developed pursuant to the permit issuance procedures of W.S. § 35-11-502(j), (k), and (m).

#### **Section 3.** Permit Amendments and Transfers.

- (a) Permit amendments constituting a major change for municipal solid waste landfills shall comply with the requirements of Chapter 2 of these rules.
- (b) Permit amendments constituting a major change for all non-municipal solid waste facilities and minor changes at all solid waste facilities shall comply with the following:
- (i) Within sixty days of receipt of any application for a permit amendment, the Administrator shall conduct a review of the application and provide a written response to the operator.
- (A) If the amendment is deemed complete and demonstrates compliance with applicable standards and constitutes a major change, the public notice and comment period in Section 2(c)(ii) of this Chapter shall commence.
  - (B) If the amendment is deemed complete and demonstrates

compliance with applicable standards and constitutes a minor change, the Administrator shall render a decision.

- (ii) If the proposed amendment is determined to be inadequate, the operator shall be required to submit any additional information required by the Administrator, unless there is a basis for denial.
- (c) All amendments shall comply with the location, design and construction, operating, monitoring, financial assurance, and closure standards of the applicable chapter of these rules.

## (d) Permit transfers:

- (i) An operator shall receive written approval from the Director prior to transfer of any permit authorized by these rules.
- (ii) Permit transfer applications shall be in writing by the operator. The application shall contain:
- (A) The name, address and telephone number of the legal operator of the facility to whom the permit will be transferred, and, at a minimum, a summary, listing of any administrative order, civil or administrative penalty assessment, bond forfeiture, civil, misdemeanor, or felony conviction, or court proceeding for any violations of any local, state or federal law occurring within a minimum of five years of application submittal relating to environmental quality or criminal racketeering, of the solid waste manager, the applicant, or if the applicant is a partnership or corporation, any partners in the partnership or executive officers or corporate directors in the corporation;
- (B) The name, address and telephone number of the solid waste manager;
  - (C) Proposed date of the transfer of the permit; and
- (D) Signed and notarized documentation from the new operator indicating that the new operator has agreed to accept and be bound by the provisions of the permit and any amendments, agreed to construct and operate the facility in accordance with the approved plan, and agreed to accept responsibility for the facility's compliance with the standards specified in the applicable chapter of these rules, including the responsibility to perform corrective actions.
- (iii) The original operator shall retain responsibility for the facility according to the terms of the original permit until the application for permit transfer has been approved by the Director. The new operator may not operate the facility until the permit transfer has been approved.
  - (iv) No permit may be transferred from one operator to another unless the

new operator demonstrates compliance with the financial assurance requirements of Chapter 7 of these rules.

## Section 4. Permit Denial, Revocation, Modification, or Termination.

- (a) The Director may deny a permit if:
- (i) Permit issuance would conflict with any provision of the Act or these rules:
  - (ii) The applicant fails to submit the required information;
- (iii) The facility history indicates continual noncompliance with these rules;
- (iv) The application indicates that the facility would not comply with the location, design and construction, operating, monitoring, closure or post- closure standards as specified in the applicable sections of these rules;
  - (v) The application misrepresents actual site conditions;
- (vi) The applicant fails to employ a solid waste manager who meets the qualifications of the applicable chapter of these rules; or
- (vii) The applicant, or any partners, executive officers, or corporate directors, has been found civilly or criminally liable for violations of environmental quality or criminal racketeering laws or regulations which in the judgment of the Director constitutes evidence that the applicant cannot be relied upon to conduct the operations described in the application in compliance with the Act and these rules.

## (b) Permit revocation:

- (i) The Director may revoke a permit in instances of continual noncompliance, or if it is determined that the permit application misrepresented actual site conditions, or if the continued operation is inconsistent with any provision of the Act or these rules.
- (ii) The Director shall notify the operator of his or her intent to revoke the permit. The written notification shall contain the basis for revoking the permit. All permit revocation procedures shall be accomplished in accordance with the requirements of the Wyoming Administrative Procedures Act.
- (iii) The Director may order facility closure following permit revocation. Closure and post-closure activities shall be accomplished in accordance with a plan approved by the Administrator. If a closure/post-closure plan has not been approved, closure and post-closure activities shall be accomplished in accordance with the standards specified in the

applicable chapter of these rules.

(c) Permit modification: The Director may modify an existing permit by notifying the facility operator in writing. The written notification shall contain the basis for modifying the permit.

## (d) Permit termination:

## (i) Operating permit termination:

(A) Upon completion of closure activities, the operator shall provide a certification, with supporting documentation, from a Wyoming registered professional engineer confirming that the provisions of the closure plan have been carried out and that the facility has been closed in compliance with the closure standards specified in these rules. The operator shall be notified in writing whether the closure certification is deficient or a written termination of the operating permit shall be issued. Operating permits shall not terminate until written authorization has been provided by the Administrator.

## (ii) Closure permit termination:

- (A) Following the initial minimum post-closure period specified in the applicable chapter of these rules, the owner or operator may submit a petition to the Administrator requesting termination of the facility's closure permit and post-closure period. Petitions shall include supporting documentation and certification from a Wyoming registered engineer that post-closure care has been completed in compliance with the post-closure plan and in a manner protective of human health and the environment. The operator shall be notified in writing whether the post-closure certification is deficient or a written termination of the closure permit shall be issued. Closure permits shall not terminate until written authorization has been provided by the Administrator.
- (iii) Release of financial assurance: Following permit termination, financial assurance shall be released as prescribed in Chapter 7 of these rules.

## Section 5. One-Time or Emergency Waste Management Authorizations.

## (a) Authorization application procedure:

- (i) This section applies to emergency situations, spilled solid wastes and residues from uncontrolled releases. This section does not apply to the land disposal of municipal solid wastes, mixed wastes, hazardous wastes or actions completed under either a hazardous waste permit or a hazardous waste corrective action order.
- (ii) The Administrator may choose to issue a one-time or emergency waste management authorization in lieu of the permits specified in Section 2 of this Chapter. This type of waste management authorization shall only be considered under the following conditions:

- (A) The proposed waste management activity shall be a single occurrence of limited duration;
- (B) The applicant documents that other waste management and reuse options were thoroughly investigated and that no other reasonable alternatives had been identified;
- (C) The proposed waste disposal site would meet the applicable location standards specified in Chapter 3, or 4 of these rules or the proposed waste management site would meet the applicable location standards specified in Chapter 8 of these rules;
- (D) The proposed waste management activity would not present a significant threat to public health or the environment;
- (E) The waste management activity would result in de minimis impacts which would not warrant the initiation of public participation procedures;
  - (F) The total waste disposal area would be no more than one acre;
- (G) The applicant can document that permission has been obtained from the landowner to manage the materials at the proposed waste management location, if that location is not owned by the applicant; and
- (H) The applicant commits to promptly record a notarized notice with the county clerk, in the county where the facility is located, which adequately describes the location, nature and extent of any waste disposal activity.
- (iv) The waste management authorization request shall document compliance with the conditions specified in subsection (a)(ii) of this section allowing for the Administrator's consideration of a one-time or emergency waste management authorization. The request shall contain information adequate to demonstrate compliance with the standards specified in the applicable chapter of these rules.
- (v) The waste management authorization request shall be reviewed by the Administrator within forty-five days after submission.

#### (b) Authorization issuance:

(i) The Administrator may deny a one-time or emergency waste management authorization for any of the reasons specified in Section 4(a) of this Chapter. The Administrator may also deny a one-time or emergency waste management authorization if it is determined that the proposed waste management activity would not be subject to the provisions described in subsections (a)(i) and (a)(ii) of this section.

- (ii) If the waste management authorization request is determined to be complete and the request demonstrates compliance with the standards in the relevant application requirements section, a waste management authorization will be granted by the Administrator.
- (iii) The operator shall notify the Administrator following completion of authorized waste management activities. This notification shall be accompanied by site photographs adequate to demonstrate the site conditions following closure.
- (iv) The term of the waste management authorization shall be no longer than one year unless, for good cause, the Administrator approves additional time.

## Wyoming Administrative Rules

## Environmental Quality, Dept. of

## Solid Waste Management

Chapter 6: Transfer, Treatment, and Storage Facility Regulations

Effective Date: 05/03/2019 to Current

Rule Type: Current Rules & Regulations

Reference Number: 020.0009.6.05032019

#### **CHAPTER 6**

## TRANSFER, TREATMENT, AND STORAGE FACILITY REGULATIONS

## Section 1. In General.

- (a) Authority: The authority for the rules and regulations promulgated in this chapter is the Wyoming Environmental Quality Act, Wyoming Statutes (W.S.) §§ 35-11-101 et seq.
  - (b) Permit transition:
    - (i) Existing facilities:
- (A) Existing facilities that have received wastes after the effective date of these regulations:
- (I) The operator of any facility with a complete application or a valid permit or an authorization that has not expired by the effective date of these regulations shall either:
- (1.) Submit a renewal application before the existing permit or authorization expires, or
- (2.) Cease receipt of wastes before the existing permit or authorization expires and close in conformance with the closure standards in this chapter.
- (II) The operator of any facility without a complete application or a permit or authorization that has expired by the effective date of these regulations shall either:
- (1.) Submit a renewal application no later than six (6) months after the effective date of these regulations, or
- (2.) Cease receipt of wastes within six (6) months after the effective date of these regulations and close in conformance with the closure standards in this chapter.
- (B) Existing facilities that have not received wastes after the effective date of these regulations: The operator may be required to submit a closure plan upon request by the Administrator. The Administrator may request such a plan whenever the Administrator has reason to believe that health and safety hazards are present or there is evidence of environmental contamination.
- (ii) New facilities: The operator of any new facility shall submit an application as specified in Chapter 1 and shall obtain a permit prior to construction;

## (iii) Closing facilities:

- (A) Anticipated closure: The operator of any facility with a valid permit on the effective date of these regulations shall provide written notice of the intent to close to the Administrator at least thirty (30) days prior to commencing closure and close the facility in conformance with the closure standards in the facility's permit and this chapter. Closure shall be completed within ninety (90) days, unless additional time is granted by the Administrator. Within thirty (30) days after closure activities have been completed, the operator shall submit written documentation of closure to the Administrator. When the Administrator determines that closure has been properly completed and there are no health and safety hazards or environmental contamination, the permit shall be terminated and financial assurance will no longer be necessary.
- (B) Unanticipated closure: In the event any facility ceases operation, as determined by nonreceipt of solid wastes for a continuous nine (9) month period or any continuous one (1) year period for petroleum-contaminated soils land treatment facilities and mobile transfer, treatment and storage facilities, the operator shall provide written notification to the Administrator no later than thirty (30) days after the end of such nine (9) month or one (1) year period and close the facility in conformance with the closure standards in the facility's permit and this chapter. Closure shall be completed within ninety (90) days, unless additional time is granted by the Administrator. Within thirty (30) days after closure activities have been completed, the operator shall submit written documentation of closure to the Administrator. When the Administrator determines that closure has been properly completed and there are no health and safety hazards or environmental contamination, the permit shall be terminated and financial assurance will no longer be necessary.
- (C) Mobile transfer, treatment and storage facility closure: The operator of any mobile facility shall provide written notification to the Administrator within thirty (30) days if the operator no longer plans to operate the facility.

## (c) Permit terms:

- (i) Permits shall be issued for the operating life of the facility through closure and completion of any required remediation activities, as approved by the Administrator.
- (ii) Mobile facilities shall not be operated in a single location for more than one (1) year, unless the Administrator provides specific written authorization;
- (d) Definitions: The definitions in W.S. § 35-11-103(a) and (d) of the Wyoming Environmental Quality Act and the definitions in Solid Waste Rules and Regulations Chapter 1 apply to these rules.

## **Section 2.** Permit Application Requirements.

(a) General standards: All facilities shall comply with the applicable standards in this chapter, whether or not detailed information must be submitted in a permit application.

- (b) Permit application forms: All permit applications shall contain a completed permit application form. All permit application forms shall be signed by the operator, the landowner and any real property lien holder of public record. All applications shall be signed by the operator under oath subject to penalty of perjury. All persons signing the application shall be duly authorized agents.
  - (i) The following persons are considered duly authorized agents:
- (A) For a municipality, state, federal or other public agency, by the head of the agency or ranking elected official.
  - (B) For corporations, at least two principal officers.
- (C) For a sole proprietorship or partnership, a proprietor or general partner, respectively.
- (ii) Except for Low Hazard/Low Volume (LH/LV) facilities (fixed and mobile), all permit applications shall be prepared under the supervision of a professional engineer registered in the State of Wyoming. Except for LH/LV facilities (fixed and mobile), all permit application forms shall be stamped, dated and signed by a professional engineer. In addition, all portions of the permit application that require geological services or work shall be stamped, signed and dated by a professional geologist licensed by the State of Wyoming.
- (c) Low Hazard/Low Volume facility permit applications, except applications for mobile facilities: In addition to a permit application form, LH/LV permit applications shall include:
- (i) An original USGS map or another map approved by the Administrator, identifying the location of the facility. If the facility is located within a city or town, a map of the city or town may be used in lieu of an original USGS map.
- (ii) A brief narrative describing the facility, including a description of waste management activities, the type and quantity of waste managed, the service area and the source of incoming waste.
- (iii) A demonstration that the facility meets the location standards in Section 4 of this chapter.
- (iv) Except for municipally operated facilities, a detailed description of the tasks to be completed in order to properly close the facility, including but not limited to the removal and proper management of the maximum amount of wastes, both treated and untreated, that may be stored at the facility, cleaning of all solid waste management units and equipment, and reclamation of the site.
  - (v) Information to verify compliance with Chapter 7, including an estimate of

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third-party costs associated with facility closure tasks, and an appropriate financial assurance mechanism.

- (d) Mobile and full-size fixed transfer, treatment, and storage facility permit applications: In addition to a permit application form, a written application shall demonstrate compliance with the applicable requirements of Sections 3-17 of this chapter. If any standard or requirement is not applicable to the facility, the permit application shall explain why the standard or requirement is not applicable.
- (e) Renewal applications: Renewal applications shall be submitted as required in Chapter 1 and shall contain the following information:
- (i) A compilation of any available previous permit application materials and supplemental information updated and revised as necessary to describe any amendments and fulfill the information requirements specified in this chapter, except for surface ownership and location standards. The applicant may submit copies of only the updated and revised portion of the previous application, if the revised and updated pages are appropriately numbered and dated to facilitate incorporation into the previous permit document.
- (ii) Any necessary plan revisions and any requests for approval of amendments.

## **Section 3.** General Facility Information.

- (a) Requirements for mobile and full-size fixed facilities:
- (i) The name, address and telephone number of the operator of the facility to whom the permit would be issued, and a listing of any administrative order, civil or administrative penalty assessment, bond forfeiture, misdemeanor or felony conviction, or court proceeding, for any violations of any local, state or federal law relating to environmental quality or criminal racketeering, in which the applicant (including any partners in a partnership or executive officers in any corporation, if the applicant is a partnership or corporation) has been or is currently involved.
- (ii) The position title, address, and telephone number of the solid waste manager.
- (iii) A brief narrative describing the facility, the type of waste transfer, treatment and storage that is planned, including but not limited to chemical, physical, biological, and thermal activities. A descriptive statement of the procedures and processes to be used, and the type, amount, and source of incoming waste shall be provided. The narrative shall also describe the service area of the facility.
  - (b) Additional requirements for full-size fixed facilities:
    - (i) The legal description of the property to be used as a transfer, treatment and

storage facility. The complete legal description shall consist of a plat and legal description, monumented and signed in accordance with Wyoming statutes by a Wyoming licensed land surveyor.

- (ii) Information describing surface ownership of the site and all lands adjacent to the facility boundary.
  - (c) Access agreement: The application shall include the following access agreement:
- (i) The owner of the facility authorizes Department representatives, upon the presentation of credentials and other documents as may be required by law, to access and enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of a permit, authorization or exemption; have access to and copy, at reasonable times, any records that must be kept under the conditions of any permit, authorization or exemption; inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the Act; and collect resource data, sample or monitor at reasonable times, for the purposes of ensuring compliance or as otherwise authorized by the appropriate rules and regulations of the Department, any substances or parameters at any location.

## **Section 4.** Location Standards.

- (a) General standards: New transfer, treatment and storage facilities shall not be located in violation of the standards in this section.
- (b) Local zoning: Facility locations shall not be in conflict with local zoning ordinances or land use plans that have been adopted by a county commission or municipality.
- (c) Floodplains: Facilities shall not be located within the boundaries of a 100-year floodplain.
  - (d) Wetlands: Facilities shall not be located in wetlands.
- (e) Outdoor waste management: Waste management activities that are not conducted inside an enclosed building, tank or a container shall not be located within 1,000 feet of the following unless the facility or waste management unit or area is screened from view, as approved by the Administrator:
  - (i) An occupied dwelling house, school or hospital.
  - (ii) An interstate or primary highway right-of-way.
  - (iii) A public park or recreation area.
- (f) Wild and Scenic Rivers Act: Facility locations shall not diminish the scenic, recreational and fish and wildlife values for any section of river designated for protection under

the Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq., and implementing regulations.

- (g) National Historic Preservation Act: Facilities shall not be located in areas where they may pose a threat to an irreplaceable historic or archeological site listed pursuant to the National Historic Preservation Act, 16 U.S.C. 470 et seq. and implementing regulations, or to a natural landmark designated by the National Park Service.
- (h) Critical habitat: Facilities shall not be located within a critical habitat of an endangered or threatened species listed pursuant to the Endangered Species Act, 16 U.S.C. 1531 et seq., and implementing regulations, where the facility may cause destruction or adverse modification of the critical habitat, may jeopardize the continued existence of endangered or threatened species or contribute to the taking of such species.
- (i) Critical winter range: Facilities shall not be located within critical winter ranges for big game or breeding grounds for grouse unless, after consultation with the Wyoming Game and Fish Department, the Administrator determines that facility development would not conflict with the conservation of Wyoming's wildlife resources.
- (j) Special waste: Any facility used for the management of a special waste regulated under Chapter 8, Special Waste Management Standards, shall also comply with applicable location standards established under Chapter 8.

## Section 5. Geology, Hydrology and Hydrogeology.

- (a) Requirements for mobile and full-size fixed facilities:
- (i) An evaluation of the facility's potential to impact surface and ground water quality, based on the facility design and operating practices.
  - (b) Additional requirements for full-size fixed facilities:
- (i) Detailed information describing the site's geology, hydrology and hydrogeology and an evaluation of the potential to impact surface and groundwater quality based on the site's geology, hydrology and hydrogeology shall be provided if waste management occurs outside an enclosed building.

## Section 6. Design and Construction Standards.

- (a) Waste management units: The size, type and number and purpose of all solid waste management units and equipment shall be described. This information shall also include a description of the capacity of the solid waste management units and equipment in terms of how much waste can be transferred and treated per hour, day, month or year and the maximum quantity of wastes, both treated and untreated, that can be stored in each solid waste management unit.
  - (b) Fences and gates: Other than mobile facilities, each facility shall be fenced and

equipped with a gate that can be locked. Facilities do not need to be fenced and equipped with a gate that can be locked if the facility is located in a remote or industrial area that already has adequate access control features in place to meet the intent of this standard. Appropriate measures shall be used to restrict access to mobile treatment facilities.

- (c) Access signs: Each point of access shall be identified by a sign that shall be easily readable, maintained in good condition, and contain, at a minimum, the following information:
  - (i) The facility name.
- (ii) The name and phone number of the responsible person to contact in the event of emergencies.
  - (iii) The hours of operation if the facility is open to the public.
- (iv) Depending on the particular waste type, additional information describing the particular hazards of the waste may also be required.
- (d) Traffic signs: Each facility shall have signs to direct traffic to the proper waste management area, if the facility is open to the public.
- (e) Waste management unit signs: Solid waste management units and equipment used to manage treated or untreated waste shall be identified by a sign or label that shall be easily readable, maintained in good condition and identify the name of the solid waste management unit or equipment and the waste type contained in the solid waste management unit.
- (f) Access roads: Facility access roads shall be constructed to enable use under inclement weather conditions as applicable.
- (g) Fire lanes and buffer zones: For those facilities where any waste management occurs outdoors, the facility shall have a fire lane/buffer zone constructed around all active solid waste management units and equipment or within the site perimeter fence. The width of the fire lane/buffer zone shall be a minimum of twenty (20) feet, but may be wider depending on the specific waste type and the ability of fire fighting equipment to properly operate within the facility.
- (h) Surface water structures: For those facilities where any waste management occurs outdoors, the facility shall have surface water structures to control surface water run-on and run-off. Surface water structures shall be designed and constructed to:
- (i) At fixed facilities, prevent flow onto the active portion of the facility during the peak discharge from a 25-year storm.
- (ii) At fixed facilities, collect and control runoff from the active portion of the facility from at least the water volume from a 24-hour, 25 year storm.

- (iii) At mobile facilities, control run-on and runoff from the active portion of the facility.
- (iv) At all facilities, sediment control structures shall be designed and constructed in accordance with Chapter 11 of the Water Quality Rules and Regulations.
- (i) Waste containment: Units shall be designed and constructed to contain the wastes within the unit and prevent the migration of contaminants. Solid waste management units that manage liquid waste shall also meet the following standards:
- (i) Above ground tanks and containers shall be equipped with low-permeability secondary containment systems that provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation.
- (ii) Below ground tanks or containers shall be designed and constructed with leak detection systems.
- (iii) Ponds shall be designed and constructed in accordance with Chapter 11 of the Water Quality Rules and Regulations.
- (iv) Open-topped tanks, containers and ponds that contain wastes that are either petroleum-based or have a pH less than 3 or greater than 10 shall be designed and constructed with netting that is adequate to prevent access by migratory birds.

## Section 7. Operating Standards.

- (a) Access controls: Access shall be controlled to prevent the public, livestock or wildlife from being exposed to hazardous constituents or conditions. Access does not need to be controlled if the facility is located in a remote or industrial area that already has adequate access control features in place to meet the intent of this standard.
- (b) Waste types and quantities: Each facility shall accept and manage only those wastes and quantities that are specified in the facility permit, unless the Administrator provides specific written authorization to accept and manage other wastes and quantities.
- (c) Waste screening: Waste screening measures shall be used to prevent the management of unauthorized wastes. The waste screening measures may include specific waste testing procedures to verify that only authorized wastes are accepted at the facility.
- (d) Hazardous waste: Hazardous waste shall not be managed unless the Administrator provides specific written authorization.
- (e) Waste confined: All wastes shall be confined to solid waste management units and equipment as specified in the permit.

- (f) Surface water and groundwater contact: Waste shall not contact surface water or groundwater.
- (g) Fire protection: All facilities shall be equipped with at least one working portable fire extinguisher and a communication system for contacting local emergency management agencies. Depending on the particular waste type or management method, additional fire protection and emergency management equipment may be required.
- (h) Litter collection: Each facility shall have an effective litter collection program to contain litter within the facility and to prevent the facility from becoming unsightly, if the facility manages wastes that are susceptible to blowing.
- (i) Disease vectors: Onsite populations of disease vectors shall be prevented or controlled using techniques appropriate for the protection of human health and the environment.
  - (j) Dust and odors: Adequate measures shall be taken to minimize dust and odors.
  - (k) Scavenging: Scavenging shall be prohibited at all facilities.
- (l) Mechanical breakdown: In the event of extended mechanical breakdown, all untreated wastes shall be removed from the facility to an approved alternate facility before the wastes create a public nuisance, health hazard, fire hazard, odors or vector habitat.
- (m) Waste and wastewater: All wastes and wastewaters generated from any waste management processes shall be characterized and managed by the operator in accordance with applicable Department standards unless the facility is mobile and the facility operator will not be responsible for managing waste.
- (n) Confirmation sampling: Confirmation sampling and analysis shall be conducted by the operator to verify that wastes have been properly treated unless the facility is mobile and the facility operator will not be responsible for managing the waste.
- (o) Water Quality and Air Quality standards: Facilities shall be operated so that they are not in violation of Water Quality and Air Quality standards.

## **Section 8. Monitoring Standards.**

- (a) General standards: All facilities required to institute monitoring shall meet the standards described in this section. The application shall include a detailed description of the environmental monitoring program including a description of the monitoring well location, design, construction and development. A description of the groundwater sampling program shall be provided including sampling frequency, test parameters, sampling procedures, test methods and quality control
- (b) Collection and management of samples: Groundwater, soil, and decomposition gas samples shall be collected and managed in accordance with Department guidance or

equivalent methods approved by the Administrator.

## (c) Groundwater:

- (i) Well placement: All facilities required to install monitoring wells shall locate and construct them in accordance with the Department's requirements. The system must be capable of monitoring the quality of background groundwater and groundwater passing the relevant point of compliance established by the Administrator that shall be within 150 meters (492 feet) of the waste management unit boundary on land owned by the owner of the facility.
- (ii) Well design, construction/installation and abandonment: All wells shall be designed, constructed and installed in accordance with the Water Quality Division Chapter 26 requirements. All abandoned monitoring wells shall be plugged and sealed in accordance with the Water Quality Division Chapter 26 requirements.
- (iii) Detection monitoring: Operators required to monitor groundwater shall institute a detection monitoring program by initially collecting four (4) quarterly samples from each well and testing each sample for the constituents specified in Chapter 2, Appendix C unless alternate or additional constituents are required by the Administrator based on wastes managed at the facility. After collection of the initial four (4) samples, semiannual samples shall be collected unless the Administrator approves an alternate sampling frequency.
- (A) The owner or operator must determine whether or not there is a statistically significant increase over background values as follows:
- (I) The owner or operator must compare the groundwater quality of each parameter or constituent at each monitoring well using the approved statistical method; and
- (II) Within thirty (30) days after completing sampling and analysis, unless an alternate time frame is approved by the Administrator, the owner or operator must determine whether there has been a statistically significant increase over background at each monitoring well.
- (B) If there is a statistically significant increase over background for one or more constituents in any well the operator must:
- (I) Notify the Administrator in a written report with supporting documentation and place a copy of the report in the facility operating record within fourteen (14) days.
- (II) The owner or operator may be required by the Administrator to initiate an assessment monitoring program unless within ninety (90) days or an alternate time frame approved by the Administrator, the owner or operator demonstrates to the Administrator in writing that the statistically significant increase over background is not due to the solid waste facility or unit, but that the difference is due to another source of pollution, error

in sampling, analysis or statistical evaluation, or natural variation in groundwater quality. The owner or operator shall prepare a report documenting this demonstration, and following approval by the Administrator, place the report in the operating record for the facility. If the demonstration is approved, the owner or operator shall continue detection monitoring.

## (III) If a successful demonstration is not made:

(1.) The owner or operator shall request that the Administrator classify groundwater according to Wyoming Water Quality Rules and Regulations and establish groundwater protection standards for applicable constituents.

## (iv) Assessment monitoring:

- (A) If the concentration of one or more constituents exceeds background, the Administrator may require the operator to analyze groundwater samples for some or all of the constituents found in Chapter 2, Appendix A or B based on the wastes managed at the facility. Some or all of these constituents may be added to the detection and/or assessment monitoring program for the facility.
- (B) After groundwater protection standards have been established, within thirty (30) days after completing sampling and analysis, unless an alternate time frame is approved by the Administrator, the owner or operator shall determine if there has been a statistically significant increase over a groundwater protection standard in each downgradient well specified by the Administrator using a statistical method approved by the Administrator.
- (C) If one or more constituents are detected at statistically significant levels above the groundwater protection standard at a relevant point of compliance established by the Administrator that is no more than 150 meters (492 feet) from the waste management unit boundary on land owned by the owner of the facility, the owner or operator shall within fourteen (14) days notify the Administrator of the constituents detected above the groundwater protection standard in a written report with supporting documentation.
- (D) Unless the owner or operator demonstrates that the statistically significant increase was caused by another source, resulted from an error in sampling, analysis, or statistical evaluation, or from natural variation in groundwater quality, the Administrator may require the owner or operator to characterize the nature and extent of the release, conduct an assessment of corrective measures, and institute corrective action remedies approved by the Administrator.
- (v) Facilities required to monitor groundwater shall conduct statistical evaluations of groundwater data using the methods in Chapter 2, Section 9(b)(i)(C)(V) through (VII).
- (d) Air: Air monitoring, if required, shall be conducted in accordance with Air Quality Division regulations.

- (e) Soil core: Soil core monitoring, if required, shall be conducted in accordance with a plan approved by the Administrator.
- (f) Vadose zone: Vadose zone monitoring, if required, shall be conducted in accordance with a plan approved by the Administrator.

## Section 9. Recordkeeping Standards.

- (a) General standards: The following records shall be maintained at the facility or an approved alternative location and available for inspection and copying as specified by Chapter 1:
  - (b) Records for all facilities:
    - (i) A copy of the approved permit application.
    - (ii) A copy of the Department permit letter.
  - (c) Records for mobile and full-size fixed facilities:
- (i) Records of litter collection activities, including dates and areas of litter collection, if applicable.
- (ii) Records of the source (if not a mobile facility), volume and characteristics of wastes received by the facility.
- (iii) Records of the destination (if known), volume and characteristics of wastes removed from the facility.
- (iv) Records of monitoring activities and copies of monitoring data, if applicable.
- (v) Records of any problems causing operations to cease and emergencies, including but not limited to fire or equipment failure.

## Section 10. Reporting Standards.

- (a) Reporting standards for mobile facilities: The following records shall be provided to the Administrator prior to mobilization, on a form provided by the Administrator. Copies of these records shall be maintained at the facility or an approved alternative location and available for inspection and copying as specified by Chapter 1:
- (i) The name, address and telephone number of the generator at each location where the facility will operate.
- (ii) The location or street address of each location where the facility will operate.

- (iii) Records demonstrating that each location where the facility will operate meets the location standards specified in Section 3 of this chapter.
- (iv) Estimated dates of mobilization to and demobilization from each location where the facility will operate.
- (v) Records of the source, volume and characteristics of wastes that will be managed by the facility.
- (b) General reporting requirements for all facilities: Operators shall submit a report or permit amendment to the Administrator under the following circumstances:
- (i) Fires and other emergencies: The operator shall report fires and other emergencies to the Administrator as soon as reasonably possible.
- (ii) Monitoring: If monitoring is required, following each sampling event, operators shall provide the Administrator with copies of all required environmental monitoring data and statistical evaluations within thirty (30) days after completion of sampling and analysis unless the Administrator approves a reporting delay for good cause. Operators may be required to submit supporting charts and maps representing the data in the monitoring reports. Monitoring data shall be submitted electronically in a format specified by the Administrator.
- (iii) General facility changes: A permit amendment application shall be submitted for approval prior to implementing any change that would result in non-compliance with the facility permit or the approved permit application. Permit amendments shall comply with the requirements of Chapter 1 of the Solid Waste Rules and Regulations.
- (iv) Additional Information: The Administrator may require reporting of additional information needed to demonstrate compliance with these rules and regulations.

## Section 11. Closure Standards.

- (a) General standards: The application shall include a detailed description of the tasks to be completed in order to properly close the facility, including but not limited to the removal and proper management of the maximum amount of wastes, both treated and untreated, that may be stored at the facility, cleaning of all solid waste management units and equipment, and reclamation of the site. Facilities shall meet the following standards:
  - (b) Commencement and completion of closure:
- (i) Fixed facilities: At all fixed facilities, closure activities as specified in the approved facility permit application, shall commence at a time no later than nine (9) months following the time the facility ceases to receive solid wastes. Closure shall be promptly completed within twelve (12) months following commencement of such closure activities unless the Administrator approves an extended closure period for good cause.

- (ii) Mobile facilities: At the completion of each mobile transfer, treatment and storage facility operation at a specific location, all waste management units and equipment shall be properly cleaned, decontaminated, dismantled and removed from the site.
- (c) Removal of waste: All remaining treated and untreated wastes shall be removed from the facility and transported to a permitted facility for treatment, storage, or disposal. No wastes shall be allowed to remain at the facility for a period longer than thirty (30) days after closure has commenced
- (d) Equipment decontamination: All solid waste management units and equipment shall be properly cleaned, decontaminated, dismantled and removed from the facility.
- (e) Access restrictions: Perimeter fences, gates and any other access restrictions shall be maintained until the facility has been satisfactorily closed, as determined by the Administrator. The application shall state the length of time that the closed facility will maintain access restrictions to prevent entry by the public and large animals.
- (f) Surface water structures: Surface water structures shall be maintained until the facility has been satisfactorily closed, as determined by the Administrator.
- (g) Monitoring systems: Environmental monitoring systems, if required, shall be maintained until the facility has been satisfactorily closed, as determined by the Administrator, at which time they shall be properly abandoned. Applications shall include a description of the method and schedule by which the environmental monitoring systems will be abandoned.
- (h) Post-closure use: Each facility shall be returned to the use specified in the permit, unless an alternative use is approved by the Administrator.
- (i) Other information: The application shall include any other information requested by the administrator to verify that an adequate closure has been accomplished.

#### Section 12. Financial Assurance Standards.

- (a) General standards: Except for mobile and municipally operated facilities, all facilities shall comply with the financial assurance requirements of Chapter 7.
- (b) Third-party costs: The application shall include an estimate of the third-party costs associated with facility closure tasks and an appropriate financial assurance mechanism.

#### Section 13. Corrective Action Standards.

- (a) Schedule: On a schedule approved by the Administrator, the operator must:
  - (i) Implement a remedy approved by the Administrator.

- (ii) Continue monitoring to demonstrate the effectiveness of the remedy.
- (iii) Take interim measures determined necessary by the Administrator to ensure protection of public health and the environment.
- (b) Alternate remedies: If the selected remedy is not meeting the corrective action standards, the owner or operator shall implement other methods or techniques that have been approved by the Administrator that could practicably achieve compliance with the requirements, unless there is no practicable alternative and the owner or operator:
- (i) Demonstrates to the satisfaction of the Administrator that the remedy cannot be achieved.
- (ii) Implements alternative measures that have been approved by the Administrator to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment.
- (iii) Implements alternate measures for control of the sources of contamination or for removal or decontamination of equipment, units, devices, or structures that are consistent with the overall objective of the remedy and that are technically practicable.
  - (c) Remedy completion:
    - (i) Remedies shall be considered complete when:
- (A) The owner or operator complies with groundwater protection standards at all points within the plume of contamination that lie beyond the relevant point of compliance established by the Administrator. Compliance with the groundwater protection standards shall be considered complete when concentrations of constituents have not exceeded the groundwater protection standard(s) for a period of three (3) consecutive years using approved statistical procedures.
  - (B) All actions required to complete the remedy have been satisfied.
  - (ii) When the operator believes the remedy is complete, the operator must:
- (A) Notify the Administrator in writing, with supporting documentation, and place a copy of the notice in the facility operating record certifying that the remedy has been completed.
- (B) Petition the Administrator to be released from the financial assurance requirements for corrective action under Chapter 7 of these rules and regulations.
- (C) When, upon completion of the certification, the Administrator determines that the corrective action remedy has been completed, the owner or operator shall be released from the requirements of financial assurance for corrective action.

## Section 14. Special Waste Standards.

(a) Special waste standards: The application shall include information describing compliance with standards for the transfer, treatment, and storage of any special waste as provided in Chapter 8.

## Section 15. Commercial Solid Waste Facility Standards.

(a) Commercial solid waste facility standards: The permit application shall demonstrate compliance with the requirements of Chapter 10 and W.S. § 35-11-514.

## **Section 16.** Additional Information.

(a) Additional information: The Administrator may require additional information needed to demonstrate compliance with these rules and regulations.

## Section 17. Supporting Documentation/Appendices.

- (a) Supporting materials: At a minimum, appendices shall include the information in this section.
- (b) Map or aerial photograph: For fixed facilities, an original USGS topographic map or aerial photograph of the area shall be submitted showing land ownership, land use and zoning within one-half mile of the facility, unless there is an incinerator at the waste management site, in which case the map or aerial photograph shall show land ownership, land use and zoning within one mile of the facility. The map or photograph shall be of sufficient scale to show all city boundaries, occupied dwellings, schools, hospitals, industrial buildings, water wells, water courses, roads and other applicable details and shall indicate the general topography.
- (c) General facility plot plan: For fixed facilities, a general facility plot plan at a scale approved by the Administrator shall be submitted. If all waste management activities occur within a single building, a scaled floor plan can be used in lieu of a general facility plot plan. The general facility plot plan shall illustrate the following features:
- (i) Facility boundaries, including any buffer zones and fire lanes proposed between the solid waste permit boundary and the property boundary.
  - (ii) Points of access.
  - (iii) Working area/perimeter fence location.
  - (iv) Location of all solid waste management units and equipment.
  - (v) Locations of any buildings to house equipment or for other uses.

- (vi) The location of any surface water structures.
- (vii) The location of environmental monitoring devices.
- (viii) Any other facility features requested by the administrator.
- (d) Cross sections and drawing details: Cross sections and drawing details may be requested with sufficient specifications to describe:
- (i) The movement of wastes through the waste management facility, including the points where process wastes are generated.
  - (ii) Site access roads.
  - (iii) Solid waste management units and equipment.
  - (iv) Secondary containment structures and leak detection systems.
  - (v) Surface water structures.
  - (vi) Environmental monitoring systems.
  - (vii) Any other design and construction details requested by the administrator.
- (e) Logs, forms, and reports: Blank copies of any logs, forms, and reports used by the facility to comply with recordkeeping requirements, including a description of where these records will be located.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY SOLID AND HAZARDOUS WASTE DIVISION

## SOLID WASTE GUIDELINE #27

## "Dead Animal Management"

#### Introduction

The purpose of this guideline is to summarize the options available in Wyoming for dead animal management.

#### Background

In Wyoming, dead animals are regulated as a municipal solid waste as defined by the Solid Waste Rules Chapter 1, Section 1 (b)(lvii), which defines municipal solid waste (MSW) as "solid waste resulting from or incidental to residential, community, trade or business activities, including garbage, rubbish, dead animals, abandoned automobiles and all other solid waste other than construction and demolition, industrial or hazardous waste."

Items meeting the definition of municipal solid waste must be managed by facilities permitted by the Wyoming Department of Environmental Quality (Department), unless an exemption is obtained. The Department does not allow dumping of solid wastes in open pits or trenches or open burning of such waste. The Department has worked with operators to develop options for dead animal management that allow them to select an option that best fits their particular situation. The Department recommends that anyone wishing to dispose of dead animals contact their local waste operator to determine if dead animal disposal is allowed at the facility. Each local waste operator may place their own restrictions on waste generators and transporters. Local waste operators may limit or prohibit dumping of blood and other liquids. Liquid waste management through small wastewater systems or by surface discharge may require a Water Quality Division permit.

Below is a summary of dead animal management options authorized by the Department:

## • Burial at a permitted municipal solid waste landfill

- o The Solid Waste Rules allow for the burial of dead animals, whole or otherwise, at permitted municipal solid waste landfills. This disposal option is preferred because of the environmental controls used at these facilities.
- o In order to dispose of dead animals, a municipal solid waste landfill permit is required. The owner of the municipal solid waste landfill must obtain an operating permit under Chapter 2 of the Solid Waste Rules.

## Disposal at a permitted transfer station

- Some transfer stations accept dead animals along with other municipal solid waste for transfer to a regional landfill. Whether the local operator wants to allow this is a local decision and not regulated by the Department.
- Transfer stations are permitted under Chapter 6 of the Solid Waste Rules.

## Composting and burial at a construction and demolition landfill

o Composting preserves landfill space and minimizes the need to transport dead animals to landfills. If dead animal waste is composted to bone and hide, the resulting waste material

- may be disposed of in a permitted construction and demolition landfill, eliminating the need for transport to a regional MSW landfill. The composting process is described in further detail in Guideline #17.
- Construction and demolition landfills are permitted under Chapter 4 of the Solid Waste Rules.

## Low hazard/low volume treatment permit for permanent composting facilities

- The Administrator may consider ongoing dead animal composting at permitted low hazard/low volume facilities if the compost area is no larger than 2 acres and other composting conditions are met.
- Low hazard/low volume facilities are permitted under Chapter 6 of the Solid Waste Rules. The permit application must address the requirements outlined in the Solid Waste Rules.
- o If the composting area is larger than 2 acres, then a full-size fixed transfer, treatment, and storage facility permit application may be necessary. This type of facility is also permitted under Chapter 6 of the Solid Waste Rules. The permit application for a full-size fixed facility is more detailed compared to a low hazard/low volume facility permit.

## De minimis exemption

O Animal composting may be conducted without a Solid Waste permit if: the compost area is no larger than 1 acre; composts no more than 50 animals at any given time, unless an alternate amount is approved by the Administrator; and the Department is allowed access to inspect the operation.

## Incineration Facilities

- o Incinerators are another option for dead animal management. Incineration reduces the volume of the waste to ashes, which can be disposed of at an MSW Landfill. Incinerators require an Air Quality Division permit, as well as a solid waste permit, prior to operation. Small scale incinerators are currently used at veterinary clinics throughout the state.
- o Incinerators are permitted under Chapter 6 of the Solid Waste Rules.

#### Rendering

o While there are no rendering facilities currently based in Wyoming, there are rendering companies that provide their service to concentrated animal feeding operations in the state. Expansion of this service throughout the state is encouraged by the Department for the management of dead animals.

## **Wyoming Exemptions**

The Department may allow an exemption from the above disposal options for activities relating to farm and ranch management as well as emergency situations.

## Farm and ranch disposal exemption

Wyoming Statute (W.S.) § 35-1-103(d)(ii) states that "Solid waste management facility" means any facility for the transfer, treatment, processing, storage or disposal of solid waste, but does not include lands and facilities owned by a person engaged in farming or ranching and used to dispose of solid waste generated incidental to his farming and ranching operations. Therefore, farmers and ranchers may dispose of their own animal mortality on their own property.

## One-time or emergency authorization

- O Wyoming regulations also provide authority for the Administrator to exempt disposal operations from the regulations when there is an emergency or catastrophic death event. When unanticipated and infrequent disposal is necessary due to an emergency or the unexpected death of a large number of animals, the Administrator may consider a one-time or emergency burial authorizations.
- o The authorization process for a one-time or emergency situation is described in Chapter 1 of the Solid Waste Rules.

## Unlined Municipal Solid Waste Landfills

Consistent with federal requirements, W.S. § 35-11-527(a) requires all new MSW landfills to be constructed with an engineered containment system, which includes a liner and leachate collection system, OR constructed in accordance with a performance-based design (PBD) which demonstrates that groundwater will not be impacted by contaminants above safe levels protective of public health and other applicable groundwater uses. The MSW landfill is constructed with an engineered containment system, which includes a liner and leachate collection system or if an owner or operator is granted a PBD, the facility may dispose of whole, partial, or composted dead animals.

The PBD process, which requires Department approval, is described in further detail in Guideline 22 and consists of four parts:

- Adequate characterization of site specific conditions
  - o Characterization factors include depth to groundwater, groundwater flow direction and rate, soil types, presence of subsurface fractures, etc.
- Predict leachate through Hydrologic Evaluation of Landfill Performance (HELP) modeling
  - o Estimates potential for leachate generation
- Fate and Transport Modeling
  - o Evaluates potential for leachate to reach groundwater.
- Assessment of landfill gas, waste types, and facility operating practices

## **Further Information**

Permitting a solid waste facility is outlined in the Wyoming Environmental Quality Act and the Solid Waste Rules. Different types of permits are available for dead animal management. Please contact the Department for more detailed information on the different types of permits available.

Construction and operation of a small wastewater system or surface discharge of wastewaters may require a Water Quality Division Permit. For further information, contact Groundwater Section Manager at (307) 777-7072. Additionally, Fact Sheet: Slaughterhouse Permitting summarizes Water Quality Division permitting requirements for the management of slaughterhouse wastewaters.

Potential air emissions from the use of an incinerator may require an Air Quality Division permit. For further information, contact the New Source Review Program Manager at (307) 777-7045.

For further solid waste information, contact the Solid and Hazardous Waste Division offices: Casper: (307) 473-3450 / Cheyenne: (307) 777-7752 / Lander: (307) 332-6924

Suzanne Engels, Administrator

Solid and Hazardous Waste Division

Date 1, 2022