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CHAPTER 4

CONSTRUCTION AND DEMOLITION LANDFILL REGULATIONS

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CHAPTER 4

CONSTRUCTION AND DEMOLITION LANDFILL REGULATIONS

Section 1. In General.

(a) Authority: The authority for the rules and regulations promulgated in this chapter is the Wyoming Environmental Quality Act (Act), W.S. 35-11-101 et seq.

(b) One-time or emergency disposal authorization: The one-time or emergency disposal authorization procedure described in Chapter 1 will be considered for the land disposal of construction/demolition wastes.

(c) Permit transition:

(i) For existing facilities:

(A) Existing facilities that receive wastes after the effective date of these regulations and do not have a permit issued for the life of the facility: The operator shall submit a renewal application within one (1) year after the effective date of this regulation.

(B) Existing facilities that have not received wastes after the effective date of these regulations: The operator may be required to submit a closure permit application upon request by the Administrator. The Administrator may request such an application whenever the Administrator has reason to believe that health and safety hazards are present, there has been evidence of environmental contamination.

(ii) For new facilities: The operator of any new facility shall submit a permit application in accordance with the permit application procedures specified in Chapter 1.

(iii) For closing facilities:

(A) Anticipated closure: The operator of a facility with a valid permit shall submit a closure permit application to the Department at least twelve (12) months prior to the anticipated closure date, unless the Administrator approves interim measures with delayed final closure for good cause upon application by the operator.

(B) Unanticipated closure: In the event any facility ceases operation, as determined by nonreceipt of solid wastes for any continuous nine month period, the facility operator shall provide written notification to the Administrator no later than thirty (30) days after the end of such nine month 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.

(d) Permit terms:

(i) Permits for new landfills will be issued for the operating life of the facility, through closure.

(ii) Renewal permits will be issued for the operating life of the facility, through closure.

(iii) Closure permits will be issued for a period which includes the time required to complete closure activities and a minimum five year post-closure term. The closure permit period will extend until the Administrator finds that facility closure is protective of human health and the environment consistent with the purposes of the Act. If, following receipt of documentation from the operator, the Administrator determines that all closure and post-closure activities have been completed and closure is protective of human health and the environment, the permit shall be terminated as specified in Chapter 1.

Section 2. Permit Application Requirements.

(a) Permit application requirements:

(i) Permit applications for new facilities and renewal permit applications shall contain a completed application form and a written report containing the applicable information in Sections 3 through 17 of this chapter. Records and supporting documents such as well logs, maps, cross-sections, and monitoring reports should generally be included in the written report as appendices.

(ii) All permit application forms shall be signed by the operator, the land owner 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. 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.

(b) Renewal application requirements: Facilities without a permit issued for the life of the facility shall submit a renewal application, as required in Chapter 1, which includes a compilation of previous permit application materials and supplemental information updated and revised as necessary to document facility operations and activities carried out during the last permit term. Renewal applications shall include a copy of the approved permit or renewal permit application or revisions to the previous application, if revised and updated pages and drawings are appropriately numbered and dated to facilitate incorporation into the previous permit application document.

(i) Renewal applications shall contain:

(A) Any necessary plan revisions for the remaining life of the facility and any requests for approval of amendments;

(B) Detailed construction and operation specifications for the remaining life of the facility, if such specifications were not included in an approved facility permit application;

(c) Closure permit application requirements: Closure permit applications shall be submitted as required in Section 2 (a) (iii) and Section 11.

Section 3. General Facility Information:

(a) Operator information: The name, address and telephone number of the legal 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.

(b) Manager information: Position title, address and telephone number of the solid waste manager.

(c) Legal description: Legal description of the property to be used as a disposal site. 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.

(d) Facility narrative: A brief narrative describing the disposal facility. The narrative should include the size of the facility, the type of waste disposal activities that are planned (area fill, trench fill, special waste areas) and the type, amount and source of incoming waste. The narrative should also describe the service area of the disposal facility.

(e) Surface and mineral ownership: Information describing surface and mineral ownership of the site and surface ownership of all lands within one mile of the facility boundary.

(f) Source of wastes: The source of wastes and the type and quantity of waste (on a daily, weekly or monthly basis) that will be disposed at the facility.

(g) Site capacity and life: Estimated site capacity and site life, including the calculations on which these estimates are based.

(h) Potential to impact surface and groundwater quality: An evaluation of the facility's potential to impact surface and groundwater quality based on the facility design and hydrogeologic information.

Section 4. Location Standards.

(a) New facilities: New facilities and lateral expansions of existing facilities shall not be located in violation of W.S. 35-11-502(c) and the following standards:

(i) Local zoning ordinances: Facility locations shall not conflict with local zoning ordinances or land use plans adopted by a county commission or municipality.

(ii) 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 USC 1271 et seq., and implementing regulations.

(iii) 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 USC 470 et seq. and implementing regulations, or to a natural landmark designated by the National Park Service.

(iv) Endangered Species Act: Facilities shall not be located within a critical habitat of an endangered or threatened species listed pursuant to the Endangered Species Act, 16 USC 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.

(v) Big game winter range/grouse breeding grounds: 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 Director determines that facility development, would not conflict with the conservation of Wyoming's wildlife resources.

(vi) Hydrogeologic conditions: Facilities shall not be located in an area where the Administrator, after investigation by the applicant, finds that there is reasonable probability that solid waste disposal will have a detrimental effect on surface water or groundwater quality.

(b) New units and lateral expansions:

(i) Floodplains: New units and lateral expansions shall not be located within the boundaries of a 100-year floodplain.

(ii) Wetlands: New units and lateral expansions shall not be located in wetlands.

(c) Facilities regulated under Chapter 6 or 8: Facilities which are also subject to regulation under Chapter 6 or 8 shall not be located in violation of the standards in Chapters 6 or 8.

(d) Access roads: The roads leading to facilities shall not be subject to the location standards described in this section.

Section 5. Geology and Hydrology:

(a) Summary description: A summary description of available local geologic or hydrologic information, including copies of all available well logs for wells located within one mile of the proposed site. This description should include information on the depth to the uppermost groundwater, groundwater aquifer thickness and hydrologic properties, and the potentiometric surface. Supporting documentation such as well completion logs, geologic cross sections, soil boring lithologic logs, potentiometric surface maps and soil or groundwater testing data should be supplied as an appendix.

Section 6. Design and Construction Standards:

(a) Surveyed corners: All site boundary corners shall be surveyed and marked with permanent survey caps.

(b) Posting standards: If the facility is open to the public, each point of access shall be identified by a sign, which shall be easily readable, maintained in good condition and which contains at a minimum the following information:

(i) For facilities not open to the public:

(A) Identification of the facility as a solid waste landfill.

(B) Wastes accepted for disposal at the facility.

(C) The position title and phone number of the responsible person to contact in the event of emergencies.

(ii) For public facilities:

(A) The facility name;

(B) The position title and phone number of the responsible person to contact in the event of emergencies;

(C) The hours of operation;

(D) Wastes accepted for disposal at the facility;

(E) Identification of the facility as a public facility;

(F) A requirement to notify the landfill operator of any asbestos wastes.

(c) Access road standards: Facility access roads shall be constructed to enable use under inclement weather conditions.

(d) Topsoil standards: Topsoil from all disturbed areas shall be stripped and stockpiled in an area which will not be disturbed during facility operation. Topsoil stockpiles shall be located such that they will not be disturbed until needed for reclamation purposes. These stockpiles shall be identified by signs, and vegetated for stabilization. Topsoil shall not be removed from the facility without written authorization from the Department.

(e) Structural stability: Engineering measures shall be incorporated into the landfill design to insure stability of structural components in unstable areas and seismic impact zones.

(f) Surface water structures: Surface water diversion structures shall be sized to collect and control runoff from the active portion of the landfill from at least the water volume resulting from a 24-hour, 25-year storm and prevent flow onto the active portion of the landfill during the peak discharge from a 25-year storm.

(g) Sediment control: Sediment control structures shall be designed and constructed in accordance with the Water Quality Division Rules and Regulations.

(h) Slope stability for excavations: Trench wall slopes shall not exceed a ratio of

1.5:1 (horizontal:vertical) unless a slope stability analysis demonstrates steeper slopes can be safely constructed and maintained. This analysis may be based on site specific soil stability calculations or Wyoming Occupational Safety and Health Administration regulations for excavations.

(i) Buffer zones: A buffer zone of at least 20 feet shall be maintained within the perimeter boundary.

(j) Cover material: An evaluation of the availability of cover material sufficient to properly operate the facility through the closure period.

(k) Engineered containment:

(i) The Administrator may require an engineered containment system in future disposal areas, including a composite liner and final cover with a permeability less than or equal to the permeability of the bottom liner system, in new units and lateral expansions if:

(A) The operator cannot demonstrate that concentrations of pollutants listed in the National Primary Drinking Water Regulations, 40 C.F.R. Part 141, will not be exceeded 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, leased, or otherwise controlled by the Operator, or;

(B) When groundwater contamination exceeds Department standards 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, leased, or otherwise controlled by the Operator.

(ii) Engineered containment systems, if required by the Administrator, shall be designed and constructed as specified in Chapter 2, Section 7 (g) and (h).

Section 7. Operating Standards.

(a) Litter control: The operator shall maintain a routine litter collection program within the landfill and off-site when necessary. The application shall describe the frequency of litter collection for internal fences, perimeter roads and off-site areas, special operating procedures to be used during periods of high wind and a summary of any wind speed and direction data available for the local area.

(b) Manager qualifications: Each solid waste manager shall:

(i) Possess a complete working knowledge of the solid waste

management facility operational plan. For any facility which is operated in compliance, the solid waste manager's working knowledge shall be presumed to be adequate. For any facility which is being constructed or operated out of compliance, the solid waste manager may be required to demonstrate working knowledge of the plan to the Department by written or oral examination. This demonstration shall be conducted:

(A) For any new solid waste manager, no later than six months following assumption of responsibility for operating a facility, or

(B) For any existing solid waste manager, no later than six months following the date the facility is permitted under this Chapter.

(ii) Attend the classroom or field training program described in the approved plan. For any facility operated in compliance, the personnel training program shall be presumed to be adequate. For any facility which is being constructed or operated out of compliance, the Administrator may disapprove the training program described in the plan and require the operator to submit a revised training program within thirty (30) days for approval by the Administrator.

(iii) Attend any training course sponsored by the Department, which the Administrator requires to provide training on changes to state or federal solid waste rules or guidelines. For any such mandatory training course, the Department shall provide each operator with a minimum of ninety (90) days' notice prior to the scheduled training course.

(iv) In the event that a qualified solid waste manager terminates employment, the operator shall designate a new solid waste manager who meets the requirements of the approved plan, within six months of such termination.

(c) Routine Cover: Routine cover shall control fires, litter, odor, and disease vectors. Wastes shall be covered with at least six (6) inches of uniformly compacted soil at least monthly or more frequently if required by the Administrator. Alternate types of routine cover may be approved by the Administrator.

(d) Confine working face: Dumping shall be limited to the smallest practical area. Signs or other physical dumping barriers shall direct dumping to the proper area and the facility attendant shall assure that dumping is adequately confined.

(e) Access Control: Access shall be prohibited at any time other than the facility's operating hours.

(i) The working area of all facilities shall be fenced in such a manner as to discourage people and livestock from entering the facility.

(A) Additional fencing may be required to restrict access to reclaimed areas or other areas that may present public health and safety hazards;

(B) If the facility is located on property which already has a restrictive perimeter fence, the requirement for a perimeter fence around the working area may be waived.

(ii) Access roads shall be equipped with a gate which shall be locked when the facility is unattended.

(f) Surface water restrictions: Standing or running water shall not come into contact with refuse. All facilities shall take adequate measures to prevent and/or alleviate ponding of water over filled areas. Surfaces shall be graded to promote lateral surface water runoff.

(g) Burning: No open burning of solid waste is allowed, with the exception of clean wood, tree trimmings and/or brush with prior approval from the Air Quality Division.

(h) Fire protection and other emergency protection measures: Facilities shall maintain, at a minimum, an unobstructed 10 foot firelane around the working area or inside the perimeter of the facility boundary. Landfill personnel shall have access to portable fire extinguishers when on-site. Personnel shall have a communication system (radio, telephone, etc.) with which to alert the local fire department.

(i) Liquid wastes: Liquid wastes shall not be disposed.

(j) Hazardous wastes: Hazardous wastes shall not be disposed.

(k) Salvaging: Salvaging shall not interfere with normal operations.

(l) Waste compaction: All solid waste shall be effectively compacted in order to reduce long term settling and conserve landfill space.

(m) Copy of plan: A copy of the operating plan shall be available at the facility when landfill personnel are on-site or at an alternate location approved by the Administrator.

(n) Intermediate cover: Any area where wastes will not be disposed for a period of 180 days shall be covered with 6 inches of routine cover material and an additional 12 inches of intermediate cover.

(o) Vector control: On-site populations of disease vectors shall be prevented or controlled using techniques appropriate for the protection of human health and the environment.

(p) Dust/odor/nuisance control: Adequate measures shall be taken to minimize dust and odors, and to prevent the occurrence of any public nuisance.

(q) Contact with groundwater prohibited: Wastes shall not be allowed to be placed in contact with groundwater.

(r) Traffic control: If the facility is open to the public, signs shall be posted to direct traffic to the proper area for dumping.

(s) Groundwater quality: Solid waste disposal facilities shall not be allowed to alter groundwater quality, as determined by groundwater monitoring. If groundwater contamination exceeds Department standards at a relevant point of compliance established by the Administrator, the disposal unit shall promptly be closed on a schedule approved by the Administrator and the landfill shall either be closed or future disposal areas shall be constructed with an engineered containment system.

(t) Discharge to surface waters prohibited: Facilities shall be operated such that leachate is not allowed to enter any surface water, either on-site or off-site, unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit pursuant to the Clean Water Act.

(u) Topsoil handling: A description of the topsoil handling procedures to be used, including measures to be used to protect the piles from erosion;

(v) Signs: A description of the signs that will be posted to direct traffic to the proper waste management area;

(w) Waste screening: Facilities shall have an on-site attendant during operation of the facility. The application shall include waste screening procedures which shall assure disposal of authorized wastes only.

Section 8. Monitoring Standards.

(a) Collection and management of samples: Groundwater, soil core, vadose zone, and decomposition gas samples shall be collected and managed in accordance with Department guidance or equivalent methods approved by the Administrator.

(b) Groundwater monitoring:

(i) Groundwater monitoring systems:

(A) A groundwater system must be installed which consists of a sufficient number of wells to monitor water from the uppermost aquifer which may be

affected by leakage from the facility or unit. The system must be capable of monitoring the quality of background groundwater and groundwater passing downgradient wells located within 150 meters (492 feet) of the waste management unit boundary on land owned, leased, or otherwise controlled by the operator. Well locations must be approved by the Administrator.

(B) The Administrator may approve a groundwater monitoring system designed to monitor groundwater from the facility, in lieu of individual waste disposal units, if the system is determined to be capable of adequately detecting groundwater pollution. In approving a facility-wide groundwater monitor system, the Administrator shall consider:

(I) Number, spacing, and orientation of the individual waste units;

(II) Hydrologic setting;

(III) Site history and design; and

(IV) Type of waste accepted at the individual waste units.

(ii) Groundwater sampling and analysis shall meet the requirements of Chapter 2, Section 9(b)(i)(C)(I) through (IV).

(iii) Statistical evaluations of groundwater data shall meet the requirements of Chapter 2, Section 9(b)(i)(C)(V) through (VII).

(iv) Detection monitoring: Operators shall institute a detection monitoring program by sampling each well at least semiannually, and testing each sample for the constituents specified in Appendix I.

(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 Appendix I 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; or

(II) Within ninety (90) days, unless additional time is granted by the Administrator for good cause, demonstrate to the Administrator in writing that the statistically significant increase over background is not due to the solid waste disposal 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 report is approved, the owner or operator shall continue detection monitoring.

(III) If a successful demonstration is not made:

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

(2.) The owner or operator may be required to initiate an assessment monitoring program.

(v) Assessment Monitoring:

(A) If the concentration of one or more Chapter 4 Appendix I constituents exceeds background, the Administrator may require the operator to analyze groundwater samples for the constituents found in Chapter 2 Appendix A or B. 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, 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.

(I) 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.

(II) The owner or operator may be required to conduct an assessment of corrective measures and institute corrective actions approved by the Administrator.

Section 9. Recordkeeping Standards.

(a) Records maintained for three years: The following records shall be maintained at the facility or an approved alternate location and available for inspection and copying for three (3) years:

(i) Log of litter collection activities including dates and sites of litter collection and names of responsible personnel, if applicable.

(ii) Log of refuse compaction and covering procedures specifying the dates on which compaction and covering operations were conducted, area compacted and covered, and names of responsible personnel;

(iii) Records of wastes sold or salvaged;

(iv) Record of any problems causing operations to cease, including but not limited to fire or equipment failure;

(b) Records maintained through post-closure: The following records shall be maintained at the facility or an approved alternate location and available for inspection and copying for the life of the facility through the end of the post-closure period:

(i) As-built specifications for disposal units with their dates of construction, length, width, depth and location;

(ii) Dates when trenches or units are completed and their contents;

(iii) Monitoring data;

(iv) Permit applications and Department permit letters;

(v) Dates when reclamation activities take place;

(vi) Log of waste inspections and other screening activities specifying the

date, time, and name(s) of the inspection personnel;

(vii) Records of operator training;

(viii) Copies of written correspondence with the Department;

(ix) Closure and post-closure plans, if not already in the permit application, and semiannual post-closure inspection logs, descriptions of actions to correct problems encountered during the post-closure period, and any monitoring, testing, and analytical data required.

Section 10. Reporting Standards.

(a) Annual reports: Annual reports for the previous calendar year shall be submitted in a format approved by the Administrator by March 1. At a minimum, annual reports shall include the following information:

(i) A summary description of facility operations and activities carried out during the last year including, but not limited to, the construction of new waste disposal units;

(ii) A description of any final cover and reclamation activities completed during the last year with supporting documentation that reclamation was completed in accordance with the Solid Waste Rules and the facility permit;

(iii) Electronic copies of all required monitoring data not already submitted following a sampling event in a format specified by the Administrator. The Administrator may require paper copies of monitoring data. Operators may also be required to submit supporting charts and/or maps which represent the data.

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

Section 11. Closure and Post-Closure Standards.

(a) Commencement of closure: Approved closure activities shall commence no later than thirty (30) days after the date on which each unit receives the known final receipt of wastes and shall be completed within one hundred eighty (180) days following commencement of closure. The Administrator may approve:

(i) Delayed closure of a unit or facility if the unit or facility has additional remaining disposal capacity, and the owner demonstrates that there will be no threats to human health or the environment from the unclosed facility or unit, and

(ii) Extensions of the closure period if needed to adequately complete closure activities and the owner demonstrates that there will be no threats to human health or the environment from the unclosed facility or unit.

(b) Notification and certification of closure: Prior to the commencement of unit and facility closure activities, the operator shall notify the Administrator in writing. Within ninety (90) days following closure of each unit and facility, the operator shall submit a certification with supporting documentation signed by an engineer licensed to practice in Wyoming that closure has been completed in accordance with the approved closure plan and place a copy of the certification in the facility operating record.

(c) Notice on deed: At facility closure, an instrument which clearly gives notice of the restrictions that apply to future activities on the disposal facility property shall be filed for recording by the registrar of deeds (county clerk) in the county where the facility is located. Wording of such an instrument shall indicate that the property has been used as a construction demolition waste disposal facility. This shall be recorded prior to any property transaction resulting in another use for the property. The owner/operator, or its successors, shall ensure that post-closure use of the property will be restricted to prevent any disturbance to the facility's containment system including caps and liners, or the functioning of the facility's monitoring system. The owner or operator may request permission from the Administrator to remove the notation from the deed if all wastes are removed from the facility.

(d) Length of post-closure period: The post-closure period shall extend for a period of not less than five (5) years after completion of closure activities. Following this initial minimum period, the post-closure period shall be automatically extended until such time when 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.

(e) Design and construction standards:

(i) Minimum period for maintenance of access restriction: The operator shall not remove the facility's fence, gates and any other restrictions until the site has been closed and revegetated, if post-closure land use requires establishment of vegetative cover. Post-closure maintenance activities will be required for a minimum of 5 years. The permit application shall describe the method by which the operator will maintain access restrictions to any closed facility;

(ii) Prevention of erosion or ponding problems: The site shall be designed and constructed to inhibit future problems with erosion or ponding of surface water over filled areas. This may be done by site grading and revegetation, emplacement of rip rap or other appropriate means. The permit application shall describe the methods by which surface

erosion or water ponding problems identified during site inspections will be corrected;

(iii) Minimum thickness of subsoil and topsoil for final cover: For closure, a compacted layer of subsoil or a combination of materials as specified in the permit, at least two feet (2') thick shall be constructed over the refuse or any intermediate cover already in place. This compacted layer shall be covered with at least six inches (6") of topsoil and graded to prevent erosion or surface water ponding. The permit application shall include a description of the final soil cover and how it will be constructed, as well as methods used to revegetate the site;

(iv) Seeding specifications: Any portion of the site disturbed by solid waste disposal activities shall be reseeded consistent with the post-closure land use, in order to establish vegetation capable of minimizing wind and water erosion of the final cover. Vegetation shall be of a diverse mixture selected for compatibility with climatic conditions, require little maintenance and have root depths that will not exceed the depth of the final cover.

(v) Surveyed corners: If not accomplished previously, all site boundary corners shall be surveyed and marked with permanent survey caps upon facility closure.

(vi) Surface water diversion: Surface water diversion structures shall be maintained in operating condition throughout the closure/post-closure period. The permit application shall include the method that will be used to divert surface water from the site during the post-closure period. Facility inspections shall be conducted at least twice per year and problems encountered shall be promptly corrected;

(f) Monitoring information: The application shall demonstrate compliance with Section 8 and describe the method by which all environmental monitoring systems will be maintained for the length of the closure/post-closure period.

(g) Recordkeeping: The operator shall comply with the applicable recordkeeping requirements of Section 9.

(h) Reporting:

(i) Electronic copies of all required monitoring data not already submitted following a sampling event in a format specified by the Administrator. The Administrator may require paper copies of monitoring data. Operators may also be required to submit supporting charts and/or maps which represent the data.

(ii) The Administrator may require reporting of additional information needed to demonstrate compliance with these rules and regulations.

(i) Supporting documentation: The application shall include any supporting documentation listed in Section 16 that is pertinent to the closure/post-closure phase, including but not limited to:

(i) A final contour map;

(ii) A general facility plot plan at a scale approved by the Administrator illustrating past areas of waste deposition, estimated dates of fill and any other pertinent features;

(iii) A map or aerial photograph of the area shall be submitted showing land ownership, land use and zoning within one mile of the disposal site. The map or photograph shall be of sufficient scale to show all city boundaries, each occupied dwelling house, schools, hospitals, industrial buildings, water wells, water courses, road and other applicable details and shall indicate the general topography.

(j) Closure permit application requirements: Closure permit applications shall include the information in this paragraph and demonstrate compliance with paragraphs e – j of this section. A copy of the pertinent materials from the approved permit application or approved renewal permit application, revised and updated as necessary, may be used to fulfill these requirements.

(i) Permit application form: Each closure permit application shall contain a permit application form signed in the manner described in Section 2(a)(ii).

(ii) General information:

(A) General site information specified in Sections 3(a) through (e);

(B) A narrative describing the site operating history including the dates of operation, the disposal methods used and the types and amounts of waste accepted;

(C) A description of the closure/post-closure stage of landfill development, including:

(I) A description of the land use anticipated after closure;

(II) The wording of the deed notice;

(III) If the facility is open to the public, a copy of the notice of closure.

(iii) Site geology: Geologic information required by Section 5.

Section 12. Corrective action standards.

(a) Completion of corrective action: Corrective action remedies shall be considered complete when:

(i) 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. The relevant point of compliance shall be no more than 150 meters (492 feet) from the waste management unit boundary on land owned, leased, or otherwise controlled by the operator;

(ii) 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 the approved statistical procedures. The Administrator may approve an alternate length of time during which the owner or operator must demonstrate compliance with the standard(s), considering:

(A) Extent and concentration of the release(s);

(B) Behavior characteristics of the hazardous constituents in the groundwater;

(C) Accuracy of the monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variables that may affect the accuracy; and

(D) Characteristics of the groundwater; and

(iii) All actions required to complete the remedy have been satisfied.

(iv) When the operator believes the corrective action remedy is complete, the operator shall:

(A) Notify the Administrator in writing, with supporting documentation, and place a copy of the notice in the facility operating record; and

(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, 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 13. Financial Assurance Standards. The permit application shall demonstrate compliance with the requirements of Chapter 7.

Section 14. Transfer, Treatment and Storage Facility Standards. The permit application shall demonstrate compliance with the requirements of Chapter 6.

Section 15. Special Waste Standards. The permit application shall demonstrate compliance with the requirements of Chapter 8.

Section 16. Commercial Solid Waste Facility Standards. The permit application shall demonstrate compliance with the requirements of Chapter 10 and W.S. 35-11-514.

Section 17. Supporting Documentation/Appendices. At a minimum, appendices shall include the information in this section.

(a) Maps and plans:

(i) An original topographic map with a scale of 1:24,000 with the proposed facility location shown; an original USGS topographic map with a scale of 1:62,500 or other suitable topographic map may be submitted if a 1:24,000 map is unavailable;

(ii) A map or aerial photograph of the area shall be submitted showing land ownership, land use and zoning within one mile of the disposal site. The map or photograph shall be of sufficient scale to show all city boundaries, each occupied dwelling house, schools, hospitals, industrial buildings, water wells, water courses, road and other applicable details and shall indicate the general topography.

(iii) A general facility plot plan (map) with a scale and contour intervals approved by the Administrator shall be submitted. The general facility plot plan shall at a minimum illustrate the following features:

(A) Facility boundaries including any buffer zones proposed between the solid waste boundary and the property boundary;

(B) Points of access;

(C) Locations of soil borings and monitoring wells;

(D) Locations of proposed trenches or area fill locations;

(E) Working area/perimeter fire lane;

(F) Working area/perimeter fence location;

(G) Locations of any facility buildings.

(iv) Additional facility plot plans, at a scale approved by the Administrator, shall be submitted as necessary to show orderly development and use of the facility through the life of the site. These plot plans shall at a minimum contain the following information:

(A) Excavation plans for development of trenches or preparation of area fill locations;

(B) Development of temporary surface water diversion structures which may be necessary to adequately control surface water run-on and run-off;

(C) Access to active waste disposal areas, including development of internal roads;

(D) Cover stockpile locations;

(E) Topsoil storage locations;

(F) Litter screen placement information, if applicable;

(G) Location of special waste management areas;

(H) Other details pertinent to the development and use of the facility.

(v) A map showing proposed final contours prepared with a scale and contour intervals approved by the Administrator.

(vi) Detailed design plans, including but not limited to plans for liners, leachate collection and management systems, caps and associated quality assurance/quality control (QA/QC) plans. The Administrator may approve submittal of detailed design plans as a minor permit amendment periodically over the life of the facility, but detailed plans must be submitted at least three (3) years prior to the anticipated construction date of new units.

(vii) Cross sections and/or drawing details shall be submitted with sufficient specifications to describe:

(A) Internal litter catch screens or fences, if applicable;

(B) Working area/perimeter fencing;

(C) Access roads;

- (D) Trench or area fill method;
- (E) Systems used for monitoring, collection, treatment and disposal of leachate, if required;
- (F) Groundwater monitoring well design;
- (G) Surface and subsurface drain systems to control run-on and run-off and or inflow;
- (H) Special waste management areas, if applicable;
- (I) All components of engineered containment systems, if applicable, which include, but are not limited to, liners, caps, and berms.
- (J) Construction quality assurance/quality control (QA/QC) plans for engineered containment systems, if applicable;
- (K) Any other design details requested by the Administrator.

(b) Recordkeeping logs: A copy of the blank record keeping logs/forms that will be maintained during the operating life and closure/post-closure period.

Appendix I - Constituents for Detection Monitoring			
pH ¹	Total Dissolved Solids (TDS) ¹	Chemical Oxygen Demand (COD) ²	Total Organic Carbon (TOC) ²
Ammonia as N ¹	Bicarbonate ²	Calcium ²	Carbonate ²
Chloride ¹	Fluoride ¹	Iron ¹	Magnesium ²
Manganese ¹	Nitrate as N ¹	Potassium ²	Sodium ²
Sulfate ¹			

1. Constituents that may have a class of use based limit in Chapter 8 of the Wyoming Water Quality Rules and Regulations and/or an MCL.
2. Constituents that may be used to characterize and compare groundwater quality. These constituents are useful in determining the similarities and/or differences in the composition of water from specific hydrogeologic units and may help show whether particular units are hydraulically separate or connected. These constituents may be used to classify natural waters and help differentiate between natural variability and a release from a landfill.