Landfarm Rules

May 2017

Rick Thompson, Supervisor Solid Waste Section rithompson@mt.gov 406-444-5345

Landfarm Rules

- Rules effective March 11, 2017
- Requires compliance for existing facilities within 6 months
- Established standards for One-Time, Minor, Intermediate, and Major Landfarms
 - "One-Time" Landfarm:
 - Less than 2,400 yds³ at landfarm site
 - Contaminated soil from single source
 - "Minor" Landfarm:
 - No greater than 2,400 yds³ from single or multiple events
 - Either accepted for or undergoing treatment
 - "Intermediate" Landfarm
 - $>2,400 \text{ yds}^3 \text{ but } < 8,000 \text{ yds}^3$
 - "Major" Landfarm
 - >8,000 yds³

Facilities/operations exempt from Solid Waste licensure

- Landfarms at CECRA remediation sites.
- Landfarms located within the license boundary of a licensed Class II Landfill

Before landfarming, consider...

- Siting criteria
 - Depth to groundwater
 - Hydraulic conductivity of BTZ soils (no greater than 1x10⁻⁵)
 - Setbacks from wells, residents, surface water (find an appropriate site before looking for willing landowners)
- Landfill disposal costs vs. site development, long-term operation and management, post-closure, and liability.
- Upfront costs of landfilling vs. landfarming.
- Is landfarming still the best decision?

New Definition

One-time Landfarm – means a landfarm facility for remediation of less than <u>2,400</u> cubic yards of non-hazardous contaminated soil generated from a single site, regardless of the source, <u>and will not be used to treat contaminated soil on an on-going basis</u>.

Note: Contaminated soil does not include concrete, wood, metal, or any other non-soil material.

Landfarm Categories

One-time Landfarm	<2,400 yds ³ (single-site)
Minor Landfarm	<2,400 yds ³
Intermediate Landfarm	<8,000 yds ³
Major Landfarm	>8,000 yds ³

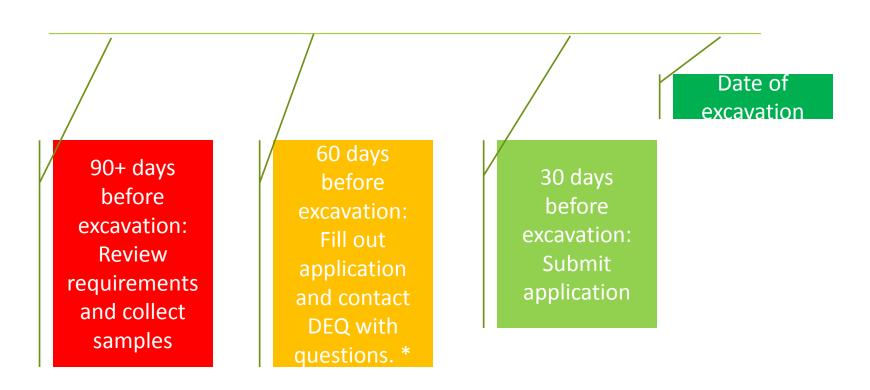
Landfarm Fee Structure

	License Application Fee	Annual License Fee
One-time Landfarm	\$500	None
Minor Landfarm	\$1,200	\$600
Intermediate Landfarm	\$2,400	\$1,200
Major Landfarm	\$3,600	\$1,800

Planning Timeline (One-Time Landfarm)

Back calculate based on planned excavation date

* Each application submittal requires a fee.



General Rule Requirements

- Facility Design Criteria
- Groundwater Protection
- Surface Water Control
- Siting and Setback Requirements
- Operation and Maintenance Requirements
- Sampling and Analysis
- Recordkeeping and Annual Reporting
- Closure and Post-Closure Monitoring Requirements

General License Application Requirements:

- Facility Contact and Applicant Information
- Facility Location (legal and directional)
- Background Soil Sample Results from proposed site
- Contaminated Soil Analytical Results
- Landowner Approval (consider an access agreement)
- Local City/County Planning/Zoning Approval (talk to the Sanitarian)
- Volume of contaminated soil proposed for remediation at the site
- Operation and Maintenance Plan
- Site Closure Plan
- Site Maps (location and site specific)

Minor, Intermediate, and Major Landfarms also:

- Groundwater Monitoring Plan (if dtw >25' but <50' bls)
- Additional information necessary for an EA
- Financial Assurance
- General Liability Insurance Policy

Operation and Maintenance Requirements

- Control storm water run-on and prevent storm water runoff
- Leachate management
- Control site access
- Description of personnel and equipment
- Description of landfarming method(s)
- Site management (who, when, how)
- Maximum 12-inch lift

Landfarm Sampling and Analysis Requirements

- Each minor, intermediate, and major facility is required to sample and report findings to DEQ Solid Waste Program 3x a year.
- All facilities must sample TZ and BTZ
- All facilities must use Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846)
- ALL facilities must till twice during first month, then monthly thereafter (*keep records of tilling activities*)

Remediation Standards and Post-Remediation Use

- Contaminants permanently reduce to residential RBSL's
- No use of remediated soils in any location that threatens human health and the environment, for residential topsoil, or for any purpose in school playgrounds or day care centers.

Financial Assurance

- Minor, Intermediate, and Major Landfarm facilities are required to provide financial assurance for closure, and post-closure monitoring and maintenance.
- Mechanisms must comply with the provisions in ARM 17.50.540.
 - surety bond, trust fund, letter of credit, insurance policy, etc.

Closure and Post-Closure Requirements

- Soils remediated to target goals may be left in place, site regraded and seeded.
- Soils not reaching target goals may:
 - continue to be treated;
 - sent off for landfill disposal; or,
 - depending upon analytical results, covered with 2-feet of approved cover soil, graded and seeded. (may require deed notation)
- Restoration of site to acceptable conditions
- 2-year post closure monitoring period
 - Vegetative growth
 - Surface water runoff
- Recordkeeping and reporting requirements final report summarizing analyses, methods, and request for closure approval

QUESTIONS?