

Vermont NRCS Worksheet

Assessment of Water and Air Quality Concerns Associated With On-Farm Livestock Mortality Handling

Farmer's Name:
 Farm Name:
 Site Location:

Date of Evaluation:
 Tract and Field No:
 Evaluator:

Indicate the Type of Handling for Livestock Mortalities

	Rendering Company Pickup of All Mortalities ¹ (<i>Discontinue filling out this form</i>)	
On-Farm Composting	Complete Section 1	Enter Section 1 Average Score >
On-Farm Burial	Complete Section 2	Enter Section 2 Average Score >
Left Outside/Uncovered	<u>Discontinue filling out this form.</u> This method of management provides many risks from an environmental standpoint and that of disease transmission. Resource Management System planning alternatives should be provided.	
Other: (Specify)		

If 'Other', provide details including professional judgement of whether a resource concern is present due to this management.

Provide a sketch or map of the facility. Include proximity to water courses and dwellings where applicable.

¹ Carcasses should be removed within 48 hours to mitigate problems associated with odor and disease transmission.

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SECTION 1 - Livestock Composting Facility Information

Note: Complete each question in this section if assessment of a livestock composting facility is needed.

RANKING SCORE:	4	3	2	1	SCORE
Distance to Stream, Ditch or Other Sensitive Hydrologic Features	>500 feet	>200 feet	100 - 199 feet	< 100 feet	
Floodplain	Facility is located outside the 100-year floodplain	Facility is located within the floodplain but is protected from a 100 year inundation		Facility is within the 100 year floodplain and not protected from inundation	
Distance to Well or Drinking Water Source	> 500 feet	300 - 499 feet	200 - 299 feet	< 200 feet	
Slope of the Site		2 - 3 % Slope	4 - 8 % Slope or 0 - 1 % Slope	> 8 % Slope	
Soil Information		Moderately Well Drained (SM, ML)	Poorly Drained (ML)	Well Drained or Very Poorly Drained (MH, CH, CL, SP, GP)	
Depth to Bedrock at the Site		> 36 inches	18 - 36 inches	< 18 inches	
Depth to Seasonal High Water Table		> 36 inches	18 - 36 inches	< 18 inches	
Surface Runoff Into the Facility	All surface runoff is diverted away from the facility			Surface runoff flows into and through the facility	
Contaminated Runoff from the Facility	The facility produces no runoff or all runoff is contained			Runoff from the facility is evident	
Facility Management - Rumen		Rumen is Lanced to Avoid Bloating and Bursting		Rumen is Not Lanced	
Facility Management - Base Layer		> = 24 inches of wood chips containing pieces 4-6 inches long	< = 24 inches of bulky, absorbent organic material	No base layer is used. Carcasses are placed directly on the ground	
Distance From A Residence	> 900 feet	300 - 899 feet	151 - 299 feet	< 150 feet	
Facility Management - Cover Layer		>= 24 inches of dry, high-carbon material (old silage, sawdust, dry stall bedding, etc)	13 - 23 inches of dry, high-carbon material (old silage, sawdust, dry stall bedding, etc)	12 inches or less of cover is used	
Facility Management (Air Quality)	Residual piles are not turned for at least 6 months to mitigate odor issues	Residual piles are not turned for at least 3 months to mitigate odor issues		Residual piles are turned before 3 months have elapsed	
Facility Management - General Site Cleanliness		Good		Poor	
Total Score of Section 1:					
Average Score for Section 1 (Total Score divided by 15)					

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SECTION 2 - Livestock Burial Information

Note: Complete each question in this section if assessment of a livestock burial facility is needed.

RANKING SCORE:	4	3	2	1	SCORE
Surface Cover Over Top Of Burials		2 or more feet of soil placed immediately over the top of the burial upon deposit of a carcass into the pit *	2 or more feet of soil over the top of the burial	< 2 feet of soil over the top of the burial	
Proximity Of Facility To Drinking Water Sources		> 300 feet from existing water supplies *, and outside of Wellhead PA.	> 300 feet from existing water supplies *, but within Wellhead PA.	< 300 feet from existing water supplies	
Proximity Of Facility To Surface Water		> 200 feet from a water body or watercourse	100-199 feet from a water body or watercourse	< 100 feet from a water body or watercourse	
Soils	Clays (CH, CL, MH)	Silts (ML, GM)	Sandy Loams (ML, SM)	Sands and Gravels (GP, SP)	
Depth to Bedrock From <u>Bottom</u> Of Burial Pit		> = 72 inches *		< 72 inches	
Depth to Seasonal High Water Table From <u>Bottom</u> Of Burial Pit		> = 48 inches *		< 48 inches	
Use Of Hydrated Lime		> = 1/8 Inch used immediately upon deposit a of carcass into the pit *	> = 1/8 Inch used	< 1/8 inch used	
Total Score of Section 2:					
Average Score for Section 2 (Total Score divided by 7)					

* Minimum needed to meet Vermont State Regulations.

Instructions:

A ranking of 2.5 or greater in either section meets the Vermont NRCS Resource Management System Quality Criteria (for that section). Any individual category (row) ranked with a score of 1 or 2 should be further assessed for risk related to that category.

Results:

3.6 - 4.0 = Low Risk 2.5 - 3.5 = Low to Moderate Risk 1.6 - 2.4 = Moderate to High Risk 1.0 - 1.5 = High Risk

Other:

If livestock's death is the result of a highly infectious disease then the State Veterinarian must be contacted. Animals that exhibit neurological disorder behavior prior to death must have samples collected by a veterinarian for testing. Special disposal regulations apply.

References:

'Procedure Addressing Disposal Of Dead Animals' by VT ANR Waste Management Division
<http://www.anr.state.vt.us/dec/wastediv/solid/pubs/DeadAnimalProcedure.pdf>

'Natural Rendering: Composting Livestock Mortality and Butcher Waste' by Cornell Waste Management Institute
<http://www.nwnyteam.org/DairyUpdates/Natural%20RenderingFS.pdf>

'Composting Livestock Mortality' A Composting Livestock Mortality fact sheet by the Vermont Agency of Agriculture.
<http://www.vermontagriculture.com/composting.pdf>

'Composting Animal Mortalities On the Farm' by VT Natural Resources Conservation Districts and VT Agency of Agriculture Food & Markets
Contact the Windham County Natural Resources Conservation District @ 802-254-9766 Extension 104

Vermont NRCS Conservation Practice Standard 316 - *Animal Mortality Facility*

This document can be accessed in Section IV of the Vermont NRCS Electric Field Office Technical Guide (eFOTG)

<http://efotg.nrcs.usda.gov/SelectCounty4eFOTG.aspx?map=VT>

ADDITIONAL NOTES: