| Logo for the Virginia Department of Environmental Quality | Emergency Permit Application FormAnimal Mortality Burial |
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This is an application for an emergency permit to dispose of animal mortalities through deep burial on-site or off-site from the farm of generation, at a facility that is not already permitted to dispose of solid wastes. Emergency permit requests for deep burial should only be requested as the last resort option to manage animal mortality. Alternatively, emergency permits for above-ground or shallow burial (up to 24 inches below ground surface) should be requested using the Emergency Permit Application Forms for Animal Mortality Composting (AMC).

The emergency permit request may be oral or written. If oral, it shall be followed within five days by a written emergency permit application. Oral responses can only be given if the applicant is fully aware of the siting, design, and operational requirements outlined in this application, otherwise a written request must be provided using this application. Send the written request to the Department.

*Emergency Permits are valid for 90 days from the time they are issued.*

*All associated waste activities must be inclusive in the 90-day period.*

# ****INSTRUCTIONS:****

Read all sections carefully. Fill in all of the information on DEQ Form AMB-01 and all applicable information on DEQ Form AMB-02. Public notice information required by the applicant is found on AMB-03 and a certification signature is required on AMB-04. Note that a site map, flood map, US Fish and Wildlife Service National Wetlands Inventory Map and a list of wastes to be received, and the manner and location of their treatment, storage and disposal must accompany this application. The site may either be selected prior to the emergency or immediately after the emergency. The Department encourages pre-selection. Follow the applicable guidelines below.

## Pre-Selected Sites:

If the site is pre-selected, public participation must be held in accordance with the Virginia Solid Waste Management Regulations **(VSWMR) § 9 VAC 20-81-410.B.4**. Pre-selected sites, if approved, will be granted an emergency permit upon request at the time of the emergency. The applicant needs only to contact the Department, either orally or in writing, and provide public notice that a pre-selected site will be used for the present emergency. The notice shall include, as a minimum, the applicants name and contact information, the nature of the emergency, and the location of the site and owners name. Oral requests shall be followed with a written request within five days. A copy of the public notice per § 9 VAC 20-81-410.B.4 must accompany the written notification. DEQ Form AMB-01 and DEQ Form AMB-02 must be on file with the Department prior to the emergency for all pre-selected sites. The public notice form is found on form AMB-03.

## Post Emergency Sites:

In the case of selecting a site immediately after an emergency, the Department may grant a temporary emergency permit through oral or written requests. The applicant may verbally relate the information requested on DEQ Form AMB-01 and DEQ Form AMB-02 but must provide written copies within five days or as soon as the infrastructure support will allow. In addition, a public notice as per **§ 9 VAC 20-81-410.B.4** shall be published, by the applicant, within five days of the request, or as soon as practicable, in order for the emergency permit to become effective. A copy of the advertisement shall be sent to the Department once it is published. Disposal of waste may commence upon verbal approval but all waste activities must cease after 90 days. In addition, closure activities must be completed by the expiration of the 90-day period.

Emergency Permit Application Form

Animal Mortality Burial

DEQ Form AMB-01

**Please indicate the type of application:**

[ ]  Pre-Selected Site Application

[ ]  Post-Emergency Site Application, Specify Emergency:

## Emergency Permit - Applicant Information

**Business / Farm Name:**

**Mailing Address:**

**City, State, Zip:**

**Primary Contact Person:**       **Contact Title:**

**Contact Phone:**       **Contact E-mail:**

**Secondary Contact Person:**       **Contact Title:**

**Contact Phone:**       **Contact E-mail:**

## Emergency Permit - Site Information

**Emergency Site Name:**

**Emergency Site Location:**

**Latitude:**       Deg       Min      Sec North **Longitude:**       Deg       Min      Sec West

**Approximate size:**       acres

**Owner of Site:**

**Owner’s Address:**

**City, State, Zip:**

**Owner’s Phone:**

**Types of waste to be managed** *(Specify approximate quantity and type of mortality, and any other wastes to be managed by burial. See Attachment C for more information regarding acceptable waste limitations):*

**Burial pit construction and waste placement method** *(See Attachment D for more information. Additional sheets may be used)*:

**Planned engineering controls** *(See Question 7 on AMB-02 – If any of the site characteristics exist, please briefly describe engineering controls to avoid impacts)*:

DEQ Form AMB-02

## Emergency Permit - Siting Criteria

Please answer the following questions to indicate whether the features outlined in the Siting Criteria table below are present at the proposed emergency permit site. Additional information is provided in Attachments A-F to support these questions. Please read each criterion carefully – bold answers correspond with sites eligible for emergency off-site animal mortality burial. **Be sure to sign the certification on DEQ Form AMB-04.**

| Q# | Siting Criteria | Response  |
| --- | --- | --- |
| 1 | Does the site have direct access to roads that are paved or surfaced (can be gravel) and capable of withstanding anticipated load limits? | [ ]  **Yes** [ ]  No |
| 2 | Is the burial area geologically stable (see Attachment A)? | [ ]  **Yes** [ ]  No |
| 3 | Is the burial area prone to base floods (100 year flood plain, coastal flooding) or inundation? | [ ]  Yes [ ]  **No** |
| 4 | Does the burial area contain wetlands (see Attachment B)? | [ ]  Yes [ ]  **No** |
| 5 | Is the burial area:  |  |
| 5a | > 200 feet to any residence, school, daycare center, hospital, nursing home, or recreational park area? | [ ]  **Yes** [ ]  No |
| 5b | > 100 feet from any surface water, such as perennial (regularly flowing) stream or river? | [ ]  **Yes** [ ]  No |
| 5c | > 100 feet to its property boundary? | [ ]  **Yes** [ ]  No |
| 5d | > 500 feet from any well, spring, or other groundwater source of drinking water? | [ ]  **Yes** [ ]  No |
| 5e | > 500 feet from the nearest edge of the right-of-way of any public road unless the site is screened from public view? | [ ]  **Yes** [ ]  No |
| 5f | > 100 feet from intermittent drainage, caves, sinkholes, and rock outcrops? | [ ]  **Yes** [ ]  No |
| 5g | > 10,000 feet of any airport runway end? | [ ]  **Yes** [ ]  No |
| 5h | > 1 mile upgradient of any existing surface or groundwater public water supply intake or reservoir?  | [ ]  **Yes** [ ]  No |
| 6 | Does the site have adequate berm area and terrain to manage run-on, run-off and leachate (based on a rainfall intensity of 24-hour duration and a 25 year return period)? | [ ]  **Yes** [ ]  No |
| 7 | Does the burial area contain any of the following site characteristics: * Slopes greater than 33%?
* Springs, seeps, or other groundwater intrusions?
* Gas, water, sewage, electrical or other transmission lines under the site?
* Prior existence of an open dump, unpermitted landfill, lagoon, or similar facility?
* Strip mine pits, coal seams, or coal outcrops?

If Yes, please describe engineering controls to avoid impacts on AMB-01. | [ ]  Yes [ ]  **No** |
| 8 | Can at least 5 feet of separation be maintained between the bottom of the burial pit and the seasonal high groundwater table and bedrock? | [ ]  **Yes** [ ]  No |
| 8a | If no, can at least 2 feet of separation be maintained? [ ]  **Yes** [ ]  No |  |
| 9 | Can a 50-ft firebreak between the limits of the burial area and all tree lines be maintained? | [ ]  **Yes** [ ]  No |
| 10 | Does the burial area contain any cemeteries (public, private, pet) or culturally sensitive areas? | [ ]  Yes [ ]  **No** |
| 11 | Is the burial area within a wildlife management area or area designated as the critical habitat of any endangered species?  | [ ]  Yes [ ]  **No** |
| 12 | Is adequate land available for burial? (based on USDA’s Carcass Management Dashboard) | [ ]  **Yes** [ ]  No |
| 13 | Are sufficient quantities of loose fill material and soil available for waste placement and final cover (See Attachment D)? | [ ]  **Yes** [ ]  No |
| 14 | Can the site be closed in accordance with Department standards (see Attachment E)? | [ ]  **Yes** [ ]  No |

## Siting Criteria Attachments

Be sure to include the following attachments with DEQ Form AMB-02 to support the answers to the above questions.

[ ]  Site Location Map

[ ]  FEMA Map or Equivalent showing site relative to floodplains

[ ]  US Fish and Wildlife Service National Wetlands Inventory Map

DEQ Form AMB-03

## Public Notice for Emergency Permits

VSWMR 9 VAC 20-81-410.B.4 requires a public notice to be accompanied with the written permit. The **Applicant** will modify the template provided and send it to a newspaper in the largest circulation for that municipality. The template contains the required information. A copy of the advertisement from the newspaper must be submitted to the Department within 24 hours after submitting the contact information and siting checklist. Once the Department receives the required permit application and a copy of the advertisement from the applicant the permit will be signed and issued. The actual publication date of the advertisement should be the soonest date possible depending on the soonest newspaper publication date.

The following template is provided for use by applicants to satisfy the public notice requirements. The blue italicized words should be replaced with information specific to the applicant, emergency, and burial site. Additional modifications to the template can be made so long as the following minimum required information is included:

* Name and address of the office granting the emergency authorization;
* Name and location of the facility so permitted;
* A brief description of the wastes involved;
* A brief description of the action authorized and reasons for authorizing it; and
* Duration of the emergency permit.

## Public Notice Template

PUBLIC NOTICE FOR A TEMPORARY EMERGENCY PERMIT TO DISPOSE OF SOLID WASTE DUE TO *(named emergency)* FOR *(city, town, county)*, VA

Due to the recent emergency from *(named emergency)*, and pursuant to the requirements of 9 VAC 20-81-410.B.4 of the Virginia Solid Waste Management Regulations (VSWMR), Permitting of Solid Waste Management Facilities, The Virginia Department of Environmental Quality (DEQ), *(specify Regional Office and address)*, hereby authorizes *(Facility or Property Owner)* to operate a temporary emergency animal mortality burial site located at *(site address or location description)*.

The site will receive the following solid wastes: *(list wastes to be managed)*.

Typical treatment, storage, and disposal options will include: *(brief description of waste management activities to occur)*.

The site meets the minimum siting requirements deemed necessary for environmental protection and public safety. Groundwater monitoring is not required but leachate management and run-off control are required. The permit will expire 90 days from the date of verbal or written authorization given on *(insert date of verbal or written permit issuance)*.

Closure shall include the placing of a final cover of soil over buried wastes and removal of all temporary features used in support of the waste activities associated with burial, environmental protection, maintenance, and operation. Final closure should return the site to as near as natural condition as possible prior to the disposal of waste. If there are any questions or concerns regarding the issuance of the temporary emergency permit, please contact the DEQ at *(DEQ Regional Office phone number (XXX) XXX-XXXX)* or at the above address.

DEQ Form AMB-04

## Certification

I hereby affirm that the information provided on this application is accurate and complete to the best of my knowledge. I fully understand the requirements of the siting criteria and that an emergency permit is valid for 90 days from the time of issuance. All activities must be inclusive in the 90-day period. Failure to provide accurate and complete information or follow the requirements and conditions of this application may result in permit denial or revocation. I have enclosed a copy of the advertisement that was published in the local newspaper.

I also affirm that I have pursued all animal mortality management options according to the Virginia Department of Environmental Quality’s Animal Management Hierarchy, and that the following were unavailable: rendering, on-site composting, off-site composting, on-site above-ground burial, incineration at a permitted incinerator, and disposal at a permitted sanitary landfill.

SIGNATURE: DATE:

NAME:

TITLE:

The following items must be returned to the Department to complete the Emergency Animal Mortality Burial permit application:

[ ]  Contact Information (AMB-01)

[ ]  Siting Checklist (AMB-02) with attachments

[ ]  Copy of Advertised Public Notice

[ ]  Certification (AMB-04)

**Permit Application Fees:** In addition to the above, applicants for an Emergency Permit are required to pay a permit application fee. The fee must be paid within 60 days of submitting an application (9VAC20-90-60.A.3.). The fee for emergency permit applications is $2,310. (9VAC20-90-120, Table 3.1-1).

The fee must be paid by check or money order payable to "**Treasurer of Virginia**" and should be mailed to:

Department of Environmental Quality

Receipts Control

P.O. Box 1104

Richmond, VA 23218

## ATTACHMENT A: GEOLOGY

Emergency animal mortality burial areas shall not be sited in geologically unstable areas where inadequate foundation support for the structural components of the burial pit exists. Factors to be considered when determining unstable areas shall include:

1. Soil conditions that may result in differential settling and subsequent failure of containment berms;

EXAMPLES: highly compressible clays; liquefiable soil; expansive soils; peat; collapsible soils; frost-susceptible soil; soils susceptible to hydrocompaction; or other conditions not explicitly listed

1. Geologic or geomorphologic features that may result in sudden or non‑sudden events and subsequent failure of containment berms;

EXAMPLES: landslide prone areas; abandoned river channels and lakes; highly erosion-prone areas; over sole source aquifer; highly karstic areas; groundwater seeps; structural discontinuities such as extreme folding, faulting, fracturing and jointing; or other conditions not explicitly listed

1. Man‑made features or events (both surface and subsurface) that may result in sudden or non‑sudden events and subsequent failure of containment berms;

EXAMPLES: emergency routes; unpermitted landfills; sludge lagoons; unsuitable fill; adjacent to highly explosive products such as chemical, petroleum, or fertilizer storage bins; downstream of weakened or damaged dams or other water retention structures; over underground excavations such as storage tanks, sewer, and traffic tunnels, mine shafts; or other conditions not explicitly listed

1. Presence of sink holes within the disposal area.

## ATTACHMENT B: WETLANDS

Wetlands shall be avoided at all times. Existing wetland delineation maps prepared the US Fish and Wildlife Service shall be used to determine prohibited areas. *Attach an applicable Wetlands Inventory Map with this application*. Wetlands that are encountered on the site yet are not covered by the map shall not be used unless the U.S. Army Corps of Engineers provides an approval letter and it is attached to this application.

## ATTACHMENT C: WASTE

### **Acceptable Waste**

Acceptable wastes include animal carcasses; small amounts of manure, feed, straw and hay; and other materials associated with the agricultural operation that are not classified as a hazardous waste.

No other wastes are authorized for burial, including hazardous waste; treated or painted wood; municipal wastewater treatment sludge, biosolids, or septage; agricultural waste containing herbicide or pesticide residues; or any other material prohibited by the Virginia Solid Waste Management Regulations. Free liquids are prohibited.

## ATTACHMENT D: BURIAL PIT DESIGN AND OPERATION

DEQ provides the following design and operational criteria for a burial pit. Consideration for alternate designs and filling should be discussed with DEQ staff prior to requesting this Emergency Permit.

### **D.1. Composite Liner**

* The side walls of the burial pit shall be sloped no steeper than 1:1, or one foot horizontal to one foot vertical.
* The burial pit must be lined, including along side walls, extending above the uppermost level at which carcasses are to be placed. The liner must meet sanitary landfill design standards (e.g. consist of at least two-foot layer of compacted soil or augmented soil with a hydraulic conductivity of no more than 1x10-7 cm/sec and covered with a minimum 30 mil flexible membrane liner).
* The burial pit must have a leachate collection and removal system that is pumped or drained on a regular basis to prevent the accumulation of liquids on the liner.
* Above the leachate collection layer, place at least two feet of absorbent material, such as straw or wood shavings, chips, bark or mulch, rock dust, saw dust, or other absorbent material approved by the DEQ, prior to placing the first layer of animal carcasses.

### **D.2. Waste Placement**

* Alternate layers of carcasses and loose fill material in the pit – no more than two feet of carcasses per layer, and at least two feet of loose fill material per layer. The loose fill material shall be straw, wood shavings, chips, bark or mulch, rock dust, graded gravel, or other material approved by the DEQ. Material with a high carbon content is recommended to promote carcass decomposition.
* If burial requires more than one day, at least 6 inches of loose fill material or soil cover shall be placed over the carcasses at the end of the working day to prevent odors, vectors, and other nuisances.
* Following placement of the final layer of animal carcasses, a minimum of three feet of loose fill such as straw, wood shavings, chips, bark or mulch, rock dust, graded gravel, or other material approved by the DEQ, shall be placed over the alternating layers of carcasses and loose fill and below the ground surface. Material with a high carbon content is recommended to promote carcass decomposition.
* If more than one burial pit is required, a minimum of ten feet shall separate the nearest portions of adjacent burial pits.
* A burial facility will be required to obtain a stormwater discharge permit if they are deemed a significant source under the provisions of 9VAC25-31-120 A.1.c.

### **D.3. PPE and Delivery Vehicle Cleaning**

* Personnel involved in the burial activities should wear boot covers (or spray boots with Virkon-S) and N-95 masks. PPE should be bagged for disposal prior to leaving the burial site. Bagged PPE can be disposed of as normal solid waste.
* Vehicles delivering animal carcasses to an approved deep burial site, should go through the closest truck wash after leaving the site.
* After the truck wash, the truck’s tires and wheel well surfaces should be sprayed with Virkon-S.

## ATTACHMENT E: CLOSURE AND POST-CLOSURE CARE

The facility shall be closed in a manner that minimizes the need for further maintenance and controls, minimizes or eliminates the post-closure escape of leachate, surface runoff, decomposition gas migration, or waste decomposition products to the groundwater, surface water or the atmosphere.

### **F.1. Final Cover Design**

* The final cover shall consist of 24 inches of earthen material the top 6 inches of which must be capable of supporting native plant growth.
* Final height of the burial pit, including final cover, should be three (3) feet above ground surface to allow for settlement, and finished slopes shall be stable, seeded, configured to control erosion, runoff; and prevent ponding of water. The top slope shall be at least 2% after allowance for settlement.

### **F.2. Post-closure site monitoring and maintenance**

* As settlement in the burial pit occurs, additional earthen material shall be added to maintain the cap and to prevent ponding of water.
* Leachate should be removed (drained or pumped) from the unit at a frequency to maintain less than 12 inches of leachate on the liner. Leachate must be processed through an approved wastewater treatment plant and/or managed in coordination with VDACS if a disease caused the mortality.

## ATTACHMENT F: ADDITIONAL REQUIREMENTS

The following additional requirements apply to properties approved for deep burial of animal mortalities.

* Depending upon the site geology, proximity of residences, and other features of the proposed burial site, the DEQ reserves the right to require monitoring for landfill gas and installation of one or more groundwater monitoring wells and ongoing groundwater monitoring for nitrates, phosphates, and/or other parameters as a condition of the emergency burial permit.
* Following closure, the edge of the burial pit (outside the liner) shall be visibly marked with stakes, flags, or similar.
* Within 90 days of the date of the emergency permit; submit to the local land recording authority a survey plat indicating the location and dimensions of the burial pit(s). Any monitoring wells present should be included and identified by number on the survey plat. The plat filed with the local land recording authority shall contain a note, prominently displayed, which states the owner’s or operator’s obligation to notify the DEQ prior to disturbance of the burial pit(s).
* Within 120 days of the date of the emergency permit, record a notation on the deed to the facility property, or on some other instrument which is normally examined during title searches, notifying any potential purchaser of the property that the land has been used to dispose of animal carcasses in one or more burial pits. A copy of the deed notation as recorded shall be filed with the department.