



Operation & Maintenance Plan Agrichemical Handling (Code 309)

Landowner/Operator:

Date:

NRCS Service Center:

Conservation District:

Practice Location:

Tract/Field ID:

(Lat/Long or UTM Coord, or Sec/TS/R)

Expected Lifespan

The minimum expected lifespan of this practice is at least 15 years.

A properly operated and maintained **Agrichemical Handling Facility (AHF)** is an asset to your property. The purpose of this practice is to provide an environmentally-safe facility to:

- Store, mix, load, and clean-up agrichemicals
- Retain incidental spillage or leakage; and reduce pollution to surface water, ground water, air and/or soil
- Other beneficial uses

The estimated life span of this practice is 15 years. The life of the practice can be assured and usually extended by developing and carrying out a good operation and maintenance program.

Inspections and maintenance are required to achieve the intended function, benefits, and life of the practice. The landowner/operator is responsible to establish and implement an inspection and maintenance program. Items to inspect and maintain for this practice include, but are not limited to, the following:

General

1. An operator of a farm storage facility shall maintain the facility to minimize the risk of a discharge. Prepare and maintain a site-specific written discharge response plan.
2. A written record of all inspections and maintenance are to be made on the day of the inspection or maintenance and kept at the storage site or at the nearest local office for the agrichemical facility.
3. All secondary containment and operational areas shall be maintained free of debris and foreign matter.
4. Inspect after significant storm events and on a regular basis to identify repair and maintenance needs. Develop a routine inspection procedure for the facility that is part of the overall facility management plan. Develop an inspection checklist to be followed during every inspection including, but not limited to, the following:
 - Storage tanks (corrosion, mechanical damage, or UV deterioration)
 - Tank valves and fittings
 - Containment area drainage
 - Emergency containment and clean-up equipment (spill kits, floor dry, chemical-rated fire extinguisher, eye wash)
 - Concrete joints and sealants
 - Concrete floor (cracks; minor vs major cracking)
 - Wall surfaces
 - Sumps and sump pumps
 - Protective coatings and paint (sealant deterioration)
 - Pumps, meters, and plumbing runs
 - Flexible membrane liners and ballast (liner joints and connection points)



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- Electrical systems and controls
 - Sight gauges
 - Exterior siding and roofing
5. Personal protective equipment (goggles, gloves, boots, disposable suits, etc.).
 6. Keep plastic or metal tubs available to place under all leaking valves and pumps until they are repaired. Fix leaky couplings and valves immediately to reduce concrete's exposure to pesticides, save product, and prevent long-term corrosive conditions that damage the containment.
 7. Clean up pesticides immediately after any leakage or spill to reduce the amount of exposure for the concrete. Sweep or vacuum dry product, then pressure wash the pad.
 8. At the end of each season's use, clean the mix load pad by sweep or vacuum of dry product and pressure washing.
 9. Clean mixing/loading pads if used daily to prevent build-up of pesticides. This practice also helps reduce the volume of precipitation that could be contaminated by storm water if the pad is not clean.
 10. Promptly repair or replace damaged components as necessary. Consult your local NRCS office for any guidance.

Storage Area

1. Do not store fertilizers or other non-pesticide chemicals in the pesticide storage area.
 2. Segregate liquid and dry pesticides in the storage areas.
 3. Use non-absorbent materials for shelving.
 4. Provide containment on shelves for containers of liquid formulations.
 5. Separate pesticides by type (herbicides, insecticides, etc.) to minimize the potential for accidental misuse and contamination.
 6. Do not store containers in front of windows and doorways.
 7. Store glass containers under cool conditions and on lower shelves.
 8. Store dry products on pallets or shelves - prevent direct contact with the floor.
 9. Do not store materials that may become contaminated by fumes, dust, or spills in the direct presence of pesticides.
 10. Only store products in original labeled containers. Transfer to another container only in emergencies and attach the original label to the new container.
 11. Minimize long-term storage by purchasing products on an as-needed basis or, at a minimum, for only a single application season.
 12. Secure, anchor or elevate tanks to prevent flotation or instability.
 13. Secure and lock storage areas to prevent unauthorized access by persons, children, or animals.
 14. Store personal protective equipment separately from pesticides.
- ### Agrichemical Handling Pad (Mixing/Loading Area)

1. Test facility using clean water before the first use to ensure complete containment and to provide a practice run for collection and recovery.
2. Maintain the facility in a clean state at all times by responding immediately to any spills, leaks, or drips of agrichemical containing materials.
3. Keep the pad and storage facility free of items not necessary for storing, mixing and loading, and clean-up operations.
4. Loading and unloading operations shall be supervised at all times by an attendant who is



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familiar and/or trained with the procedures that are used for the control and recovery of discharges.

5. Any filling or unloading point of a mobile containment shall be positioned over the containment area during loading and unloading or assume retention of any discharge.
6. Avoid cross-contamination of product mixes that are not compatible or are not permitted by pesticide labeling. Do not place rinsate in tanks for storage. Stored rinsate can be mistakenly cross-mixed, thereby creating hazardous waste. Utilize rinsates as soon as possible before they have opportunity to be cross-mixed in violation of pesticide labeling. Hazardous waste must be disposed of according to state regulations.
7. Apply pesticide containing rinsate or sediment only to target sites at or below labeled rates. Rinsate can be reused; however, it can become waste if there is no longer an opportunity to use it as it was originally intended. Waste must be disposed of according to state regulations.
8. Immediately clean up any spills, leaks, or accidents from which pesticides or contaminated water come in contact with the pad.
9. Liquids shall not be allowed to remain in the sump for longer than 72 hours or deterioration of the concrete will occur.
10. Do not drain/rinse water or rinsate from the sprayer onto the pad as a standard practice. Attach clean water tank to the sprayer to purge the sprayer of pesticides after pesticide application. Purge the sprayer in the target field.
11. Sediment collected in the sump should be removed to prevent build-up. At a minimum, sediments should be removed prior to a switch from one crop to another.
12. Triple or power rinse containers at the time of emptying to facilitate easy clean-up.
13. Empty pesticide containers shall be kept on the pad until the containers are returned to permanent/primary pesticide storage areas.
14. Utilize a backflow prevention device or maintain an air gap on water supply lines.
15. Clean the facility pad or storage area by pressure washing. Pressure washing should be done after each change in pesticide use. Take care not to blow material off the pad or out of the containment area. Apply wash water and pesticide to target area at or below label rates. When exposed to rainfall, if the pad is not power-washed after daily use during the growing season, provide a means of storing or field applying accumulated rainfall according to the agrichemical label within 72 hours following the rainfall event.
16. When cleaning containment areas, the area must be washed using a biodegradable cleaner, then double rinse the area using clean water, and remove all rinsate that is generated by the containment area cleaning process.
17. All joints, seams and cracking are to be sealed to prevent leakage from the handling pad.

Disposing of Pesticide Containing Rinsates and Sediments

1. Utilize collected and recovered pesticide-containing materials, such as rinsates and sediments, according to their original intended purpose by land applying these materials only to targeted sites at or below labeled rates. If reuse is not possible because of incompatible combinations of products, concentrations present or unknown or the effectiveness of the products is questionable, then these materials must be handled as a waste and disposed of according to state and federal solid waste regulations.
2. It is illegal to dispose of pesticide-containing materials by:
 - Pouring pesticides into any drain or into lakes, ponds, streams, or other water bodies.



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- Pouring pesticides on the ground.
- Discarding pesticides in desolate areas or ravines.
- Burying excess pesticides.
- Transferring pesticides from their original containers to other containers for means of making disposal easier.
- Burning pesticides or pesticide containers.
- Using pesticides for other than their labeled uses.

Disposing of Pesticide Containers

1. By properly triple or power rinsing containers at the time of use, pesticide residues can be removed and proper disposal can take place. Proper disposal consists of recycling, reconditioning, or landfilling at approved sanitary landfills. Contact your local agrichemical dealer, UVM-Extension Office, or the Vermont Agency of Agriculture for information on participating in pesticide container recycling program.
2. **DO NOT** dispose of pesticide containers by:
 - Sending non triple-rinsed or non-power-rinsed pesticide containers to sanitary landfills, re-conditioners, or recyclers.
 - Discarding pesticide containers in unapproved landfills or dumps.
 - Reusing pesticide containers for other purposes.
 - Disposing of any pesticide container inconsistent with its labeled directions.

Safety:

1. Maintain all warning signs in accordance with state regulations and pesticide label requirements.
2. Maintain all safety equipment including fire extinguishers, first aid equipment, and other personal protective equipment as required by pesticide labels.
3. Provide safety training for all personnel who will be using the facility.
4. Contact the local emergency planning coordinator, local fire marshal, and insurance carrier to develop a plan of action in the event of an emergency. Provide them a copy of the floor plan showing location, name, and amount of agrichemicals stored.
5. Keep the following information at the facility and at the operator's home (for after-hours use):
 - List of emergency telephone numbers including:
 - Police
 - Local Emergency Planning Coordinator
 - Fire Department
 - Poison Control Center
 - Vermont Agency of Agriculture
 - Vermont Department of Environmental Conservation (DEC)
 - A floor plan showing the location, name, and amount of pesticides stored.
 - Inventory of agrichemicals stored.
 - Materials Safety Data Sheets (MSDS) and label for each pesticide stored and/or used.
 - A site plan showing locations of the facility and nearby sensitive areas such as waters of the state, drains, wells, houses, livestock areas, other buildings, and the direction of runoff.



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Security Requirements

1. Storage containers and appurtenances shall be secured to provide reasonable protection from wildlife, vandalism, and unauthorized access at all times. The container and appurtenance may be secured using any of the following:
 - Fencing
 - Lighting
 - Locks
 - Other means to prevent tampering
2. For non-application season storage, all appurtenances and valves on storage containers or mobile containers shall be locked or otherwise secured.
3. All storage containers shall be equipped with a shutoff valve that is located on the storage container or at a distance from the storage container dictated by standard engineering practice.
4. For multiple valves that are located on a single line, the valve closest to its storage container shall be securable.
5. Valves on empty containers shall be closed.

Site Closure and Discontinuation of Operation

If a farm storage facility is closed or operations are discontinued, then the following provisions shall be complied with:

- All pesticides, rinsates, wash waters, and other materials that contain pesticides shall be removed from the facility site and utilized for the original intended purpose of the product or disposed of in a manner that is approved by the Michigan Department of Agriculture.
- The pesticide storage containers at the facility shall be thoroughly cleaned by triple rinsing or the equivalent. All valves and connections on containers shall be removed, and the openings shall be sealed.

Operation, Maintenance and Inspection Costs

1. It is estimated that the annual time to routinely inspect and make minor repairs to your Agrichemical Handling Facility will be:
 - a. Inspection = 1 hour/month
 - b. Minor Repairs = 1 hour/month
 - c. Most minor repairs can be made by the operator using basic hand tools. However, major repairs to damaged concrete, roofing, siding, etc. may require hiring a professional experienced in these repairs and improvements.

Specific Requirements for Your Practice

1. _____
2. _____
3. _____
4. _____
5. _____



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Specific Site Requirements