

# Infosheet #6 Disposal of Farm Wastes

This infosheet provides background to Worksheet #6 of the *Environmental Farm Plan Workbook*. It outlines options that you could adopt to address problem areas in your operation. In most cases you'll need more information before implementation: please refer to the resource materials listed in the infosheet, and consult OMAF Environmental Farm Plan (EFP) Technical Advisors.

All options are classed as Actions or Compensating Factors. Actions address the areas of concern identified, and will change the EFP rating to (3) or Best (4). Compensating Factors are alternatives that will adequately address the concerns, but will not change the rating in the EFP worksheets.

**If the disposal of farm wastes creates off-site impacts on air or water quality, it could result in MOE investigation and possible charges. Readers should note that most (1) actions in the worksheet are shown in bold, indicating this concern.**

## Dead Animals

---

### ISSUE

#### **6-1 Animals covered by ODADA (swine, cattle, horses, sheep, goats)**

The current *Ontario Dead Animal Disposal Act (ODADA)* covers proper disposal procedures for only five types of animals: swine, cattle (beef & dairy), horses, sheep, and goats.

The *Act* was originally created to keep dead animals out of the human food system. OMAF has inspectors who investigate complaints and levy stiff fines.

---

### WHAT CAN YOU DO

#### **OPTION #1 – ACTION**

**Pickup of dead animals greater than about 25 kg in size by a Licensed Dead Animal Collector (LDAC) within 48 hours of knowledge of death:**

- renderers are most interested in larger mature animals, since they are worth more money, but will take smaller ones
- animals deteriorate quickly, so deal with them as soon as possible
- keep animals adequately covered, out of sight when at the road
- clean up the road site when the animals have been picked up
- note that some LDAC will not pick up some dead animals because of disease, drug residue, or other health concerns

#### **OPTION #2 – ACTION**

**Store animals less than about 25 kg in size (such as lambs, weaner pigs, and goat kids) in a freezer within 48 hours of knowledge of death, and hold for pickup by a LDAC:**

- freezer should be large enough to permit timely, frequent pickups
- use tapered, smoother containers such as plastic pails or bins, as carcasses will stick together when frozen
- keep the freezer locked

- clean and disinfect the freezer between uses
- note that some LDAC will not pick up some dead animals because of disease, drug residue, or other health concerns

### **OPTION #3 – ACTION**

#### **Dig a hole and bury animals under 2 feet of earth within 48 hours of knowledge of death on the same farm producing them:**

- burial in frozen ground is difficult and not recommended
- do not bury in earth that has a shallow water table, or bedrock
- keep away from watercourses, wells, tiles, and surface inlets
- no more than 2500 kg in each hole is recommended
- the soil cover is important to prevent exhumation by scavengers
- when a large volume of dead animals are buried, such as after a fire, the carcasses could bloat and push up above the ground, so avoid massive volumes in the same graves
- be conscious of safety issues around common graves that are filled over time, because the holes are open for a period.

### **OPTION #4 – ACTION**

#### **Compost animals within 48 hours of knowledge of death:**

- sawdust is the best carbon source, but straw or others will work
- compost structures can be simple, but walls are quite important
- animals should not make up more than 25% of the pile by volume
- there should be at least 0.6 m of carbon source over the mortalities as a cover to keep in heat, act as an odour filter and discourage scavenging
- there should be minimal leachate, odours, or signs of scavenging if composting is done properly.

### **FOR MORE INFORMATION:**

*Ontario Dead Animal Disposal Act, 1976*

*Managing On-Farm Mortalities, OMAF Factsheet Order No. 01-025*

*On-Farm Composting of Livestock and Poultry Mortalities, OMAF Factsheet Order No. 03-083*

*Proper Burial Techniques for Small Animals and Poultry Mortalities Under 25 kg, OMAF Factsheet Order No. 03-049*

---

**6-2 Animals not covered by ODADA (chickens, turkeys, ducks, geese, ratites, foxes, rabbits, mink, deer, etc)**

If animals are not properly disposed of, there is potential for disease transfer among farms, among animals on the same farm, and to humans. Also, air pollution from decay, vermin, water pollution, and an unpleasant sight can result.

**OPTION #1 – ACTION**

**Pickup of dead animals greater than about 25 kg in size by a Licensed Dead Animal Collector (LDAC) within 48 hours of knowledge of death:**

- renderers are most interested in larger mature animals, since they are worth more money, but will take smaller ones
- animals deteriorate quickly, so deal with them as soon as possible
- keep animals adequately covered, out of sight when at the road
- clean up the road site when the animals have been picked up
- note that some LDAC will not pick up some dead animals because of disease, drug residue, or other health concerns

**OPTION #2 – ACTION**

**Store animals less than about 25 kg in size (such as chickens, turkeys, rabbits) in a freezer within 48 hours of knowledge of death, and hold for pickup by a LDAC:**

- freezer should be large enough to permit timely, frequent pickups
- use tapered, smoother containers such as plastic pails or bins, as carcasses will stick together when frozen
- keep the freezer locked
- clean and disinfect the freezer between uses
- note that some LDAC will not pick up some dead animals because of disease, drug residue, or other health concerns. Also, some renderers will not handle feathers.

**OPTION #3 – ACTION**

**Dig a hole and bury animals under 2 feet of earth within 48 hours of knowledge of death on the same farm producing them:**

- burial in frozen ground is difficult and not recommended
- do not bury in earth that has a shallow water table, or bedrock
- keep away from watercourses, wells, tiles, and surface inlets
- no more than 2500 kg in each hole is recommended
- the soil cover is important to prevent exhumation by scavengers
- when a large volume of dead animals are buried, such as after a fire, the carcasses could bloat and push up above the ground, so avoid massive volumes in the same graves
- be conscious of safety issues around common graves that are filled over time, because the holes are open for a period.

#### **OPTION #4 – ACTION**

##### **Compost animals within 48 hours of knowledge of death:**

- sawdust is the best carbon source, but straw or others will work
- compost structures can be simple, but walls are quite important
- animals should not make up more than 25% of the pile by volume
- there should be at least 0.6 m of carbon source over the mortalities as a cover to keep in heat, act as an odour filter and discourage scavenging
- there should be minimal leachate, odours, or signs of scavenging if composting is done properly

#### **OPTION #5 – COMPENSATING FACTOR**

##### **Incinerate them on the farm in an approved incinerator with a Ministry of Environment *Certificate of Approval*:**

- approved incinerators are not burn barrels or open fires
- approved incinerators would operate at temperatures of at least 1000°C on the secondary burner for at least 1 second

---

#### **FOR MORE INFORMATION:**

*Ontario Dead Animal Disposal Act, 1976;*

*Managing On-Farm Mortalities, OMAF Factsheet Order No. 01-025*

*On-Farm Composting of Livestock and Poultry Mortalities, OMAF Factsheet Order No. 03-083*

*Proper Burial Techniques for Small Animals and Poultry Mortalities Under 25 kg, OMAF Factsheet Order No. 03-049*

---

## **Animal Health Care Products**

### **6-3 Leftover products still usable by this farm's animals, and still within expiration date**

Avoid having large quantities of leftover animal health care products. The greatest risks of improper storage are the health and safety of people, livestock and pets. Having an abundance of leftover products increases the potential for medication errors. Animal health care products include: drugs, medicines, ointments, insect

OMAF = Ontario Ministry of Agriculture and Food; MOE = Ontario Ministry of the Environment  
ONTARIO ENVIRONMENTAL FARM PLAN WORKBOOK C INFOSHEET #6

#### **OPTION – ACTION**

##### **Return to place of purchase if no longer needed, or store them in their original containers in an appropriate storage, or use up materials for their intended and registered purpose:**

- keep materials in original containers
- discuss returning materials with your veterinarian; disposal costs may be an issue
- locked storages help protect products from temperature changes, sunlight, dust, moisture, animals, insects and children

repellants, vaccines, needles, disinfectants, cleaners, rodenticides, and fumigants that do not have a Pesticide Control Product (PCP) number.

- most antibiotics are heat-sensitive and best stored between 2°C and 8°C conditions. Check labels and store accordingly leftover and usable means that the product is still effective.

---

**6-4 Leftover products, not usable by this farm's animals, or no animals it can be used for, or past the expiration date, or contaminated**

It is difficult to avoid having some outdated or unusable animal health care products. The greatest risks of improper disposal are to the health and safety of people, livestock and pets.

These products include all items in question #3 that are contaminated, useless because of poor storage conditions, and products that expire before the animals can use them.

**OPTION #1 – ACTION**

**Return to place of purchase:**

- discuss this with your veterinarian
- keep products in their original containers

**OPTION #2 – ACTION**

**Immediately dispose at an approved Hazardous Waste Depot (HWD) for hazardous wastes or an approved Landfill Site (LS) for non-hazardous wastes:**

- suppliers or veterinarians should be consulted on these items
- keep products in their original containers so the HWD or LS knows what to do with it
- these products may be stored temporarily on the farm in an appropriate storage

**OPTION #3 – ACTION**

**Store in an appropriate storage area on the farm for disposal in near future at an approved Hazardous Waste Depot (HWD) for hazardous wastes, or an approved Landfill Site (LS) for solid non-hazardous wastes:**

- keep materials in original containers
- discuss returning materials with your veterinarian
- these products need to be in a locked storage

**OPTION #4 – ACTION**

**Pickup by an approved MOE carrier:**

- consult the *Yellow Pages*.
-

---

## 6-5 Banned products

Banned animal health care products should not be used under any circumstances because of risk to the health and safety of people, animals and pets. These include products no longer allowed to be sold because of human, animal or environmental safety concerns.

### OPTION #1 – ACTION

#### Return to place of purchase:

- keep products in their original containers
- discuss this with your veterinarian

### OPTION #2 – ACTION

#### Immediate disposal at an approved Hazardous Waste Depot (HWD) for hazardous wastes or an approved Landfill Site (LS) for solid non-hazardous wastes:

- suppliers or veterinarians might help determine which items should go where
- keep products in original container so the HWD or LS knows what to do with them
- these products may be stored temporarily on the farm in an appropriate storage.

### OPTION #3 – ACTION

#### Store in an appropriate storage area on the farm for disposal in near future at an approved Hazardous Waste Depot (HWD) for hazardous wastes, or an approved Landfill Site (LS) for solid non-hazardous wastes:

- keep materials in original containers
- discuss returning materials with your veterinarian
- these products need to be in a locked storage.

### OPTION #4 – ACTION

#### Pickup by an approved MOE Carrier:

- consult the *Yellow Pages*.
- 

## 6-6 Needles and scalpel blades and non-biomedical waste (gauze, bandages, latex gloves, etc.)

These materials can be very dangerous if not handled properly and should never be put in your regular garbage

### OPTION #1 – ACTION

#### Store in an approved commercial container in an appropriate storage area on the farm until disposal of by a medical waste handling company:

- discuss options with your veterinarian.

### OPTION #2 - ACTION

#### Immediate disposal at a Hazardous Waste Depot (HWD):

- consult with medical waste company, HWD staff, or veterinarian.

### OPTION #3 – ACTION

#### Store in closed, leakproof, rigid container (not glass) in an appropriate storage area

**on the farm for disposal in near future at an approved Hazardous Waste Depot (HWD):**

- do not place liquids such as bleach in the container for disinfection, as this creates a chemical hazard
- consult with medical waste company, HWD staff, or veterinarian

**FOR MORE INFORMATION:**

Attend an Livestock Medication Education Program

---

## **Packaging Materials And Containers Used During Farm Operations**

---

### **6-7 Plastic film coverings (greenhouse plastic, large bale wraps, plastic mulches, etc)**

The use of plastic film coverings in agriculture has proliferated in recent years with the increase in greenhouses, over-wintering hoop houses, plastic mulches for crops and feed wraps. Disposal has become an issue.

#### **OPTION #1 – ACTION**

**Reuse as much as possible:**

- plastic films have a variety of reuse options such as lining truck boxes, covering machinery, lining backyard skating rinks, etc.

#### **OPTION #2 – ACTION**

**Ensure coverings are clean, dry, sorted into similar types of materials, compacted as much as possible, then recycle through a plastic recycling company:**

- some farmers use hay balers to compact plastic wrap, although it must be done safely
- check with recycler for best actions.

#### **OPTION #3 – ACTION**

**Dispose at approved Landfill Site for solid non-hazardous waste:**

- call ahead, not all sites will accept these wastes

---

### **6-8 Packaging materials**

If a large number of packaging materials, containers and other items are used on the farm, it is unacceptable to simply burn or dump them. Either approach can pollute air, water and soil. Burning may contravene local bylaws or the *Environmental Protection Act*.

#### **OPTION #1 – ACTION**

**Reuse as much as possible:**

- farmers are innovative when it comes to reusing these materials.

#### **OPTION #2 – ACTION**

**Ensure packaging materials are empty and clean, then recycle where local program exist:**

- these materials do not need to be pristine, just clean.

### **OPTION #3 – ACTION**

**Packages that cannot be reused or recycled should be emptied and cleaned, then disposed of at an approved Landfill Site:**

- there are currently 1,350 active approved Ontario Landfill Sites.

---

### **6-9 Petroleum product packaging (oil, fuel, lubricants, paint, etc)**

Farmers use a lot of petroleum-based products such as lubricating oils, hydraulic fluid, metal working fluids, insulating fluids or coolants, fuels, and paints. It is often difficult to use up the entire product before it becomes worthless. Burning and/or dumping these "empty" containers on the farm is unacceptable because of the fire risk and potential for surface and ground water contamination.

### **OPTION #1 – ACTION**

**Use up product and recycle containers, if local programs exist.**

### **OPTION #2 – ACTION**

**Dispose at an approved Landfill Site for solid non-hazardous wastes provided containers are empty:**

- check with your municipality to see which products they will take.

### **OPTION #3 – ACTION**

**Use up product, allow packages to dry completely, then store them in an appropriate storage for disposal in the near future at an Approved Landfill Site:**

- keep this area well ventilated and appropriately marked
- do not store them for extended periods.

### **FOR MORE INFORMATION:**

Recycling Council of Ontario 1-800-263-2849  
Blue Pages under "Wastes & Recycling"

---

## **Farm Structural Materials**

### **6-10 Building components (concrete, stone, block & bricks, wood frames, sheet steel, glass, sheet plastic and shingles, fencing, wire)**

Piles of old building rubble are an eyesore. More importantly they could be dangerous to people (especially children) and livestock because of sharp materials such as nails. Burning these materials causes air pollution and may not be allowed by local bylaws. Piles of this material become excellent nesting sites for

### **OPTION #1 – ACTION**

**Reuse and recycle as many items as possible**

- farmers are quite innovative at finding uses for old materials
- demolition companies will remove buildings for a fee
- some buildings can be relocated.

### **OPTION #2 – ACTION**

**Sort similar materials and send to recycling facility approved to receive construction building components**

- most building components can be recycled or reused such as stone, block and concrete

vermin. Concrete, stone, blocks, bricks, etc. should not be used as fill, or for soil erosion prevention.

foundations, brick, wood studs, wood poles, steel framing, sheet steel, plywood and wood cladding, trusses, shingles, and concrete or steel silos

- most building components are relatively inert and will not harm the environment, however the preservative materials on some (e.g. lead paint, pressure treated wood) could cause problems.

#### **OPTION #3 - ACTION**

**Dispose of at an approved Landfill Site for solid non-hazardous wastes:**

- the cost of separating and transporting is costly.

---

#### **6-11 Restricted use old building components (insulation, asbestos, composite products, pressure-treated lumber, etc.)**

Burning and/or burying materials on the farm can pose risks to people (especially children) and livestock through polluted air and ground water. Many wood materials have been chemically treated to last longer and should not be burned on the farm. Asbestos fibre can cause respiratory problems. Some insulation materials are flammable and give off dense chemical smoke if burned.

#### **OPTION – ACTION**

**Materials that cannot be reused or recycled are taken to an approved Landfill Site for solid non-hazardous wastes, or a Hazardous Waste Depot for hazardous wastes:**

- note disposal of asbestos waste as outlined in Section 17 of Ontario Regulation 347, EPA
- the cost of separating and transporting is prohibitive so in many cases demolition companies will remove for a fee.

#### **FOR MORE INFORMATION:**

Recycling Council of Ontario 1-800-263-2849  
Blue Pages under "Wastes & Recycling"

---

### **Machinery and Equipment**

#### **6-12 Machines, equipment and appliances that do not contain refrigerants (farm machinery, vehicles, appliances, etc)**

Inquisitive children and livestock are at risk around old, rusty, sharp equipment. Piles of these materials make excellent hiding places for vermin.

#### **OPTION #1 - ACTION**

**Properly remove oil, fuel, antifreeze and reuse/recycle, if possible:**

- send parts to scrap dealer, or approved Landfill Site for solid non-hazardous wastes
- send waste anti-freeze and waste oil to a selected Waste Depot (such as some vehicle repair shops) or Hazardous Waste Depot.

#### **OPTION #2 – COMPENSATING FACTOR**

**Send all materials to scrap dealers, or an approved Landfill Site for non-hazardous wastes.**

---

**6-13 Machines, equipment and appliances that contain refrigerants (refrigerators, freezers, air conditioners)**

Some appliances and equipment contain CFCs, which can damage the earth's ozone layer. Refrigerators and freezers could cause suffocation if used as hiding places for children.

**OPTION #1 – ACTION**

**Reuse or recycle, if possible:**

- call your Municipality for local rules.

**OPTION #2 - ACTION**

**Arrange for a certified person to remove refrigerants, then send parts to scrap dealers or an approved Landfill Site for solid non-hazardous wastes.**

**OPTION #3 – COMPENSATING FACTOR**

**Send all materials to scrap dealers, or an approved Landfill Site for non-hazardous wastes, providing a certified person has removed the refrigerants.**

---

**6-14 Restricted use old components (pressurized tanks, lead-acid or nickel cadmium batteries, mercury and thermometers)**

Improperly handled pressurized tanks and batteries have killed people in explosions. Batteries can cause serious water quality problems and health concerns because of the lead or nickel-cadmium content

**OPTION #1 – ACTION**

**Reuse or recycle as much as possible:**

- landfill sites won't take these items
- returning the components back to the supplier is the best option; if they don't they will know who will take them
- batteries can be taken back to battery collection depots
- mercury thermometers should be disposed of at a Hazardous Waste Depot.

**OPTION #2 - ACTION**

**Store safely on farm for disposal in the near future at a Hazardous Waste Depot.**

---

**6-15 Tires**

Piles of tires are an eyesore on the farm. In large quantities, they can be a fire or safety hazard. Deterioration could lead to environmental contamination. Tires decrease in value over time. Therefore, stockpiling is not worth the risk. Also, tires hold stagnant water and are an excellent breeding ground for vermin and for mosquitoes which could carry the West Nile Virus.

**OPTION #1 - ACTION**

**Reuse tires where possible.**

**OPTION #2 - ACTION**

**Take tires to a tire dealer:**

- recyclers will pick up tires for a small fee (about \$5/tire in 2004).

**OPTION #3 - ACTION**

**Take tires to an approved Landfill Site for solid non-hazardous wastes offering this service**

Provincial laws govern how many tires can be stored in one location at one time without a permit (MOE). Never burn tires as they give off a dense, chemical smoke.

- there is usually a fee for this service.

#### **OPTION #4 – ACTION**

**Reuse, in limited quantities for other purposes on the farm such as holding down tarps over feed.**

#### **FOR MORE INFORMATION:**

Contact your Municipality

---

### **Preservatives**

---

#### **6-16 Leftover, but usable (adhesives, paint, cleaners, lubricants, etc.)**

Most leftover preservative materials are petroleum-based and could be a fire hazard when stored in one place. If dumped on the farm, they could contaminate surface or ground water.

#### **OPTION #1 – ACTION**

**Store safely on the farm and use them up as needed, or share with a neighbour:**

- leftover paint can often be used as a primer on future paint jobs
- consider organizing a community "garage sale" with other farmers where these products are traded or exchanged.

#### **OPTION #2 – ACTION**

**Send to an approved Hazardous Waste Depot or Selected Waste Depot, with non-hazardous wastes to an approved Landfill Site, or Hazardous Waste Depot, as required:**

- note that Landfill Sites are not generally approved to receive liquid and hazardous wastes
  - containers need to be empty and dry if sent to Landfill Site
  - containers partly filled should go to a Hazardous Waste Depot.
- 

#### **6-17 Used motor oil produced on farm**

Of the approximately one-billion litres of lubricating oils sold in Canada each year, about one-half can be recovered for reuse. Vehicles on Ontario's farms collectively use millions of litres of oil each year. The safe disposal or reuse of used oil is important to reduce the risk to water quality and reduce the risk of fire.

#### **OPTION #1 – ACTION**

**Reuse as a lubricant on equipment, being sure not to apply too much:**

- an example is stable cleaner chains.

#### **OPTION #2 – ACTION**

**Take to an approved Hazardous Waste Depot, or Selected Waste Depot, Used Oil Recycling Depot:**

- note that Selected Waste Depots can only accept up to 25 litres of used oil from someone at a time

- there are 350 drop-off depots across the province where farmers can deliver up to 25 L/day at no charge
- local MOE offices can supply lists of locations.

**OPTION #3- ACTION**

**Pick-up by an approved MOE carrier, or contractor approved to manage liquid hazardous wastes.**

**Dumps**

**6-18 Existing on-farm dumps (for materials produced by that farm operation)**

Many farms have small dumps containing wastes that may have been there for many years. Take an inventory of these dumps to determine whether there is a safety concern for people, livestock, wildlife, or the environment

Currently there are no legal implications, assuming the wastes were generated on the same farm where the dump is located.

**OPTION #1 – ACTION**

**No dump on the farm at all:**

- confirm this through a thorough investigation of possible areas, such as in the bush, in areas that are not farmed, and ravines.

**OPTION #2 - ACTION**

**If a dump is found, remove existing materials and take them to an appropriately approved waste disposal facility.**

**OPTION #3 - ACTION**

**Small amount of inert materials stored on site, fenced off to prevent entry:**

- this includes wood, concrete, or bricks providing the site is dry and fenced
- remove hazardous materials (obtain professional assistance if necessary)
- farm dumps can reduce a property's resale value, especially if it's contents are unknown.

*At the request of the **Ontario Farm Environmental Coalition**, consisting of the Ontario Federation of Agriculture, Christian Farmers Federation of Ontario, AGCare, and the Ontario Farm Animal Council, the following people contributed to the development of Infosheet #6:*

*Hugh Fraser, OMAFRA (Chair)*

*Ken Hough, OCPA*

*Dave Armitage, OFA*

*Ed Barrie, OMAFRA*

*Barb Lovell, OMAFRA*

*Gord Coukell, OMMB*

*Gary Kay, MOEE*

*Eric Wilson, OMAFRA*

*The following people contributed to the revisions (2004) of Infosheet #6:*

*Hugh Fraser, OMAF (Chair)*

*Dave Armitage, Ontario Federation of Agriculture*

*Craig Richardson (OMAF)*

*Jonathan Watchurst, EFP Representative*

*Craig Newton, MOE*

*Paul Sims, MOE*

*Technical Editing Committee:*

*H.J. Smith, OMAF*

*Jim Myslik OMAF*

*Bob Stone, OMAF*