

INFOSHEET #6

DISPOSAL OF FARM WASTES

How to address concerns identified in your Environmental Farm Plan Worksheet #6



Based on
Environmental Farm
Plan Workbook,
4th ed. 2013

This infosheet outlines options to address concerns identified in your Environmental Farm Plan (EFP) as they relate to disposal of farm wastes.

All options are classed as **Actions** or **Compensating Factors**.

- **Actions** address identified concerns, and will change the EFP rating to (3) or Best (4).
- **Compensating Factors** are alternatives that will adequately address the concern, but will not change the rating in the EFP worksheet.

If the disposal of farm wastes creates off-site impacts for air or water quality, it could result in complaints to the Ministry of the Environment, Conservation and Parks (MOECC) and a possible on-site investigation. Note that in Worksheet #6, most (1) ratings are shown in bold, indicating a violation of legislation.

In most cases, you'll need more information before choosing and implementing options. Sources for more information are noted at the end of this infosheet.

For help with technical terms, please see the full glossary in your EFP Workbook.

WASTE ANIMAL HEALTH PRODUCTS AND EQUIPMENT

6-1. Unwanted or expired products

BACKGROUND	WHAT CAN YOU DO?
<p>Avoid accumulating quantities of leftover animal health care products.</p> <p>Improper storage can pose risks to people, livestock and pets. An abundance of leftover products increases the potential for medication errors.</p> <p>Animal health care products include: drugs, medicines, ointments, insect repellents, vaccines, disinfectants, cleaners, rodenticides and fumigants that do not have a Pesticide Control Product (PCP) number.</p> <p>All livestock medicines have a Drug Identification Number (DIN) or a New Animal Drug Application (NADA) number.</p>	<p>OPTION 1 – ACTION</p> <p>Use up materials for their intended and registered purpose wherever possible.</p> <p>Ensure proper storage:</p> <ul style="list-style-type: none"> • keep materials in original containers • use a locked storage to help protect products from temperature changes, sunlight, dust, moisture, animals, insects and children • be aware that most antibiotics are heat-sensitive and best stored between 2°C and 8°C (35.5–46.5°F). <p>Dispose of unwanted products in a responsible manner:</p> <ul style="list-style-type: none"> • return to place of purchase – discuss protocols with your veterinarian • take to local Hazardous Waste Depot – check with your municipality for details • hire a commercial disposal company.




Avoid accumulating quantities of leftover animal health care products. Always keep them in their original containers in an appropriate storage.

For more information about safe handling of livestock medicines and related products:

- Responsible Disposal of Unwanted Medicines and Sharps, OMAFRA factsheet, Order no. 05-051
- Safe On-Farm Storage of Unwanted Medicines and Sharps, OMAFRA factsheet, Order no. 05-053
- Livestock Medicines Education Program (LMEP), www.ontariolivestockmed.com

6-2. Animal health equipment

BACKGROUND	WHAT CAN YOU DO?	 <p data-bbox="1528 592 1976 678">Store waste animal health equipment in a closed, leakproof, rigid container. Do not use glass.</p>
<p>Needles, used syringes, scalpel blades and similar devices used to administer medication can be very dangerous if not disposed of properly, and should never be put in your regular garbage.</p>	<p>OPTION 1 – ACTION</p> <p>Store in an approved commercial container, or use a leakproof, rigid container (not glass).</p> <p>Keep in an appropriate storage area on the farm until disposed of by a medical waste handling company:</p> <ul style="list-style-type: none"> • consult with the medical waste company, Hazardous Waste Depot staff, or your veterinarian • do not place liquids such as bleach in the container as a disinfectant, as this may create a hazardous chemical reaction. <p>OPTION 2 – ACTION</p> <p>Dispose of used equipment immediately at local Hazardous Waste Depot:</p> <ul style="list-style-type: none"> • consult with the medical waste company, Hazardous Waste Depot staff, or your veterinarian. 	

WASTE FILMS AND PACKAGING

6-3. Plastic film coverings (greenhouse plastic, large bale wraps, plastic mulches, etc.)

BACKGROUND	WHAT CAN YOU DO?
<p>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.</p> <p>Disposal has become an issue. Burning or burying the plastic film is a violation of legislation.</p> <div data-bbox="218 1151 621 1451" data-label="Image"> </div>	<p>OPTION 1 – ACTION</p> <p>Reuse as much as possible:</p> <ul style="list-style-type: none"> • consider reusing plastic films for lining truck boxes, covering machinery, lining backyard skating rinks, etc. <p>OPTION 2 – ACTION</p> <p>Recycle through a plastic recycling company:</p> <ul style="list-style-type: none"> • ensure coverings are clean, dry, sorted into similar types of materials, and compacted as much as reasonable – some farmers use hay balers to compact plastic wrap, although it must be done safely • check with the recycler for your best collection strategy. <p>OPTION 3 – ACTION</p> <p>Dispose at an approved landfill site for solid non-hazardous waste:</p> <ul style="list-style-type: none"> • call ahead for information – not all sites will accept these wastes. <div data-bbox="1593 1370 1877 1476" data-label="Text"> <p>See OMAFRA factsheet: Recycling Farm Plastic Films, Order no. 95-019</p> </div>

6-4. Other plastic bags and plastic pails and jugs, plastic twine, etc.

The use of plastic film coverings in agriculture has expanded in recent years. Repurpose them whenever possible.


BACKGROUND	WHAT CAN YOU DO?
<p>Used packaging materials, containers and other items can accumulate on the farm.</p> <p>Burning or burying them is unacceptable. Either approach can pollute air, water and soil, and violates legislation.</p>	<p>OPTION 1 – ACTION</p> <p>Reuse as much as possible.</p> <p>Farmers are quite innovative when it comes to reusing these materials.</p> <p>OPTION 2 – ACTION</p> <p>Ensure packaging materials are empty and clean (not pristine), then recycle where a local program exist:</p> <ul style="list-style-type: none"> • remove any soil. <p>OPTION 3 – ACTION</p> <p>Dispose of materials that cannot be reused or recycled at an approved landfill site:</p> <ul style="list-style-type: none"> • empty and clean materials first. <p>There are currently 1,350 active approved Ontario landfill sites.</p>



Material that cannot be reused or recycled should be disposed of at an approved landfill site.

For local recycling resources, see the Yellow and Blue pages of your telephone book, under "Wastes & Recycling."

6-5. Paper products such as cardboard, fruit and vegetable containers, paper and jute bags, baskets

BACKGROUND	WHAT CAN YOU DO?
 <p>Reuse and recycle paper products as much as possible. Burning or burying these products is not recommended.</p>	<p>OPTION 1 – ACTION</p> <p>Use up the products, and recycle the containers where local programs exist.</p> <p>OPTION 2 – ACTION</p> <p>Dispose at an approved landfill site for solid non-hazardous wastes, provided the cardboard containers are empty:</p> <ul style="list-style-type: none"> • check with your municipality to see which products they will accept.

WASTE FARM BUILDING COMPONENTS

6–6. Recyclable farm building components (concrete, stone, blocks, bricks, wood frames, sheet steel, glass, shingles, fencing, wire)

BACKGROUND	WHAT CAN YOU DO?
<p>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 and wood splinters.</p> <p>Burning these materials causes air pollution and may be a violation of legislation.</p> <p>Piles of this material become excellent nesting locations for vermin.</p> <p>Concrete, stone, blocks, bricks, etc. that are painted, contaminated with soluble or decomposable chemical substances, or have exposed iron rebar should not be used as fill, or as material to prevent soil erosion.</p>	<p>OPTION 1 – ACTION</p> <p>Reuse and recycle as many items as possible.</p> <p>Farmers are quite innovative at finding uses for old materials.</p> <p>Some buildings can be relocated as a unit or disassembled and reassembled in a new location. Demolition companies will remove buildings for a fee.</p> <p>OPTION 2 – ACTION</p> <p>Sort similar materials and send to a recycling facility approved to receive uncontaminated construction building components, such as:</p> <ul style="list-style-type: none">• stone, block and concrete foundations, brick, wood studs, wood poles, steel framing, sheet steel, plywood and wood cladding, trusses, shingles, and concrete or steel silos. <p>Most building components are relatively inert and will not harm the environment. However, preservative materials such as lead paint or pressure-treated wood could cause problems.</p> <p>OPTION 3 – ACTION</p> <p>Dispose of at an approved landfill site for solid non-hazardous wastes:</p> <ul style="list-style-type: none">• note that the cost of separating and transporting can be considerable.



Most uncontaminated building components can be recycled or reused.

6-7. Non-recyclable farm building components (insulation, asbestos, composite products, pressure-treated lumber, etc.)

BACKGROUND	WHAT CAN YOU DO?
<p>Burning and/or burying materials on the farm can pose risks to people, especially children, and livestock through polluted air and ground water, and is a violation of legislation.</p> <p>Many wood materials have been chemically treated to last longer and should not be burned on the farm.</p> <p>Asbestos fibre can cause respiratory problems and must be handled with extreme care.</p> <p>Some insulation materials are flammable and give off dense chemical smoke if burned.</p>	<p>OPTION 1 – ACTION</p> <p>Reuse as many items as possible.</p> <p>OPTION 2 – ACTION</p> <p>Take materials that cannot be reused or recycled to an approved landfill site for solid non-hazardous wastes, or a Hazardous Waste Depot for hazardous wastes:</p> <ul style="list-style-type: none"> • note: legislation concerning disposal of asbestos waste is outlined in Section 17 of Ontario Regulation 347, Environmental Protection Act • the cost of separating and transporting can be prohibitive – in many cases demolition companies will remove all the material for a fee.



Materials that cannot be reused or recycled should be taken to an approved landfill site for solid non-hazardous wastes, or a Hazardous Waste Depot for hazardous wastes.

WASTE DEVICES THAT USED ENERGY TO OPERATE

6-8. Electronics

BACKGROUND	WHAT CAN YOU DO?
<p>Electronic products, such as computers, televisions, DVD players, and hand-held devices, should be safely recycled.</p> <p>An industry-led program is in place to help, with over 600 collection sites and other affiliate sites across the province.</p>	<p>OPTION 1 – ACTION</p> <p>If an electronic product still operates properly, donate it to a charitable organization or a school.</p> <p>OPTION 2 – ACTION</p> <p>Use the Waste Electrical and Electronic Equipment Program Plan to divert and recycle electronic waste:</p> <ul style="list-style-type: none"> • see www.recycleyourelectronics.ca for a site near you, and any associated costs. <p>OPTION 3 – ACTION</p> <p>Take old electronics to an approved landfill site that recycles these devices.</p>



For more information about recycling electronics, and to find a drop site near you, go to: www.recycleyourelectronics.ca.

6–9. Equipment and appliances that contain refrigerants (refrigerators, freezers, air conditioners)

BACKGROUND	WHAT CAN YOU DO?
<p>Some appliances and equipment contain CFCs (chlorofluorocarbons, also called freon), which can damage the earth's ozone layer if improperly released.</p> <p>Some can also be an immediate danger to children. Unless properly decommissioned, the door latches of refrigerators and freezers can engage, confining a child and possibly leading to suffocation.</p>	<p>OPTION 1 – ACTION</p> <p>Reuse or recycle, if possible:</p> <ul style="list-style-type: none"> • call your municipality for information on the proper removal of the refrigerant, decommissioning and disposal. <p>OPTION 2 – ACTION</p> <p>Arrange for a certified person to remove the refrigerants and properly tag the machine:</p> <ul style="list-style-type: none"> • then send the machine to a scrap dealer or an approved landfill site for solid non-hazardous wastes.



Old appliances may be an environmental and safety hazard.

6–10. Machinery, equipment and appliances not containing refrigerants

BACKGROUND	WHAT CAN YOU DO?
<p>Old, deteriorating vehicles and equipment can be a hazard to people and livestock. As well, they make excellent hiding/nesting areas for vermin.</p> <p>A farm cleanup will not only make things look better, but may generate some revenue from the sale of scrap metal.</p>	<p>OPTION 1 – ACTION</p> <p>Reuse as much as possible:</p> <ul style="list-style-type: none"> • landfill sites will not take these items. <p>OPTION 2 – ACTION</p> <p>Take to a scrap metal dealer:</p> <ul style="list-style-type: none"> • sort out higher value metal (i.e. copper, aluminium) • do not include pressurized containers (e.g. propane tanks) in scrap loads – this is a safety hazard and loads will be rejected. <p>OPTION 3 – COMPENSATING FACTOR</p> <p>Store safely on the farm for disposal in the near future.</p>



Do not include pressurized containers (e.g. propane tanks) in scrap loads.

6-11. Batteries

BACKGROUND	WHAT CAN YOU DO?
<p>“Batteries” includes all kinds of batteries – from small ones for handheld appliances to the lead acid types.</p> <p>Batteries can cause serious water quality problems and health concerns because of the lead or nickel-cadmium content.</p> <p>Lead acid batteries have scrap value and a trade allowance is usually given if purchasing a new replacement battery. Old stockpiled batteries can be recycled.</p>	<p>OPTION 1 – ACTION</p> <p>Take batteries to a scrap metal dealer or recycling location.</p> <p>OPTION 2 – ACTION</p> <p>Store in a dry secure location until recycled:</p> <ul style="list-style-type: none"> • for more information, see www.call2recycle.ca. <p>OPTION 3 – ACTION</p> <p>Store rechargeable batteries individually to prevent creating a fire hazard.</p>



A trade allowance is usually given when purchasing a new replacement battery.

For more recycling information:

- www.call2recycle.ca
- www.makethedrop.ca
- contact your local office of Ministry of the Environment, Conservation and Parks

WASTE PRESERVATIVES

6-12. Lubricating oils and oil filters produced on the farm

BACKGROUND	WHAT CAN YOU DO?
<p>Vehicles on Ontario’s farms collectively use millions of litres of oil each year, much of which can be reused.</p> <p>The safe disposal or reuse of used oil is important to reduce the risk to water quality and the risk of fire.</p> <p>Dumping, burying or burning on the farm or in a non-approved appliance is a violation of legislation. Oil must not be used for dust suppression.</p>	<p>OPTION 1 – ACTION</p> <p>Reuse as a lubricant on equipment, being sure not to apply too much:</p> <ul style="list-style-type: none"> • light oiling of stable cleaner chains is a one possible reuse. <p>OPTION 2 – ACTION</p> <p>Take to an approved Hazardous Waste Depot, Selected Waste Depot or Used Oil Recycling Depot:</p> <ul style="list-style-type: none"> • Selected Waste Depots can only accept up to 25 L of used oil at any one time • there are 350 drop-off depots across the province where farmers can deliver up to 25 L/day at no charge • local Ministry of the Environment, Conservation and Parks office can supply locations. <p>OPTION 3 – ACTION</p> <p>Hire an approved Ministry of the Environment, Conservation and Parks carrier or contractor to manage liquid hazardous wastes and used oil filters.</p>



Roughly 50% of the 1 billion litres of lubricating oils sold annually in Canada can be recovered for reuse.

6-13. Antifreeze


BACKGROUND	WHAT CAN YOU DO?
<p>Ethylene glycol poisoning is caused by ingesting ethylene glycol, which is the primary ingredient in both automotive antifreeze and hydraulic brake fluid.</p> <p>Ethylene glycol is a toxic, colourless, odourless liquid with a sweet taste. Glycolic acid and oxalic acid are the cause of the toxicity.</p> <div data-bbox="220 446 619 747" data-label="Image"> </div> <div data-bbox="220 747 619 844" data-label="Caption"> <p>Store antifreeze in a properly labelled container to prevent accidental poisoning.</p> </div>	<p>OPTION 1 – ACTION</p> <p>Take unwanted antifreeze to an approved Hazardous Waste Depot or Selected Waste Depot:</p> <ul style="list-style-type: none"> • your local Ministry of the Environment, Conservation and Parks office can supply locations • see also www.makethedrop.ca. <p>OPTION 2 – ACTION</p> <p>Hire an approved Ministry of the Environment, Conservation and Parks carrier or contractor to manage liquid hazardous wastes.</p> <p>Note that a mix of oil and antifreeze, however slight, will not be accepted.</p>

6-14. Paints and coatings

BACKGROUND	WHAT CAN YOU DO?
<p>“Paints and coatings” include: latex and alkyd (oil-based) paints, primer and base coats, and water and solvent-based stains and coatings.</p> <p>These products can be dangerous if not stored and used in the recommended way.</p> <div data-bbox="315 1144 714 1445" data-label="Image"> </div> <div data-bbox="315 1445 714 1542" data-label="Caption"> <p>Visit www.makethedrop.ca to find the nearest location that accepts unwanted paints.</p> </div>	<p>OPTION 1 – ACTION</p> <p>Store securely and use up as needed.</p> <p>OPTION 2 – ACTION</p> <p>Contact your municipality to see if donation/reuse opportunities are available:</p> <ul style="list-style-type: none"> • some municipalities have drop-offs where unwanted paint is stored and can be used by anyone in need of paint. <p>OPTION 3 – ACTION</p> <p>Take to an approved Hazardous Waste Depot or Selected Waste Depot:</p> <ul style="list-style-type: none"> • your local Ministry of the Environment, Conservation and Parks office can supply locations • see also www.makethedrop.ca.

MISCELLANEOUS WASTES

6-15. Tires from farm machinery

BACKGROUND	WHAT CAN YOU DO?	 <p data-bbox="1524 594 2024 651">Old tires can be reused for other purposes on the farm such as holding down tarps over feed.</p>
<p>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.</p>	<p>OPTION 1 – ACTION</p> <p>Return the tires to your tire dealer.</p>	
<p>Also, tires can hold stagnant water and are an excellent breeding ground for mosquitoes, including those carrying the West Nile virus.</p>	<p>OPTION 2 – ACTION</p> <p>Take the tires to an approved landfill site for solid non-hazardous wastes offering this service.</p>	
<p>Provincial laws govern how many tires can be stored in one location at one time without a permit from Ministry of the Environment and Climate Change. Never burn tires as they give off a dense, chemical smoke. Dumping or burning tires is a violation of legislation.</p>	<p>OPTION 3 – ACTION</p> <p>Reuse in limited quantities for other purposes on the farm.</p>	

For more information, contact Resource Productivity and Recovery Authority 1-888-936-5513 or www.rpra.ca/programs/tires/

6-16. Pressurized containers

BACKGROUND	WHAT CAN YOU DO?
<p>Pressurized containers can leak or even explode when exposed to fluctuating temperatures, humidity or pressure.</p> <p>Exploding pressurized tanks have killed people.</p> <p>Many retailers accept refillable containers if replacements are being purchased.</p>	<p>OPTION 1 – ACTION</p> <p>Securely store pressurized containers outside until you can return to the retailer:</p> <ul style="list-style-type: none"> • store where they are safe from tampering and toppling • avoid direct sun • transport in a secure upright position on a flat surface. <p>OPTION 2 – ACTION</p> <p>Take to an approved Hazardous Waste Depot or Selected Waste Depot:</p> <ul style="list-style-type: none"> • find a location at www.makethedrop.ca • transport in a secure upright position on a flat surface.



Many retailers accept refillable containers if replacements are being purchased.

6-17. Devices containing mercury

BACKGROUND	WHAT CAN YOU DO?
<p>Because mercury is toxic, even small mercury spills should be considered hazardous and should be cleaned up with caution. Products containing mercury should be recycled or disposed of properly.</p> <p>It is a violation of legislation to dispose of any device containing mercury by dumping or burial.</p> <p>Products that may include mercury include compact fluorescent lights (CFLs), some paints, and old batteries, thermostats and fuel sensors.</p>	<p>OPTION 2 – ACTION</p> <p>Take materials containing mercury to an approved Hazardous Waste Depot or Selected Waste Depot:</p> <ul style="list-style-type: none"> • contact your municipality, or find a location at www.makethedrop.ca • transport in a secure upright position on a flat surface.



Unlike incandescent lights, which can be disposed of safely in the regular garbage, CFLs contain mercury, which can have significant impacts on both human health and the environment. Some large retailers accept them. They must be disposed of properly, through an approved Hazardous Waste Depot or Selected Waste Depot.

6-18. On-farm garbage dumps for materials produced by that farm operation

BACKGROUND	WHAT CAN YOU DO?
<p>Many farms have small dumps containing wastes that may have been there for many years. Take a careful inventory of these dumps to determine if there is a safety concern for people, livestock, wildlife, or the environment.</p> <p>Assuming the wastes were generated on the same farm where the inactive dump is located, and there are no offsite impacts, it is unlikely that its presence will be an immediate issue. However, there could be liability issues upon refinancing or resale.</p>	<p>OPTION 1 – ACTION</p> <p>Confirm there is no dump on the farm:</p> <ul style="list-style-type: none"> • conduct a thorough investigation of possible areas, such as in the bush, in areas that are not farmed, gravel pits and ravines. <p>OPTION 2 – ACTION</p> <p>If a dump is found, and if materials can be safely removed, take them to an approved waste disposal facility.</p> <p>OPTION 3 – ACTION</p> <p>If a small amount of inert materials is stored on site, fence it off to prevent entry:</p> <ul style="list-style-type: none"> • this includes wood, concrete, or bricks providing the site is dry and fenced • remove hazardous materials – obtain professional assistance if necessary.



A farm dump can reduce a property's resale value, especially if its contents are unknown or hazardous.



Best Management Practices publications present in-depth explanations, tips and advice for Ontario farmers.

FOR MORE INFORMATION

Ontario Ministry of Agriculture, Food and Rural Affairs

Many sources of supplementary information are available. Below are some suggestions to get you started. Most can be found online at www.ontario.ca/omafra or ordered through ServiceOntario.

- Recycling Farm Plastic Films, Order no. 95-019
- Responsible Disposal of Unwanted Medicines and Sharps, Order no. 05-051
- Safe On-Farm Storage of Unwanted Medicines and Sharps, Order no. 05-053

BEST MANAGEMENT PRACTICES

BMP publications are excellent sources to better understand on-farm environmental issues and discover a range of proven, practical options to address them. BMP publications are available at no charge to Ontario farmers. To order, see ServiceOntario information.

Inquiries to the Ontario Ministry of Agriculture, Food and Rural Affairs

Agricultural Information Centre

Ph: 1-877-424-1300

Email: ag.info.omafra.ontario.ca

Web: www.ontario.ca/omafra

ACKNOWLEDGEMENTS

At the request of the Ontario Farm Environmental Coalition, consisting of Farm & Food Care Ontario, the Ontario Federation of Agriculture, and the Christian Farmers' Federation of Ontario, the following people and organizations contributed to the revision of this infosheet:

Infosheet #6 Contributing Authors: Hugh Fraser (Chair), Craig Richardson, Matt Wilson – Ontario Ministry of Agriculture, Food and Rural Affairs; Tracey Firth – Canadian Animal Health Institute; Barry Friesen – CleanFARMS; Dave Murray – former EFP representative; Paul Sims – Ontario Ministry of the Environment, Conservation and Parks; Jim Poel – Ontario Processing Vegetable Growers

Infosheet Technical Editing Committee: H.J. Smith (Chair), Kevin McKague, Ted Taylor, Daniel Ward – Ontario Ministry of Agriculture, Food and Rural Affairs; Jim Myslik – Consultant

Order through ServiceOntario

Online at ServiceOntario Publications –
www.ontario.ca/publications

By phone through the ServiceOntario Contact Centre
Monday–Friday, 8:30 am–5:00 pm

416-326-5300

416-325-3408 TTY

1-800-668-9938 Toll-free across Ontario

1-800-268-7095 TTY Toll-free across Ontario

Additional Resources

CleanFARMS – www.cleanfarms.ca/resources_ontario
See A Guide to Recycling Non-Nutrient Agricultural Waste in Ontario

Livestock Medicine Education Program –
www.ontariolivestockmed.com

Ontario Electronic Stewardship –
www.recycleyourelectronics.ca

Resource Productivity & Recovery Authority - www.rpra.ca/programs/tires

Recycling Council of Ontario – www.rco.on.ca

Stewardship Ontario, Orange Drop Program –
www.makethedrop.ca