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EC98-753 Farm*A*Syst Nebraska's System for Assessing Water Contamination Risk Fact Sheet 7: Improving Hazardous Materials and Waste Management

Robert Grisso

*EC98-753 Farm*A*Syst Nebraska's System for Assessing Water Contamination Risk Fact Sheet 7: Improving Hazardous Materials and Waste Management*

DeLynn Hay

University of Nebraska-Lincoln, dhay1@unl.edu

Paul J. Jasa

University of Nebraska at Lincoln, pjasa1@unl.edu

Richard K. Koelsch

University of Nebraska - Lincoln, rkoelsch1@unl.edu

Sharon Skipton

University of Nebraska-Lincoln, sskipton1@unl.edu

See next page for additional authors

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Authors

Robert Grisso, DeLynn Hay, Paul J. Jasa, Richard K. Koelsch, Sharon Skipton, and Wayne Woldt

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FACT SHEET 7

Nebraska's System for Assessing Water Contamination Risk

Improving Hazardous Materials and Waste Management

Waste is inevitable. Things which have been outgrown, broken, replaced, or are just no longer needed add to the waste produced at homes, acreages and around farms. Most of the waste accumulated around the farm, acreage and home is **solid waste**. Solid waste includes all discarded materials — newspapers, empty paint cans, liquids, gases, pickle jars, orange peelings, leftover food, worn out shoes, junk mail — this list is endless. Some of these solid wastes contain potentially hazardous materials.

Hazardous waste is waste which includes toxic chemicals, corrosives, explosives, flammable substances, and other potentially harmful materials. Some hazardous materials, such as lubricating oils, solvents for cleaning metal parts, or pesticides, are an unavoidable part of rural life. Take some time, though, to examine your activities that involve using hazardous materials to make sure you really

need all the products you are using. Keep in mind that hazardous waste generated from rural business activities must be managed in accordance with *Title 128—Rules and Regulations Governing Hazardous Waste Management in Nebraska* if generated in regulated quantities (see definition of regulated quantities in glossary of *Worksheet 7*).

In 1990, Congress passed the Pollution Prevention Act. This law mandates that our environmental policy be based in pollution prevention. This policy indicates that all wastes should be dealt with in the following order:

- **Prevention.** Pollution should be prevented or reduced at the source whenever feasible.
- **Recycling.** Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible.
- **Treatment.** Pollution that cannot be prevented or recycled should be handled in an environmentally safe manner whenever feasible.
- **Disposal or release.** Disposal or release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

When you are certain you are purchasing and using only essential products, carefully consider how to use the products safely, recycle or reuse them when possible, and dispose of remaining products in a way that will not pose a risk to your or your neighbors' drinking water. A few simple management principles apply in every situation:

- Use hazardous products away from your well (150 feet or more), even when all your spills and drips will be contained.
- Return excess product, spills, or drips to the original activity. For example, reuse filtered waste antifreeze as water in other radiators; contain oil or grease drips and use for future lubrication needs; dispose of pesticide



container triple rinse water by spreading on fields at the proper application rate for the pesticide.

- Contain any unusable wastes, spills, and drips for appropriate disposal.

Some counties may be offering hazardous materials collection programs. These options will become increasingly important. Hazardous wastes generated in unregulated quantities due to business practices have been banned from landfills since September 1996. Household quantities (the amount and type of products you purchase for use in the home and auto garage) are still unregulated and can be included with regular trash for disposal in a permitted landfill¹ but other options should be considered when available.

Farm, acreage and household trash

This category of solid waste may contain potentially hazardous substances such as:

- **Ash and sludge** from burned home and garage trash and waste oil.
- **Packaging and containers** that contained hazardous materials or are incinerated.
- **Personal care products** such as spot removers; dry cleaning fluids; moth balls; and shoe and leather polishes.

¹Acceptance of types of waste varies with landfill owners/operators.

- **Hobby products** such as pesticides used in pet care; artist paints and solvents; undiluted photography and swimming pool chemicals; strong acids.

- **Home cleaning and repair products** such as pest strips; furniture and wood polishes and waxes; lead-based paint; other paints; stains and finishes; paint and finish preparation products; wood-preserving products.

- **Rural business waste** including unusable or waste cleaners, solvents, pesticides, oil, grease, antifreeze, tires, and other hazardous wastes that are generated from cleaning, maintaining, or general use of equipment or agricultural/ranching procedures.

Many rural residents have traditionally disposed of their wastes at an on-site location. Common disposal methods have included incineration or simply piling or burying trash in a ditch on the "back 40." These practices are environmentally unsound and, as of October 1, 1993, it is illegal to dispose of waste on the "back 40." The management and disposal of regulated quantities of hazardous waste are covered under *Title 128—Rules and Regulations Governing Hazardous Waste Management in Nebraska*. The *Nebraska Integrated Solid Waste Management Act* and *Title 132—Integrated Solid Waste Management Regulations* prohibit the disposal of solid and unregulated quantities of hazardous

waste at any location, other than a permitted facility.

Health concerns, toxicity, and the increased volume of waste being generated by today's consumer and producer requires that new approaches to disposal practices be adopted. These new approaches help ensure that safe drinking water supplies are available for rural residents and their neighbors.

This new approach suggests several changes in traditional practices:

- Buy only what you need in quantities you can safely use.
- The typical rural burning site where everything from paper to plastic to hazardous waste is burned should be eliminated for all but a limited number of needs. Trash should not be disposed at a rural site by burying or "ditching it," with the exception of organic waste that can be composted (such as vegetable and fruit peels, leaves, grass, and straw).
- Trash that has not been in contact with hazardous materials such as plastics, glass, paper, tin, and aluminum should be taken to a recycling facility, transfer station, or a permitted landfill whenever possible.
- Farm, acreage and household hazardous waste should be separated from general trash and saved for a hazardous waste collection program where available. If not available, approved alternative

management recommendations should be followed. (See *Worksheet 7* references at the end of this publication.)

Household hazardous waste and hazardous waste from the rural business cannot be safely disposed of on-site without causing some form of pollution. Disposing hazardous wastes from the rural business on-site is a violation of state law and can pollute your water supply.

Household waste vs. rural business waste

Nebraska divides hazardous waste into two management categories: wastes produced from products used in the home, and wastes produced as part of a business.

In general, household hazardous waste is exempt from regulation under state and federal law but the waste should be handled responsibly. Household hazardous waste may be safely disposed of at household hazardous waste collection events sponsored by some communities or at a municipal solid waste transfer station and/or landfill.¹ For information about household hazardous waste collection events, contact your local University of Nebraska Cooperative Extension office or the Nebraska Department of Environmental Quality.

Regulated quantities of hazardous waste from the rural or agricultural business must be

disposed of at a permitted hazardous waste management facility or by using a permitted hazardous waste disposal contractor. Unregulated quantities of hazardous waste are banned from disposal in a landfill. Contact the Nebraska Department of Environmental Quality if you are uncertain of your business status. For more information about hazardous waste contractors, contact the Hazardous Waste Section of the Nebraska Department of Environmental Quality.

Burning

Researchers estimate that ground-level concentrations of 2,3,7,8-TCDD dioxin due to burning household trash in a burn barrel are 7,000 times the amount formed during trash burning in a municipal incinerator. Ash and sludge resulting from on-site burning may also contain significant amounts of toxic substances such as lead, cadmium, chromium, dioxin, and furan compounds.

As of September 1999 there are no state regulations for burn barrels for household waste generated by residents in rural areas. Local city or county officials may regulate their use and should be contacted concerning the use of burn barrels in your area. A burn permit may be required for the open burning of household refuse, trees, and vegetation from the property. Burning agriculturally related material that is potentially hazardous is legal if it is recom-

mended by the manufacturer. Tires, rubber, treated wood, oily substances, asphalt, and plastic should not be burned. Ashes from the burn barrels should be disposed of at a permitted transfer station or landfill.¹

As of September 1999 it is legal to burn used oil, if uncontaminated with other solvents, in an oil-fired space heater designed for burning oil as its only fuel. Many service stations use this kind of space heater and accept oil from “do-it-yourselfers.” Used oil burned for energy recovery is regulated under Title 128, Chapter 7, and the emissions must be vented in compliance with *Title 129—Nebraska Air Quality Regulations*. Contain and dispose of any resulting ash or sludge in a permitted transfer station or landfill.¹ Used oil contaminated with solvents or other materials may be a hazardous waste and must be properly managed.

There are no specific design standards available to adequately protect the environment from air pollution or groundwater contamination resulting from on-site burning and improper ash disposal of trash, plastic product containers, used oil, hazardous products, and other materials used on the farm, ranch or home-site. The typical operation at open burning sites, burn barrels, oil burners, and domestic incinerators is not adequate for burning at the temperatures required to eliminate the pro-

duction of toxic substances such as dioxin compounds, chlorine products, solvent vapors, and residues of heavy metals.

While burning may destroy some toxic substances, others will become concentrated in the smoke, ash, and sludge resulting from burning waste. Repeated burning on the same location under similar weather conditions may cause the toxic substances in smoke and ash (especially heavy metals such as lead, mercury, and arsenic) to accumulate in a concentrated area around the burn barrel. These substances, as well as the toxic substances in ash and sludge disposed of through land spreading or burial, could result in groundwater contamination.

Empty pesticide bags and plastic containers should not be burned. If the label allows burning and you have no alternative, burn them well away from people, pets, and farm stock during calm wind conditions because air will carry pesticide particles from the fire. Burn in small quantities and only on fields where the pesticide was applied.

Building and wood maintenance cleaners and chemicals

This category of potentially hazardous substances includes:

- **Solvent-based building and wood cleaners** including

wood polishes and products for wood floor and panel cleaning. (Detergent-based cleaners generally do not pose a threat to groundwater.)

- **Wood preservatives** including creosote, chromated copper arsenate (CCA), osmose K-33, pentachlorophenol, or methyl isothiocyanate.
- **Equipment maintenance products** such as stripping and finishing products, stains and paints, products for brush or spray gun cleaning, and adhesives such as glues and caulk. This category also includes solvents as used in degreasers and paint thinners; stains and varnishes; and wood-preservative compounds.

Disposing of these products by dumping them on the ground or in a septic system could allow hazardous constituents to leach to groundwater. When used for a rural business, on-site disposal of any of these products is illegal. (For information about proper septic system management, see *Worksheet and Fact Sheet 8, Household Wastewater Treatment*.)

If you must purchase and use these materials, the best disposal methods are to purchase only what you need, use up leftovers, or share unused products with others when safe to do so. Solidify unused leftover **household** products, such as paints or adhesives, where conditions permit. Evaporation should occur in open air, away from children, pets, and flames.

Dispose of any remaining hazardous liquid or sludge at a household hazardous waste collection program if available. If you have no other choice, it can be disposed of at a permitted transfer station or landfill.¹

Some products, such as paint thinners, can be filtered and reused. Products such as wood preservatives and old lead-based paints need to be labeled and saved for disposal at community household hazardous waste collection program, by a hazardous waste contractor if available, or, as a last resort, in a permitted transfer station or landfill¹ (if solidified).

Because of the volume of these products used in rural areas, even spills and drips can add up to a problem for groundwater. Avoid maintenance activities within 150 feet of your well. Generally, conduct maintenance activities so that spills and drips can be contained using drop cloths. Evaporate collected drips and dispose of the resulting sludge or hardened material in a permitted transfer station or landfill.¹

Leftover or unusable pesticides and container disposal

This category of potentially hazardous substances includes all types of pesticides and pesticide containers, including those used for indoor plants and yard care. Handle all categories of

pesticides as directed on the label to prevent health and environmental problems. Pay particular attention to pesticides classified as “restricted use.” Pesticide labels and regulations concerning their use often change over time. Remember that pesticides might not have current warning labels, and some may even have been banned since the time of purchase.

The only acceptable management practices for pesticides are to use the pesticide according to current label directions or arrange for disposal with a hazardous waste contractor. When the EPA bans a pesticide it provides a “buy-back” and disposal program for a period of time. Pesticides purchased in mini-bulk tanks or returnable containers allow the return of excess chemical to the cooperative or retail store. For leftover pesticides that cannot be disposed of in any of these ways, store them safely until they can be disposed of through a community household hazardous waste collection program (for unregulated quantities of hazardous materials) or a hazardous waste contractor.

Pesticide waste includes empty pesticide containers as well as leftover pesticides. Agricultural pesticides come in mini-bulk tanks, five-gallon plastic containers, or paper containers. Mini-bulk tanks are returned to the place of purchase when application has been completed. Some five-gallon plastic containers can be

returned to the place of purchase for disposal. Paper containers should be bundled and taken to a permitted solid waste facility. Check with your local University of Nebraska Cooperative Extension office, farm cooperative, or retail store to learn whether container disposal opportunities have been arranged and follow label directions for use, cleaning, and disposal.

If you cannot return plastic containers to the place of purchase, triple-rinse them, return the rinse water to the spray tank and apply following label instructions.

Triple-rinsed or power-washed containers are not considered hazardous and can be disposed of at a permitted landfill. However, because of liability concerns, some landfills will not accept even triple-rinsed containers. Triple-rinsed pesticide containers may still contain enough pesticide residue that they should not be used for any other purpose.

When dealing with pesticide containers:

- Read and follow all label directions.
- Store pesticides only in the original, labeled containers.
- Wear appropriate protective gear as directed by the label.
- Never reuse a pesticide container for any purpose.
- To recycle, return the rinsed container to supplier or dispose of pesticide containers properly.
- When not using a water nurse tank, always use a backflow prevention device when filling

spray tank or rinsing pesticide containers.

- Mixing and loading sites should be at least 150 feet away from all wells.

Pesticide container recycling programs are available in some areas of the state. Some recycling programs will only accept certain types of containers. Check with your local Extension office for pesticide container recycling opportunities in your county. (For more detailed information about the management and storage of pesticides on the farm, see *Worksheet and Fact Sheet 4, Pesticide Storage and Handling.*)

Vehicle maintenance

This category contains some potentially hazardous substances, which include:

- vehicle maintenance products, such as antifreeze, oil, and grease
- solvents for oil and grease removal and disposal
- engine parts, and equipment cleaners
- lubricants
- rust removers
- paints and paint preparation products
- brush or spray gun cleaners
- lead acid battery replacement

Oils, fuels, and solvents used for cleaning metal parts can include toxic ingredients. Fortunately, good recycling opportunities exist for both solvents and waste oil. Consider contracting with a solvent

recycler to rent a parts washer. Old solvents are picked up by the recycler and you are provided with clean solvent. Oil can be collected from rural sites by several companies or you can take your oil to a collection tank. There are oil collection tanks available in every county, and often more than one. Burning waste oil is an option that was discussed earlier in this fact sheet. **Dumping of waste oil is prohibited.**

Oil filters should be drained 12 to 24 hours so that they contain no free liquids. The filter should be punctured, crushed, or dismantled and drained. Oil filters should be kept separate from other waste and disposed of at permitted transfer stations or landfills¹ as a separate waste, or recycled where possible.

Use up old fuels (leftover quantity stored for several months) whenever possible and safe to do so. Dilute one part old fuel with five parts new fuel to protect your engine.

Antifreeze may be recycled or safely diluted and disposed, if allowed, in a municipal sewer system. Do not pour down storm water drain since they often drain into area lakes or rivers directly without treatment. Contact a nearby city to find the closest acceptable location. Do not dump antifreeze into your own drain if you have a septic tank or lagoon. It may kill the organisms that the system depends on, and may contaminate your groundwater.

If you paint a lot of vehicles

or other equipment, use a paint booth. Some booths are structured to collect excess paint and spray gun cleaners for later disposal with a solvent recycler. Note that filters used with a paint booth may be considered a hazardous waste when discarded.

Design and location of the equipment maintenance area is important. Some people use a grease pit. Others allow drips and spills to collect on the shed floor. In both cases, the area is generally "cleaned" through periodic flushing.

If you prefer to keep your vehicle maintenance floor clean through flushing, you will need a system to contain waste liquids so that they will not be flushed onto soil. Flushing to a **paved** outdoor area and evaporating the material is an acceptable method of disposal. Using sawdust or other absorbents to soak up drips and spills is another common practice. Evaporate volatile chemicals in a protected outdoor area with good ventilation and take the sawdust to a permitted transfer station or landfill.¹ Burning any of these substances can produce air emission deposits that have the potential to contaminate groundwater.

Evaporation of liquid wastes prior to flushing may take care of the problem of contaminated runoff, but it is not recommended due to air quality concerns and the potential for liquids to seep through cracks in floors. Although flushing is acceptable, it is one of many

past waste management methods that should be re-evaluated to determine whether it is worth the risks of contamination to the environment.

Vehicle batteries should be recycled. They were banned from landfills September 1, 1994. Local battery dealers often collect used batteries or should be able to put you in contact with recyclers.

Storage of chemicals and hazardous waste

Some activities may result in leftover or used chemicals such as waste oil and solvents that need to be stored until disposal. Locate the storage area for these chemicals and their wastes at least 150 feet from your well. Seal and dike storage areas to prevent well contamination from spills if the volume of the stored products and wastes exceeds 10 gallons (or less if acutely hazardous).

Store chemicals in original, clearly labeled containers designed to contain that hazard category (flammables, poisons, or corrosives). Provide a well-ventilated, flame-free area with sturdy shelving for storage of labeled containers in the building where you commonly use them. When choosing the storage location, keep indoor air quality, safety, commercially available spill kits, and flammability considerations in mind. Be sure that the area is secure and adequately vented to prevent buildup of fumes

from leftover products. As a rule of thumb, if you can smell your stored products, ventilation is inadequate to protect your health, and remember that some products do not have an odor. Also, be sure that the storage area provides a means to segregate flammables, poisons, and corrosive wastes to minimize accidental release due to chemical interactions.

Hazardous wastes generated in regulated quantities in the course of maintaining equipment, such as solvents and parts washer solution, must be collected and placed in appropriate closed containers and labeled with the words “hazardous waste,” the name of the waste, and the full date the waste was put into the container. Mixing hazardous waste is a practice to be avoided. Other requirements can be found in Title 128.

Hazardous waste generated from household vehicle maintenance should be recycled or stored safely until it can be taken to a household hazardous waste collection site. Evaporation of household hazardous wastes has the potential for spills, contact by children or pets, and fire. Use safe evaporation methods only when no household hazardous waste collection program is available.

Outdoor storage of wastes and products, especially liquids, should be on bermed surfaces constructed of materials that will contain any spills.

For example, batteries may be stored in a plastic-lined area, but some solvents could dissolve a plastic liner. Spilled solvents also may be able to penetrate concrete or asphalt if they are not cleaned up quickly.

Store flammable chemicals and batteries in an area that will be shaded from direct sunlight. Rags used to clean up solvent spills also may be a fire hazard. Commercial products are available to safely clean up spills. Store used cleaning materials with the same care as hazardous materials. Inspect all storage areas regularly for detection of spills or leaks, proper labeling, and to see that containers are in good condition, closed, and not bulging.

Cleaning old dump sites

As previously mentioned, all dumping of wastes outside a permitted transfer station or landfill¹ is illegal. It is recommended that landowners survey the property to locate any old dump sites. If any are found, the dump should be cleaned of any potentially hazardous materials such as lead-acid batteries, paint cans, pesticide containers, oil storage containers, solvents, cleaning chemical containers, etc. These wastes should be disposed of at a permitted transfer station or landfill,¹ or recycled when possible. Any remaining waste in the dump site should be covered with at least 2 feet of soil, with slope so that water drains away from the site. Establish a perennial grass cover

on the fill site to protect the soil. Cleaning the dump site before the waste leaks and pollutes the surface water and/or groundwater will avoid expensive cleanup costs and liability.

Laws regulating disposal of wastes

Disposal of regulated hazardous wastes from farms and other businesses falls under federal statutes in the RCRA Subtitle C and in Nebraska under *Title 128—Rules and Regulations Governing Hazardous Waste Management in Nebraska* enforced by Nebraska Department of Environmental Quality. *Title 132—Integrated Solid Waste Management Regulations* and RCRA Subtitle D provides restrictions for land burial of solid waste. Open burning and incineration of trash are regulated in Nebraska under *Title 129—Nebraska Air Quality Regulations*. Other laws dealing with waste disposal in Nebraska include the Nebraska *Integrated Solid Waste Management Act, Title 117—Nebraska Surface Water Quality Standards*, the Federal Clean Water Act, and the Federal Clean Air Act.

Under federal hazardous waste regulations, farms and other rural businesses may be considered “conditionally exempt.”* An operation is “conditionally exempt” if it *generates* less than 220 pounds of hazardous waste in a month or *accumulates* no more than 2,200 pounds at any time; or

generates no more than 2.2 pounds of acutely hazardous waste or accumulates no more than 1 kilogram (2.2 pounds) of acutely hazardous waste at any one time. “Conditionally exempt” operations are not required to obtain an EPA identification number or a manifest form for disposal of hazardous wastes.

“Acutely hazardous” and “hazardous” wastes are listed in federal and state regulations. Aldicarb and heptachlor, for example, are acutely hazardous pesticides.

A word of caution: Because some pesticides commonly used by rural residents are listed as acutely hazardous waste in state regulations, farmers wishing to dispose of pesticides may not be “conditionally exempt.” Rural residents who accumulate more than 2.2 pounds of acutely hazardous waste need to acquire an EPA identification number and use the manifest system to dispose of those wastes. In Nebraska, these generators are regulated by Nebraska Title 128.

Disposing veterinary medical wastes might present a problem on some farms, ranches and acreages. Ask your veterinarian for advice on specific wastes (such as antibiotic containers). Nebraska Department of Environmental Quality (NDEQ) considers empty and clean containers as solid waste, and other veterinary medical waste should be handled as “special” waste. NDEQ can provide information

about regulations that might affect veterinary medical waste disposal.

*States use terms to refer to categories of waste generators that may not be the same as federal terms. Contact your local University of Nebraska Cooperative Extension office or the Nebraska Department of Environmental Quality for more information.

CONTACTS AND REFERENCES

Who to call about...

Health concerns, effects of hazardous wastes, and human poisoning:

Nebraska Health and Human Services System, P.O. 95007, Lincoln, NE 68509-5007, (402) 471-2541.

Toxic Substance Control Act Assistance Information Service, Environmental Protection Agency, Washington, DC 20024, (202) 554-1404.

Your physician, Poison Control Center in the nearest city, or Nebraska Poison Control Center, Children’s Memorial Hospital at (800) 955-9119 or (402) 390-5555.

Identification and disposal of hazardous wastes:

Nebraska Department of Environmental Quality, P.O. Box 48922, Lincoln, NE 68509-8922, (402) 471-4287.

State Fire Marshall’s Office, 246 South 14th, Lincoln, NE 68508, (402) 471-2027.

UNL Cooperative Extension Division, (402) 472-6319 for household wastes and (402) 472-8656 for commercial and business.

EPA Hazardous Materials Branch, 726 Minnesota Avenue, Kansas City, KS 66101.

Explosives, gun powder, shells, etc.:

Nebraska State Patrol, 3510 Northwest 36th Street, Lincoln, NE 68524, (402) 470-2404.

A specific product:

Contact the company that makes the product. The company’s phone number is frequently on the label. Or, call the Chemical Referral Center, at (800-262-8200). Sponsored by the Chemical Manufacturers’ Association, this number will refer you to a specific manufacturer for answers about product questions. The company’s phone number may also be found through the 800 phone number information at (800) 555-1212 (if the company has a nationwide 800 phone number).

Refer to Material Safety Data Sheets (MSDS Sheets). Companies supply this information on the products they sell. MSDS describe in lay terms any potential health risks posed by the product.

U.S. Consumer Product Safety Commission, (800) 638-2772 or (312) 353-8260.

Nebraska Attorney General — Consumer Protection Division, (402) 471-4796.

<p>Nebraska Department of Environmental Quality — Hazardous Waste Section, (402) 471-4217.</p> <p>Local University of Nebraska Cooperative Extension Educator.</p> <p>Hazardous waste collection: A listing of hazardous waste contractors is available from Nebraska Department of Environmental Quality, P.O. Box 98922, Lincoln, NE 68509-8922, (402) 471-4210.</p> <p>National Household Hazardous waste collection programs, Dana Duxbury and Associates, 16 Haverhill Street, Andover, MA 01810.</p> <p>Your local University of Nebraska Cooperative Extension Educator.</p> <p>Chemicals, pesticides and other agricultural chemicals and their disposal in your county: Your local University of Nebraska Cooperative Extension Educator or your NRD office.</p> <p>Nebraska Department of Agriculture, Pesticide Program, 301 Centennial Mall South, Lincoln, NE 68509, (402) 471-2394.</p> <p>National Pesticide Telecommunications 24-hour hotline, (800) 858-7378.</p> <p>Nebraska Department of Agriculture, Feed and Fertilizer Program, 301 Centennial Mall South, Lincoln, NE 68509, (402) 471-2394.</p>	<p>Recycling programs: Nebraska State Recycling Association, (800) 248-7328.</p> <p>Nebraska Department of Environmental Quality, (402) 471-4210.</p> <p>Nebraska Department of Agriculture, (402) 471-2394.</p> <p>Keep Nebraska Beautiful, Suite 120, 4630 Antelope Creek Road, Lincoln, NE 68506, (402) 486-4562.</p> <p>Your local University of Nebraska Cooperative Extension Educator.</p> <p>What to read about...</p> <p>Publications are available from sources listed at the end of the reference section. (Refer to number in parentheses after each publication.)</p> <p>General information on hazardous waste management: <i>Household Waste Management: For Your Health and Environment's Sake</i>, Extension Circular EC 92-441. A comprehensive look at hazardous waste management in the home. Includes types of hazardous wastes found in homes, what happens to these wastes in common disposal practices, and options for Nebraskans. (1)</p> <p><i>Pollution Prevention in Business</i>, NebFact NF93-122. The Pollution Prevention Act mandates are explained as well as the need for environmentally sound practices. (1)</p>	<p><i>Don't Dump it: The Ban on Private Property Disposal of Solid Waste</i>, NebFact NF94-181. Describes the new regulations and options available to pursue environmentally responsible solid waste disposal practices. (1)</p> <p><i>Guidance Document for Landowners and Farm/Ranch Operators</i>, Nebraska Department of Environmental Quality. Answers commonly asked questions about managing solid waste. (2)</p> <p><i>Guidance Document for Solid Waste Management</i>, Nebraska Department of Environmental Quality. Document to assist in managing solid waste after the closure of local dumps and anticipating the statewide landfill ban of certain types of waste. (2)</p> <p><i>Pollution Prevention: A Tool Kit for Farm Cooperatives</i>, Extension Circular EC 95-739. 70 pages. An informational program to assist in reducing and preventing pollution in your farm cooperative. (1)</p> <p><i>Pollution Prevention: A Tool Kit for Vehicle Maintenance Shops</i>, Extension Circular EC 95-742. 70 pages. An informational program to assist in reducing and preventing pollution in your vehicle maintenance shop. (1)</p>
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Hazardous waste management:

Directory of Commercial Hazardous Waste Management Facilities. Environmental Protection Agency EPA/530-SU87-024. Primary source for treatment, storage, and disposal (TSD) facilities. (3)

Handling Wastes: Household Paint and Paint Related Products, NebFact NF94-194. (1)

Handling Wastes: Household Solvents, NebFact NF94-193. (1)

Handling Wastes: Household Cleaning and Maintenance, NebFact NF94-191. (1)

Handling Wastes: Household Batteries, NebFact NF94-192. (1)

Handling Wastes: Vehicle Batteries, NebFact NF94-195. (1)

Managing Wastes: Tires, NebFact NF94-197. (1)

Handling Wastes: Household Appliances (White Goods), NebFact NF94-189. (1)

Handling Wastes: Residential Fluorescent Lighting and PCB Ballasts, NebFact NF94-190. (1)

Pesticides, pesticide waste minimization and disposal:

Pesticide Laws and Regulations), NebGuide G79-479. General information on federal and state laws and regulations regarding pesticide use in Nebraska. (1)

Best Management Practices for Agricultural Pesticides to Protect Water Resources, NebGuide G93-1182. What happens to pesticides after application, factors affecting pesticide movement, and best management practices to minimize the potential for pesticide contamination of groundwater and surface water. (1)

Hazardous Waste Management Requirements for Pesticide Applicators, NebGuide G83-674. Selected provisions of federal and state hazardous waste laws and regulations dealing with pesticide application. (1)

Rinsing Pesticide Containers, NebGuide G93-1150. Discusses the economic and environmental savings to proper rinsing of pesticide containers as well as compliance to state and federal regulations. (1)

Disposal of Excess Pesticides and Related Waste, NebGuide G79-473. Explains the proper method of dealing with pesticide wastes. (1)

Pesticide Safety Telephone Hotlines, Extension Circular EC90-2501. (1)

The Pesticide Label, 1989, NebGuide G89-937. (1)

Composting:

Garden Compost, NebGuide G86-810. Discusses the advantages of compost, the compost heap, ingredients, uses, and instructions for making compost. (1)

Recycling:

Nebraska Recycling Directory, Nebraska Department of Environmental Quality. Listing of recycling centers and information resources in the state. (2)

Motor Oil:

Handling Wastes: Used Oil and Antifreeze, NebFact NF94-196. (1)

Publications available from...

1. Your county University of Nebraska Cooperative Extension office or directly from IANR Communications and Information Technology, 105 Ag Communications Building, P.O. Box 830918, University of Nebraska-Lincoln, Lincoln, NE 68583-0918, (402) 472-9712.

Some publications are free of charge, others have small charges for publication and handling.

2. Nebraska Department of Environmental Quality, Integrated Waste Management Section, Suite 400, The Atrium, 1200 N Street, Lincoln, NE 68509-8922, (402) 471-4210.

3. EPA Hazardous Materials Branch, 726 Minnesota Avenue, Kansas City, KS 66101.



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