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HAZARDOUS WASTE MANAGEMENT

Introduction

This document serves as a guide to the Hazardous Waste Management Program for ECHO Charter School. It combines rules, regulations and guidelines set forth by a number of state and federal regulatory agencies and will be used to ensure that hazardous waste produced by ECHO Charter School is handled, stored and disposed of properly.

Regulatory Overview

The Resource Conservation Recovery Act (RCRA) laws were enacted to monitor and regulate the generation and disposal of hazardous, non-hazardous (solid), and medical wastes, and to develop underground storage tank standards. Nationally, the Environmental Protection Agency (EPA) is authorized by RCRA to regulate activities relating to waste management, develop waste minimization policies, and enforce underground storage tank standards.

In Minnesota, the Minnesota Pollution Control Agency (MPCA) has received authorization from the EPA to enforce the state's hazardous, non-hazardous, medical waste management, and underground storage tank laws. The MPCA, in turn, has authorized each county in the seven-county metropolitan (Minneapolis-St. Paul) area to license hazardous waste generators. All hazardous waste generators must be licensed regardless of the quantity produced. Minnesota regulations include all the EPA regulations plus additional limitations, restrictions, and requirements.

References

40 Code of Federal Regulations (CFR) 260 to 270
MR Chapter 7045
MR Chapter 7046



Definitions

°F—Degrees Fahrenheit

EPA—Environmental Protection Agency

Generator—A person or organization that produces hazardous waste. Information concerning the determination of generator status can be found in “Generator Size” below.

MNDOT—Minnesota Department of Transportation

MPCA—Minnesota Pollution Control Agency

NPDES—National Pollution Discharge Elimination System

POTW—Publicly Owned Treatment Works

RCRA Solid Waste—Any unwanted material that is not discharged through exhaust stacks to the atmosphere or municipal sewer. NOTE: Intentionally discharging hazardous wastes to the atmosphere or sewer does not change the material’s hazardous classification and is illegal.

RCRA Hazardous Waste—Any material that poses a threat to human health or the environment. Waste materials are hazardous if they can be placed into one of the categories listed in “Waste Evaluation” below.

RCRA Acutely Hazardous Waste—Hazardous materials that are listed in regulations under 40 CFR 261.33(e).

TCLP—Toxic Characteristic Leaching Procedure; determines the quantity of hazardous material that is leachable.

TDSF—Treatment, Disposal, and Storage Facility

Waste—Unwanted material. Non-hazardous waste typically includes garbage, refuse, etc. The generator of the waste is responsible for determining if waste components are hazardous or non-hazardous. Methods for determining if the waste is hazardous are located in the “Hazardous Waste Classification” section of this program.

Hazardous Waste Compliance Overview

In general, a waste is a hazardous waste if it exhibits one or more of the following characteristics:



1. Ignitability (flash point less than 140° F);
2. Oxidizer (adds oxygen to a fire or chemical reaction);
3. Corrosive (pH equal to or less than 2.5 or a pH equal to or greater than 12.5);
4. Reactive (unstable or explosive);
5. Lethal (materials which cause death in low concentrations);
6. Toxic (materials which release toxic substances);
7. Listed (substances listed by name in MR 7045.0135);
8. PCBs (materials containing more than 50 ppm PCB);
9. Waste oil that is not recycled; or
10. Fluorescent and HID lamps not recyclable.

Procedure

- ◆ Evaluate all waste streams from the facility.
- ◆ If waste is hazardous, determine the amount of hazardous waste produced per month.
- ◆ Obtain an EPA Identification Number.
- ◆ Obtain a MPCA license or county license if located in the seven-county metro area.
- ◆ Place hazardous waste in an approved container and properly label.
- ◆ Accumulate and store waste properly.
- ◆ When ready for shipment off-site, prepare a shipping manifest.
- ◆ Assure that the hazardous waste is transported and disposed of properly.
- ◆ Develop and implement an emergency action plan.
- ◆ Train personnel on how to handle hazardous waste properly.
- ◆ Maintain all records relating to the hazardous waste for the minimum required time. The MPCA recommends that these records be maintained for the life of



the business.

Waste Evaluation

In order to determine if any hazardous waste is produced, all wastes will need to be inventoried and then evaluated for certain characteristics that make it hazardous. Examples of wastes that may be produced by a facility and should be evaluated include:

1. Solid wastes -- wastes not discharged through exhaust stacks or sewer;
2. Wastes that are discharged to the sewer;
3. Byproducts from a manufacturing process;
4. Products that do not meet quality control specifications and are discarded;
5. Materials that are discharged through an exhaust stack; and
6. Materials that are recycled such as degreasing or cleaning solvents recycled by another school;

Information needed to evaluate a waste can be obtained from the following sources:

1. A list or formula for the raw materials that went into the material to be discarded;
2. Safety Data Sheets (SDSs) listing the hazardous ingredients contained in a product;
3. Knowledge and published information of the processes and materials that make up the waste material;
4. Lab analysis (a waste material may need to be analyzed by a laboratory to determine if it exhibits one or more of the characteristics of a hazardous waste; the lab must be familiar with EPA testing and sampling methods); or
5. Hazardous Waste Rules (the material or processed waste may be listed in the hazardous waste rules as a hazardous waste).

Exemptions

Certain wastes are exempted from the hazardous waste rules. Therefore, the first step in evaluating a waste should be to determine if a particular waste is exempt. The following list gives most of the wastes that are exempted from the hazardous waste rules:



1. Normal household refuse;
2. Approved sewer discharges to a POTW;
3. Waste discharged under a NPDES permit;
4. Non-household refuse such as cardboard, paper, untreated wood, and plastic (many of these materials can and should be recycled);
5. Recycled used oil not contaminated with a listed hazardous waste;
6. Most demolition debris;
7. All emissions permitted by the MPCA;
8. Fly ash and related wastes from the burning of fossil fuels;
9. Mining overburden and certain ore processing wastes;
10. Samples of hazardous waste collected and transported to a laboratory for analysis;
11. Certain wastes containing chromium III;
12. Hazardous waste generated in storage tanks, transport vehicles, and pipelines while the waste remains in the vessel; and
13. Residues in empty containers and empty inner liners per MR 7045.0127 (see next section).

For additional details on wastes that are exempted from the hazardous waste rules, see MR 7045.0120. If the waste that is being evaluated is not exempt, then proceed to evaluate the waste for any hazardous characteristics.

Residues in Empty Containers and Empty Inner Liners (MR 7045.0127)

Hazardous wastes remaining in an empty container or empty container liner are exempt from MR parts 7045.102 to 7045.1030 and 7045.1300 to 7045.1380 if the following conditions have been met.

Hazardous Waste Containers

1. All waste that can be removed has been removed;
2. No more than 2.5 centimeters (one inch) of residue remains;



3. If the container size is less than or equal to 110 gallons, no more than 3% by weight of the total capacity remains; and
4. If the container size is more than 110 gallons, no more than 0.3 % by weight of the total capacity remains.

Acutely Hazardous Waste Containers

1. The container or liner has been triple rinsed using an appropriate solvent;
2. The container or liner has been cleaned by another method shown to be effective in scientific literature or through testing; and
3. For a container, only when a liner protected the interior of the container from contact with the acutely hazardous waste, and the liner has been removed.

Empty Compressed Gas Cylinders

1. The pressure in the cylinder is approaching atmospheric pressure.

Listed Wastes

A waste is a hazardous waste if it is listed under MR 7045.0135 Subparts 2 through 5.

F-listed wastes (subpart 2)

These are wastes that are listed by name from nonspecific sources.

K-listed wastes (subpart 3)

These are wastes from specific sources such as wastewater treatment sludge from wood preserving processes using creosote and/or pentachlorophenol.

P-listed wastes (subpart 4)

This list includes chemicals that are discarded chemical products, off-spec products, spill residues, and materials remaining in containers.

U-listed wastes [subpart 4(F)]

This list includes hazardous wastes from commercial chemical products that are listed alphabetically by chemical name.

PCB wastes (subpart 5)

Wastes containing PCBs at a concentration of 50 ppm or higher are hazardous wastes.



Ignitable Wastes (MR 7045.131 subpart 2)

A waste is an ignitable hazardous waste if a representative sample has any of the following properties:

1. Is a liquid having a flash point of less than 140° F as determined by a Pensky-Martens or Seta flash closed cup tester;
2. Is not a liquid but will burn vigorously when ignited or subject to moisture, friction, or spontaneous chemical changes;
3. Is an ignitable compressed gas as defined by 49 CFR 173.300; or
4. Has an ignitable hazardous waste number of D001.

Oxidizers (MR 7045.131 subpart 3)

A waste is an oxidizing hazardous waste if it exhibits the following properties:

1. Is an oxidizer as defined by 49 CFR 173.151;
2. Supplies oxygen to a reaction in the absence of air (a partial list of oxidizers includes chlorates, nitrates, peroxides, chromic acid, nitric acid, and nitric oxide); or
3. Has an oxidizing hazardous waste number of D001.

Corrosive Wastes (MR 7045.131 subpart 4)

A waste is a corrosive hazardous waste if a representative sample has any of the following properties:

1. Is an aqueous solution which has a pH less than or equal to 2.0 or a pH greater than or equal to 12.5;
2. Is a liquid which will corrode steel at a rate greater than 0.25 inches per year at a temperature of 130° F; or
3. Has a corrosive hazardous waste number of D002.

Reactive Wastes (MR 7045.131 subpart 5)

A waste is a reactive hazardous waste if a representative sample has any of the following properties:



1. Is normally unstable and readily undergoes a violent change without detonation;
2. Reacts violently with water;
3. Forms potentially explosive mixtures with water;
4. Is capable of detonation or explosive reaction when subject to a strong initiating source or if heated under confinement;
5. Is capable of detonation or explosive reaction under standard temperature and pressure;
6. Is an explosive listed in 49 CFR 173.51, 173.53, or 173.88;
7. Contains cyanides or sulfides capable of generating toxic gases, vapors, or fumes; or
8. Has a reactive hazardous waste number of D003.

Lethal Wastes (MR 7045.131 subpart 6)

A waste is a lethal hazardous waste if a representative sample causes death to half of the test animals exposed to the following amounts:

1. Ingestion—a dose of less than 500 milligrams of material per kilogram of body weight);
2. Skin absorption—a dose of less than 1,000 milligrams of material (applied to the skin) per kilogram of body weight; or
3. Inhalation—a concentration of less than 2,000 milligrams of material per cubic meter of air for dusts or mists (a concentration of less than 1,000 milligrams of material per cubic meter of air for gases or vapors).

A waste is also classified as a lethal hazardous waste if its lethal hazardous waste number is MN01.

Toxic Wastes (MR 7045.131 subpart 7)

A waste is toxic hazardous waste if it releases (leachable) toxic metals, pesticides, or volatile organic chemicals above specified limits as determined by test methods described in 40 CFR 261 appendix II (TCLP) or alternate methods approved by the MPCA.

If the waste material contains any of the contaminants in the TCLP List, the waste is a



hazardous waste if:

1. TCLP test methods show that the waste can release the contaminant at concentrations equal to or greater than the corresponding concentration listed in the table;
2. The contaminate makes up a major portion of the waste; or
4. 100% of the contaminant is assumed to be released and calculations show that the concentration is equal to or exceeds the corresponding listed concentration.

Used Oil

Used oil is exempt from hazardous waste regulations if it does not contain a listed hazardous waste and if it is recycled or reclaimed in an approved manner.

Used oil filters must be recycled or disposed of as hazardous waste.

Lead-acid Batteries

Used lead-acid batteries are banned from deposit into sanitary landfills and must be recycled. Retailers and wholesalers are required to exchange lead-acid batteries.

Polychlorinated Biphenyls (PCBs)

A waste material containing PCBs at a concentration greater than 50 ppm is a hazardous waste.

Fluorescent and High-intensity Discharge (HID) Lamps

Fluorescent and HID lamps contain small amounts of mercury, lead, and cadmium. Therefore, these lamps must be recycled or disposed of as hazardous waste.

Generator Size (MR 7045.0206)

All hazardous waste generators must determine how much hazardous waste is produced per month. This is usually done by totaling the amount of hazardous waste produced for the year and then dividing by 12. The following wastes should not be used when determining generator size:

1. Exempted waste;
2. Recycled waste such as lead-acid batteries and fluorescent lights;



3. Properly managed used oil;
4. Properly treated, sewerage hazardous waste;
5. Non-hazardous mixture of hazardous and non-hazardous wastes (as long as the hazardous portion of the waste is counted); and
6. Spent materials that are reclaimed or reused on site that have been counted once already.

Large Quantity Generator (LQG)

A LQG:

1. Produces more than 100 kilograms (220 lbs.) and less than 1,000 kilograms (2,200 lbs.) of hazardous waste per month; and/or
2. Produces less than 1 kilogram (2.2 lbs.) of acutely hazardous waste per month; or
3. Generates less than 100 kilograms (220 lbs.) of soil, water, debris, or residue contaminated with an acutely hazardous waste.

Very Small Quantity Generator (VSQG)

1. Produces less than 100 kilograms (220 lbs.) of hazardous waste per month; and/or
2. Produces less than 1 kilogram (2.2 lbs.) of acutely hazardous waste per month; or
3. Generates less than 100 kilograms (220 lbs.) of soil, water, debris, or residue contaminated with an acutely hazardous waste.

Hazardous waste quantity determinations must include the amount of acutely hazardous waste generated.

Generator Requirements

The amount of hazardous waste generated by a facility determines the level of regulation that pertains to the generator. For example, a LQG is required to develop and implement a hazardous waste training program whereas a VSQG is not required to have a training program. However, employees of VSQGs should be familiar with safe hazardous waste handling procedures and spill response.



General Requirements

All generators are required to comply with certain hazardous waste regulations. These requirements are listed as follows:

Generator Identification Number (MR 7045.0221)

All generators must obtain an identification number from the U.S. Environmental Protection Agency. The completed form should be mailed to:

U.S. EPA, Region 5
RCRA Activities
P.O. Box A-3587
Chicago, IL 60604

Generator License (MR 7045.0225)

All generators of hazardous waste must be licensed regardless of the quantity produced. Since the license is only good for one year, it must be renewed annually.

Generators located within the Twin Cities seven-county metro area should obtain the license from their respective county hazardous waste staff. Besides licensing, these county staffs also monitor and regulate hazardous waste generation.

The telephone numbers for the seven-county hazardous waste staffs are provided below:

Anoka County.....	422-7064
Carver County	361-1800
Dakota County.....	891-7020
Hennepin County.....	348-4919
Ramsey County	292-7898
Scott County.....	496-8177
Washington County	430-6655

Generators located in Greater Minnesota (outside the seven-county metro area) must obtain their license from the MPCA. To apply for a license, call the MPCA at (612) 296-6300 or (800) 657-3864.

Hazardous Waste Containers (MR 7045.0626)

Hazardous wastes must be placed in appropriate containers. The containers must meet the following requirements:

1. Meet DOT specifications for materials and construction;
2. Be constructed of materials that are compatible with waste;



3. Be in good condition (not rusted or damaged);
4. Be constructed so that they are leak-proof and able to withstand shock without impairing the ability to remain leak-proof;
5. Capable of containing wastes in the event the container is dropped or overturned;
6. Be closed and secure except when adding or removing hazardous waste; and
7. Be inspected at least weekly to check for leakage and the condition of the containers (the inspections must be documented on a weekly inspection form).

Container Marking and Labeling

- ◆ Containers must be labeled when hazardous waste is first placed into the container. The label must display the following information:
 - “Hazardous Waste”
 - Description of the waste that clearly identifies the contents to employees and emergency
 - Accumulation start date
- ◆ Containers must be documented on a weekly inspection form.
- ◆ Prior to shipping the hazardous waste, the Department of Transportation (DOT) and MPCA require the following labels to be placed on the side of the container:
 - Hazard Labels—DOT labels (4” x 4”) that display the particular hazard (flammable, corrosive, etc.) associated with the hazardous waste
 - DOT Shipping Name—identifies the contents of the containers to DOT (an example of a DOT name would be “Waste Flammable Liquid, NOS”)
 - DOT I.D. Number—indicates what material is in the container so appropriate actions can be taken in case of an accident. The number contains 4 digits with a prefix of either NA for North American shipments or UN for international shipments. For example, a shipment of petroleum distillates remaining in the U.S. would display the number “NA 1255.”



- ◆ NOTE: For additional information, see table in 49 CFR 172.101.
 - Hazardous Waste Label—could be used when the hazardous waste is first placed into the container to reduce the duplication of labeling work. The label has blanks for the DOT name and I.D. number, generator's name and address, EPA I.D. and manifest numbers, and accumulation start date.
- ◆ All markings and labels must be legible. To protect labels from spills during filling, the MPCA recommends that the labels not be placed directly below the bung or fill point.

Transport Vehicle Placards

The generator is responsible for supplying or assuring that the transporter's vehicle displays the proper DOT hazard placard. For additional information on DOT labels and placards, contact MNDOT at (612) 296-7109.

Hazardous Waste Storage Area

Hazardous wastes must be stored in designated areas. These storage areas must be designed according to EPA, MPCA, county, and municipal requirements. The EPA and MPCA requirements are listed as follows:

- ◆ Storage areas with containers holding free liquids must have provisions for containment of spills or leaks.
 1. The base or floor of the storage area must be impervious to leaks or spills.
 2. The base or floor of the storage area must be sloped or curbed to contain at least 10 percent of the area's storage capacity or the volume of the largest container, whichever is larger.
- ◆ Storage areas must be inspected weekly to check for leakage and the condition of containers. The inspections must be documented on a weekly inspection form.
- ◆ Incompatibles, such as an oxidizer and a flammable, must not be stored together. These materials must be separated by a distance of 20 feet or with a barrier such as a dike, berm, or wall within the storage area.
- ◆ Containers in the storage area must be arranged to allow for easy access and inspection. Containers should be arranged so that labels and markings are readable.
- ◆ Aisle space in storage areas must allow unobstructed movement of personnel



and equipment.

- ◆ Outside storage areas have the following additional requirements:
 1. Must be protected from vandalism, unauthorized entry, and damage from vehicles and other equipment.
 2. Ignitable wastes must be protected from direct sunlight.
 3. Wastes affected by sunlight or moisture must have an overhead covering.

Hazardous Waste Storage Time

The length of time a generator may store hazardous waste is dependent upon the generator's size as determined by "Generator Size" above. The storage time limitations are provided below:

VSQGs

- ◆ VSQGs may accumulate up to 1,000 kilograms (2,200 lbs.) of hazardous waste.
- ◆ The date the container is filled must be written on the container.
- ◆ Hazardous waste must be shipped within 180 days of the date when 1,000 kilograms has been accumulated. If the TSDF is located more than 200 miles from the generation site, an additional 90 days is allowed.

SQGs

- ◆ SQGs may accumulate up to 3,000 kilograms (6,600 lbs.) of hazardous waste.
- ◆ The date (accumulation start date) when hazardous waste is first placed into the container must be written on the container.
- ◆ Hazardous waste must be shipped within 180 days of the accumulation start date. An additional 90 days is allowed if the TSDF is located more than 200 miles from the generation site.

LQGs

- ◆ No limitation is placed on the amount of hazardous waste that may accumulate.
- ◆ The date (accumulation start date) when hazardous waste is first placed into the container must be written on the container.
- ◆ Hazardous waste must be shipped within 90 days of the accumulation start date.



Satellite Accumulation

Under certain conditions, a generator may completely fill a container with waste before the storage time limit “start date” begins. The conditions under which satellite accumulation is allowed are:

1. Hazardous waste collection container is located at or near the point of generation;
2. The floor on which the satellite accumulation container is located must be impervious to the waste;
3. Maximum quantity of satellite accumulation cannot exceed 55 gallons of hazardous waste or one quart of acutely hazardous waste;
4. Container is marked with fill date after it is full;
5. Container must meet same requirements as for non-satellite accumulation containers;
6. Container is moved to storage area within 3 days after it is filled; and
7. Container is inspected by the person or persons operating the process.

Exceeding Accumulation Limits

Exceeding accumulation time and quantity limitations will result in losing current status and require licensing at a higher (more restrictive) level.

Transportation and Disposal of Hazardous Waste

Transporting Hazardous Waste

The hazardous waste transporter does not assume ownership of the hazardous waste when it is loaded for shipment. The generator is responsible to make sure the hazardous waste is transported and disposed of properly. To ensure that the waste is handled properly, the generator must choose a transporter that fulfills the requirements listed as follows:

- ◆ Licensed by the Department of Transportation,
- ◆ Has an EPA I.D. number,
- ◆ Registered to haul hazardous waste in the destination state,
- ◆ Carries a minimum of \$1,000,000 liability insurance,



- ◆ Carries a minimum of \$5,000,000 liability insurance if transporting over 3,500 gallons of bulk hazardous waste,
- ◆ Drivers are trained in emergency response and carry spill clean-up kits on each trip,
- ◆ Has a written contingency plan, and
- ◆ Displays appropriate decals or placards.

VSQGs

A VSQG may transport its own hazardous waste to a collection site (MR 7045.0320). The collection site must be licensed by the MPCA and the generator must comply with the following requirements:

- ◆ Use appropriate containers and label properly,
- ◆ Separate incompatible waste and secure waste adequately in vehicle,
- ◆ Transport the waste in a business vehicle,
- ◆ Transport only the waste produced by the business,
- ◆ Use a regular shipping paper, and
- ◆ Other requirements per MPCA fact sheet 1.25.

Treatment, Storage, or Disposal Facilities (TSDF)

The generator of the hazardous waste must ensure that the waste is delivered to a TSDF that meets the following requirements:

- ◆ Has an EPA I.D. number,
- ◆ Permitted as a TSDF in its state of operation,
- ◆ Carries \$5,000,000 liability insurance,
- ◆ Trains employees in waste handling and emergency response procedures,
- ◆ Has an emergency response contingency plan, and
- ◆ Properly manages hazardous waste.

The generator should contact the TSDF to ensure that the waste was received and treated and/or disposed of properly. In addition, the generator should check with regulatory agencies in the TSDF's state for fines or citations against the TSDF.



Information about a Minnesota TSDF can be obtained from the MPCA.

Shipment Manifest

A school or generator who transports or offers for transportation hazardous waste for off-site treatment, storage, or disposal must prepare manifest before transporting the waste off-site. This requirement also includes hazardous waste shipped for recycling or reclamation. The manifest is a shipping form that must be filled out for all off-site shipments of hazardous waste. This document originates with the generator and must accompany the hazardous waste en route to its final destination. The manifest form can be obtained from the state, transportation school, or the TSDF.

The manifest is a one-page form with several carbon copies. Each party handling the waste must sign and keep a copy of the manifest form. The manifest provides a way of “tracking” the waste and ensures that the waste is handled properly. Requirements for preparing a manifest are listed below:

1. Minnesota generators who ship hazardous waste to another location in Minnesota or a state without its own manifest must use Minnesota’s manifest (MPCA Form PQ-00371-04).
2. Minnesota generators who ship hazardous waste to a TSDF in a state with its own manifest form must use that state’s manifest.

The Minnesota manifest has 8 copies. These copies are to be distributed as follows:

- Copies 1-5 are given to the transporter.
- Copy 6 is sent to the state where the TSDF is located if not in Minnesota.
- Copy 7 is sent to the MPCA within 5 days of shipment.
- Copy 8 is retained by the generator.
- Copy 3 is returned to the generator by the TSDF.

If the generator does not receive a copy back from the TSDF within 35 days, check with the TSDF to check on status of the shipment. If the copy is not received within 45 days, notify the MPCA in writing that the TSDF copy has not been received and what efforts have been made in resolving the issue.

Manifests from Other States

When a generator in Minnesota uses another state’s manifest, the generator must provide the MPCA photocopies of the following manifest copies:

1. Two-signature (generator and transporter) manifest copy.
2. Three-signature (generator, transporter and TSDF) manifest copy.



Emergency Planning and Response

The extent to which a generator must comply with emergency planning and response requirements depends upon the generator's size.

LQGs

Large quantity generators are required to have a written Contingency Plan, formal Emergency Response Plan, and a designated Emergency Response Coordinator. These plans must contain the following elements:

1. Name, address, and telephone number of Emergency Response Coordinator.
2. Telephone numbers of agencies that provide emergency services.
3. Arrangements with local emergency response agencies such as fire and police departments, local hospital, and hazmat teams.
4. A list of hazardous wastes, amount generated, and quantity stored. The plan should also include a list of other hazardous materials.
5. Site plan showing hazardous waste storage areas.
6. Fire protection and spill containment equipment list and locations.
7. Procedures detailing responses to emergency situations.
8. Notification to local authorities such as fire and police departments and hospitals regarding the type of wastes that are being stored.
9. An Evacuation Plan must be included in the Contingency Plan. Evacuation Plan requirements are discussed in the "Employee Emergency and Fire Prevention Plan" model.
10. A description of preventative measures such as inspections, training, and emergency response equipment must be included in the Plan.
11. Other requirements:
 - A copy of the Contingency Plan must be sent to fire and police departments, local hospital, hazmat team, and MPCA.
 - The Emergency Response Coordinator must notify the National Response Center, MPCA, and local authorities when the plan has been implemented.
 - A copy of the plan must be located on-site for review by personnel at any



time.

- The Contingency Plan must be updated when the rules change, the plan fails in an emergency, the Emergency Coordinator changes, the emergency equipment changes, or the facility's construction, design, operation, or maintenance changes.
- The name and telephone number of the Emergency Coordinator, other emergency numbers, and the location of emergency response equipment must be posted by the telephone located near the hazardous waste storage area.
- The Emergency Response Coordinator must notify the National Response Center (800) 424-8802, Minnesota Duty Officer (612) 649-5451, and local authorities in the event a spill threatens human health or the environment.

SQGs

Small quantity generators are required to have a formal Emergency Response Plan and an Emergency Response Coordinator. The emergency response plan must include the following information:

1. Instructions on how to reach the Emergency Response Coordinator.
2. Telephone numbers of agencies that provide emergency services.
3. Documentation that affected employees are thoroughly familiar with proper waste handling and emergency procedures.
4. Emergency response and spill procedures.
5. Notification of the National Response Center (800) 424-8802, Minnesota Duty Officer (612) 649-5451, and local authorities in the event a spill threatens human health or the environment.

The following information must be posted next to the telephone on the premises:

1. Name and telephone number of emergency coordinator.
2. Telephone number of fire department or other outside emergency response agencies.
3. Location of fire extinguishers and spill control material.

VSQGs

Very small quantity generators must comply with the following emergency response



requirements.

1. Internal communications or alarm system capable of alerting personnel.
2. Telephone or 2-way radio capable of contacting outside emergency agencies such as the fire department.
3. Fire extinguishers, spill control equipment, decontamination equipment, etc., as needed.
4. Adequate water volume and pressure to supply fire hoses, sprinklers, etc.
5. Notification of the National Response Center (800) 424-8802, Minnesota Duty Officer (612) 649-5451, and local authorities in the event a spill threatens human health or the environment.

Very small quantity generators are not required to have an Emergency Response Plan or Emergency Response Coordinator. However, personnel working with hazardous waste should know the proper handling techniques, what personal protection is needed, and the proper response to a spill or other emergency. Telephone numbers of emergency response agencies must be posted.

Contingency Plans

VSQGs are not required to have a designated Emergency Response Coordinator or a formal contingency plan, but are required to have the necessary emergency response equipment, comply with hazardous waste storage requirements, develop accident prevention procedures, and notify local authorities of hazardous waste activities.

Contingency plans are written documents that describe how a facility will respond to an emergency situation. These plans must contain procedures and step-by-step instructions that are designed to protect human health and the environment in the event of an explosion, fire, natural disaster, or spill which may result in releasing hazardous materials and/or waste to the environment.

Contingency plans and Emergency Response Plans are closely related. However, contingency plans address the issues and concerns surrounding hazardous materials or wastes. A contingency plan must contain the following minimum information:

- Instructions to follow in the event an emergency situation involves a hazardous material or waste
- A listing of hazardous materials and wastes and the potential hazards associated with these materials
- Arrangements with emergency response agencies



- Name and telephone numbers of the Emergency Response Coordinator
- Names and telephone numbers of the members of the emergency response team, if applicable
- A list and location of emergency and spill response equipment
- Evacuation plan including methods of notification and escape routes
- Emergency phone numbers and emergency response equipment list and locations must be posted by a telephone(s) that will be used in the event of an emergency

Contingency plans must be submitted to:

- ◆ MPCA
- ◆ Local fire department
- ◆ Local police department
- ◆ Local hospital
- ◆ Local emergency response teams

Once the contingency plan has been implemented, the Emergency Coordinator must notify the National Response Center, MPCA, and the local authorities listed above.

Hazardous Waste Personnel Training

Training requirements for employees handling hazardous waste vary according to generator size. LQGs' training requirements are much more comprehensive than the requirements for SQGs and VSQGs.

Training must be documented and the training records kept for five years.

NOTE: Hazardous waste training can be combined with OSHA's Right-To-Know training if the requirements of MR 7045.0558 are met.

Large Quantity Generators

- ◆ LQGs must have a designated hazardous waste training coordinator.
- ◆ Training must be designed for the particular site and waste streams.
- ◆ Personnel must be trained in the procedures applicable to tasks they perform or according to job description.
- ◆ Personnel handling hazardous wastes and personnel working in areas where hazardous waste is present must be trained in the pertinent emergency



responses outlined in the Contingency Plan.

- ◆ Hazardous waste training must be done annually and within 6 months of initial job assignment involving hazardous waste.
- ◆ LQGs must document training and maintain records for five years.
- ◆ **Small Quantity Generators**
- ◆ SQGs must ensure that all personnel involved in handling waste are thoroughly familiar with handling the waste properly and the emergency procedures relevant to their responsibilities.
- ◆ SQGs must document training and maintain records for five years.
- ◆ **Very Small Quantity Generators**
- ◆ No training is required but is strongly recommended for those who handle hazardous waste. These personnel should know the following:
 - ◆ Hazards associated with the waste
 - ◆ How to safely handle the waste
 - ◆ How to protect themselves in the event of a spill
 - ◆ If assigned, how to clean up spills

Record Keeping

Hazardous waste generators must maintain the records listed below for a minimum of three years. However, since the liability associated with the hazardous waste never ceases, the generator should maintain the following records for an indefinite period of time:

- ◆ Manifests
- ◆ Manifest exception reports
- ◆ Licenses
- ◆ Disclosures
- ◆ Hazardous waste test and analytical reports
- ◆ Training documents
- ◆ Annual reports
- ◆ Biennial reports
- ◆ Inspection logs
- ◆ Material Safety Data Sheets
- ◆ All correspondence relating to the hazardous waste



Land Disposal Rules

All hazardous wastes destined for land disposal must be pretreated so that any toxins present in the waste are destroyed or degraded. All generators, transporters, and TSDFs who want to dispose of hazardous waste on or in the land must comply with MR 7045.1300.

Exceptions

Small Quantity Generators

Small quantity generators are required to prepare and submit the same paperwork as the large quantity generators. However, SQGs may use an alternate manifest system as specified in MR 7045.0075 subpart 5.

Very Small Quantity Generators

Very small quantity generators may use an alternate manifest system as specified in MR 7045.0075. Also, a VSQG may transport hazardous waste without a manifest if transportation is in the generator's vehicle and if the waste is transported to a very small quantity waste collection program under MR 7045.0320.

Annual Reports

All generators must renew their hazardous waste license each year. When the license application is prepared, generators must report on their hazardous waste activities for the past year.

Other Requirements

Fees

The MPCA requires generators to pay annual fees to recover the costs associated with administering the hazardous waste program. The fees are based on the generator's size, the volume of hazardous waste, and the method of waste management.

Miscellaneous

- ◆ The generator must possess adequate financial resources to ensure that the hazardous waste will be managed properly.
- ◆ Hazardous spills and releases must be reported to the Minnesota Duty Officer system at 649-5451.
- ◆ Recover any hazardous waste that has spilled or leaked as soon as possible.



Take any other action necessary to protect human health and the environment.

- ◆ Develop waste minimization programs.

Forms

In addition to the forms mentioned previously in this regulation, the Hazardous Waste Emergency Response and Contingency Plan consists of the following six forms which must also be completed and kept on file to maintain compliance with this regulation:

1. Emergency Contacts List
2. Hazardous Wastes Generated On-Site
3. Site Plan
4. Emergency Response Procedures
5. Hazardous Waste Generator - Local Authority Notification
6. Required Emergency Equipment

