ENVIRONMENTAL PROTECTION PROGRAMS

The Legislature has declared in statute that each person in Minnesota has a right to the protection, preservation and enhancement of air, water, land and other natural resources, and that each person also has the responsibility to contribute to the protection, preservation and enhancement of those resources. To secure and advance that right a number of state agencies have responsibility and authority for policy development, standard setting, permitting and enforcement in environmental areas. These agencies include the Minnesota Environmental Quality Board, the Minnesota Pollution Control Agency, the Minnesota Department of Natural Resources, the Minnesota Department of Agriculture, the Minnesota Department of Health, and others. The Directory of Licenses and Permits at the back of this book lists the appropriate regulatory agency by regulated activity.

ENVIRONMENTAL REVIEW

Certain projects (for example, the construction or expansion of commercial or industrial facilities) can trigger specialized environmental review intended to prevent damage to environmental resources as a result of private or public development projects. This preventive planning approach helps identify and mitigate possible environmental problems while the project is still in the planning stages before permits are issued and construction or operation begins.

Those reviews are conducted by a legally defined "responsible governmental unit" and are of two types: an Environmental Assessment Worksheet and an Environmental Impact Statement. An Environmental Assessment Worksheet is a preliminary review to evaluate the potential for significant environmental effects from a project. An Environmental Impact Statement is a more comprehensive environmental review. The size and nature of certain projects trigger a mandatory Environmental Worksheet and/or an Environmental Impact Statement while in other cases the nature of review is at the discretion of the responsible governmental unit. For more information, contact the Minnesota Environmental Quality Board or the Minnesota Pollution Control Agency at the address and telephone numbers listed in the Resource Directory section of this Guide.

THE MINNESOTA POLLUTION CONTROL AGENCY

As noted above, several state agencies have responsibilities for environmental protection. The Minnesota Pollution Control Agency (MPCA) is the agency specifically charged with efforts to eliminate, reduce or control the levels of pollution in the environment. It is the principal agency for permitting associated with air quality and water quality, for the management of hazardous and solid waste, and for the enforcement of pollution control statutes and regulations.

Permit requirements, application procedures, schedules and other procedural requirements vary with the facility or activity involved. Most permits require a 30-day public notice. If members of the public object to issuance of the permit, and/or ask for a public hearing before a state administrative law judge, there may be further evaluation of the application and delay in issuance of the permit. The MPCA always has the option of denying a permit if the proposed facility or activity may result in some significant potential for pollution that cannot be corrected.

Non-compliance with MPCA rules or permit requirements could result in MPCA enforcement action involving administrative penalties, stipulated damages, civil or criminal legal action, and revocation of the MPCA permit. As a practical matter, MPCA permit holders should ensure that they have adequate and appropriate operating practices and qualified personnel in place to meet permit requirements and avoid enforcement action.

HAZARDOUS WASTE

Minnesota has an extensive program for the "cradle-to-grave" management of hazardous waste. Every business in Minnesota is responsible for determining if the waste it produces is hazardous. Many types of businesses, organizations, non-profit groups and governments generate hazardous waste in the course of providing their products or services, including but not limited to the following: cleaning and maintenance; chemical manufacturing and formulating; construction; equipment repair; health care providers; furniture manufacturing and refinishing; wood preservation; laboratories; laundries and dry cleaning; metal manufacturing; electroplating; transportation; electronics; textile, plastics, and leather manufacturing; pesticide manufacture and application; printing and photography; schools and colleges; vehicle repair and auto body shops; and utilities.

Wastes may be hazardous by either exhibiting a hazardous-waste characteristic or by being listed as a hazardous waste.

Characteristic wastes include:

Ignitable waste. A liquid is ignitable if it has a flash point less than 140 degrees Fahrenheit. Check the product's label or Material Safety Data Sheet (MSDS) for this information. A nonliquid waste is ignitable if, at a standard temperature and pressure it can cause a fire through friction, absorption of moisture, or spontaneous chemical changes, and burns so persistently that it creates a hazard.

Oxidizing waste. An oxidizer adds oxygen to a reaction or fire in the absence of air. Oxidizing wastes often have chemical names beginning with "per..." or ending with "...oxide" or "...ate" (for example: persulfate and chlorate). Many oxidizing wastes also contain nitrogen or halogens such as fluoride, chlorine, bromine, and iodine.

Corrosive waste. Any water-based waste having a pH of 2 or less (an acid) or 12.5 or more (a base) is corrosive. Check the product's label or MSDS for this information. A corrosive waste may also be a liquid that is able to corrode greater than one-fourth of an inch of steel per year at 130 degrees Fahrenheit.

Reactive waste. Unstable or explosive wastes, wastes that react violently when brought in contact with water, and wastes that release toxic vapors (such as hydrogen cyanide or hydrogen sulfide) are considered reactive and hazardous (example of reactive waste: unspent lithium batteries greater than 9 volts).

Lethal waste. Lethal wastes exhibit oral or dermal values (LD50) or inhalation values (LC) below a certain lethal threshold. If the health hazard data on the MSDS or other information leads you to suspect a waste may be lethal, contact your metropolitan county (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott or Washington) or MPCA district office hazardous waste staff for assistance.

Toxic waste. Wastes are considered toxic if using the Toxicity Characteristic Leaching Procedure (TCLP), they leach metals or organics at or above certain threshold values. A list of T.C. chemicals and their maximum allowable concentrations is available on the MPCA website at www.pca.state.mn.us under Waste Publications.

Listed hazardous wastes are printed in Minnesota Rules 7045.0135 and include the following:

- Many spent chlorinated solvents used for degreasing (carbon tetrachloride, methylene chloride, trichloroethane, trichloroethylene, and others);
- Many other waste solvents, cleaners and strippers (acetone, butyl alcohol, carbon disulfide, cresol, ethyl acetate, methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), methyl or wood alcohol, toluene, xylene, and others);
- Certain wastes derived from products containing ten percent or more of the above solvents;
- Residues from distillation units (or other similar systems) used to recover the above solvents;
- Most wastes from electroplating operations (cleaning and stripping tank solutions, plating bath solutions and sludges, and sludges from pre-treatment of wastewater);
- Certain wastes from the heat treatment of metals;
- Wastes produced during specific manufacturing processes (certain chemicals, explosives, inks, and pigments), petroleum refining and steel finishing (pickle liquor);
- Many unusable or off-specification commercial products: aniline, certain antibiotics, arsenic compounds, benzenes, chloroform, creosote, cyanide compounds, formaldehyde, hydrofluoric acid, hydrogen sulfide, lead compounds, mercury compounds, naphthalene, many nitrogen compounds, many pesticides, and pentachlorophenol (penta);
- Phenols and pyradine; and
- Polychlorinated biphenyls (PCBs) at concentrations greater than 50 parts per million.

The four lists of hazardous waste (F, K, P and U) are available on the MPCA website at www.pca.state.mn.us under Waste Publications.

Hazardous waste must be managed in accordance with Minnesota hazardous-waste rules. The generator requirements are summarized as follows:

- Obtain a hazardous waste identification number (formerly called an EPA identification number) (at no cost) by filling out the Notification of Hazardous-Waste Activity and sending it to the MPCA. This form, instructions, and assistance for completing the form may be obtained from the MPCA or the appropriate metropolitan county hazardous-waste program.
- Next, a company may have to apply for a hazardous-waste generator license from the MPCA (for businesses located in greater Minnesota) or from the appropriate metropolitan county (for businesses located in the seven-county metropolitan area).
- Hazardous-waste containers must be properly marked and labeled. As soon as a waste is put in a container, it must be marked with the words "hazardous waste," an accumulation start date, and an easily understood description of the waste.

- Prior to off-site shipment, most hazardous wastes must be placed in specific Minnesota Department of Transportation (DOT) containers and labeled with a DOT hazard label and hazardous-waste label. For more information, contact the MPCA or your metropolitan county office.
- Store hazardous waste properly and restrict its accumulation time and amounts to specified limits as noted below.

Indoor storage of hazardous waste is regulated by fire prevention and building codes, in addition to hazardous-waste rules. Containers must be stored closed, with adequate aisle space between them for easy access and inspection. Floor drains must not allow waste to escape.

Hazardous waste stored outdoors must be in an area where access is restricted. The waste must be stored on a curbed, impermeable surface, and, if ignitable, must also be protected from direct sunlight.

Very Small Quantity Generators (VSQG)

If less than 220 pounds (or 100 kilograms) of hazardous waste is generated each month, the generator can accumulate up to 2,200 pounds (1,000 kg) indefinitely. Once this amount (about four drums of liquid) has accumulated, the generator has 180 days to have it transported off-site to a storage, treatment, or disposal facility within 200 miles. If the designated facility is farther away than 200 miles, the generator has an additional 90 days to ship the waste.

Minimal Quantity Generator (MQG)

A sub-classification of VSQGs is MQGs, which generate 100 pounds (about 10 gallons liquid) or less of hazardous waste per year. However, if any acute hazardous waste is generated, the MGQ classification can not be applied. The generator can accumulate up to 550 pounds indefinitely. Once this amount (about one 55 gallon container) has accumulated, the generator has 75 days to have it transported off-site. The MPCA does not require MQGs to apply for a license, however metropolitan counties may. Some counties do not recognize the MQG classification.

Small Quantity Generators (SQG)

If between 220 and 2,200 pounds (or 100 to 1,000 kilograms) of hazardous waste is generated each month, the generator must ship the waste to a storage, treatment, or disposal facility within 180 days of the accumulation start date, provided the receiving facility is within 200 miles. If the facility is farther away than 200 miles, the generator has 270 days to ship the waste.

Large Quantity Generators (LQG)

If more than 2,200 pounds (1,000 kg) of hazardous waste is generated each month, the generator must ship all accumulated hazardous waste off-site to a storage, treatment, or disposal facility within 90 days of the accumulation start date. If the 90-day deadline is not met, the generator must obtain a hazardous-waste storage facility permit.

Licenses

Licenses must be renewed annually and fees are based on the amount of hazardous waste generated and the disposal method. Permit fees are also assessed if generators need an MPCA permit for their waste treatment, storage or disposal activities. For more information contact the MPCA or the metropolitan county hazardous-waste office.

It is the generator's responsibility to know the rules that apply to the management of a particular hazardous waste. Copies of the hazardous-waste rules can be obtained from the Minnesota Bookstore at the address and telephone number listed in the Resource Directory section of this Guide.

STORAGE TANKS

Tank owners are required to register their tanks with the MPCA. Owners of regulated underground storage tanks (USTs) and above ground storage tanks (ASTs) must report information such as tank age, size, and contents within 30 days after installation of a new tank, or within 30 days after any changes in tank ownership, use, or contents. The agency provides forms for this purpose. Septic tanks and some pipeline facilities are excluded from tank regulations but are regulated under other rules.

The MPCA must receive 10 days advance notice, in writing, prior to the installation, removal, or repair of regulated USTs. Only MPCA certified contractors can perform UST installation, repairs and removal projects. The agency provides a list of these certified contractors. Contractors are not required to be certified or provide advance notice for installation, removal, or upgrade of ASTs or non-regulated USTs. However, individuals and companies doing AST work must follow applicable standards outlined in Minnesota Rules, Chapter 7151. MPCA does not regulate USTs with a capacity of 110 gallons or less, residential or farm USTs storing 1,100 gallons or less of motor fuel (used for non-commercial purposes), and USTs storing 1,100 gallons or less of heating oil (used to heat the property where the tank is located).

UNDERGROUND STORAGE TANKS (USTs)

According to Minnesota Rules, Chapter 7150, most new and existing regulated USTs must have spill, overfill, and corrosion protection. USTs that do not have these safeguards must immediately be taken out of service and either, replaced, removed, or abandoned-in-place with fire marshal approval. Regulated USTs were required to have leak detection on or before 1993 based on the age of the tank.

The MPCA has made changes to certain requirements for operating UST systems. While most rules remain the same, there are changes that may affect you as the owner of a regulated UST.

All new underground tanks, as well as any associated piping must be double-walled and fuel dispensers, and submersible pump heads, must have a secondary containment design, meaning a liquid-tight barrier to capture and detect leaks. Existing piping, fuel dispensers and submersible pump heads, when repaired may require replacement.

For double-walled tanks, you will need to check monthly for liquids in the interstice between the walls, and document the check. If the interstice has a continuous automatic liquid sensor with

alarm, you will just need to perform an annual function check of the sensor.

Drop tubes extending to within 12 inches of the tank floor are required for all tanks. New gasoline tanks must have a drop tube extending to within six inches of the tank floor if the facility has greater than 10,000 gallons monthly throughput.

Secure anchoring of breakaway valves under dispensers must be maintained.

Monthly checks of all sump areas (fill pipe spill buckets, submersible pump sumps, and under-dispenser sumps) are now required. If you have a submersible pump sump with liquid-tight containment and a liquid sensor alarm that is function tested annually, then the sump may be checked *annually*. Checking the sump means lifting the lid and looking for spilled or leaked product, water, or debris, and cleaning out the sump if necessary. Keep a record of sump checks. A checklist is available from the MPCA, or owners can make their own.

All automatic line leak detectors must be function tested annually. Testers must be MPCA-certified contractors, have received testing approval from the manufacturer, or be specifically qualified by reason of training or experience. Owners may not perform the tests unless they are qualified. Obtain the test result record from the contractor and keep it. A publication, *What Tank Owners need to know about the New Underground Storage Tank Rules* (www.pca.state.mn.us/publications/t-u1-19.pdf) is available from MPCA.

If you have an impressed current type of cathodic protection system, then the system's rectifier must be checked every 60 days. Check that current is being delivered and record the volt and amp readings. Owner-operators may do this. A corrosion expert must inspect the system for effective protection at least annually, rather than every three years as previously.

If your cathodic protection is sacraficial anode they must be tested every three years. If your system is designed with external testing stations, the three-year tests and post-repair tests may be performed by the owner/operator, using a voltmeter. Record and maintain the results. External test stations must test all piping as well; if they are not designed to do this, use a qualified cathodic protection tester.

If you have a high level alarming system for protection during tank fills it must be audible to the fill driver. It is recommended that the alarm be tested for proper function at least annually, and must be audible to the fill operator.

For tanks with internal linings, due to lining failure concerns, these tanks must be emptied, entered, and internally inspected by a qualified third-party inspector at least *every* five years. New requirements cover pre-notification, inspection techniques, and reporting. Very minor repairs are allowed; however, if the lining ever fails, the tank must be permanently closed.

After *90 days* of inactivity, temporary closure is required. This means the tanks must be completely emptied and a notification form must be filed with the MPCA. Any rectifier must be kept on, and any cathodic protection system must be tested every year or three years, as applicable. After one year of inactivity, the tank owner must request and receive written approval to extend the temporary closure period, otherwise the tanks must be permanently closed. This means closed-in-place (filled with an inert substance) or removed from the ground. After five years of inactivity, all tanks must be permanently closed.

Prior to closing the transaction of selling or purchasing property with USTs, the seller must notify the purchaser of the purchaser's duty to notify the MPCA. Purchaser must file a notification form with the MPCA for the change in ownership, and must certify that all operators, including lessees, have read the UST rules and know how to operate and maintain UST systems.

ABOVE GROUND STORAGE TANKS (ASTs)

With a few exceptions, all new and existing AST facilities with a total storage capacity of less than one million gallons must have corrosion protection, overfill protection, secondary containment, and substance transfer area protection according to Minnesota Rules, Chapter 7151. Monitoring and leak detection requirements also exist for these ASTs. A general permit is no longer required for these regulated AST facilities. Some tanks excluded from these regulations include farm ASTs, ASTs with a capacity of 500 gallons or less, residential ASTs storing 1,100 gallons or less of motor fuel (used for non commercial purposes), and ASTs storing 1,100 gallons or less of heating oil (used to heat the property where the tank is located).

If an AST holds more than 10,000 gallons, a spill response plan is required. This plan describes the steps the tank owner will take if there is a spill or another type of accident. Call the MPCA at the telephone number listed in the Resource Directory of this Guide for the content requirements of a spill response plan.

AST facilities with total storage capacity of greater than or equal to one million gallons must obtain an individual permit for their tanks. The individual permit addresses tank inspection and maintenance, spill containment, tank gauging, overfill protection, corrosion protection, and tank upgrades. Permits are issued for up to five years. To obtain an individual site permit for your facility, please call the MPCA's AST program.

Tank owners and operators can participate in an environmental audit program. This program allows tank owners to make improvements to their site before fines or violation notices are issued or enforcement action is taken. The environmental audit cannot be used at facilities where serious and repeat violations have occurred.

More information about tanks is available by calling the MPCA or by reviewing the MPCA website at www.pca.state.mn.us. Click on programs and select "Aboveground Storage Tank Systems" or the "Storage Tank Compliance and Assistance Program".

WATER QUALITY REQUIREMENTS

Businesses may need a permit or certificate from the MPCA if they:

1. Discharge any wastewater into surface waters (including storm sewers);

2. Operate an agricultural feedlot;

3. Operate a disposal system which land-applies wastewater, or by product;

4. Operate a large on-site drain field; or

5. Operate any one of a class of categorical industries.

6. Discharge storm-water from an industrial or construction site.
7. Plan to dredge, fill, inundate or drain a wetland to the extent that a United States Army Corps of Engineers permit would be required. The MPCA must then certify that permit.

Businesses requiring an extension of a sanitary sewer system will be affected by the MPCA requirement that any municipality must have a Sewer Extension Permit before extending its sanitary sewer lines. For more details, please see the MPCA factsheet found at www.pca.state.mn.us, then click on Permits, then click on Water Permits. There is a sewer extension permit application fee.

Feedlot Permits

The Minnesota Pollution Control Agency regulates the collection, transportation, storage, processing and disposal of animal manure. The Feedlot Program implements rules governing these activities. MPCA is the principal agency for regulating feedlots in Minnesota. In addition, 54 counties administer the program for feedlots under 1,000 animal units. A National Pollution Discharge Elimination System (NPDES) permit is required for all feedlots that meet or exceed the threshold for large Concentrated Animal Feeding Operations (CAFO) under the Code of Federal Regulations, or with 1,000 animal units or more.

The feedlot rules apply to all aspects of livestock manure and process wastewater management including the location, design, construction, operation and management of feedlots and manure handling facilities and the land application of manure and process wastewater.

Information on feedlot permits, regulations and related issues is available from the MPCA at the address and telephone number listed in the Resource Directory section of this Guide, or on their website at www.pca.state.mn.us/hot/feedlots.html.

National Pollutant Discharge Elimination System (NPDES) Permits

NPDES permits are required for any discharge of wastewater into surface waters, including non-contact cooling water and air-conditioning or heat-pump water. NPDES permits are not required if the discharge is to a publicly-owned sanitary sewer system. However, local permits may be required – check with your local municipality.

NPDES permits are required for feedlots that either exceed the large Concentrated Animal Feeding Operations (CAFO) threshold (i.e. 700 dairy cows, 2,500 swine, 1,000 beef, etc.) or have a capacity of 1,000 animal units or more.

Permit applications are available from the MPCA at the address and telephone number listed in the Resource Directory section of this Guide. Applications must be submitted 180 days before the planned activity commences. There is an application fee, and an annual permit fee. Except for the categorical industries listed below, there are no such fees if the discharge goes to a sanitary sewer. Applicants should be prepared to provide information on the location, quantity and quality of the proposed discharge. NPDES permits are issued for a period of up to five years.

Storm-Water Discharge Permits

Certain types of industrial facilities must apply for a storm-water discharge permit from the MPCA. In addition, storm-water permits may be required for certain construction activities. Minnesota's storm-water permitting program is designed to help improve the quality of the state's waters by reducing or eliminating the chemicals and sediments carried into surface waters with storm-water runoff.

All required industrial facilities must apply for a general storm-water discharge permit from the MPCA. In addition, an industry-specific permit may be required depending on the environmental risk of storm-water runoff from the facility. Construction projects disturbing one or more acres must apply for a general NPDES storm-water permit from the MPCA. Storm-water permits may require the preparation of a plan for managing storm-water runoff, potentially including construction of holding basins or diversion structures.

The program has broadened due to new federal regulations, so, if you have potential discharges find out if your industrial facility requires a storm-water permit. The MPCA and EPA have websites with information on the storm water permit programs. Check the MPCA home page and EPA storm-water page for information.

State Disposal System Permits

State disposal system permits are required for disposal of wastewater other than to surface waters, including large septic tank and drainfield systems and spray irrigation of wastewater. The need for an SDS permit may be satisfied by certain construction or operating practices; these must be evaluated on a case-by-case basis. Only domestic sewage should be discharged to drainfields.

Process wastewater, washwater and other wastewater should be discharged to a city sewer system. This may be a major consideration when siting a new industry.

Application forms are available from the MPCA at the address and telephone number listed in the Resource Directory section of this Guide. Applications should be submitted 180 days ahead of the anticipated beginning of construction. SDS permits are issued for a period of up to five years. There is an application fee and annual fees, which depend on the size of the facility.

Permits for Categorical Industries

Certain types of industries are required to be regulated under the Clean Water Act even if they discharge their wastewater to a municipal sanitary system. Examples of these industries are: pulp and paper mills; most food processing plants; textile mills; chemical manufacturing plants; electroplating companies; plastics and other synthetics manufacturers; fertilizer plants; metal manufacturing plants; steam power plants; companies producing leather, glass, asbestos, rubber, and timber products.

Requirements for categorical industries are set by the U.S. Environmental Protection Agency. In most cases, a prospective permit holder cannot contest these requirements. Categorical industries are subject to U.S. EPA pretreatment regulations.

A number of large sanitary districts and cities have been delegated authority to issue categorical-industry permits. These include the Metropolitan Council, Environmental Services, the Western Lake Superior Sanitary District, Winona, Rochester, Albert Lea, Owatonna, St. Cloud, Mankato and Red Wing.

Categorical-industry permits are issued for other cities by the MPCA for a period of up to five years. Application forms may be obtained from the MPCA. There is a $350 application fee and an annual fee for categorical industry permits. Permit applications should be submitted 180 days ahead of the commencement of the proposed activity. Questions about water quality permits should be directed to the MPCA. Addresses and telephone numbers are listed in the Resource Directory section of this Guide.

Underground Disposal Control

Disposal of industrial wastewater in underground sewage treatment systems is not allowed.

AIR POLLUTION CONTROL REQUIREMENTS

Minnesota businesses must comply with MPCA rules to protect air quality. Some rules apply even though the business will not have air emissions requiring permits.

Motor Vehicle Emission Controls

Owners of businesses that operate motor vehicle fleets should be aware that it is contrary to state rules and federal regulations to remove or disable the air pollution control equipment on motor vehicles, and it is illegal to operate motor vehicles unless the pollution control equipment is in place and is in operating condition.

Notification of Emergency Air Releases

The MPCA must be notified immediately of any releases to the air that might endanger human health, damage property or create a public nuisance. The business must take the steps necessary to prevent such releases.

Air Emissions Facility Permits

An air-emissions facility permit will be required if the business has the potential to emit more than the following airborne pollutants in a single year (in tons/year): lead 0.5; fine particulate matter < 10 microns, 25; single hazardous air pollutant 10; two or more hazardous air pollutants 25; sulfur dioxide 50; nitrous oxides, 100; carbon monoxide 100; particulate matter 100; volatile organic compounds 100. There is an application fee and an annual permit fee. Under certain circumstances, local health and welfare problems have to be addressed through an air emission facility permit even though the business would otherwise be exempt under Minnesota rules. This may be because of toxic air emissions or dust from the proposed business.

Although not all will require air-emissions permits, business operators who should be aware of MPCA air quality rules are those whose businesses include the use of boilers, incinerators, electrical generators and solvent-borne coatings. Other businesses whose operations fall under air quality rules are those that create emissions such as dust, including grain elevators, concrete batch plants, sand and gravel operations and building demolition operations.

Permit applications should be submitted before construction is to begin. Applicants will need to know the characteristics of the exhaust gas stream before and after, any emission control equipment, type and design of emission control equipment, the relation of emission points to nearby structures and other information. The permitting process may be delayed if information is inadequate, if the facility is proposed in an area where the air quality is already below standards, or if public demands result in scheduling public hearings.

Business operators in doubt about the need for a permit should call the MPCA. Businesses that have fewer than 100 employees and are independently owned and operated may call the MPCA's Small Business Environmental Assistance Program at the telephone number listed in the Resource Directory section of this Guide.

Asbestos Removal

Prior to any renovation or demolition work in a commercial space, a survey for the presence of asbestos is required. This survey must be conducted by an inspector that is certified by the Minnesota Department of Health. An asbestos abatement contractor licensed by the Minnesota Department of Health may be required for removal depending on the type and quantity of asbestos affected by the project. Notifications must be submitted to the MPCA prior to all demolition and most asbestos abatement projects. Business owners should be aware that asbestos removal is also regulated by the Asbestos and Lead Compliance Unit of the Minnesota Department of Health and the Occupational Safety and Health Division of the Minnesota Department of Labor and Industry. The respective addresses and telephone numbers for information on these requirements is listed in the Resource Directory section of this Guide. For further information, contact the MPCA Asbestos Unit.

SOLID WASTE MANAGEMENT

County Waste-Management Plans

The Minnesota Legislature gave primary responsibility for solid-waste management to the state's 87 counties. Contact the county solid-waste officer for details about the county waste-management plan, which outlines waste disposal options for businesses and for information about relevant ordinances. This plan, developed by the county and approved by the MPCA, may have specific business-related requirements. Cities may also have local solid-waste ordinances, and those plans should be reviewed as well.

The Legislature also gave direction to counties about the most preferred methods of waste management, a hierarchy from the most to the least environmentally beneficial. Since waste generation has increased one to two percent each year for more than 30 years, it pays for government and businesses to reduce wastes as much as possible, thereby reducing garbage bills,

specific business solid-waste fees, and the percentage of taxes going toward waste-disposal costs.

The waste management hierarchy is:

- Reduce and reuse – the best waste is, of course, none at all, so it is prudent to reduce waste by wise purchasing, good inventory management, and reuse of waste products.
- Recycling – by separating out those wastes with intrinsic value, disposal costs will be reduced. Among wastes local governments may collect (or you may decide to collect and recycle yourself): glass, aluminum, tin, some plastics, white office paper, mixed paper, cardboard, paperboard, Tyvek envelopes, newsprint, printer cartridges, and more. Also, by establishing business policies that promote recycling, such as separating white office paper,and purchasing recycled paper and packing, markets are created for those materials that otherwise might be discarded.
- Composting – yard wastes and some food products can be composted into beneficial soil amendments.
- Incineration – a waste-to-energy incinerator consumes solid waste and produces energy, but has possible air-quality impacts, costs more than landfilling and produces its own waste – ash.
- Landfilling – shipping wastes to a permitted landfill safely isolates wastes, but does not normally produce any side benefit (except in rare cases where methane is recovered for energy use) or reduce solid-waste volume.

Counties' integrated waste-management systems use a combination of these waste-management techniques. By considering these various options along with the county's plan, a business can demonstrate concern for community needs and enhance its reputation as a business that cares about the environment.

Solid-Waste Taxes for Business Wastes

Businesses pay different solid-waste taxes from households in the same area. The tax rate is 9.75 percent on residential garbage service and 17 percent on commercial garbage service. Businesses that produce construction, demolition debris, medical waste, or nonhazardous industrial waste will pay a tax of 60 cents per cubic yard of collection capacity. The Department of Revenue collects the taxes, which are used to support cleanup of old landfills and grants for waste-reduction and recycling programs.

Solid-Waste Permits and Enforcement

The Minnesota Pollution Control Agency permits and regulates solid-waste facilities, including landfills (mixed municipal solid waste, demolition debris, and industrial types), transfer stations, incinerators, composting facilities and more. In addition to state permits, local units of government (such as counties, cities or townships) may also have ordinances or licenses required for certain activities or facility types. These requirements attempt to assure that any solid wastes disposed of in Minnesota facilities will not become a source of liability later. If your wastes go to other states, it makes sense to find out whether you could be held liable for cleanup of those wastes later.

The MPCA has permit application processes to build or operate a solid-waste facility as part of a business, or to dispose of nonhazardous industrial wastes by land application (lime residues applied to agricultural land, for example). Concerns about illegal dumping of solid waste on a property can be directed to the county solid waste officer, the MPCA or the Minnesota Department of Natural Resources, all of which have certain authorities that may be of assistance.

Specific Materials Banned From the Waste Stream or Requiring Specific Disposal

Some wastes are banned or must be disposed of according to state laws or MPCA rules. Among those things that are banned from normal disposal are: waste tires; yard and tree waste; motor oil and filters, as well as other vehicle fluids; lead-acid batteries; nickel-cadmium batteries or other rechargeable or nonremovable battery packs; major appliances, including removal of items containing polychlorinated biphenyls (PCBs), such as old transformers; computer monitors; telephone books; all mercury including fluorescent and high-intensity discharge lamps and mercury switches (building, automotive); lead paint waste; chlorofluorocarbon (CFC) refrigerants; and petroleum-based sweeping compound. To find out more about disposal or recycling options for these materials, contact your solid-waste officer, call the MPCA or visit the MPCA website at the address listed in the Resource Directory Section of this Guide, to look at a copy of the Minnesota solid waste rules.

Electronic Waste

Electronic waste, or E-waste, is any waste that has a circuit board or cathode ray tube (CRT). This includes items that businesses use every day, such as computers, televisions, telephones and fax machines. Because of their potential lead content, when these items become a waste a business must then to be hazardous unless supporting test data is available proving otherwise. Businesses can either have the e-waste recycled or handled as a hazardous waste.

Minn. Stat 115A.1310 - 115A.1330 impacts retailers, collectors, recyclers, and manufacturers of video display devices sold to households (for example, televisions and computer monitors, including laptops). Among its requirements, this law requires retailers to only sell products of registered manufacturers. Registration and reporting requirements also apply to businesses that collect, recycle, or manufacture video display devices. For more information on these requirements, call the MPCA or visit the MPCA website at www.pca.state.mn.us/oea/stewardship/electronics-law.cfm.

Heavy Metals in Products

Minnesota law prohibits the use of heavy metals (lead, cadmium, mercury and hexavalent chromium) in all packaging and certain products. If the business produces, purchases, uses or distributes a product or packaging using these metals, contact the MPCA to determine whether the business is in compliance with regulations. Certain legal products containing mercury, such as thermometers, thermostats, and automobile switches, are among the materials with restricted distribution or disposal. Contact the MPCA if you have questions about heavy metals in products or packaging.

Buying Recycled Products

Businesses that buy recycled products help to create better markets for recyclables. Through wise purchasing of recycled products or those using less toxic constituents or less packaging, a business makes a statement about its commitment to the environment, can reduce solid-waste fees and makes its collected recyclables increase in value.

Recycling Space Requirements for Building Owners

Minnesota state law requires buildings of 1,000 square feet or more to provide "suitable space" for the separation, collection, and temporary storage of recyclable materials (Minn. Stat. 16B.61). The law applies to new or significantly remodeled commercial structures.

In addition to the requirements of state law, specific numeric standards for recycling space have been adopted in the Minnesota Uniform Building Code (UBC). The UBC requires a certain percentage of space to be set aside for recycling, depending on how the space is used.

Labeling and Purchasing Recycled Products

The recycling logo is one way to signal that the business produces a product that contains recycled materials or is packaged in recycled materials to the consumer. While there are no specific regulations governing use of the recycling logo, the preferred practice is to use the logo, percent of recycled content, and percent of recycled content made up of post consumer waste (i.e., materials recycled by consumers).

Food Wastes

The MPCA and several other organizations currently assisting businesses seeking to reduce, recycle or compost food wastes. If the business produces food wastes, there are several cost-saving and environmentally sound methods of reuse or disposal. Contact the MPCA for more information.

COMPLIANCE ASSISTANCE

MPCA Publications

The MPCA offers free fact sheets to assist the regulated community. For a list of available fact sheets, contact the MPCA or access it on the MPCA website at www.pca.state.mn.us under Publications within the program pages. In addition, the MPCA publishes an "Environmental Guide for Small Business in Minnesota," created to give small manufacturers a user-friendly guide to Minnesota's environmental regulations. That publication addresses air quality, hazardous waste, water quality, emergency response, storage tanks, cleanup and remediation, pollution prevention, OSHA, and agriculture issues. Copies are available by contacting the MPCA's Small Business Environmental Assistance Program at the address and telephone number listed in the Resource Directory section of the Guide. Copies are also available on the internet at www.pca.state.mn.us.

Minnesota Technical Assistance Program (MnTAP)

This business assistance program helps industrial-waste generators improve process efficiency while minimizing their impact on human health and the environment. MnTAP is a nonregulatory program that offers free, confidential assistance to help business comply with environmental regulations by evaluating pollution prevention strategies before offering other waste management suggestions. For more information, contact MnTAP at the telephone number listed in the State Government section of the Resource Directory section of this Guide.

Superfund and Voluntary Investigation and Cleanup (VIC)

The federal and state Superfund programs deal with hazardous-waste sites where contamination threatens public health and the environment. The Minnesota Environmental Response and Liability Act (MERLA), Minnesota's Superfund law, gives the MPCA the authority to require those responsible for the contamination to undertake investigation and cleanup.

The Voluntary Investigation and Cleanup program provides guidance and technical assistance to parties who want to voluntarily clean up a property contaminated with hazardous substances. For more information about the state or federal Superfund programs or the VIC program, call the number listed in the Resource Directory for the Minnesota Pollution Control Agency.

One-Stop Program

The MPCA One-Stop program helps businesses navigate through the various environmental regulations they may face in the expansion or creation of their business. The goal is to make regulatory compliance in all environmental medias a smoother, friendlier, more efficient experience for Minnesota businesses. The program includes multimedia assistance in hazardous waste, air quality, stormwater, wastewater, and pollution prevention. This program offers environmental assistance at all stages of planning. However, the greatest environmental benefit can be achieved if environmental considerations (such as low impact development, green building design, water and energy conservation, waste and pollution prevention) can be incorporated into the earliest design stages of a new or expanding business possibly resulting in less burdensome regulations or permits.

Small Business Environmental Assistance Program/Environmental Rules and Regulations

Small businesses with limited resources can get help understanding Minnesota's environmental rules and regulations through the Small Business Environmental Assistance Program at the MPCA. The purpose of this program is to help small businesses understand the environmental rules and regulations that may apply to their business; assist in completing permit applications; inform the businesses of their rights and responsibilities regarding environmental rules and regulations; and provide assistance so that the businesses may comply with environmental rules and regulations even when a permit is not required.

Businesses requesting this confidential service should contact the MPCA's Small Business Environmental Assistance Program at the address and telephone number listed in the Resource Directory section of this Guide.

Small Business Ombudsman

The Small Business Ombudsman serves as a representative, or a liaison, for small businesses in their interactions with the MPCA. The Ombudsman offers the following services: confidential assistance to small businesses involving regulations and compliance; resolution of complaints or disputes involving regulations and small businesses; help in identifying funding sources to purchase equipment that meets or exceeds environmental regulations; and coordination of small business input during rule development. The Ombudsman also solicits feedback from small businesses and trade associations for the development of assistance activities tailored to small business needs.

The ombudsman is located at the MPCA at the address and telephone number listed in the Resource Directory section of this Guide.

The Small Business Environmental Improvement Loan Program

For existing businesses, the Small Business Environmental Improvement Loan Program offers low interest loans of up to $50,000 for financing environmental projects such as equipment or process upgrades and costs associated with the investigation and clean-up of hazardous materials. More information and an application are available by calling the Small Business Ombudsman at PCA at the address and telephone number listed in the Resource Directory section of this Guide.

Potential Environmental Problems with Property

Real-estate transactions have consequences for property buyers, sellers, developers, lenders, insurance companies, landlords and tenants. These parties have an interest in limiting the potential liability involved with the transfer of land that has been affected by hazardous substances, pollutants or contaminants. As a result, the MPCA receives requests from many businesses for assistance with evaluating and dealing with known or suspected land contamination.

The state has a range of services to assist those involved in land transfers in dealing with potential problems. In most cases, potential land buyers or developers will request or be willing to perform an environmental assessment of the property before sale. If contamination is discovered, then decisions need to be made about who will pay for further investigation or cleanup and how health or environmental risks will be minimized or eliminated. The following programs can be helpful to those involved with land transactions, including environmental consulting firms hired to help businesses assess or clean up property.

Properties Where Environmental Assessments Have Not Been Completed

Over the past few years, it has become standard practice for those involved in land transfers to perform an environmental assessment of the property before sale. Buying or developing land,

particularly in former or current industrial-use areas, can pose problems if all parties involved do not know whether the property has been affected by its former use. Past disposal practices did not take into account what we now know are the problems posed by hazardous substances. It pays to follow the general rule "buyer beware."

The first step in performing an assessment is usually hiring an environmental consulting firm with the expertise to conduct an environmental assessment of the property. While the MPCA does not recommend specific consulting firms, the agency does have lists of environmental consultants who can be hired to assess property. The agency's Voluntary Investigation and Cleanup (VIC) Program also has a series of fact sheets which outline the features of a good environmental assessment. These can be accessed on the web page at www.pca.state.mn.us/cleanup/vic.html. If the business performing the assessment wants legal assurances that the property poses no or limited liability, the business can sign up for the VIC Programs. The staff will oversee the environmental investigation and cleanup, if needed, and work to provide the necessary assurances. Voluntary parties pay the cost of MPCA review, oversight and preparation of assurances of the assessment.

If petroleum chemicals are the contaminants most likely to be found on site, the MPCA Petroleum Brownfields Program can assist with review and oversight and provide closure letters. If agricultural chemicals are involved, the Minnesota Department of Agriculture provides similar review and oversight services.

The environmental assessment involves seeking existing information about the property, its past uses, and its enforcement or permitting history, if any. It also includes an inspection of the site, noting areas where further testing is needed.

The environmental investigation involves actual testing of soil, ground water, surface water, tank contents or other possible contamination areas. The results of the testing may indicate the need for another round of testing or may be sufficient to make a determination about whether the site is contaminated and, if so, where and with what substances at what levels. If the assessment indicates site contamination, the business and/or consultant performing the assessment has the duty to notify the MPCA (through the Minnesota Duty officer), no matter whether the land transfer takes place or not. The land owner may also have the responsibility of filing an affidavit with the county where the property is located prior to a transfer of ownership. However, the business discovering environmental problems is not necessarily the party who is required to perform further work to clean up the site.

"Brownfields" Sites

"Brownfield" is a term for industrial or commercial properties that are candidates for redevelopment but sit idle due to actual or suspected contamination. Cities, development agencies, counties and other groups have identified land that would be attractive to developers if information about environmental status of these sites were available. For sites where no voluntary party has come forward, the state and federal governments have developed several initiatives that will allow interested parties to obtain environmental information about sites. The MN Department of Employment and Economic Development (DEED), the U.S. Environmental Protection Agency, and the MPCA all are involved in various efforts to assess and, if needed, clean up brownfield sites. Contact the MPCA or DEED to find out more information about brownfields initiatives.

Superfund: Sites Posing Imminent Risks, Abandoned Sites, and Enforcement Approaches

There are certain sites that are not good candidates for voluntary approaches, and the state and federal Superfund programs are designed to handle these problem sites. Among the types of sites most appropriate for Superfund:

- Sites that pose an imminent risk to public health or the environment, where the state must act quickly to assure that the public or environment is protected;
- Sites that pose risks, and have no responsible parties that can fund investigation and cleanup activities; and
- Sites where responsible parties are known, but are unable or unwilling to undertake necessary investigation and cleanup actions.

Under Superfund law, responsible parties are defined, in part, as site owners, facility operators who handled wastes on the site, transporters who brought wastes to the site, and generators whose wastes end up on the site. If a risk to public health or the environment is identified, a site can be assessed by the MPCA and placed on the state Superfund list. Listed sites are eligible for use of the funds appropriated for site investigations and cleanups under the state Superfund law. The MPCA can also utilize these funds to perform removal work or emergency actions if an imminent risk to public health or the environment does exist.

If responsible parties are known but refuse to undertake cleanup, both state and federal laws can be used to enforce action. Usually, this non-cooperative approach is more expensive, time-consuming and difficult for both the regulatory agency and the responsible party.

Other Land Contamination Programs

The state has other special programs or laws dealing with contaminated land, a few of which are listed below:

- Contamination Tax: The Minnesota Legislature has established a contamination tax on properties affected by hazardous substances to allow for a deduction in the value of the property based on contamination present. The tax ratio varies depending on whether the tax payer is a responsible party and has a MPCA approved Response Action Plan. This law is designed to provide a tax incentive to landowners who clean up contaminated property. Contact the Minnesota Department of Revenue for more information.
- Contamination Cleanup Grants: The Legislature provides money for Contamination Cleanup Grants for cities, housing and redevelopment authorities, economic development authorities and port authorities. To qualify for a grant, the applicant must provide the Commissioner of DEED with a site description, approved response action plan, detailed estimate of cleanup costs, appraisal of the market value of the property, description of planned land use, and explanation of how the applicant plans to pay for its share of the project. The applicant must be willing to pay at least 25 percent of the project cost. Contact DEED for more information.

- Drycleaner Legislation: A special fund has been established to deal with land contamination from former dry-cleaning operations. Funds for investigation and cleanup activities come from annual registration fees and fees on some dry cleaning chemicals. Contact the MPCA for more information.
- Guidance Documents and Technical Assistance: The MPCA provides guidance documents for investigation and cleanup of contaminated land, fact sheets on state and federal Superfund programs, site-specific fact sheets on some sites, and other brochures and newsletters oncontaminated property issues. Contact the MPCA for more information.

Environmental Audit Program

Environmental auditing is a process of examining a facility to determine how well its operations are complying with local, state and federal environmental regulations. This program encourages businesses and other organizations to conduct their own environmental audits and correct any problems they may discover. The intent of the program is to focus on the goal of achieving greater environmental compliance, rather than on fines or other penalties. In addition to involving more people in helping to protect the environment, the program also allows businesses to discover and correct minor problems before they become major liabilities, and, in most cases, to avoid enforcement penalties that might otherwise be assessed.

Any business or governmental unit that is regulated by an environmental law or rule in Minnesota can conduct an environmental audit, using either on-site personnel or an outside firm if desired. The MPCA provides free audit checklists to assist organizations in conducting their audits. After the audit, the organization must submit a report that includes a summary of the results, a schedule for any corrective actions that must be taken (subject to MPCA approval if greater than 90 days), and either a statement that pollution-prevention opportunities have been examined (for smaller facilities) or a certification that pollution-prevention requirements have been met (for larger facilities).

Generally, participants in the audit program are then given protection from enforcement fines or other penalties for any violations found, unless they are repeat violations or involve either criminal activities or activities that cause serious harm to the environment or public health. Audit forms need not be submitted to the MPCA (although they may be requested by the agency if there is probable cause to believe that a crime occurred), but participants should be aware that their summary reports are considered public documents and will be placed in the agency's files, subject to public review under Minnesota's Data Practices Act.

The Environmental Audit Program is designed to help both business and government work actively and cooperatively in protecting our environment. When a participant successfully meets the requirements of the program, that facility can display a "Minnesota Green Star" award for a period of two years after completing the audit and any required corrective or cleanup work. For more information and/or copies of fact sheets and checklists, call the MPCA or check the agency's website at www.pca.state.mn.us and look under Waste/Waste Prevention/ Environmental Auditing Project, or Programs/Environmental Audit Program.

USING PROFESSIONAL ADVISORS

Even before beginning that evaluation, the entrepreneur often will decide whether to perform that evaluation himself or herself, or engage an accountant or attorney to assist him or her. Professional advisors, such as attorneys and accountants, can greatly enhance an entrepreneur's review of a potential business. This is true for at least two reasons. First, those professionals will have no emotional attachment or stake in that review process; their objectivity may serve as an important counterbalance to an entrepreneur's enthusiasm. Second, those professionals should be able to provide thorough review of financial or intellectual property information provided, and should be knowledgeable of any potential obstacles to the success of the business (such as the need for licenses or permits). For instance, it is important that someone thoroughly evaluate financial information supplied by a seller or offeror, or pro forma information prepared by the entrepreneur, and in many cases a professional is best suited to that task.