

# School wastes

Many wastes disposed by primary and secondary schools present risks to human health and the environment if improperly managed. This fact sheet will discuss the hazardous waste and related requirements for these wastes administered by the Minnesota Pollution Control Agency (MPCA) and the Metropolitan counties of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington (Metro Counties).

Colleges, universities, and other postsecondary educational institutions are subject to different requirements; those that apply to general businesses. For guidance, see MPCA fact sheet #w-hw1-00, Summary of hazardous waste requirements, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-00.pdf>.

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Assume that any waste managed by your school is a hazardous waste unless this fact sheet states otherwise or you have evaluated the waste as non-hazardous. For information on evaluating wastes, see MPCA fact sheet #w-hw1-01, Evaluate waste, at <https://www.pca.state.mn.us/sites/default/files/w-hw1-01.pdf>.

## May hazardous wastes be consolidated from multiple school sites?

Unless advised otherwise in this or linked MPCA fact sheets, hazardous waste may not be transported from one school site to another, even in the same school district, unless the district has obtained a license for a Very Small Quantity Generator (VSQG) Collection Program.

A school district that operates a licensed VSQG Collection Program may consolidate hazardous waste from many sites for a later single pickup by a disposal vendor, however the consolidation site is subject to more stringent regulation. See MPCA fact sheet #w-hw2-52, Starting a Very Small Quantity Generator hazardous waste collection program, at: <https://www.pca.state.mn.us/sites/default/files/w-hw2-52.pdf>.

## How must hazardous wastes be disposed?

Your disposal options will depend on your site’s regulated generator size. The generator size is determined by the volume of hazardous waste generated at a site each calendar month. See MPCA fact sheets #w-hw1-02, Determine generator size, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-02.pdf>; and #w-hw1-06, Treat or dispose of hazardous waste, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-06.pdf>.

In addition, many schools, and even many school districts, are eligible to use a VSQG Collection Program, often at lower cost than commercial vendors. See MPCA fact sheet #w-hw2-51, Very Small Quantity Generator collection programs, at <https://www.pca.state.mn.us/sites/default/files/w-hw2-51.pdf>. Public schools may also utilize the state hazardous waste disposal vendor contract instead of independently hiring a disposal vendor. Contact the MPCA for more information. See [More information](#) on page 7.

## Aerosol cans and compressed gas cylinders

Schools may manage waste aerosol cans and compressed gas cylinders as universal wastes in Minnesota. See MPCA fact sheet #w-hw4-00, Waste aerosols and compressed gas cylinders, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-00.pdf>.

## Architectural paint

Architectural paint includes any paint or coatings intended for your buildings, interior or exterior. It does not include aerosol paints, art products, vehicle coatings, or thinners or solvents. Architectural paint may be water-based, known as 'latex', or solvent-based, known as 'oil'. Though only solvent-based paint is considered hazardous waste in Minnesota, VSQGs may dispose of both water-based and solvent-based architectural paint for free at a Licensed Paint Collection Site (LPCS) in Minnesota. See MPCA fact sheet #w-hw4-37a, Architectural paint, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-37a.pdf>.

## Art education wastes

Art education may involve many materials that are hazardous wastes when disposed, including paints and ceramic glazes, thinners and solvents, and photography chemicals. In addition to used and discarded materials, unusable or damaged materials in supply storage may be regulated wastes. To minimize risks from unusable materials, the MPCA recommends that schools perform an annual complete inspection of art education storage areas, either prior to the beginning of or after the close of the academic year.

Ingredients that may render art paints and glazes hazardous include heavy metal pigments, such as barium, cadmium, chromium, lead, and selenium, and solvents, such as those used in and to thin oil paints. Waste art paints and glazes must be assumed to be hazardous unless evaluated as non-hazardous. For information on evaluation, see MPCA fact sheet #w-hw1-01, Evaluate waste, at <https://www.pca.state.mn.us/sites/default/files/w-hw1-01.pdf>.

Art education wastes that are discharged to the sewer must first be notified to the publicly owned treatment works (POTW), more commonly known as a sewage treatment plant that services the school. It is then the decision of the POTW whether to allow, condition or limit, or prohibit the discharge. Accumulate hazardous art education wastes as discussed in MPCA fact sheet #w-hw1-05, Accumulate hazardous waste, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-05.pdf>.

Manage photography-related wastes, such as fixer, developer, and negative wastes, as discussed in MPCA fact sheet #w-hw4-46, Photographic and X-ray waste, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-46.pdf>

## Asbestos

Asbestos is commonly found in legacy school buildings as an insulator, fire protectant, and electrical sheathing, as well as in floor tiles, siding, and some mastics. Schools remain responsible for ensuring asbestos surveys, appropriate remediation, and proper disposal from their buildings are performed, even if the actual work is carried out by a contractor. Notice to the MPCA must be submitted at least ten days in advance of any demolition or renovation work using MPCA form #w-sw4-21, Demolition/Renovation notification, at: <https://www.pca.state.mn.us/sites/default/files/w-sw4-21.pdf>

For more information on asbestos identification and abatement, see the MPCA's Asbestos in demolition or renovations webpage at: <https://www.pca.state.mn.us/waste/asbestos-demolition-or-renovations>.

## Automotive shop wastes

School automotive shops generate identical wastes and are subject to the same requirements as vehicle repair businesses. Vehicle components may be hazardous waste when removed and discarded, and part and tool cleaning may generate hazardous wastes. You may find guidance for these wastes in MPCA fact sheets:

- #w-hw4-63 Vehicle dismantling and salvage <https://www.pca.state.mn.us/sites/default/files/w-hw4-63.pdf>
- #w-hw4-43 Solvent-based parts washers <https://www.pca.state.mn.us/sites/default/files/w-hw4-43.pdf>
- #w-hw4-44 Aqueous-based parts washers <https://www.pca.state.mn.us/sites/default/files/w-hw4-44.pdf>
- #w-hw4-39a Sandblasting <https://www.pca.state.mn.us/sites/default/files/w-hw4-39a.pdf>

## Batteries

Schools may manage waste batteries that would be hazardous waste in Minnesota, including lead-acid, nickel-cadmium (NiCad), silver-containing, and many lithium batteries, as universal wastes. See MPCA fact sheet #w-hw4-62, Universal wastes, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-62.pdf>. Do not count universal wastes towards a site's hazardous waste generator size. Some Metro Counties may require reporting.

The MPCA encourages schools to recycle non-hazardous batteries, including alkaline and nickel-metal hydride (NiMH) batteries, when possible as an alternative to solid waste disposal.

Caution: Batteries may still present an arc and fire risk even if non-hazardous. The MPCA recommends that batteries always be stored to ensure terminals may not touch or be short-circuited. In addition, U.S. Department of Transportation (DOT) regulations may require terminal isolation when batteries are shipped off site even if the batteries are not hazardous wastes. Contact the Minnesota Department of Transportation (Mn/DOT) for questions regarding battery transport. See [More information](#) on page 7.

## Electronics

Electronics, or *E-wastes*, include any equipment with circuit boards that you can no longer use, including laptops, tablets, projectors, peripherals, audio & video equipment, light-emitting diode (LED) lighting equipment, and robotics materials. If you ensure that they are recycled, do not report E-wastes to your Metro County or the MPCA or count them towards your site's hazardous waste generator size. Do not dispose of E-wastes into solid waste. For more information on E-wastes, see MPCA fact sheet #w-hw4-15, Managing electronic wastes, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-15.pdf>.

## Epinephrine injectors

Epinephrine injectors, commonly known by the brand name Epi-Pen™, include both a discarded pharmaceutical and a sharp. The type of pharmaceutical epinephrine in these devices is not a hazardous waste in Minnesota. While unused sharps are also not regulated in Minnesota, schools may voluntarily manage discarded epinephrine injectors by placing them into their sharps waste containers, as long as they have contacted their infectious waste disposal vendor or receiving hospital and ensured the vendor or hospital will accept this waste.

## Fluorescent and high-intensity discharge (HID) lamps

Schools may manage waste lamps that would be hazardous waste in Minnesota, including fluorescent and high-intensity discharge (HID) lamps, such as sodium vapor, mercury vapor, and halide lights, as universal wastes. See MPCA fact sheet #w-hw4-62, Universal wastes, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-62.pdf>. Do not count universal wastes towards a site's hazardous waste generator size. Some Metro Counties may require reporting.

Note: Some fluorescent lamps are designed to pass the hazardous waste test for mercury, and are commonly labeled as 'low mercury' or by having green-colored metal end caps, known as 'green tips'. These lamps still contain mercury, and in Minnesota must still be recycled. Do not dispose any fluorescent lamps into solid waste.

## Laboratory chemicals

Many laboratory chemicals are hazardous wastes when disposed, including acids and bases, oxidizers, solvents, and any water-reactive substances. In addition to used and discarded materials, unusable or damaged materials in supply storage may be regulated wastes. To minimize risks from unusable materials, the MPCA recommends that schools perform an annual complete inspection of laboratory and science storage areas, either prior to the beginning of or after the close of the academic year.

Waste laboratory chemicals must be assumed to be hazardous unless evaluated as non-hazardous. For information on evaluation, see MPCA fact sheet #w-hw1-01, Evaluate waste, at <https://www.pca.state.mn.us/sites/default/files/w-hw1-01.pdf>.

Laboratory chemicals that are discharged to the sewer must first be notified to the POTW that services the school. It is then the decision of the POTW whether to allow, condition or limit, or prohibit the discharge. Schools must comply with the direction of the POTW, regardless of manufacturer or distributor advice, or statements contained in safety data sheets (SDS) or other documents.

Accumulate hazardous laboratory chemical waste as discussed in MPCA fact sheet #w-hw1-05, Accumulate hazardous waste, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-05.pdf>.

## Mercury

Minnesota schools may not use or possess elemental mercury or mercury in education equipment, including thermometers, barometers, and manometers. The MPCA recommends that schools inspect all science education storage areas to ensure all mercury and mercury devices have been removed and properly disposed.

Accumulate elemental mercury as a hazardous waste as discussed in MPCA fact sheet #w-hw1-05, Accumulate hazardous waste, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-05.pdf>.

Mercury-containing devices may be managed as universal wastes. See MPCA fact sheet #w-hw4-62, Universal wastes, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-62.pdf>.

While schools may continue to use mercury-containing equipment in building components, such as thermostats, aquastats, pressuretrols, and vaporstats, the MPCA recommends replacing this equipment when possible.

## PCB ballasts

Legacy fluorescent and HID lighting in many older school buildings may include ballasts containing polychlorinated biphenyls (PCBs). PCB ballasts in Minnesota must be managed as hazardous wastes when removed after failure or upgrades. See MPCA fact sheet #w-hw4-48f, Managing PCBs in ballasts and small capacitors, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-48f.pdf>.

When feasible, the MPCA recommends school upgrade lighting systems to either replace ballasts potentially containing PCBs with modern non-PCB ballasts or more energy-efficient light emitting diode (LED)-based lamps, to reduce potential exposure to students and staff from PCBs that can be released from ballasts if they overheat. Any overheated or smoking ballast suspected of containing PCBs should be immediately removed from service, staff and students evacuated, and the Minnesota Duty Officer notified. The MPCA can provide cleanup guidance.

## PCB caulking

Some older school buildings in Minnesota may have been constructed using caulking that contains PCBs. PCB caulking in Minnesota must be managed as hazardous waste if removed during an abatement project. Caulking attached to demolition debris may be disposed as demolition waste or solid waste in Minnesota. PCB caulking in good condition may remain in place, however if exposed on building surfaces, may create a risk to students and staff of airborne or skin-contact contamination. See MPCA fact sheet #w-hw4-48k, Managing sealants and coatings containing PCBs, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-48k.pdf>.

## Pesticides

Schools may manage waste pesticides, such as herbicides, insecticides, rodenticides, and disinfectants, as universal wastes, if they dispose of them through the Minnesota Department of Agriculture's Waste Pesticide Collection Program. Schools may dispose of up to 300 pounds of pesticides annually through this free program. See MPCA fact sheet #w-hw4-62, Universal wastes, at:

<https://www.pca.state.mn.us/sites/default/files/w-hw4-62.pdf>.

## Pharmaceuticals

Schools may come into possession of student pharmaceuticals when they are abandoned at the end of the academic year or when they are confiscated from students. The MPCA recommends that schools first attempt to return pharmaceuticals to students' legal guardians when possible.

Student pharmaceuticals are divided into three categories:

- Non-prescription, also known as 'over-the-counter' (OTC), medications, such as aspirin and ibuprofen
- Prescription, also known as 'legend', medications, such as asthma inhalers and insulin
- Controlled substances, sometimes incorrectly overgeneralized as 'narcotics', such as many attention-deficit disorder (ADD/ADHD) and anti-anxiety medications

Schools are strongly discouraged from sewerage any pharmaceuticals for disposal. Sewered pharmaceuticals are not actually treated, but are simply diluted and discharged unchanged into Minnesota lakes and rivers.

School staff may transport both non-prescription and prescription pharmaceuticals to a Household Pharmaceutical Collection Site (HPCS), commonly known as a 'Take It To the Box' program, or a 'dropbox', at a participating pharmacy or law enforcement agency for disposal. You may search for HPCSs near your location using the tool on the MPCA's Managing unwanted medications webpage at:

<https://www.pca.state.mn.us/living-green/managing-unwanted-medications>.

Do not report pharmaceutical or vaping-related wastes to the MPCA or Metro County or on your site's annual hazardous waste license application, and do not count them towards the site's hazardous waste generator size.

Only law enforcement agencies may transport controlled substances from schools for disposal. The MPCA recommends that schools work through their school resource officers (SROs), if available, or contact local law enforcement agencies to request pick up and disposal. Non-prescription and prescription pharmaceuticals may also be taken by law enforcement agencies. While law enforcement agencies are not required to provide this service, some will to reduce availability of unwanted drugs in the community. Many regions of the state also are served by multi-agency drug task forces, which may be willing to assist schools if local law enforcement agencies decline. Do not report controlled substance wastes to the MPCA or Metro County and do not count them towards the site's hazardous waste generator size.

Schools may also choose to use an on-site drug destruction product. Schools must determine whether any such product they use meets any applicable U.S. Drug Enforcement Administration (DEA) and Minnesota Board of Pharmacy (Board) requirements for controlled substance destruction; the MPCA cannot make this determination. See the On-site drug destruction products entry in MPCA fact sheet #w-hw3-35, Regulatory consensus on health care issues, at: <https://www.pca.state.mn.us/sites/default/files/w-hw3-35.pdf>.

## Preserved specimens

Though preserved biological specimens are not themselves hazardous wastes or infectious wastes and may be disposed into the normal solid waste as long as they are not releasing any free liquid, the MPCA advises using caution in handling these wastes, as they can still expose staff and students to toxic preservative. Free liquid preservatives must be assumed to be hazardous when discarded unless evaluated as non-hazardous. For information on evaluation, see MPCA fact sheet #w-hw1-01, Evaluate waste, at

<https://www.pca.state.mn.us/sites/default/files/w-hw1-01.pdf>.

## Sharps and infectious waste

Infectious waste generated by schools includes contaminated sharps and wastes that may release blood. For identification and management requirements, and a link to a list of approved disposal vendors, see MPCA fact sheet #w-sw4-30, Infectious waste, at: <https://www.pca.state.mn.us/sites/default/files/w-sw4-30.pdf>.

You may transport infectious wastes for consolidation at a district site or to a disposal facility, or you may contract with a disposal vendor to properly manage them. Do not dispose of infectious waste into solid waste.

Public schools in Minnesota may also dispose of infectious waste at a licensed hospital if they package the waste to the hospital's standards. Hospitals must accept this waste from public schools, but may charge a reasonable fee for the service. Hospitals may voluntarily also accept infectious waste from private schools.

**Note:** The MPCA has observed that many hospitals in Minnesota may not be aware of this provision. The MPCA recommends that schools wishing to dispose of their infectious waste at a licensed hospital contact the hospital well before transport. The MPCA can assist to educate hospitals when necessary.

## Used oil and related wastes

Schools commonly generated used oil from equipment maintenance, including heating & ventilation equipment and grounds equipment. Identify and manage used oil as explained in MPCA fact sheet #w-hw4-30, Used oil and related wastes, at: <https://www.pca.state.mn.us/sites/default/files/w-hw4-30.pdf>.

## Vaping devices and liquids

Vaping devices, also known as E-cigarettes, include three main components: vaping liquid, sometimes known as eJuice, in a tank, cartridge, or pod; a heater to vaporize the liquid; and a battery to power the heater. Vaping devices present fire risk from inadvertent activation of the heaters or short-circuiting of the batteries, and health risk from the ingredients contained in the vaping liquid, often concentrated nicotine or controlled substances.

### Accumulation

Fire risk from accumulated vaping devices may be minimized through safe packing practices. Vaping device heaters may either be button-activated or draw-activated. The MPCA recommends accumulating button-activated vaping devices using a separated 'tackle box'-type approach to prevent compaction from putting pressure on buttons. Schools may choose to also use commercially available fire-suppression containers or add fire-suppression material to their container. The MPCA recommends packing draw-activated vaping devices in individual plastic bags to reduce risks of battery shorting and contact with any leaked vaping liquid. Schools are advised to segregate visibly damaged devices and accumulate them in a fire-resistant container for as short a time on-site as possible prior to disposal. The MPCA recommends using containers that are manufactured specifically to hold damaged, defective, or recalled (DDR) batteries. See [Batteries](#) on page 3.

Vaping liquid bottles, vials, tanks, cartridges, and pods may be accumulated with non-prescription and prescription pharmaceuticals for disposal. Vaping liquid and items known to contain controlled substances must be segregated and may be managed with controlled substance pharmaceuticals for disposal.

### Disposal

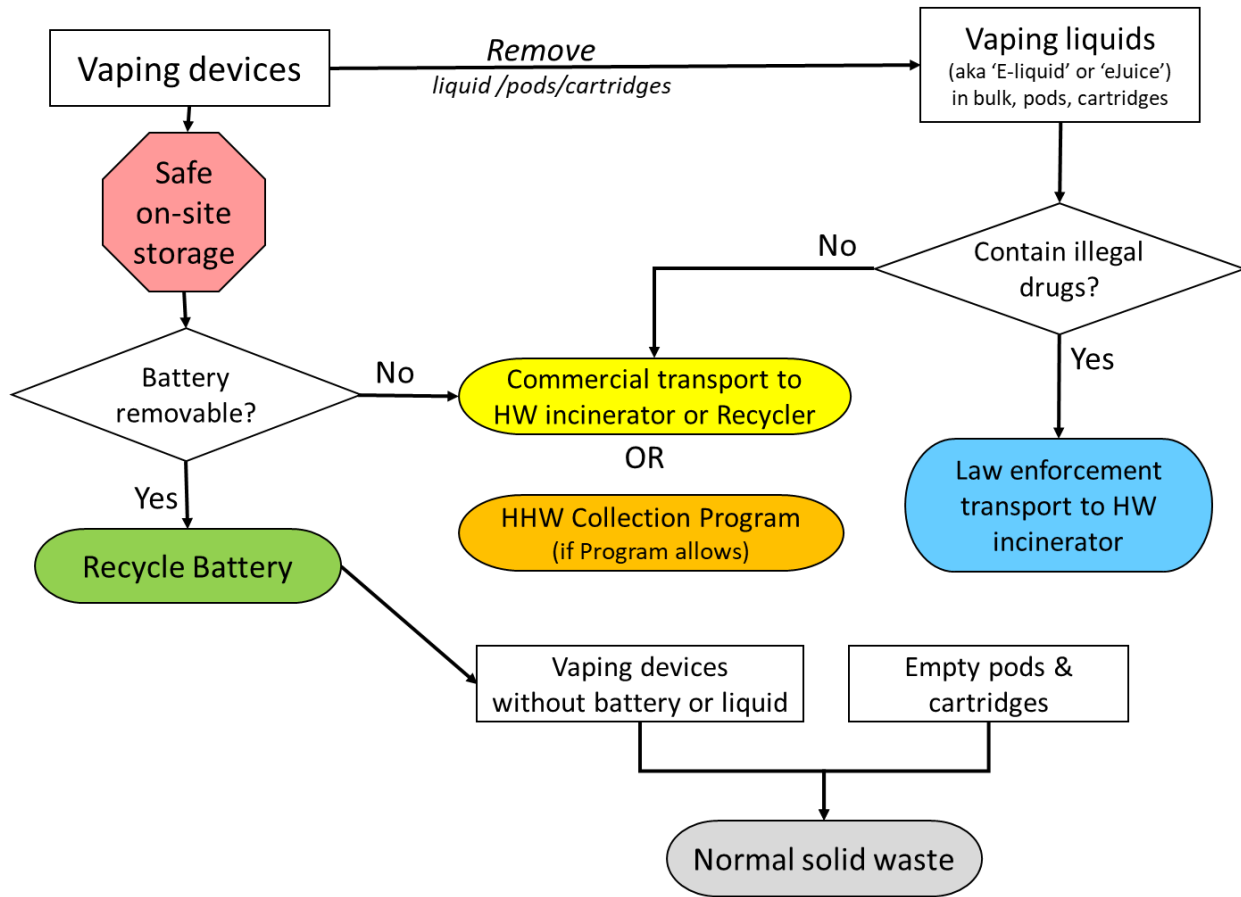
Schools may dispose of vaping devices and liquids through the options listed in MPCA fact sheet #w-hw1-06, Treat or dispose of hazardous waste, at: <https://www.pca.state.mn.us/sites/default/files/w-hw1-06.pdf>.

In addition, schools may also dispose of these wastes through a Household Hazardous Waste (HHW) Collection Program that has agreed to accept the waste. You may search for HHW Collection Programs near your location using the MPCA's Find your household hazardous waste collection site tool at:

<https://www.pca.state.mn.us/waste/find-your-household-hazardous-waste-collection-site>.

Though the batteries commonly found in vaping devices are below the threshold for hazardous waste regulation, due to the fire risk, the MPCA recommends managing vaping devices from which batteries cannot be easily removed as hazardous wastes. See the recommended management [flowchart](#) on page 7.

## Recommended vaping-related wastes management in schools



## More information

For more information, contact your Metro County or the MPCA. The Small Business Environmental Assistance Program can offer free, confidential compliance assistance. For information and assistance with waste reduction, contact the Minnesota Technical Assistance Program.

### Metro County Hazardous Waste Offices

Anoka .....	763-324-4260
.....	<a href="https://www.anokacounty.us/">https://www.anokacounty.us/</a>
Carver .....	952-361-1800
.....	<a href="http://www.co.carver.mn.us/">http://www.co.carver.mn.us/</a>
Dakota .....	952-891-7557
.....	<a href="https://www.co.dakota.mn.us/">https://www.co.dakota.mn.us/</a>
Hennepin .....	612-348-3777
.....	<a href="http://www.hennepin.us/">http://www.hennepin.us/</a>
Ramsey .....	651-266-1199
.....	<a href="https://www.ramseycounty.us/">https://www.ramseycounty.us/</a>
Scott .....	952-496-8177
.....	<a href="http://www.scottcountymn.gov/">http://www.scottcountymn.gov/</a>
Washington .....	651-430-6655
.....	<a href="https://www.co.washington.mn.us/">https://www.co.washington.mn.us/</a>

### Minnesota Department of Transportation

Hazardous materials .....	651-215-6330
.....	<a href="http://www.dot.state.mn.us/">http://www.dot.state.mn.us/</a>

### Minnesota Pollution Control Agency

Toll free (all offices) .....	1-800-657-3864
All offices .....	651-296-6300
.....	<a href="https://www.pca.state.mn.us/">https://www.pca.state.mn.us/</a>

### Minnesota Duty Officer

Toll free .....	1-800-422-0798
Metro .....	651-649-5451

### Small Business Environmental Assistance Program

Toll free .....	1-800-657-3938
Metro .....	651-282-6143
.....	<a href="https://www.pca.state.mn.us/sbeap/">https://www.pca.state.mn.us/sbeap/</a>

### Minnesota Technical Assistance Program

Toll free .....	1-800-247-0015
Metro .....	612-624-1300
.....	<a href="http://www.mntap.umn.edu">http://www.mntap.umn.edu</a>