



# Business Management Advisory

*For Precision Custom Manufacturers*

TC04

File: TECHNICAL

## HAZARDOUS WASTE MANAGEMENT

### SUMMARY

The subject of hazardous substances is broad and complicated. This situation is compounded by an intricate network of laws enforced by various agencies of federal, state and local government. This BMA is intended to supplement materials from the federal EPA, your state's environmental agency, and other more general sources.

One of the purposes of this BMA is to help you understand your company's rights and responsibilities under the various laws that apply.

Another goal is to help you comply with those laws in a way that is effective and efficient, from both an environmental and an economic standpoint. Compliance with the law can save you money in penalties. Compliance can also help you avoid lawsuits — and perhaps lower your insurance premiums.

The ultimate goals of any business are to sustain itself, to grow, and to prosper. But growth and prosperity must be achieved in a responsible manner. The air we breathe and the water we drink are everyone's responsibility. We all must do our part to protect our planet for the generations to come.

It is our hope that this BMA will save you time and serve as a handy reference as you develop an efficient and responsible hazardous waste management plan that will save you money, avoid aggravation, and contribute to your company's success.

### IS YOUR PLANT AFFECTED BY HAZARDOUS WASTE LAWS?

Under existing regulations, most tooling and machining companies generate at least some waste that can be considered hazardous. In most cases, the waste generated from tooling and machining companies is in small quantities and easily identified. This helps make the situation manageable.

Knowing your rights and obligations under the law, however, can be more complicated. There is a multi-layered web of hazardous substance laws covering different situations and different substances. These laws and regulations are issued and enforced by a vast array of agencies of the federal, state, and sometimes even local government. At the federal level alone, tooling and machining companies are likely to be subject to hazardous substance regulations from three different agencies: OSHA, EPA, and the Department of Transportation.

This BMA addresses the requirements for handling and disposing of hazardous wastes under the EPA rules, particularly those rules which affect most job shops or tooling and machining companies. A separate BMA covers tooling and machining companies' requirements under OSHA for employee hazard communication programs (See TC02 and TC38).

The principal body of law that will affect most tooling and machining companies is the "Small Quantity Generator" provision of the Resource Conservation and Recovery Act (RCRA), as enforced by the federal EPA. Other federal laws and state or local laws may also affect your plant. The principal focus of this BMA is the Small Quantity Generator (SQG) provisions of RCRA.

Information on state and local laws may be obtained from the sources listed at the end of this BMA. If there is an NTMA Chapter in your area, information on local or state environmental laws may be available from the chapter office.

### WHAT'S HAZARDOUS?

EPA says your business is "likely" to produce hazardous waste if you use:

- Oil or other petroleum products;
- Solvents, thinners, cleaning fluids, dyes, paints, etc.;
- Plating solutions, cyanide solutions, or any solutions containing heavy metals;
- Flammable materials;
- Acids and caustics that dissolve metals, wood, paper or clothing;

- Materials that burn or itch upon skin contact;
- Materials that bubble or fume upon contact with water;
- Products received with a document or label indicating that the product is hazardous.

If you are uncertain about whether or not a particular substance is considered hazardous, you can contact your state's agency or call the EPA hotline at (800) 424-9346.

EPA points out that most used oil is currently exempt from the federal regulations, but that some states have their own overriding rules. EPA itself is presently attempting to develop additional new regulations for used oil. Waste materials destined for reclamation or recycling are also generally exempt from these requirements.

#### Four Major Categories of Hazardous Waste

Practically all hazardous waste falls into one of four major categories:

- **Ignitable Waste** — Is it flammable? Will it burn easily under ordinary conditions? Solvents, fuels, paint and some metal chips fall into this category.
- **Reactive Waste** — Reactive waste is that which reacts by exploding, releasing harmful gas, or rapidly forms another hazardous substance when coming in contact with air, water or other common materials. Reactive waste may be produced in heat-treating or electroplating operations.
- **Corrosive Waste** — Strong acids and alkaline solutions are corrosives. The federal laws set limits for acidity at a pH of 2.0 and for alkaline solutions at a pH level of 12.5. Waste beyond these pH levels is hazardous. Plating, etching, and other metal finishing operations are the most common source of corrosive waste in metalworking. Any material that will injure the eyes on contact can be considered corrosive.
- **Toxic Waste** — Toxic waste is poisonous. Such waste includes carcinogens and others that may not produce symptoms immediately. Toxic waste includes pesticides and poisons harmful to animals other than human beings. Substances poisonous to touch or inhalation are also included in this category.

#### Listed Substances

The EPA lists several hundred specific substances as hazardous, but anything that falls into the four categories listed above comes under the federal rules.

#### Examples of Hazardous Waste in Some Tooling & Machining Operations

Most classes of hazardous waste material found in tooling and machining companies will include:

- Solvents and degreasers;
- Paint, paint thinners, paint removers;
- Acid or alkaline waste;

- Waste from plating, anodizing, or other chemical processes;
- Sludges bearing heavy metals like nickel or cadmium;
- Chips or swarf that are ignitable, toxic, or otherwise dangerous.

Presently, used oil is not considered hazardous unless contaminated with some hazardous material. Waste that is to be recycled or contained in closed-loop recovery systems is generally exempt. Ordinary waste such as metal chips is not considered hazardous unless it meets one of the ignitable, reactive, corrosive or toxic categories.

A detailed list of common hazardous waste with EPA identification numbers is included in the EPA's Metal Manufacturing brochure.

#### MEASURING YOUR HAZARDOUS WASTE

The various environmental protection laws generally make no distinction about the size of your company. These rules are concerned only with the type and amount of waste your plant produces. Since there are different requirements for different hazardous waste volumes, it is important that you have a way to, first, identify which of your wastes are hazardous and then to measure your output of these wastes from month to month. Measuring will help you plan a strategy to keep such waste to a minimum. Keeping the quantity low will help minimize the time and effort needed to comply. If you can substitute a product in your plant that will eliminate a particular type of hazardous waste, you should try to do so. Keeping the number of different types of hazardous waste to a minimum will also simplify things.

Waste that is not hazardous should be kept separate from hazardous waste. Mixing ten pounds of hazardous material with 90 pounds of non-hazardous waste makes the entire hundred pounds hazardous under the law.

#### What to measure:

All quantities of hazardous waste (the four major types, including those specifically listed) that are:

- Accumulated on-site.
- Packaged and transported off-site.
- Treated or disposed of on-site.
- Generated as sludges or still bottoms and removed from product tanks.

#### What not to measure:

- Spent lead-acid batteries that are sent elsewhere for recycling.
- Used oil that has not been contaminated or mixed with hazardous material.
- Residue in tanks or containers that can't be reached by pouring or pumping.
- Waste that is continuously reclaimed in closed systems without being separately stored before reclaiming. (Residue taken out of the system does have to be counted, however.)

- Waste managed in a regulated neutralization unit, a totally enclosed treatment unit, or a wastewater treatment unit.
- Waste that is discharged directly to a publicly-owned treatment works without being stored or accumulated first. Such discharges must be in compliance with the Clean Water Act.
- Waste that has already been counted once during the calendar month, treated or reclaimed, and used again.

## COMPLIANCE LEVELS

Under federal RCRA regulations, there are three levels of compliance requirements, based upon the volume of waste generated:

1. If your company generates over 1000 kg (about 2200 pounds) of hazardous waste per month, in any month, you are subject to all of the requirements of RCRA. Few tooling and machining job shops will fall into this category.
2. If you never generate more than 1000 kg of hazardous waste in any month, your plant is a Small Quantity Generator (SQG). Companies that generate more than 100 kg (220 lbs) but less than 1000 kg/month are subject to fewer requirements than those in the “over 1000 kg” category, but are still required to:
  - Obtain an EPA identification number.
  - Treat or dispose of waste on-site according to applicable laws OR ship it off-site for proper and legal treatment or disposal. Most affected tooling and machining companies are likely to ship hazardous waste off-site. Paperwork and recordkeeping requirements are imposed if waste is shipped off-site.
  - You must accumulate no more than 6000 kg in a 180-day period before treatment or shipment. If the waste is to be transported more than 200 miles for treatment or disposal, you are allowed a 270-day accumulation period.
3. If your plant generates no more than 100 kg per month of hazardous waste, it is a conditionally-exempt small quantity generator. Companies in this category are required to:
  - Identify all hazardous wastes generated;
  - Send hazardous wastes to an approved facility for treatment and/or disposal; and,
  - Never accumulate more than 1000 kg of hazardous waste on-site.

## CHANGING CATEGORIES

In job shops, the volume of hazardous waste generated may vary considerably from one month to another. It is possible to be subject to different compliance levels at different times, depending on volume.

## SEPARATE LIMITS ARE SET FOR ACUTELY HAZARDOUS WASTE.

Most waste in this category are pesticides and other very highly toxic material. Such material is not ordinarily processed by tooling and machining companies. If in doubt, a call to the RCRA Hotline at 800-424-9346 or the EPA Small Business Hotline, 800-368-5888 or one of the other information sources listed at the end of this BMA can clarify the matter. A convenient rule of thumb is: **“IF YOU THINK IT MIGHT BE HAZARDOUS, IT PROBABLY IS.”**

Checking with one of the hotlines can confirm your suspicions or save you the cost and time of unnecessary special handling of substances that may not actually be hazardous.

## NOTIFICATION

If your plant generates more than 100 kg of hazardous waste in any calendar month, you must notify your state environmental agency or your regional EPA office and you must obtain an EPA identification number.

The federal EPA issues form 8700-12 for notification. Your state may use its own form. The proper form is available from your state agency. Completed forms should be sent to your state hazardous waste agency or to your regional EPA office. Your state agency can provide further details on notification procedures in your area.

An identification number will be assigned for your plant. If your company has more than one plant, a separate notification and a separate identification number is required for each plant site.

## SHIPPING WASTE OFF-SITE

Most tooling and machining companies are likely to ship waste away from their plant sites for treatment and/or disposal.

If your plant generates more than 100 kg of hazardous waste in a calendar month, you must:

- Use haulers and treatment facilities appropriate for the waste being handled.
- Complete a multi-copy manifest form for each shipment.
- Accumulate and store no more than 6000 kg of hazardous waste at your plant at any time; store waste at your plant for no longer than 180 days (270 days if waste is to be shipped more than 200 miles for treatment or disposal).

## SELECTING & USING WASTE HAULERS AND TREATMENT FACILITIES

A competent hauler that specializes in hazardous waste can carry much of the compliance burden for small quantity generators. Some haulers handle only large accounts and do not offer small quantity pickup services. A source to identify

haulers that serve small quantity generators is listed at the end of this BMA.

Qualified haulers and treatment sites will have an EPA identification number. Your state environmental authority or your regional EPA office may also be able to help you find suitable waste contractors. Your local NTMA chapter may also assemble information on contractors in your area.

It is important to remember that even though a specialty hauler can offer much expertise and assistance, the law still holds you responsible for the proper shipment and handling of your plant's waste.

Haulers will usually charge a fee to evaluate your company's waste "stream." Since different types of waste must be handled and treated differently, different fees may apply to handling various types of waste. You may also find that you need to prevent different kinds of waste from being mixed together. In any case, you should avoid mixing non-hazardous waste with hazardous waste.

### **DO-IT-YOURSELF WASTE HAULING?**

The federal rules permit you to haul waste to a treatment facility yourself. However, you must obtain a separate EPA identification number as a hauler, and comply with U.S. Department of Transportation regulations for packaging, labeling, marking and placing placards on the shipments. When hauling your own waste, you may be subject to additional responsibilities and liabilities under the Federal Motor Carrier Act. You should check with your state environmental agency to see if any state or local laws affect hauling waste yourself.

*NOTE: This may not be an economical advantage.*

### **THE MANIFEST**

The federal EPA uses a standard manifest form, EPA Form 8700-22 for hazardous waste shipments. Some states have issued their own forms which supersede the EPA form, however. Your state agency or your hauler can tell you which form to use. In either case, the state or federal forms should be available from your state agency. Your waste hauler may also be able to provide these forms.

If the state where your waste is shipped has its own manifest form, that is the one you should use. Again, your hauler or treatment facility can offer guidance on this.

The waste generator, the hauler, and the treatment facility must each sign and keep a copy of the manifest. The treatment facility will return a copy to you. The federal law requires you to keep this copy on file for three years. State requirements may vary on this point.

If you do not receive a copy back from the designated facility within 30 days, you should check with the facility. Remember that the law makes you responsible for your hauler and your treatment site.

In some cases, a contract recycling agreement can substitute for the manifesting procedure.

Manifest forms will require a Department of Transportation description code, the proper shipping name, hazard

class, and identification number. You can obtain this information most easily from your substance suppliers, your hauler, or your state or federal EPA office. The various hotlines listed at the end of this BMA can also provide assistance in this respect.

The Department of Transportation regulations are too cumbersome for most small companies to be able to use effectively as a reference.

### **STORING HAZARDOUS WASTE**

If you generate no more than 100 kg of hazardous waste in any month, you must never accumulate more than 1000 kg of hazardous waste at your plant before shipping it away for disposal.

If you fall into the 100-1000 kg/month category, you must not accumulate more than 6000 kg in 180 days. If waste is to be shipped more than 200 miles for treatment or disposal, you are allowed 270 days, but still must not exceed 6000 kg.

If your plant generates over 1000 kg in any month, your storage limits are 6000 kg over 90 days. Separate limits are set for acutely hazardous waste.

Small quantity generators need a special EPA permit to store hazardous waste for more than six months or to perform certain kinds of on-site waste treatment or disposal. Obtaining these permits can be a long, costly process and is not recommended for most tooling and machining companies.

### **CONTAINER INSPECTION**

Federal regulations require that containers for storing hazardous waste be inspected for leaks and corrosion at least once per week. Since leaks can often be easily detected by simple visual inspection, a daily visual check is recommended for most small companies.

### **EMERGENCY PLANS**

Federal regulations require that someone in the company be designated as the Emergency Coordinator. In most small companies, the Emergency Coordinator (EC) is likely to be the owner or plant superintendent.

The Emergency Coordinator must be responsible for notification to the Emergency Response Center (telephone 1-800-424-8802) in the event of a release of hazardous waste into the air, ground or water. Failure to notify of such releases (as a result of fire, explosion, flood, etc.) can result in a fine up to \$10,000 AND a year in jail, plus being held responsible for the cost of repairing environmental damage.

Having a detailed emergency plan is not a requirement for SQG's of the federal regulations but is a sound idea for the protection of your workers and your capital equipment. An emergency plan should consider "what if" for a variety of situations: fire and explosion; hurricanes and tornadoes; civil disturbances, sabotage; floods; earthquake; weather extremes.

Your local fire department should be made aware beforehand of any special problems that may occur as a result of a catastrophe in your plant.

## COMMUNITY RIGHT-TO-KNOW

In addition to the federal level reporting requirements, additional requirements exist at the community level. Local requirements will vary, but are generally in accordance with the federal requirements described below:

### Background

The Emergency Planning and Community Right-To-Know Act of 1986 became law on October 17, 1986, as Title III of the Superfund Amendments and Reauthorization Act (SARA), Public Law 99-499. It establishes new requirements for facilities at which certain substances are present in specified amounts called threshold planning quantities. These established quantities take into account the amount of the substance that, if released at a facility, would likely pose a hazardous substance emergency. The specified substances and their associated threshold planning quantities (TPQ) are listed in the November 17, 1986 Federal Register. The provisions of the law address the following:

- Emergency Planning Notification
- Emergency Chemical Release Notification
- Chemical Storage and/or Release Reporting to Community Right-To-Know Organizations

### Emergency Planning

This act does not preempt state and local laws, but it does require states to establish a state emergency response commission which, in turn, must designate local emergency planning districts and committees. If a facility has on its premises a quantity of an extremely hazardous substance greater than the TPQ stipulated by EPA, the facility is subject to the emergency planning and notification provisions of the law. These provisions require the owner or operator to do the following:

- Notify the state emergency response commission that the facility is subject to the provisions of the law.
- Designate a representative of the company who will act as a facility emergency coordinator and participate in the local emergency planning process.
- Promptly inform the local emergency planning committee of any relevant changes occurring at the facility.
- Upon request from the local emergency planning committee, promptly provide the committee any information it needs to develop and implement a district emergency plan.

### Emergency Chemical Release Notification

This law also designates spill notification quantities for the various chemicals covered by the law; these are called reportable quantities (RQ). If a chemical spill occurs that involves a volume that exceeds the RQ, then certain notification steps must be immediately initiated by the company. If an unpermitted release of an extremely hazardous substance or a hazardous chemical exceeds the designated RQ

and results in exposure to persons outside the boundaries of the facility, the owner or operator of a facility must immediately report the release to the National Response Center (800-424-8802), the local emergency planning committee of any area likely to be affected by the release, and the state emergency planning commission of any state likely to be affected.

### Reporting Requirements

The owner or operator of any facility that is required to prepare or have available a material safety data sheet (MSDS) for any hazardous chemical covered under current OSHA regulations must submit either an MSDS for each chemical or a list of such chemicals to the following agencies:

- The local emergency planning committee;
- The state emergency response commission; and,
- The fire department with jurisdiction over the facility.

The facility owner or operator must also submit an emergency and hazardous chemical inventory form (designated tier I information) to these same three agencies. In addition, upon request of any of these agencies, the facility owner or operator must provide more detailed information (designated tier II information) concerning the individual hazardous chemicals used or stored at his facility. Owners and operators of facilities that meet certain criteria must complete and submit a uniform toxic chemical release form to the EPA and to a state official designated by the Governor. This provision applies to owners and operators of facilities that:

- Employ 10 or more persons full time; and,
- Are in Standard Industrial Classification Codes (SIC) 20 through 39 (NOTE: tooling and machining companies are among these classifications); and,
- In the calendar year for which a release form is required, manufactured, processed, or otherwise used certain toxic chemicals in amounts greater than designated quantities stipulated in the law.

### Penalties

Civil and criminal penalties are authorized for failure to comply with certain provisions of the act. These include civil penalties of up to \$25,000 per day for failure to participate in the planning process and failure to give initial emergency notification, and criminal penalties of up to \$25,000 or up to two years imprisonment, or both, for knowingly and willfully failing to provide emergency notice in the event a chemical release occurs.

## SPECIAL CONSIDERATIONS

### Metal Plating and Finishing

Certain specific metalworking and metal finishing operations require pretreatment of waste fluids before waste can be discharged to public wastewater treatment facilities.

Some exemptions exist for job shops in these operations, but the rules are extremely complex in this area and each situation must be evaluated individually. A more complete analysis of these regulations exists in the Guidance Manual for Electroplating and Metal Finishing Pretreatment Standards available from EPA.

Generally, your company is subject to the pretreatment requirements if you perform one or more of these processes:

- Electroplating
- Electroless Plating
- Anodizing
- Coatings (including chromating, phosphating, metal coloring, passivating, etc.)
- Chemical Etching and Milling
- Printed Circuit Board Manufacturing

If any of these six operations exist in your plant, you may be further subject to additional pretreatment requirements for wastes arising from an additional 40 different operations including many common machining operations. The manual referenced above can provide further guidance.

### Other Operations

Some operations performed by job shops are subject to specific categorical regulations which take precedence over the metal finishing regulations. Some of these categories and the appropriate sections of the Code of Federal Regulations (CFR) are listed below. The regulations themselves are available through your EPA regional office or your state agency.

<u>CATEGORY</u>	<u>REGULATION</u>
Metal Casting Foundries	40 CFR Part 464
Aluminum Forming	40 CFR Part 467
Copper Forming	40 CFR Part 468
Plastic Molding and Forming	40 CFR Part 463
Nonferrous Forming	40 CFR Part 471

### UNDERGROUND STORAGE TANKS

If you have underground storage tanks for petroleum products or other hazardous substances, you must report information on the age, size, location, type and use of such tanks. You are required to notify the agency in your state. EPA provides a standard notification form, but some states may require the use of alternate or additional documents. Your state agency can provide details on this.

#### You must notify if:

- You own an underground storage tank used to store or dispense.
- You owned such a tank that was taken out of service between January 1, 1974 and November 8, 1984. You must also notify your designated state agency.

Owners of new underground storage tanks must notify within 30 days of installation.

Tanks covered by the new rules are those used to hold "regulated substances," and whose volume (including piping) are 10% or more below ground.

Tanks not subject to the new ruling include:

- Farm and home tanks under 1,100 gallons storing motor fuel for non-commercial purposes;
- On-site heating-oil storage tanks;
- Septic tanks;
- Pipelines regulated by other authorities;
- Surface impoundments, pits, ponds, or lagoons;
- Storm water or wastewater collection systems;
- Flow-through process tanks;
- Liquid traps or associated gathering operations;
- Storage tanks in underground areas (such as basements) but above the floor surface;
- Tanks holding hazardous substances already regulated by Subtitle C of RCRA.

Under the law, EPA can impose penalties up to \$10,000 for each tank for which notification is not given, or for which false information is submitted.

If you are considering installing an underground storage tank, you should be aware that several minimum requirements exist. New tanks must:

- Prevent release of substances from corrosion or structural failure for the operational life of the tank; AND,
- Must be cathodically protected against corrosion, or constructed of noncorrosive material or of steel clad with noncorrosive material; or designed to prevent the release or threatened release of stored substances; AND,
- The material used in the construction or lining of the tank must be compatible with the substance being stored.

The requirements for corrosion protection in new installations can be waived if soil resistance is greater than 12,000 ohm-cm at the site.

Maximum penalties for violations of the rules for new installations are \$10,000 per tank per day.

The law also makes owners of underground storage tanks responsible to:

- Have methods to detect releases.
- Keep records of those methods.
- Take corrective action in response to releases.
- Report releases and corrective actions taken.
- Provide for taking tanks out of service.
- Provide evidence of "financial responsibility for taking corrective action and compensating third parties for injury or damages from sudden or non-sudden releases." EPA notes that states may finance such activities by imposing a fee on tank owners.

Additional regulations providing standards for new tanks and for leak detection, prevention, and corrective action are expected to be developed by February, 1987 for tanks

holding petroleum products and by August, 1987 for tanks holding other hazardous substances.

## **IMPACT ON YOUR BUSINESS DECISIONS**

The entire question of environmental responsibility has complicated many fundamental business considerations.

If you are buying a business or a piece of real estate, you should be aware that you may also be accepting liability for hazards created by the previous owners or users. EPA imposes doctrines of strict liability and of "joint and several" liability in enforcing the law.

Under strict liability, you are responsible for whatever you own, regardless of whether your actions or those of a previous owner or user created the hazard. EPA usually prefers to prosecute landowners first. Gordon Bloom, writing in *Technology Review*, cited a case in which "...a machine-tool firm defaulted on a bank loan because it had spent all its cash on cleaning up a contaminated plant site. The bank decided that it would be cheaper to loan the firm more money than to foreclose and become responsible for cleaning up the site."

Buying a company's assets may provide more protection than purchasing a company outright, especially if real estate is not involved. However, in product liability cases, courts have ruled that buying assets is the same as purchasing the company if the buyer essentially continues the seller's business.

Under the "joint and several" liability you can be held responsible for the entire cost of cleanup even if you were only one of many polluters responsible.

EPA and the courts have also held that responsibility for site contamination is retroactive indefinitely. Thus, older plant sites may be particularly vulnerable.

Selling a business or a property likewise does not relieve you of responsibility.

Under the RCRA and Superfund legislation, companies can be held liable for fines, cleanup costs, and costs of repairing environmental damages. Criminal charges can also be brought against individuals, and company officers have sometimes been held personally liable for cleanup costs.

Presently, insurance options do not provide entirely satisfactory solutions. General comprehensive liability policies usually cover sudden, catastrophic, accidental losses. Some policies may specifically exclude environmental hazard coverage. Hazardous waste claims have contributed to the increase in the cost of general liability coverage.

Other policies may be specifically written to cover environmental hazards. At this writing, however, such coverage is often not available at all, or prohibitively expensive, or offered only as a self-insurance option where coverage exists only to the extent of the paid-in premium.

All in all, the most prudent strategy appears to be to minimize the quantity of hazardous material used and generated by substitution or elimination where possible; and to keep good records as protection.

## **CHEMICAL WASTE TRANSPORT COMPANIES WITH SMALL QUANTITY PICKUP SERVICES**

The Chemical Waste Transportation Council of the National Solid Wastes Management Association (NSWMA) has compiled a list of chemical waste transport companies with small quantity pickup services. Most of these companies serve wide geographic areas and some are national chains. Your local environmental agency may be able to suggest others near you. For a complete directory you may contact NSWMA at 4301 Connecticut Avenue, NW, Suite 300, Washington, DC 20008, telephone 202-244-4700.

## **TREATMENT AND DISPOSAL FACILITIES OFFERING TRANSPORTATION AND SQG SERVICES**

Some waste treatment and disposal facilities also offer hauling and small quantity generator services. The Institute of Chemical Waste Management, (another NSWMA council), can provide information on such facilities. The list, compiled from the ICWM directory, is available from ICWM/NSWMA, 4301 Connecticut Avenue, NW, Suite 300, Washington, D.C. 20008, telephone 202-244-4700.

As a matter of convenience, your treatment/disposal facility should be in your own state, if possible. This will help avoid problems with varying rules and paperwork that may differ across state lines.

## **INFORMATION SOURCES**

### **Telephone Hotlines:**

### **NATIONAL RESPONSE CENTER:**

**Toll Free 800-424-8802**

**POST THIS NUMBER NEAR YOUR PHONE!** The law requires it. If a hazardous substance is released into the ground, air or water as the result of a fire, flood or other emergency, you must notify the National Response Center immediately. This notification requirement applies to all waste generators. Failure to notify could result in a \$10,000 fine, a year in jail, or both. This is the number to call after you've called the fire department. The Center is operated by the U.S. Coast Guard.

### **EPA SMALL BUSINESS OMBUDSMAN:**

**Toll Free 800-368-5888**

The Small Business Ombudsman's Office is charged with being small businesses' representative at EPA. The hotline is manned from 9:00 a.m. to 5:00 p.m. (Eastern Time) by knowledgeable staff that can get you an answer and help you cut through red tape. This office can also assist you if you are in a dispute with EPA regulations or enforcement.

### **RCRA/CERCLA HOTLINE:**

**Toll Free 800-424-9346**

This source provides information on regulations and requirements under the Resource Conservation and Recovery

Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), better known as "Superfund." These two laws are the principal body of U.S. environmental law.

**CHEMICAL REFERRAL CENTER OF THE CHEMICAL MANUFACTURERS ASSOCIATION:**

**Toll Free 800-262-8200 - 8:00 a.m. to 9:00 p.m. (Eastern Time) Monday through Friday.**

This privately-operated service provides answers to non-emergency queries about chemicals encountered at home or work.

**OTHER SPECIALIZED ASSISTANCE:**

**Asbestos Control:** 202-554-1404

**Pesticides:** 800-858-7378

**OTHER SOURCES OF ASSISTANCE**

Your Insurance Carrier, through its loss control section, can advise you on effective ways to handle and store dangerous substances.

Your local fire department has people trained in disaster control. Making your local firefighting unit aware of any special problems can make their job easier and protect your property better. It's a good idea to give your fire company a floor plan of your plant with special hazards noted.

**OTHER HAZARDOUS SUBSTANCE REGULATIONS**

Separate regulations from the U.S. Department of Labor, Occupational Safety & Health Administration (OSHA) require that employers have a hazard communication program to inform workers of hazardous substances that may be encountered in the workplace. For further information on hazardous substances in the workplace, see NTMA's Business Management Advisory on Complying with OSHA's Hazard Communication Rules.

**KEY POINTS**

A wide range of laws and regulations are best managed as a single problem area. Your compliance strategy should address all chemical hazards and combine all regulatory requirements into a single compliance system.

Have a written system for compliance. A sound written system is your best defense against violations, lawsuits, and other challenges.

Minimize your compliance problems by minimizing your chemical hazards. Substitute or eliminate hazardous substances wherever possible.

**This BMA was prepared by NTMA's Technical Department.**

# KEEP UP-TO-DATE WITH EPA AND OSHA REGULATIONS

## MANAGING CHEMICAL HAZARDS

*(VHS-Approximately 18 minutes)*

*Catalog #8425 • \$32.95*

This video tape is the first in a series that NTMA has prepared to address compliance with environmental regulations affecting tooling & machining job shops. It is imperative today that all businesses be aware of environmental legislation that has been passed at the federal, state and local levels. This tape presents an overview for company owners and managers of the various environmental and chemical hazard regulations of EPA and OSHA, and strategies that can be followed to ensure compliance.

To order your copy today call  
**NTMA's Publications Desk at 1-800-832-7753.**