

CRAFTS AND JEWELRY MAKING

WHY BE CONCERNED?

Home-based businesses often use a variety of processes and chemicals that may generate wastes that differ from domestic wastes generated by a residential home. Potential hazardous materials associated with crafts and jewelry making include paints, sealers, glues, solvents, acids, polishers, and certain metals. Home-based businesses that manufacture crafts and jewelry generate the same types of wastes that some commercial businesses do. These wastes may include spent hazardous materials, over-spray, hazardous air-pollutant emissions, and rags. These chemicals and associated wastes should be used, stored, and disposed of in a cautious manner to prevent environmental contamination and abide with the law. While it may seem that your contribution to pollution is minor, effects of chemicals, runoff, and wasted water from hundreds or thousands of homes in your region can really add up.

IDENTIFY ENVIRONMENTAL RISKS

Processes and potential wastes associated with this business/hobby that could harm the environment are listed below. Check the activities or conditions that apply to your business.

- Handling materials that can spill (such as solvents, paints, dyes).
- Storing paints, sealers, glues, solvents, silver polish, or other potentially hazardous materials.
- Managing wastes such as leftover paints, solvents, or dyes.
- Managing scrap wood and wood shavings.
- Managing metal-plating wastes.
- Potential indoor air quality issues such as poor ventilation.
- Have abandoned or unused well on site.

IDENTIFY METHODS OF WASTE DISPOSAL

Check the waste disposal methods that you use:

- Municipal sanitary sewer
- Septic system or lagoon
- Ground, storm sewer, or surface water
- Licensed hazardous waste disposal option
- Licensed sanitary landfill/transfer station
- Compost
- Recycle
- On-site landfill (prohibited in most cases)
- Incineration/on-site burning (see Solid Waste section)

If your home-based business discharges its non-domestic waste to a septic system, then your business is required to complete and submit an inventory form to KDHE. For inventory forms, call KDHE at 785-296-5560. Some wastes associated with a home business are considered "industrial waste" and may not be disposed of in a septic tank or domestic lagoon. Non-domestic waste from your home-based occupation should not be disposed of in a sanitary sewer without written permission from the municipality. Never put wastes in a storm drain or dump on the ground! See Wastewater section in the front of this publication.

BEST MANAGEMENT PRACTICES

- Should a spill occur, use kitty litter, vermiculite, newspaper, rags, or dirt to contain and absorb the liquid. NEVER wash it down the drain or into the gutter. Determine whether the waste is hazardous or not. If non-hazardous, place it in a plastic bag or sealable can and put in the trash. If hazardous, then see the Hazardous Waste section at the front of this publication to determine disposal options.
- Use "dry cleanup" methods. Scrape and scoop before washing down. Wearing a dust mask is a good idea whenever small chemical particles are agitated and can become airborne.
- Never dump or burn leftover chemicals on your property, particularly near wells or water sources. Burning hazardous materials may produce toxic gases, airborne particles, and hazardous ash. Never pour these products down storm sewers or sanitary sewers.
- Wastes determined to be hazardous, such as solvents, must be disposed of in an appropriate manner. If you are a business and considered a Small Quantity Generator (SQG), see the hazardous waste section at the front of this module to determine your disposal options. It is best to fully use hazardous products, when possible, so there is no waste.
- Use low-hazard materials to begin with to reduce hazardous wastes generated.

Disposal of any wastes other than domestic wastes on an on-site septic system or lagoon is prohibited. Never dump wastes onto the ground or into a storm drain. This practice can result in the contamination of streams, lakes, or groundwater.

- Determine if you have a local recycling program and what products it accepts. Recycle what you can.
- Wood and wood shavings can be composted on site or sent to an organized compost program/location.
- Wastes generated from metal-plating baths are generally considered hazardous due to the metals and bath components. These baths and rinses need to be carefully containerized, labeled, evaluated, and then disposed of properly. Each situation may be unique, so call the SBEAP at 800-578-8898 for help identifying what disposal option is proper for your waste stream. Never dump these materials down the drain.

The Small Business Environmental Assistance Program, SBEAP, is a confidential non-regulatory program funded by the state in an effort to assist small businesses with environmental concerns. Contact the SBEAP at 800-578-8898 or www.sbeap.org if you have questions.

POLLUTION PREVENTION AND WASTE MINIMIZATION OPPORTUNITIES

- Substitute cadmium-free solders for solders that contain cadmium. Cadmium can cause permanent kidney damage and may cause cancer. Cadmium-free solders are now available for soldering jobs.
- Substitute water-based cleaners for toxic solvents.
- Consider replacing a solvent-based, parts-cleaning system with an agitating parts washer using an aqueous cleaning solution.
- Use alkaline cleaners or ultrasonic cleaning units instead of chlorinated solvents for degreasing operations.
- When using ammonia-based cleaners, be sure to have adequate ventilation.

- Keep storage and work areas clean and well organized.
- Keep all containers properly labeled. Make sure labels are on the sides of containers so that lids cannot be switched and contents end up mislabeled.
- Inspect materials upon delivery, and immediately return unacceptable materials to the supplier. Keep the MSDS in an accessible file. See Glossary for definition of MSDS.
- Keep accurate records/inventory of raw material usage. Mark purchase date on each container and practice "first in, first out" so that older materials are used up before new ones are opened.
- Practice preventative maintenance to avoid future losses. Periodically inspect containers and equipment for leaks.
- Keep all containers tightly covered to prevent evaporation, contamination, spillage, or drying out of contents.
- Keep waste streams separate for reuse, recycling, or treatment. Keep non-hazardous materials from becoming contaminated with hazardous wastes.
- Substitute less toxic or non-toxic substances when possible.
- Conserve water. Use water-saving devices on toilets and showers.
- ALWAYS read the label and follow directions.
- Store hazardous materials in a locked cabinet or building.
- Use only safe, approved, or original sale containers for hazardous materials storage.
- Keep containers inside a bucket or other larger container that can prevent leaks from spreading.
- Think about how you would handle a spill should it occur. Keep a container of baking soda handy to neutralize acid spills.
- Store dry products separate from liquids to prevent wetting from spills. Store liquids at the lowest level to avoid leaks dripping onto other materials.

Call KDHE at 785-296-1679, if you have a significant spill that threatens to harm water or soil in the area.

INDOOR AIR QUALITY – Personal health is at risk if airborne particles and toxic fumes are not handled properly. Ventilation is critical to reduce exposure, but when possible, it is best to avoid generating particles and fumes. Many substitute chemicals of lower toxicity are available. These should be used even if the process is more expensive or time-consuming. Consider changing techniques.

WHERE TO GET MORE INFORMATION

- Your county K-State Research and Extension office.
- The Kansas SBEAP has several publications that address these issues of regulatory compliance and pollution prevention. See the list of SBEAP publications at the end of this manual, or go to www.sbeap.org to view or download.
- For questions, call 800-578-8898. All services are free and confidential.
- A summary of environmental laws is found in the introduction/preface. The following laws may be applicable to this business:
 - wastewater regulations
 - solid and hazardous waste regulations

- Regulatory compliance information can be viewed or downloaded from the KDHE Web site at www.kdhe.state.ks.us.
- A Web site devoted to information about small-scale jewelry operations is www.ganoksin.com.
- *The Artist’s Complete Health and Safety Guide* by Monona Rossol.
- *Health Hazards Manual for Artists and Artist Beware* by Michael McCann.
- See Resources section at the back of this document.

SOURCES AND ACKNOWLEDGMENTS

- *Hazardous Waste Minimization Checklist and Assessment Manual for Jewelry Manufacturers*, California Environmental Protection Agency, Department of Toxic Substances Control, Office of Pollution Prevention and Technology Development, September 1994.
- *Jewelry Manufacturing Industry Waste Minimization* fact sheet, California Environmental Protection Agency, Department of Toxic Substances Control, Office of Pollution Prevention and Technology Development, January 1995.

ACTION STEPS

What can you do to reduce wastes or environmental risks?	Set target dates for action.

Notes: