MEMORANDUM

To:     Files  
From:   Larry Bierlein, RIPA General Counsel  
Date:   April 27, 2006  
Re:     RIPA Advisory on Empty Industrial Packaging Management  

The emptier of any drum or other industrial packaging has certain responsibilities with respect to the residues that continue to adhere to that packaging. ASTM defines an industrial packaging as “a package used for the transportation or storage of commodities, the contents of which are not meant for retail sale without being repackaged.”  

Transportation regulations. An industrial packaging that held a U.S. DOT-regulated hazardous material, then is emptied, and now holds only the residue of that material, still must be shipped as if it were full of its original contents. See 49 CFR 173.29. This means that it must be closed, with all closures tightly in place. If the lid is gone or removed, or the closures are missing or loose, the DOT regulations are not being met.  

All marks and labels originally required when the packaging was full, are still required when it is shipped with residual contents.  

Some relief from DOT shipping papers is granted in 173.29(c)(2), but only for non-bulk packaging “when collected and transported by a contract or private carrier for reconditioning, remanufacture or reuse.” Emptyed non-bulk industrial packaging being discarded or scrapped is not being shipped for reconditioning, remanufacture, or reuse, and therefore must be accompanied by certified shipping documents indicating the hazard of the residue. They may include the words “RESIDUE: LAST CONTAINED ____” in association with the shipping description. Shipping papers also are required if the means of shipping is via common carrier.  

Placarding of the vehicle is not required for emptied non-bulk packaging, but it is required for intermediate and bulk packagings that continue to hold residue of a hazardous material.  

It is important to recognize that the DOT regulations apply regardless of relief from regulation that might be granted by another agency. As discussed below, for example,
an EPA-empty packaging is not regulated by EPA, but that exception is immaterial to DOT. As long as hazardous material residue remains, emptied industrial packagings must meet the DOT rules.

DOT is concerned about the hazards of the residue if it were unintentionally released during loading, unloading, transport, or storage incident to transportation. Their concern is not abated if the industrial packaging is cut, torn, or crushed. In fact, it is enhanced because of the greater likelihood of the residue injuring transportation personnel when released from a defective packaging. DOT has said, “crushed steel drums which have not been cleaned and purged of all hazardous material residue must be packed in authorized packagings, and marked and labeled as required when the drums previously contained a greater amount of the hazardous material.” In other words, uncleaned crushed industrial packagings with hazardous material residues must be overpacked, and the overpack must meet all the DOT regulations applicable to shipment of the residue.

Hazardous waste regulation. U.S. EPA initiated hazardous waste regulations under the Resource Conservation & Recovery Act (RCRA), in 1980. At that time, they indicated that the RCRA controls, such as manifesting and facility permitting, would not be required if all that is handled are “empty” packagings. In a definition adopted in response to RIPA’s petition for rulemaking, 40 CFR 261.7 defines when a packaging is considered empty. For non-bulk packagings such as drums, the packagings first must be emptied as completely as possible using common emptying practices. In no case may the residue constitute no more than one inch or 3% of the original capacity of the packaging. EPA makes it clear that the 1-inch maximum is meant for hard-to-remove residues such as tar. In the industry, the term “drip dry” is used as shorthand to describe a properly emptied non-bulk packaging.

Intermediate bulk and bulk industrial packagings are subject to the same EPA rule, but the authorized allowable volume of residue is only 1-inch or 0.3% of the capacity of the packaging in these larger sizes.

If the packaging is not empty by these criteria, then the contents are an EPA-regulated hazardous waste. The packaging emptier is the generator of that waste, who must have his own EPA identification number, must consign the load to an EPA or State-permitted hazardous waste treatment, storage, or disposal facility, and must utilize the services of an EPA or State-registered hazardous waste transporter.

To facilitate the handling of emptied packagings in the reconditioning industry, RIPA created the empty packaging certification form used by members, in which the emptier of the industrial packaging must certify that both the DOT and EPA RCRA requirements are met when the emptied packaging is offered for transport.

Disposal liability. EPA also administers Superfund, sometimes called CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act). Under this law, people who arrange for the disposal of hazardous substances may be held jointly and severally liable for the clean up of any site where those substances are
released to the environment. Under 42 U.S. Code 9601(22), “the term ‘release’ means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, packagings, and other closed receptacles containing any hazardous substance or pollutant or contaminant). . . .” (Italics added.)

At least one case has held that the processing of scrap materials constitutes “disposal” under CERCLA. The empty packaging rule under RCRA has no meaning under CERCLA, just as it has no meaning under DOT. If any residue in an emptied industrial packaging meets the definition of a hazardous substance, then the emptier of that packaging can be held liable for the clean up of any portion or all of a site at which that residue is released, including a scrap yard.

For this reason, prudent operators of scrap facilities will not accept uncleaned industrial packagings. In addition to the environmental consequences of release of the residues, the employees in the scrap yard may be exposed to hazardous chemicals and vapors in violation of the Occupational Safety and Health Act (OSHA). Recognizing this, the association of the scrap industry and the predecessor of RIPA established a joint recommendation that all materials to be scrapped first would be cleaned using an effective cleaning agent and purged of all foreign matter and prior residues, or would be thermally neutralized in a drum reclamation furnace for the same purpose.

In 1999, Congress passed the Superfund Recycling Equity Act, which included an amendment exempting scrap processors from cleanup liability when they send lightly contaminated “recyclable material” to downstream customers, including steel mills, who must meet very specific operating criteria. This new law has a provision that excludes any industrial shipping packaging, whether intact or not, having a capacity from 30-3000 liters (i.e., 8-800 gallons), from the definition of “recyclable material.” This means that any industrial packaging such as steel or plastic drum, whether whole, shredded, or crushed, that is sent to a scrap yard or steel mill with residue in or on the packaging or its parts, will expose both the generator and the recipient of it to full Superfund cleanup liability.

Disposal facilities such as landfills also do not want empty industrial packaging. Specific operating rules in landfills prohibit such waste disposal, because ultimately the packaging will corrode and collapse, disturbing the stability of the site.

Conclusion. Hazardous residues in emptied industrial packagings pose threats to employees, the public, and the environment, and for this reason agencies like DOT and EPA under Superfund continue to regulate such industrial packagings almost to the same extent as if those packagings were full of their original contents. The emptier of any industrial packaging must recognize his responsibility to act properly, and the massive potential liabilities for his failure to act properly. These responsibilities and liabilities extend long after the emptied packaging leaves the emptier’s premises.