

Demystifying Battery Recycling.

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ABSTRACT

After a stationary battery has been deemed spent (used) and is no longer required, it must be carefully managed and steered through a disposal and reclamation process. Failing this, the owner can fall foul of several regulatory requirements that may result in various legal actions and heavy fines or imprisonment. The owner is deemed, in many cases to be the person or entity that takes delivery of the battery from the manufacturer and uses that battery. Spent batteries are also referred to as junks or cores.

The purpose of this presentation is to educate battery owners and users on how to effectively manage spent battery disposal and recycling in an environmentally and regulatory compliant way. It deals mainly with stationary lead-acid batteries as they are the main target of the rules and regulations although other chemistries are mentioned where appropriate. Major regulations are detailed for the battery disposal process covering preparation for disposal, transportation and reclamation. What happens at the recycling facility is also explained.

INTRODUCTION

Being a “green” corporate citizen make good business sense and the proper recycling of batteries is just part of this.

Recycling batteries:

- Is good for the environment.
- Reduces the cost of batteries.
- Reduces legal liabilities.
- Is good for your fellow workers and employees
- In today’s business world, it is expected and demanded.

More than 97% of all battery lead is recycled and lead-acid batteries top the list of the most highly recycled consumer products. This compares very favorably with 55% of Aluminum cans, 45% of paper products, 26% of glass bottles and 26% of tires.¹ This high percentage did not happen without certain initiatives and motivators.

The lead-acid battery has a revolving life cycle. A new lead-acid battery contains up to 80% of recycled materials and contains 99% recyclable material.² When a spent battery is sent to a properly permitted recycler it is rendered under very strict environmental regulations and the lead, other metals, acid and plastics are reclaimed and sold to battery manufactures and other industries. This reclamation cycle can occur indefinitely.

The battery industry is regulated by federal, state and local agencies who inspect manufacturing plants, control transportation, and monitor recyclers, reclaimers, and waste sites. This is a tremendously focused effort to keep lead and other contaminants out of the environment. Proper recycling plays a major part in this effort.

What are your spent batteries worth?

There are many factors which determine the value of spent batteries.

- The battery type. Some batteries containing contaminants or carcinogens are difficult to recycle.
- The reclaimable content of the battery.
- The condition of the battery. Broken or damaged battery cases may pose a problem.
- The quantity of batteries being offered for recycling.
- The location of the battery.
- The location of the smelter.
- Will the batteries be picked-up or delivered?
- The current market price of reclaimed materials.
- The supply and demand situation.

- The need of a company to obtain spent batteries.
- A manufactures need to obtain lead credits for future lead purchases.

With the current high market prices of most of the materials used in batteries, the climate is conducive to a high level of recycling. Increased global demand for lead, especially in emerging countries, decreased or limited smelter capacity, shrinking stockpiles and market speculation has increased the price of lead by approximately 500% over the last 5 years.

How are spent batteries harvested?

Spent batteries must be:

- Taken out of service and prepared for shipping.
- Collected from the owner.
- Transported, often across state lines.
- Off-loaded and sorted by type.
- Consolidated and stored.
- Processed and reformulated to industry specifications.

All of the above steps are governed by a myriad of federal, state and local rules and regulations and the original battery owner, transporter, consolidator and smelter are under these regulatory burdens and can be held liable in cases of non-compliances.

RULES AND REGULATIONS

In 1965 the **Solid Waste Disposal Act (SWDA)** became law. It was an attempt to address the emerging solid waste problems facing the USA. The **Resource Recovery Act** of 1970 directed that the nation should focus on recycling and reclamation rather than mere disposal. It directed that the US Public Health Service (PHS) should investigate and issue a report on the disposal of hazardous waste. At the same time, the US Environmental Protection Agency (EPA) was formed. In 1973 the EPA issued a report on the “**Disposal of Hazardous Wastes**” to Congress. This was a key document that created public and corporate awareness and guided the development of solid and hazardous waste management and material reclamation.

The SWDA was a broad approach and not sufficiently laid out and structured. In order to address the increasing dangers posed by hazardous wastes, in 1976 the U.S. Congress enacted the **Resource Conservation and Recovery Act (RCRA)**. This Act placed some significant requirements for the storage, treatment and disposal of hazardous wastes. The RCRA also directed that the EPA establish various rules and regulations in order to control the disposal of hazardous wastes. Following this, in 1984 the **Hazardous and Solid Waste Amendments** directed the EPA to revise the criteria for landfills that receive household and industrial hazardous waste.

The RCRA Enforcement Division has the following responsibilities:

- It develops and directs the national hazardous waste enforcement program and its other related programs in a manner that protects US residents from risks presented by hazardous wastes.
- It seeks to ensure that consistent and fair treatment of those regulated through policy and guidance development and implementation.
- It serves as a clearinghouse for legal and technical advice, information and data, including assistance to the states and the public.
- It undertakes the prosecution of violators.
- It has the responsibility for national administrative and judicial appellate litigation.

In 1980 Congress enacted the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**. This new act established broad federal authority to respond to releases or threatened releases of hazardous substances that could endanger the environment or public health. It also established requirements and prohibitions with respect to closed or abandoned hazardous waste sites and provided for the liability of the persons responsible for the release of hazardous wastes. It also established a trust fund from a special tax imposed on the chemical and petroleum industries. This fund provided for the cleanup of hazardous waste sites when a responsible party could not be identified. Because of the several billion US dollars allocated to the trust fund CERCLA became known as the **Superfund**.

The **Superfund Amendments and Reauthorization Act (SARA)** amended CERCLA in 1986. SARA built on the ERA's experience over the previous six years and made several changes and additions to the 1980 act including a new enforcement authority and increased the states involvement in all aspects of the Superfund program. The Superfund enforcement program involves finding people and entities responsible, either in whole or in part, for site contamination and negotiates with them to pay for the cleanup. There are currently approximately 84 Active Superfund Sites with "Battery" listed in the name of the site.³ Some important aspects of liability under CERCLA are:

- The Potentially Responsible Party (PRP) may be retroactively held liable for acts that happened before the creation of CERCLA in 1980.
- Any one PRP may be held liable for the entire clean-up when the harm caused by multiple parties cannot be separated.
- A PRP cannot just say that it was not negligent or that it was operating within the law. If a PRP has owned or sent any hazardous waste found at a site then they can be held liable.

The **Superfund Recycling Equity Act (SREA)** of 1999 contains certain exemptions. Section 127 of CERCLA, 42 U.S.C. 9627, exempts certain persons who "arranged for recycling of recyclable materials" from liability under Sections 107 (a) (3) and 107(a) (4). Owners and operators of CERCLA sites are ineligible for the exemption, as are arrangers and transporters of non-recyclable materials, or arrangers and transporters of recyclable material that fail to meet the criteria necessary for the exemption. SREA outlines the criteria necessary for a party to be eligible for the recycling exemption including the definition of a recyclable material, the factors needed to qualify as a recycling transaction, and the types of transactions and materials that are not exempt under the statute.

SREA places the burden of proof on private parties seeking to establish their eligibility for the recycling exemption from CERCLA liability. Under subsections (c), (d) and (e) of Section 127, the party seeking the exemption from liability must "demonstrate by a preponderance of the evidence" that certain criteria are met. In addition, a party seeking to take advantage of a statutory exemption has the burden of establishing eligibility.

To cover smaller generators of hazardous waste such as households, small business and facilities, and to encourage them to send hazardous waste to recycling facilities rather than in municipal solid waste landfills, the EPA promulgated the **Universal Waste Regulations** in 1995 to ease the management burden and promote the collection and recycling of some commonly generated wastes. In Title 40 Code of Federal Regulations (CFR) Part 273, Standards for Universal Waste Management, the EPA developed these streamlined universal waste with three goals:

- To encourage resource conservation while ensuring adequate protection of human health and the environment.
- To improve the implementation of the then current Subtitle C hazardous waste regulatory program (The subtitle or portion of RCRA that requires EPA to establish regulations regarding the management of hazardous waste. Also see Title 40 CFR 261 and 262.)
- To provide incentives for individuals and organizations to collect the unregulated portions of these universal wastes and manage them using the same systems developed for the regulated portion, thus removing them from the municipal waste stream.

To accomplish these goals, the EPA established standards in 1995 for three types of universal wastes; batteries, pesticides, and thermostats. In 1999, the EPA added hazardous waste lamps to the federal list of universal wastes (64 FR 36466). In 2005, the EPA added all mercury containing equipment to the list of waste subject to the federal program (70 FR 45508; 2005). These regulations also include management standards for four types of persons or entities managing universal waste: small quantity handlers of universal waste, large quantity handlers of universal waste, universal waste transporters, and universal waste destination facilities.

The EPA's primary goal for the universal waste program is to encourage the recycling of the above four items. However, handlers can send their waste for disposal and still remain subject to the universal waste regulations. The universal waste program is less stringent than full RCRA Subtitle C, hazardous waste regulations. Because states may enforce regulations that are more stringent than the federal RCRA program, the universal waste program is not automatically effective in states with their own RCRA programs.

Battery definition.

The universal waste regulations define a battery as a device consisting of one or more electrically connected electrochemical cells that are designed to receive, store, and deliver electrical energy (40 CFR 273.6). Also included in this definition are unbroken batteries from which the electrolyte has been removed. Hazardous waste batteries meeting this definition are subject to the universal waste regulations. However, lead-acid batteries being recycled may be managed either as universal waste or by 40 CFR Part 266, Subpart G, which contains special provisions for lead-acid batteries. The EPA does not have comprehensive data to make interpretations about whether certain battery types are or are not hazardous, so it is the generator's responsibility to determine if that battery is subject to regulation as a hazardous waste.

- When designated for recycling, batteries may be managed under the "Universal Waste" rule in 40 CFR Part 273
- Lead-Acid Batteries are regulated as Hazardous Waste by the federal government under 40 CFR Parts 261 and 262 if they are NOT being reclaimed in accordance with 40 CFR Part 266.
- When designated for recycling they may be managed under the "Universal Waste" rule in 40 CFR Part 273 (RCRA).

Public Law 104-142 "Mercury-Containing and Rechargeable Battery Management Act" also known as **The Battery Act**, was signed into law in 1996 and applies to battery disposal and recycling. Although this Act does not amend RCRA directly, it makes the federal universal waste regulations effective in all 50 states for the collection, storage, and transportation of:

- Used rechargeable batteries.
- Lead-acid batteries not managed under 40 CFR Part 266, Subpart G.
- Used consumer products containing rechargeable batteries that cannot be easily removed.
- States that have battery management standards are required to have programs identical to the federal universal waste program for the management of these materials. Hazardous waste batteries that meet the definition in this Act must be managed as universal waste.

This Act also:

- Provided for a cost-effective and efficient recycling of lead-acid and cadmium containing batteries.
- Banned from domestic sale certain mercury-containing batteries.
- Implemented a national and uniform battery labeling method.

Definition of spent batteries.

This is open to interpretation but the following is a good guide:

Once batteries are taken out of service or are disposed of, irrespective of the reason, and sent for recycling and reclamation they should be considered spent, [see *United States v. Ilco Inc.*, 996 F.2d 1126 (11th Cir. 1993)], where the court held that all batteries sent to a secondary lead smelter for recovery were "spent materials" without regard for the reason the batteries were taken out of service.

The EPA has determined that a material must: 1) be spent as a result of contamination and 2) is non-usable in that it could not continue to be used for its original purpose. The EPA has consistently interpreted this definition as applying to "materials that have been used and are no longer fit for use without being regenerated." The reason that the "as a result of contamination" verbiage was chosen is because the EPA considered that many materials typically become spent because of impurities. It was not the intent of the EPA to limit the definition of spent materials to only those materials which became spent as a result of this type of contamination. In the same rule that the EPA defined spent material, the EPA issue regulatory requirements under RCRA Subtitle C for spent lead-acid batteries being reclaimed. The EPA classifies spent lead-acid batteries as spent materials. They have stated that batteries become spent for a variety of reasons (e.g., overcharging, undercharging, frozen electrolyte, leakage, etc.) all of which the EPA regards as being "contamination" for purposes of the definition. Also, whether a battery must be nonfunctional to meet the definition, or the fact that it could still be used, is not relevant to whether or not it is a spent material. In other words, a new battery or a still serviceable one that is no longer required can still be considered spent if it is no longer required for use by the owner.

PACKING AND TRANSPORTATION

The Department of Transportation (DOT) regulatory requirements affecting the packaging and transportation of all batteries containing acid or alkali are contained in the Code of Federal Regulations, Title 49 CFR Section 173.159.

VLA and other batteries containing liquid (free) electrolyte.

DOT Title 49 CFR 173.159 (a) states that “(a) Electric storage batteries, containing electrolyte acid or alkaline corrosive battery fluid, must be completely protected so that short circuits will be prevented; they may not be packed with other materials except as provided in paragraphs (g) and (h) of this section and in 173.220 and 173.222.” In other words, what this is saying is that all “flooded batteries” must be packed in accordance with the above regulations when they are being transported for disposal.

VRLA batteries and other non-spillable batteries.

DOT Title 49 CFR 173.159 (d) states that “A nonspillable wet electric storage battery is excepted from all other requirements of this subchapter under the following conditions:

- The battery must be protected against short circuits and securely packaged;
- The battery and outer packaging must be plainly and durably marked "NON-SPILLABLE" or "NON-SPILLABLE BATTERY"
- The battery must be capable of withstanding the Vibration and Pressure Differential tests specified in 49 CFR 173.159(d)(3)(i) and 49 CFR 173.159(d)(3)(ii); and
- At a temperature of 55°C (131°F), the battery must not contain any unabsorbed free-flowing liquid, and must be designed so that electrolyte will not flow from a ruptured or cracked case.”

What this is saying is that non-spillable batteries must have their terminals insulated to protect against short circuits and have been tested in the manufacturing stage in accordance with certain vibration and pressure requirements. This would include almost all VRLA battery cells but would not include cells that have been physically damaged or dismantled. In addition to the above requirements, DOT Title 49 CFR 173.159 requires that all batteries, alkaline, lithium, lead, nickel metal hydride, etc; or battery powered products containing batteries are subject to 49 CFR 173.21(c) in the U.S. hazardous materials regulations. This provision prohibits "the offering for transportation or transportation of ... (c) Electrical devices which are likely to create sparks or generate a dangerous quantity of heat, unless packaged in a manner which precludes such an occurrence. Basically, the regulations above mean that if a battery owner does not comply, then they are in violation of the regulations and may be subject to civil penalties.

The U.S. Department of Transportation defines hazardous materials and specifies the type and number for each hazardous material (hazmat) placard used in transportation. Title 49 of the United States Code of Federal Regulations (49 CFR) also known as the Federal Motor Carriers Safety Regulations (FMCSR) requires the use of hazardous materials placards when shipping hazardous materials cargo and dangerous goods in the United States. Canada, Mexico and many other countries have similar regulations that also require the use of these placards.

Lithium and lithium ion cells and batteries are listed as Class 9, Miscellaneous Hazardous Materials, in the U.S. and thus are subject to specific packaging, marking, labeling, and shipping paper requirements and shippers must still comply with requirements of 49 CFR 173.21(c). That is, the cells and batteries must be securely packaged and offered for transportation in a manner that prevents the dangerous evolution of heat and short circuits. The regulations that govern the transport of lithium and lithium ion cells and batteries were recently amended and can be very confusing. Therefore, prior to offering these cells and batteries for transport, these regulations should be carefully reviewed.

Lead acid batteries are listed as Class 8 corrosive hazardous materials in the U.S. and international hazardous materials regulations and also are subject to specific packaging, marking, labeling, and shipping paper requirements.

However, like shippers of lithium and lithium-ion cells and batteries, shippers of "nonspillable" lead acid batteries are provided an exception to the regulations if certain testing and marking requirements are met. These batteries can then be shipped under Class 9. For batteries manufactured after September 30, 1995, the battery and outer packaging must be plainly and durably marked "NONSPILLABLE" or "NONSPILLABLE BATTERY." A nonspillable lead acid battery that does not meet the testing requirements noted above must be shipped as a Class 8 Corrosive hazardous material.

"Dry" batteries, such as alkaline, nickel metal hydride, nickel cadmium, and carbon zinc, generally are recognized as being excepted from the U.S. and international hazardous materials regulations provided they are packaged in a manner that prevents short circuits and the generation of a dangerous quantity of heat.

There is no official definition of what constitutes a "dry" battery. However, the U.S. DOT has issued numerous interpretation letters over the years that clearly recognize nickel metal hydride and nickel cadmium batteries as "dry" batteries. (See <http://hazmat.dot.gov/regs/rules.htm>.) Therefore, the overriding provisions that govern shipments of dry batteries are Special Provision 130 and 49 CFR 173.21(c) in the U.S. hazardous materials regulations. Any person that offers dry batteries or products containing dry batteries to a carrier that does not comply with Special Provisions 130 or 49 CFR 173.21(c) may be subject to civil penalties.

It is the shipper's responsibility to properly classify a hazardous material and assign it a proper shipping name from the Hazardous Materials Table (HMT).

If a company meets all the criteria to qualify as a permitted storage facility and disposal site and voluntarily complies with all requirements applicable to a permitted storage facility and disposal site, customers may ship in accordance with the exception in CFR 173.185(d).

THE RECLAMATION PROCESS

- First of all, the spent batteries are mechanically broken up, crushed and heated until they become a liquid. The various materials stratify and settle in different layers which are then separated into their various main components such as plastic, lead, copper, tin, and acid.
- The plastic parts are washed, dried, and similar plastics are melted down and extruded into small pellets. In most cases these are resold to manufacturers of battery cases.
- The lead grids, lead oxide, and other lead parts are cleaned, melted, and poured into molds to create ingots. These are called pigs or hogs depending on their size and are resold to battery manufacturers and other lead users. The recovered lead oxide is also used in new battery manufacturing.
- The acid can be neutralized to create water. The water is treated, cleaned, and tested before releasing it safely into public sewer systems. There are some other options that are also used. In the case of sulfuric acid it can be converted to sodium sulfate, an odorless white powder that is used in laundry detergent, glass, and textiles. Sometimes the acid is clarified and used in various manufacturing and treatment processes.
- Nickel cadmium batteries go through a similar process as lead-acid where the nickel, cadmium, iron and electrolyte are separated. Since cadmium is very light it is heated and vaporizes at high temperature. The cadmium vapor is blown over a water mist where it condenses, solidifies and is formed into solid ingots. It is then sent for further recycling and eventually returned to the battery manufacturer. The nickel and iron are melted into an alloy that is used to make stainless steel.
- Zinc batteries are separated and like cadmium batteries, are feed into a vacuum distillation furnace and the zinc is evaporated and separated from the other metals which include carbon and manganese dioxide. The evaporated gas is cooled, solidified and made into ingots.

So what specifically applies to me?

In reality, the rules and regulations, in true government gobbledygook and red-tape fashion, are difficult to disseminate and understand. For example, these are extracts from various regulations:

"Batteries are covered under 40 CFR part 273. (1). The requirements of this part apply to persons managing batteries, as described in 273.9, except those listed in paragraph (b) of this section." "Spent lead-acid batteries which are not managed under 40 CFR part 266, subpart G, are subject to management under this part."

"Batteries not covered under 40 CFR part 273. The requirements of this part do not apply to persons managing the following batteries:(1) Spent lead-acid batteries that are managed under 40 CFR part 266, subpart G. (2) Batteries, as described in 273.9, that are not yet wastes under part 261 of this chapter, including those that do not meet the criteria for waste generation in paragraph (c) of this section. (3) Batteries, as described in 273.9 that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in part 261, subpart C of this chapter."

It takes a knowledgeable person or entity to decipher these regulations. Seek out these people.

How do you keep out of trouble?

As far as the battery owners and users should be concerned, the best policy in dealing with recycling should be the “document everything” policy. This includes these very basic rules which may or may not be covered by the various regulations:

- When a battery is taken out of service for any reason, label the battery as spent.
- Insulate the battery terminals in a way that is not easily removed. An application of non-conductive silicon works quite well.
- If preparing for shipping, follow the regulations outlined above with respect to packing and labeling.
- If being packed for shipping by a third party, insist on a written statement the batteries have been packed and labeled in a regulatory compliant manner.
- Arrange for the removal from your location as soon as practical.
- Only contract with a knowledgeable and responsible entity that has a track record and complies with all applicable regulations.
- Make sure that the entity carries adequate indemnification insurance.
- Ask for the necessary paperwork that indemnifies the battery owner from all liabilities. This is sometimes referred to as a battery “death certificate.” All good battery recyclers will protect and indemnify customers for any environmental liability resulting from the disposal or recycling of batteries.
- Keep all paperwork on file for as long as possible. It should include:
 - Manufacturer, model number, serial number of all batteries sent for recycling.
 - The weight of the batteries sent for recycling.
 - The Material Safety Data Sheets (MSDS’s) of all batteries sent for recycling. These will indicate all hazardous ingredients and the hazardous data for those batteries.
 - The date that the spent batteries were picked-up or removed from your location.
 - The details of the transport company, including all licensing and DOT information.
 - The details of the entity that accepts the spent batteries for recycling.
 - The battery “death certificates.”

Some import things to remember:

A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).

- An unused battery becomes a waste on the date the handler decides to discard it.
- Lead-acid batteries are regulated as Hazardous Waste by the federal government under 40 CFR Parts 261 and 262 if they are not being reclaimed in accordance with 40 CFR Part 266.
- When designated for recycling, they may be managed under the “Universal Waste” rule in 40 CFR Part 273.
- If environmental contamination occurs, the EPA will generally go after the entity with the deepest pockets.
- Never assume anything. Always check with the EPA. They have national and regional “hotlines” to answer questions. They are also accessible via the internet.⁴
- Another good source of information is the Lead Hotline – The National Lead Information Center (NLIC).⁵ The NLIC provides information about lead hazards and their prevention.
- Some of the battery manufacturers themselves are excellent and regulatory compliant recyclers and some even operate their own reclamation facilities.
- Spent batteries can be a valuable commodity. Gone are the days when someone was doing you a favor by “taking them off your hands.”

What’s on the horizon?

Look for some sort of tie in with carbon credits in relation to battery recycling.

Expect some more regulatory activity with respect to some of the new battery chemistries.

A move towards using recycling programs with the highest levels of indemnity insurances.

There is a strong possibility that Radio Frequency Identification Devices (RFID) will be used in or on batteries to identify the ownership and disposal chain.

NOTES

Much of the verbiage in this paper is derived from federal, state and local government sources which are public domain. The information contained in this paper is, to the best of the author's knowledge, true and accurate at the time of publication, and is solely for informational purposes. Neither the author nor the author's employer, PowerCare and Service Solutions, Inc. ("PowerCare"), warrant the accuracy of the information and reliance upon any matter contained herein is at the sole risk of loss of the user of the information, the liability for which is expressly disclaimed and denied by the author and PowerCare.

REFERENCES

1. Battery Council International. (BCI). 401 North Michigan Avenue, 24th Floor, Chicago, IL 60611-4267. Phone: 312-644-6610. Fax: 312-527-6640. E-mail : www.batterycouncil.org
2. *ibid.*
3. Source: www.epa.gov/superfund/sites/cursites/
4. Environmental Protection Agency (EPA) National Compliance Assistance Clearinghouse. This innovative web site provides quick access to compliance assistance tools, contacts, and planned activities from the US EPA, its partners, and other compliance assistance providers. http://cfpub.epa.gov/clearinghouse/contact_us.cfm
5. National Lead Information Center. 422 South Clinton Ave, Rochester, NY 14620. Tel. 1 800 424 5323. Fax. 585 232 3111.

USEFUL SOURCES OF INFORMATION

U.S. Environmental Protection Agency, RCRA Enforcement Division (2246A), 1200 North Pennsylvania Avenue, Washington, D.C. 20460.

Source of EPA Publications and regulations. <http://www.epa.gov/epahome/publications.htm>

National Service Center for Environmental Publications (NSCEP). EPA's premiere publications resource. More than 7,000 in stock and 26,000 digital titles are available FREE of charge to search and retrieve, download, print and/or order. <http://www.epa.gov/nscep/>

EPA Lead Awareness Program. <http://www.epa.gov/lead/>

Local Government Environmental Assistance Network. <http://www.lgean.org/>

RCRA Hotline Answer questions regarding the applicability or interpretation of the RCRA regulations. 1 800 424-9346.

Superfund information. www.epa.gov/superfund/sites/cursites/

Portable Rechargeable Battery Association. 1776 K Street, NW, Washington, DC 20006 Phone: (770) 612-8826

Pipeline and Hazardous Materials Safety Administration (PHMSA). U.S. Department of Transportation. Pipeline and Hazardous Materials Safety Administration, East Building, 2nd Floor, 1200 New Jersey Ave., SE, Washington, DC 20590. Tel. 202-366-4433.