



ACS Task Force on Laboratory Chemical
& Waste Management
Committee on Chemical Safety

February 10, 2014

EPA Docket Center
Environmental Protection Agency
Mail Code 28221T, 1200 Pennsylvania Ave. NW.,
Washington, DC 20460.

Re: Docket ID No. EPA-HQ-RCRA-2013-0737

Introduction

The American Chemical Society has actively engaged with the Agency since the promulgation of the RCRA regulations on behalf of generators of laboratory scale hazardous wastes. We are concerned that the LDR requirements have had an ongoing financial and functional burden on these generators that is not reflected in the Agency's reasoning for maintaining this requirement. This letter addresses the Agency's request for comment on this issue and proposes to eliminate this requirement.

BACKGROUND: 40 CFR §268.7 lists substantial testing, tracking, and recordkeeping requirements for generators of hazardous waste. These requirements resulted from the 1984 Hazardous and Solid Waste Amendments, which restricted the land disposal of hazardous wastes without pretreatment. With the initial shipment of a waste to each treatment or storage facility, the generator must send a one-time written notice to each treatment or storage facility receiving the waste, and also maintain a copy of this notice. The information required includes: the EPA Hazardous waste numbers, manifest number of each shipment, a list of all wastes subject to land disposal restrictions (LDRs), the applicable wastewater/nonwastewater category, waste analysis data (when available), and a certification. For industrial facilities with a few, large waste streams, this requirement is not burdensome; it requires notification only with the initial shipment. For laboratory wastes, however, which consist largely of packaged reagents in labpacks, each and every labpack is considered to be a "unique" waste stream, and a separate notification must be made for every labpack shipped.

While this information may have been useful during the primary phase-in process for LDR from 1984 - 1994, at this point all treatment and storage facilities (TSDFs) are well aware of the requirements. The most recent effective date for implementation, which applies only to a few newly-identified wastes, was 1998. All TSDFs are now operating under Part B permits which clearly specify the wastes they can accept, and the re-manifesting process involved with waste consolidation at interim storage facilities results in a second duplication of the LDR notification process. The LDR process, from the laboratory waste generator perspective, results in a significantly higher cost burden, in that each vendor (often the accepting TSDF) has their own LDR notification form which must be completed for each labpack container in each shipment. While it is the generator's responsibility to make the notification, the variability in the forms from different vendor often results in the vendor's representative completing the forms while the packaging crew waits on site.

In the request for comment in Docket ID No. EPA-HQ-RCRA-2013-0737, the Agency asks for comments on these four issues:

- (i) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility;**

The LDR form is redundant considering information already provided in the hazardous waste manifesting system. Essentially no laboratory waste can be land disposed without pretreatment. The accepting TSD facility is in every case well familiar with the requirements associated with proper treatment and/or disposal, and does not need the generator to notify them of the disposal requirements for these wastes. Each manifest document includes a detailed inventory of the items included in each container, the EPA waste number, and the US DOT proper shipping name describing the hazard class. The LDR form is redundant considering the additional information supplied. This requirement discriminates against laboratories and should be eliminated. It also represents a significant paperwork burden for permitted TSD facilities that must maintain all LDR notification forms, mail copies of signed forms back to generators, and have them available for inspection by EPA and/or state agencies.

(ii) Evaluate the accuracy of the Agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

We have reviewed the Agency's 2010 ICR report on the paperwork burden of the LDR in detail and believe it contains flawed assumptions with regard to the number of lab packs generated annually, the number of resulting notifications, and the total burden to generators, receiving facilities and EPA.

While no hard statistics are available on these issues, there are several ways to estimate the cost burden to laboratory facilities and organizations. According to OSHA when it developed its Laboratory Standard (29CFR 1910.1450) in 1990, there were an estimated 35,000 chemical laboratories in the US; this number has significantly increased since 1990. Assuming each of those laboratories generates an average of only 20 labpacks per year (an extremely conservative number, considering some labs employ as many as 1000 scientists), there are a minimum of 700,000 labpacks shipped each year in the US from academic and industrial R&D chemical laboratory facilities. It should be noted that labpack containers range in size from 5 gallons to 55 gallons, and each requires its own LDR form regardless of size. Based on an average of 10 minutes to prepare the form, review, sign and make copies, and a charged labor rate for two labpack chemists at \$45/hour each, the cost (not including paper, mailing, document storage, etc.) of completing the LDR forms per labpack is approximately \$15.00. Multiplying that figure by the number of labpacks, the cost to US chemical laboratories alone is \$10,500,000. This figure does not include other shipments, such as cleanups of illegal drug facilities, emergency responses involving small quantities of chemicals, the disposal of agricultural wastes in small quantities, maintenance shops, graphic art wastes, auto repair shops and literally hundreds of other types of shipments of hazardous waste in labpack form. A more conservative estimate is 1,000,000 total labpacks annually, at a cost of \$15,000,000 to prepare and process Land Disposal Restriction Forms.

These figures are consistent with data from the EPA Biennial Report (2011), which concluded there were 32,466 tons of hazardous waste generated by medical (SIC code 6215) and scientific R&D facilities (SIC code 5417) alone; this does not include academic facilities, which are not listed among the top 50 SIC codes for hazardous waste generation. EPA and ACS estimate 40% of wastes generated by chemical laboratories are disposed in labpacks. Based on R&D expenditures nationally, approximately half of all US chemical research is performed by universities. It is not unreasonable, therefore, adding in other SIC categories that generate similar wastes, to estimate the total quantity of waste disposed in labpacks at approximately 26 tons annually. Assuming 75 lbs. of hazardous waste per labpack, an extremely conservative number considering some can contain as little as a few grams, estimation on that basis would conclude a total of 693,333 labpacks generated per year.

The Environmental Protection Agency, in its Federal Register notice of 12/01/2008, indicated there are 1580 academic facilities regulated as large and small quantity generators of laboratory wastes. Laboratories from these facilities are not covered in the two referenced SIC codes, nor are they referenced in the 2010 ICR report to OMB. The relative cost to these facilities can be considerably

higher considering many do not have the staff or facilities to consolidate lab wastes into larger consistent waste streams that do not require individual LDR certifications.

The clerical manhours for permitted TSDFs to process, maintain the forms for hundreds of thousands of LDRs, and send generator confirmations by mail is difficult to judge. Mailing costs alone for return notices acknowledging acceptance of each labpack at current postal rates amount to approximately \$500,000. Additional record maintenance, photocopying and associated labor costs would likely amount to several times that amount.

It should be noted the above conclusions and calculations are in no way consistent with prior EPA findings regarding either the impact on laboratory facilities or the total number of labpacks generated annually. In 2008, when EPA reported the paperwork burden of the Land Disposal Restrictions to OMB as required, the Agency concluded there were approximately 93,000 labpacks shipped annually in the US, requiring a total of only 6700 notifications. We believe that by consulting with key higher education and industry organizations the Agency will be able to gather much more complete and accurate data about this burden. We suggest that the Agency consult organizations such as the Campus Safety, Health and Environmental Association, the National Association of College and University Business Officers and the Alliance of Hazardous Materials Professionals.

(iii) Enhance the quality, utility, and clarity of the information to be collected; and

The current system relies on information in non-standard formats, in that every TSDF uses their own form. This results in the collection of information that does not allow for effective reporting of the impacts tracked by regulation.

(iv) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

This requirement is duplicative of similar requirements for hazardous waste determination recordkeeping and approval of waste stream acceptance at the TSDF.

PROPOSAL: Based on the information provided above, we believe that it is appropriate to eliminate the requirement for land disposal restriction notices and recordkeeping for all hazardous waste labpacks - specifically, all packaged laboratory chemicals comingled according to hazard class in a labpack (as described in 49CFR 173.12(b) and 268.7(a)(9)).

Sincerely,

Handwritten signature of Ralph Stuart in blue ink, with the letters 'CIH' written to the right of the signature.

Ralph Stuart
Chair, ACS Task Force on Laboratory Chemical & Waste Management