

**Supporting Statement For  
Information Collection Request (ICR) Number 0801.21  
“Requirements for Generators, Transporters, and Waste  
Management Facilities under the RCRA Hazardous Waste Manifest  
System – Proposed Fee Rule (Proposed Rule)”**

**April 27, 2016**

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## **1. IDENTIFICATION OF THE INFORMATION COLLECTION**

### **1A. Title and Number of the Information Collection**

This ICR is entitled, “Requirements for Generators, Transporters, and Waste Management Facilities under the RCRA Hazardous Waste Manifest System – Proposed Fee Rule (Proposed Rule),” EPA ICR No. 0801.21, OMB Control No. 2050-0039.

### **1B. Short Characterization**

Section 3002(a)(5) of the Resource Conservation and Recovery Act (RCRA) directs the U.S. Environmental Protection Agency (EPA) to “...establish requirements respecting...use of a manifest system and any other reasonable means necessary to assure that all such hazardous waste generated is designated for treatment, storage, or disposal, and arrives at treatment, storage, or disposal facilities...for which a permit has been issued...” Under this authority, EPA published regulations for a manifest system on February 26, 1980 (45 FR 12724). EPA established requirements for manifest completion, transmittal, and recordkeeping for hazardous waste generators at 40 CFR Part 262, Subpart B, for transporters at Part 263, Subpart B, and for treatment, storage, and disposal facilities (TSDFs) at Parts 264 and 265, Subpart E. EPA also requires the use of the Uniform Hazardous Waste Manifest (UHWM or manifest). Since then, EPA has modified the manifest regulations on a number of occasions.

On February 7, 2014, EPA finalized a rule to establish new requirements that will authorize the use of electronic manifests (or e-Manifests) as a means to track offsite shipments of hazardous waste from a generator’s site to the site of the receipt and disposition of the hazardous waste (79 FR 7518-7563). The final e-Manifest rule also implemented the provisions of the Hazardous Waste Electronic Manifest Establishment Act, P.L. 112-195, which directs EPA to establish a national electronic manifest system (or e-Manifest system). The rule clarifies explicitly that electronic manifest documents obtained from the Agency’s national e-Manifest system and completed in accordance with the rule’s provisions are the legal equivalent of the paper manifest forms that are currently authorized for use in tracking hazardous waste shipments. The electronic manifest documents authorized by the final regulation will be available to manifest users as an alternative to the paper manifest forms.<sup>1</sup>

EPA is now proposing a user fee methodology that would be applicable to the use of electronic and paper manifests that would be submitted to the e-Manifest system that is being established by EPA under the Act (called the proposed “fee rule”). After the implementation date for the e-Manifest system, certain users of the hazardous waste manifest will be required to pay a prescribed fee for each electronic and paper manifest they use and submit to the system, in order for EPA to recover its costs of developing and operating the e-Manifest system. EPA is also

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<sup>1</sup> EPA did not update the information collection burden associated with the regulatory changes to the manifest system announced in the e-Manifest final rule. While EPA acknowledged that the adoption of e-Manifest will change the manner in which information will be collected and transmitted, the system was not currently available and consequently the final rule did not change the information collected by the hazardous waste manifest, nor the scope of the wastes that are now subject to manifesting. EPA indicated that it would update the information collection burden in this user fee rule.

proposing several amendments to the regulations governing the use of electronic hazardous waste manifests and the completion of manifests.

This ICR describes the existing hazardous waste manifest regulations, including the e-Manifest final rule. It also describes amendments in the proposed fee rule. In addition, it estimates the annual hour and cost burden to respondents and EPA under these existing and proposed requirements.

## **2. NEED, AUTHORITY & USE FOR THE INFORMATION**

### **2A. Need & Authority to Collect Information**

EPA's authority to require use of a hazardous waste manifest system stems primarily from section 3002(a)(5) of RCRA, as discussed in Section 1B. See also RCRA sections 3003(a)(3) and 3004. In addition, the Hazardous Waste Electronic Manifest Establishment Act, PL112-195 was established by the U.S. Congress expressly to direct EPA to establish a national e-Manifest system, as well as to facilitate the establishment of the e-Manifest system by providing EPA with explicit statutory authority needed to implement the electronic manifest in a self-sustaining manner. Among other things, the e-Manifest Act directs EPA to promulgate final regulations, after consultation with the Secretary of Transportation, authorizing the use of electronic manifests within 1 year of enactment. The Act also directs the Agency to establish an e-Manifest system that may be used by any user within three years from the date of enactment of the Act.

The manifest (including the electronic manifest) serves an essential role as a control and transport document that accompanies the waste from its generation site to its treatment, storage, or disposal site. Among other things, the manifest lists the wastes that are being shipped and the treatment, storage, or disposal facility (TSDF) to which the wastes are bound. The term "manifest system" refers to the overall set of requirements for the use of the manifest.

The RCRA manifest requirements are needed to ensure that hazardous waste designated for delivery to an offsite TSDF actually reaches its destination. Thus, the manifest system serves as a self-enforcing mechanism that requires generators, transporters, and owner/operators of TSDFs to participate in an active hazardous waste tracking system. This system does not ordinarily involve intervention on the part of EPA unless hazardous wastes do not reach their designated point of disposal within a specified timeframe.

The critical components of the manifest system include the information required on the manifest itself, the transmittal of manifest copies to specified parties, the submission of exception, discrepancy, and un-manifested waste reports to EPA, and recordkeeping requirements. Each of these components assists in tracking the waste and helps the Agency in reviewing whether hazardous waste shipments have been handled properly. The manifest, by incorporating U.S. Department of Transportation (DOT) requirements applicable to shipping papers, also serves as an important safety tool. In the event of an accident during transport or delivery, information on the manifest, such as the identification of the waste's hazard class, can be used to help response teams determine appropriate response actions.

Although the generators, transporters, TSDFs, and emergency response teams (in the case of accidents) are the primary users of these records, EPA may review these documents during a facility inspection to make sure proper records are being kept and regulations are complied with. EPA also reviews and responds to exception reports, discrepancy reports, and un-manifested waste reports.

## **2B. Practical Utility & Users of the Information**

The manifest serves a number of vital uses to industry, regulators, EPA and the public. For example, it:

- Is a chain-of-custody document used by industry and regulators to track each shipment of hazardous waste from the generator to designated facility. Generators receive a copy of the manifest returned by the designated TSDF to confirm receipt of shipment. Each waste handler involved in the shipment keeps a copy and thus can be held accountable for proper handling and shipment.
- Provides information requirements sufficient to allow the use of a manifest in lieu of a United States Department of Transportation (USDOT) shipping paper or bill of lading, thereby reducing the duplication of paperwork to the regulated community.
- Provides information to transporters and waste management facility workers on the hazardous properties of the waste. When a waste is received at the designated TSDF, fingerprint analyses are performed to ensure that the shipped wastes match the manifest (e.g., the facility may check for color, specific gravity, etc.). If a significant discrepancy between the waste and manifest is found, the designated TSDF needs to contact the generator to determine next steps (e.g., proper disposition of the waste). In this respect, the manifest facilitates the safe and proper handling, treatment, storage and disposal of the shipped wastes before and after TSDF acceptance.
- Informs emergency response teams of the waste's hazard in the event of an accident, spill, or leak.
- Can be used by regulators and the public to learn about shipments of hazardous wastes to and from generators and designated TSDFs. In addition, generators and TSDFs often use manifest data as an input into the development of the Biennial Reports, which are required under Parts 262, 264, and 265. These Biennial reports are made public by EPA.

## **3. NONDUPLICATION, CONSULTATIONS & OTHER COLLECTION CRITERIA**

### **3A. Nonduplication**

No document identical or similar in purpose to the manifest is required by the federal government for the shipment of RCRA hazardous waste. Although a USDOT hazardous

materials shipping paper<sup>2</sup> contains most of the information contained on the manifest, it does not appear to be legally sufficient to track hazardous waste shipments from the generator to the designated facility (i.e. from “cradle-to-grave”). For example, USDOT’s shipping paper does not require EPA ID numbers and signatures of the transporters and all other chain-of-custody entities involved in shipping or handling the hazardous waste. EPA requires such signatures and identification numbers on the manifest to ensure accountability of each waste handler during shipment of the hazardous waste. Also, since EPA coordinated the development of the manifest with USDOT, the manifest form can be used as a USDOT shipping paper, thus eliminating the need for the transporter to carry both documents. Furthermore, the manifest form was developed as a means of standardizing the information requirements, both federal and state, thereby eliminating the need for a generator to complete and a transporter to carry multiple manifests for interstate shipments.

### **3B. Public Notice**

On May 22, 2001, EPA published a notice of proposed rulemaking (NPRM) that proposed several major revisions to the hazardous waste manifest system (66 FR 28240). The proposed rule included two distinct types of manifest system revisions: (1) revisions to the manifest form itself, including the proposed adoption of a standardized manifest form with more consistent procedures for using the manifest form to track waste shipments; and (2) proposed revisions aimed at adopting an electronic manifesting approach that would allow waste shipments to be tracked electronically, thereby mitigating the burdens and inefficiencies associated with the use of paper manifest forms. EPA received some 64 sets of public comments from affected or interested members of the public.

Since then, EPA has solicited public feedback on the e-Manifest through public forums and notices. Some are described below:

- EPA solicited stakeholder input on conceptual framework, roadmap, funding, governance, technical and business process approaches and options for an e-Manifest system during a two-day public meeting held in Washington, D.C. on May 19 and 20, 2004.
- On April 18, 2006, EPA published a public notice to announce and request comment on EPA’s intention to develop a centralized web-based IT system that would be hosted on EPA’s IT architecture (71 FR 19842, 4/18/06). EPA received strong support for a national web-based system funded through user fees. In addition, commenters generally supported EPA’s position that use of e-Manifests should be at the election of the users rather than mandatory.

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<sup>2</sup> Any person who offers a hazardous material for transportation in commerce must describe the hazardous material on a USDOT shipping paper in the manner required in 49 CFR 172 subpart C. A shipping paper includes “a shipping order, bill of lading, manifest or other shipping document serving a similar purpose and containing the information required by 49 CFR 172.202, 172.203 & 172.204.” 49 CFR 171.8 provides a definition of “shipping paper”. 49 CFR 172.205(h) states that an EPA RCRA hazardous waste manifest (EPA Form 8700-22) “may be used as the shipping paper” if it contains all the information required by 49 CFR 172 subpart C.

- On February 26, 2008, EPA published a notice to announce the availability of additional information on the e-Manifest project and solicit additional comments on two issues raised in response to the April 2006 notice: concern that an optional e-Manifest system would create dual paper and electronic systems, and differing perspectives related to confidential business information (CBI) claims for e-Manifests (73 FR 10204, 2/26/08). The notice also confirmed EPA’s commitment to finalizing a federal regulation that would authorize the use of electronic manifests as the legal equivalent of paper manifests.
- On November 19 and 20, 2008, EPA held a meeting of state government and RCRA-regulated industry representatives in Arlington, VA to discuss EPA’s 2006 announced preferred approach to develop a centralized web-based IT system that would be hosted on EPA’s existing IT architecture. Meeting participants were asked for input into the design, development, and operation of the centralized e-Manifest system.
- EPA has held a series of webinars with the public to discuss topics that required further input (including user fees). For example, webinars were held between April and June of 2009, November 20, 2014, and December 8, 2015.

### 3C. Consultations

In April 2015, EPA contacted three representatives of TSDFs to request their feedback on the ICR’s burden estimates. These individuals were contacted because their facilities are involved in multi-state shipping activities, interact with the entire range of waste handlers on manifest-related issues, and stay abreast of industry manifesting practices and burdens. As such, they can speak knowledgeably about the respective activities and burdens of small and large generators, transporters, and TSDFs. They are identified in the table.

Name	Organization	Phone	Email
Baker, Tom	Veolia Environmental Services	973-691-7330	tom.baker@veolia.com
Sauvageau, Matthew	Clean Harbors	847-468-6701	sauvageau.matthew@cleanharbors.com
Sloat, David	Stericycle	412 585-4154	david.sloat@stericycle.com

They were shown the ICR’s hourly burden estimates for the following paper manifesting activities and asked if they are acceptable and representative as an industry average:

- Preparing a manifest.
- Preparing a continuation sheet.
- Sending the manifest by mail to another waste handler.
- Placing a manifest copy in the files for recordkeeping (generators).
- Placing a manifest copy in the files for recordkeeping (TSDFs).
- Preparing and submitting an exception report.

They also were asked to suggest alternative estimates if the ICR’s estimates were not acceptable. All three individuals indicated that the ICR’s estimates are acceptable and representative. No

alternative estimates were offered.

In addition, EPA referred to the Regulatory Impact Analysis (RIA)<sup>3</sup> of the proposed fee rule to obtain updated respondent universe estimates and burden assumptions for electronic manifests and user fees. The RIA reflects the Agency's knowledge gained from interactions with states and industry for more than a decade. Refer to Section 3B of this supporting statement for EPA's outreach efforts soliciting public input on the e-Manifest. In addition, refer to the RIA for additional information on the consultations performed in preparing it.

### **3D. Effects of Less Frequent Collection**

#### **Transmittal of Manifests among Waste Handlers**

Since the manifest is required to accompany all shipments of hazardous waste when shipped offsite by the generator, less frequent preparation is not possible. The frequency of offsite shipment is determined by the generator and depends on: (1) the quantities of waste to be shipped as they impact the economies of shipment; (2) transporter scheduling; and (3) the applicable regulatory requirements. The present system gives the generator the opportunity to maximize the economies of offsite shipments by selecting a shipping frequency that is appropriate for the rate of waste generation. Further, by requiring a manifest to accompany each shipment, EPA ensures the manifest is available in the case of a discharge of hazardous waste during transportation. Information on the manifest could be useful to emergency response personnel responding to the scene. In this regard, less frequent manifesting could result in a less expedient or protective response to the release.

Note, however, that EPA provides a manifest exemption at 40 CFR 262.20(e) and (f) for specified types of shipments, as appropriate. Under section 262.20(e), small quantity generators (SQGs), or those generators who generate between 100 and 1,000 kilograms/month of hazardous waste, can be exempt from manifest requirements if the waste is reclaimed under a contractual agreement that specifies the type of waste and frequency of shipments; the transporting vehicle is owned and operated by the reclaimer; and the generator retains a copy of the reclamation agreement for three years after termination or expiration of the agreement. Under section 262.20(f), generators who transport hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way, are exempt from manifesting requirements.

#### **Collection of Manifests by e-Manifest System**

40 CFR 264.71(a)(2)(v) and 265.71(a)(2)(v) provide that, within 30 days of delivery, the designated TSDF must send the top copy (Page 1) of the paper manifest to the e-Manifest system for purposes of data entry and processing. In lieu of mailing this paper copy to EPA, the facility may transmit to the EPA system an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted

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<sup>3</sup> This document is titled "Regulatory Impact Analysis, EPA's 2015 Proposed Rule Establishing User Fees for the RCRA Electronic Hazardous Waste Manifest System (e-Manifest)."



to EPA must be submitted in data file and image file formats that are acceptable to EPA and that are supported by EPA's electronic reporting requirements and by the electronic manifest system. (Electronic manifests will be transacted within the national system and will therefore be available to the Agency.) These provisions were established in accordance with section 2(g)(1)(B) of the Hazardous Waste Electronic Manifest Establishment Act, which authorizes EPA to collect for data processing purposes any paper manifests that continue in use after the implementation of electronic manifests, so that there will be one unified data system managing the data from both electronic and paper manifests.

EPA does not believe that less frequent submittal of paper manifests is feasible. It must be emphasized that designated TSDFs must pay fees based on the number of manifests submitted to the national system. A monthly collection schedule is essential for prompt fee collection. In addition, the national operator will receive millions of paper manifests annually (inclusive of federally and state-regulated wastes). Forms must be reviewed and problems resolved. Less frequent submittal (e.g., quarterly or bi-annually) would create a large backlog of manifests, delaying and potentially hindering the correction of manifest data, data entry and billing. The national operator also would be inundated with forms, which could be overwhelming logistically. On the other hand, monthly submittal would ensure a more manageable workflow, allowing for effective and prompt data processing and billing.

### **3E. General Guidelines**

This ICR adheres to the guidelines stated in the Paperwork Reduction Act of 1995, OMB's implementing regulations, EPA's ICR Handbook, and other applicable OMB guidance.

### **3F. Confidentiality**

Section 3007(b) of RCRA and 40 CFR Part 2, Subpart B, which define EPA's general policy on the public disclosure of information, contain provisions for confidentiality. In addition, 40 CFR 260.2(a), which was amended by the final e-Manifest rule, provides that any information provided to EPA under 40 CFR Parts 260 through 266 and 268 will be made available to the public to the extent and in the manner authorized by the Freedom of Information Act, 5 U.S.C. section 552, section 3007(b) of RCRA and EPA regulations implementing the Freedom of Information Act and section 3007(b), and Part 2, as applicable.

Section 260.2(b) provides that, except as otherwise specified, any person who submits information to EPA in accordance with Parts 260 through 266 and 268 may assert a claim of business confidentiality covering part or all of that information by following the procedures set forth in section 2.203(b). Information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in Part 2, Subpart B, except that information required by section 262.53(a) and section 262.83 that is submitted in a notification of intent to export a hazardous waste will be provided to the U.S. Department of State and the appropriate authorities in the transit and receiving or importing countries regardless of any claims of confidentiality. However, if no such claim accompanies the information when it is received by EPA, it may be made available to the public without further notice to the person submitting it.

Section 260.2(c) clarifies that no claim of business confidentiality may be asserted by any person with respect to information entered on a Hazardous Waste Manifest (EPA Form 8700-22), a Hazardous Waste Manifest Continuation Sheet (EPA Form 8700-22A), or an electronic manifest format that may be prepared and used in accordance with section 262.20(a)(3). EPA will make any electronic manifest that is prepared and used in accordance with section 262.20(a)(3), or any paper manifest that is submitted to the system under sections 264.71(a)(6) or 265.71(a)(6) available to the public when the electronic or paper manifest is a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by EPA to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

EPA intends to omit the expiration date from the forms being submitted for OMB review in this ICR. The information collected on the forms is modified infrequently. Since inclusion of the expiration date on the forms in these circumstances provides little to no value for the public, EPA intends to omit it from the forms.

### **3G. Sensitive Questions**

No questions of a sensitive nature are included in any of the information collection requirements.

## **4. THE RESPONDENTS AND THE INFORMATION COLLECTED**

### **4A. Respondent Standard Industrial Classification Codes**

Following are the Standard Industrial Classification (SIC) codes and the North American Industry Classification System (NAICS) codes of facilities most likely subject to the requirements in this ICR.

<b>Industrial Sector</b>	<b>SIC Code(s)</b>	<b>NAICS Code(s)</b>
Agriculture, Forestry, Fishing, and Hunting	01-09	11
Mining	10-14	21
Utilities	49	22
Construction	15-17	23
Manufacturing	20-39	31-33
Wholesale Trade	50-51	42
Retail Trade	52-59	44-45
Transportation and Warehousing	40-47	48-49
Information	27, 48, 73 (partial), 78	51
Waste Management & Remediation Services	1799, 4953, 4959	562

Industrial Sector	SIC Code(s)	NAICS Code(s)
Public Administration	91-97	92

#### 4B. Information Requested

This section presents information collection requirements in the existing manifest regulations, including requirements in the e-Manifest final rule (79 FR 7518-7563). It also presents amendments in the proposed fee rule. EPA is proposing to amend information collection requirements at 40 CFR:

- 262.24(c);
- 263.21; and
- 264.71(l) and 265.71(l).

There are four categories of respondents that will perform these requirements, described below. This section describes the requirements that apply to each category.

- Manifest printer registrant organizations – organizations that apply to EPA for approval to produce the paper manifest for use and distribution.
- Hazardous waste generators – sites that generate hazardous waste and ship it offsite.
- Hazardous waste transporters – entities that transport hazardous waste on public roads.
- Designated treatment, storage and disposal facilities (designated TSDFs) – facilities that receive offsite shipments for management and disposal. Note that, normally, designated TSDFs also generate hazardous waste and therefore qualify as hazardous waste generators.

#### Manifest Printer Registrant Organizations

##### (a) Applying to the Registry

40 CFR 262.21(a) provides that a person may not print the manifest for use or distribution unless his/her organization (e.g., company, state agency) has received approval from EPA to do so under 40 CFR 262.21(c) and (e). In order to receive EPA approval, a registrant must submit to EPA an application that contains the information specified in 40 CFR 262.21(b). Upon EPA approval of the application, the registrant must submit three fully assembled manifests and, if needed, continuation sheets that meet the specifications of 40 CFR 262.21(f) and a description of the form samples, as specified in 40 CFR 262.21(d). In reviewing these submittals, EPA may request modification to them before approval.

##### Data Items

- An application that contains the following information:
  - Name and mailing address of registrant.

- Name, telephone number, and email address of contact person.
- Brief description of registrant’s government or business activity.
- EPA ID number of the registrant, if applicable.
- Description of the scope of the operations that the registrant plans to undertake in printing, distributing, and using its manifests, including:
  - o A description of the printing operation. The description should include an explanation of whether the registrant intends to print its manifests in-house or through a separate printing company. If the registrant intends to use a separate printing company to print the manifest on its behalf, the application must identify this printing company and discuss how the registrant will oversee the company. If this includes the use of intermediaries, the role of each must be discussed. The application must provide the name and mailing address of each company. It also must provide the name and telephone number of the contact person at each company.
  - o A description of how the registrant will ensure that its organization and unaffiliated companies, if any, comply with the requirements of 40 CFR 262.21. The application must discuss how the registrant will ensure that a unique manifest tracking number will be pre-printed on each manifest. The application must describe the internal control procedures to be followed by the registrant and unaffiliated companies to ensure that numbers are tightly controlled and remain unique. If computer systems or other infrastructure will be used to maintain, track, or assign numbers, these should be indicated. The application must indicate how the printer will pre-print a unique number on each form. The application must explain the quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time.
  - o An indication of whether the registrant intends to use the manifests for its own business operations or to distribute the manifests to a separate company or to the general public (e.g., for purchase).
- A brief description of the qualifications of the company that will print the manifest. The registrant may use readily available information to do so (e.g., corporate brochures, product samples, customer references, documentation of ISO certification), so long as such information pertains to the establishments or company being proposed to print the manifest.
- Proposed unique three-letter manifest tracking number suffix. If the registrant is approved to print the manifest, the registrant must use this suffix to pre-print a unique manifest tracking number on each manifest.
- A signed certification by a duly authorized employee of the registrant that the organizations and companies in its application will comply with the procedures of its approved application and the requirements of 40 CFR 262.21 and that it will notify EPA of any duplicated manifest tracking numbers on manifests that have been used or distributed to other parties as soon as this becomes known.

- Three fully assembled manifests and, if needed, continuation sheets that meet all of the specifications in 40 CFR 262.21(f). The form samples must be printed by the company that will print the manifest as identified in the application approved under 40 CFR 262.21(c). The registrant need not submit samples of the continuation sheet if the continuation sheet will be printed using the same paper type, paper weight, ink color of the instructions, and binding method as the manifest.
- A description of the manifest samples as follows:
  - Paper type (i.e., manufacturer and grade of the manifest paper).
  - Paper weight of each copy.
  - Ink color of the manifest’s instructions. If screening of the ink was used, the registrant must indicate the extent of the screening.
  - Method of binding the copies.

### Respondent Activities

- Prepare and submit initial application.
- Submit revised initial application to EPA, if requested.
- Submit three fully assembled manifests and, if needed, continuation sheets and a description of the form samples.
- Submit revised form samples based on EPA comment on the initial samples, if requested.

#### (b) Updating General Information in the Approved Application

40 CFR 262.21(h)(1) provides that, if an approved registrant would like to update any of the information provided in its application (e.g., to update a company phone number or name of contact person), the registrant must revise the application and submit it to EPA, along with an indication or explanation of the update, as soon as practicable after the change occurs. EPA will review and either approve or deny the revision. If the revision is denied, the registrant must respond to the Agency’s concerns.

### Data Item

- Revised application, along with an indication or explanation of the update.

### Respondent Activities

- Revise and submit the application to EPA, along with an indication or explanation of the update.
- Respond to the Agency’s concerns, if applicable.

#### (c) Requesting Approval for a New Tracking Number Suffix

40 CFR 262.21(h)(2) provides that, if an approved registrant would like a new tracking number suffix, the registrant must submit a proposed suffix to EPA, along with the reason for requesting it.

#### Data Item

- Proposed tracking number suffix, along with the reason for requesting it.

#### Respondent Activity

- Submit a proposed tracking number suffix, along with the reason for requesting it.
- (d) Requesting Approval for Changes to Printing Specifications or Use of a New Printer

40 CFR 262.21(h)(3) provides that, if a registrant would like to change the paper type, paper weight, ink color of the manifest instructions, or binding method of its manifest or continuation sheet subsequent to approval under 40 CFR 262.21(e), then the registrant must submit three samples of the revised form for EPA review and approval. If the approved registrant would like to use a new printer, the registrant must submit three manifest samples printed by the new printer, along with a brief description of the printer's qualifications to print the manifest. In reviewing these submittals, EPA may request modification to them before approval.

#### Data Items

- Three samples of the manifest form and/or continuation sheet.
- A brief description of the qualifications of the new printer, if applicable.

#### Respondent Activities

- Submit three samples of the manifest form and/or continuation sheet and, if applicable, a brief description of the qualifications of the new printer.
- Submit revised manifest form and/or continuation sheet samples to EPA, if requested.

- (e) Typesetting the Manifest Form Subsequent to its Approval

40 CFR 262.21(i) provides that, if subsequent to its approval under 40 CFR 262.21(e), a registrant typesets its manifest or continuation sheet instead of using the electronic file of the forms provided by EPA, it must submit three samples of the manifest or continuation sheet to the registry for approval. The registrant cannot use or distribute its typeset forms until EPA approves them.

#### Data Item

- Three samples of the manifest or continuation sheet.

#### Respondent Activity

- Submit three samples of the manifest or continuation sheet to the registry for approval.

(f) Requesting an Exemption

40 CFR 262.21(j) provides that EPA may exempt a registrant from the requirement to submit form samples under 40 CFR 262.21(d) or 262.21(h)(3) if the Agency is persuaded that a separate review of the registrant's forms would serve little purpose in informing an approval decision (e.g., a registrant certifies that it will print the manifest using the same paper type, paper weight, ink color of the instructions, and binding method of the form samples approved for some other registrant). A registrant may request an exemption from EPA by indicating why an exemption is warranted.

Data Item

- Documentation indicating why an exemption is warranted.

Respondent Activity

- Submit documentation to EPA indicating why an exemption is warranted.

(g) Notifying EPA of a Printing Specification Violation

40 CFR 262.21(k) requires an approved registrant to notify EPA by phone or email as soon as it becomes aware that it has used or distributed manifests that contain duplicated manifest tracking numbers.

Data Item

- Notification of duplicated manifest tracking numbers.

Respondent Activity

- Notify EPA of duplicated manifest tracking numbers.

(h) Revising the Approved Manifest if Requested by EPA

40 CFR 262.21(l) provides that, if, subsequent to approval of a registrant under 40 CFR 262.21(e), EPA becomes aware that the registrant's approved form does not satisfactorily meet the print specifications in 40 CFR 262.21(f), EPA will contact the registrant and require modifications to the form.

Data Item

- Revised manifest form samples.

### Respondent Activity

- Submit revised manifest form samples to EPA, if requested.
- (i) Responding to Suspension and Revocation Procedures

40 CFR 262.21(m) provides that EPA may suspend and, if necessary, revoke printing privileges if it finds that the registrant: (i) has deviated from its application approved under 40 CFR 262.21(c) in printing the form; (ii) has knowingly used or distributed forms that deviate from its approved form samples in regard to paper weight, paper type, ink color of the instructions, or binding method; or (iii) exhibits a continuing pattern of behavior in using or distributing manifests that contain duplicate manifest tracking numbers. EPA will send a warning letter to the registrant that specifies the date by which it must come into compliance with the requirements. If the registrant does not come in compliance by the specified date, EPA will send a second letter notifying the registrant that EPA has suspended or revoked its printing privileges. An approved registrant must provide information on its printing activities to EPA if requested.

### Data Item

- Information requested by EPA.

### Respondent Activity

- Submit information if requested by EPA.

## **Hazardous Waste Generators**

### (a) e-Manifest Setup

Facilities must register their employees with the national system before the employees can prepare or transmit an e-Manifest. The employees must update their registration information if it changes. In addition, facilities must comply with 40 CFR Part 3 requirements for identity-proofing. Section 3.2000(b)(5)(vii) requires that the identity of the individual uniquely entitled to use the device and their relation to any entity for which he or she will sign electronic documents must be determined with legal certainty by EPA or state/local, as applicable. In the case of priority reports, this determination must be made before the electronic document is received, by means of:

- Identifiers or attributes that are verified by attestation of disinterested individuals to be uniquely true of the individual in whose name the application is submitted, based on information or objects of independent origin, at least one item of which is not subject to change without governmental action or authorization.
- A method of determining identity no less stringent than the one above.
- Collection of either a subscriber agreement or a certification from a Local Registration Authority (LRA) that such an agreement has been received and securely stored.



### Data Items

- Online registration information.
- Data for identity proofing (e.g., subscriber agreement).

### Respondent Activities

- Facility employees must perform the following:
  - Register and maintain their account; and
  - If applicable, follow identity-proofing requirements:
    - o Comply with subscriber agreement provisions;
    - o Comply with LRA provisions; or
    - o Comply with requirements for identifier, attribute, or alternative method.

#### (b) Manifest Completion

40 CFR 262.20(a)(1) requires generators transporting, or offering for transportation, hazardous waste for offsite treatment, storage, or disposal to prepare a manifest (EPA Form 8700-22) and, if necessary, continuation sheets (EPA Form 8700-22A). Section 262.20(a)(3) provides that, in lieu of using the manifest form specified in section 262.20(a)(1), a person required to prepare a manifest under section 262.20(a)(1) may prepare and use an electronic manifest, provided that the person complies with the requirements in section 262.24 for use of electronic manifests, and the requirements of 40 CFR 3.10 for the reporting of electronic documents to EPA. In addition, generators of paper and electronic manifests must comply with other applicable sections of 40 CFR as applicable, including sections 262.20, 262.23, 262.54, and 262.60, as appropriate, as well as the instructions in the appendix to 40 CFR Part 262. [Note: Refer to “e-Manifest Setup” in this section for the data items and activities associated with the Part 3 requirements.]

40 CFR 262.24 establishes the legal equivalence of the e-Manifest to the paper manifest. It provides that electronic manifests that are obtained, completed, and transmitted in accordance with section 262.20(a)(3), and used in accordance with section 262.24 in lieu of EPA Forms 8700-22 and 8700-22A are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest. It also addresses other issues related to e-Manifests (e.g., requirements for a printed copy of the manifest). [Note: Refer to “Use of the Electronic Manifest” in this section for additional information.]

### Data Items

- Paper or electronic manifest, which includes the following:
  - The generator’s EPA ID or state ID number.
  - The total number of pages used to complete the manifest.
  - The emergency response phone number.
  - The manifest tracking number.

- The generator’s name and mailing address.
  - The generator’s phone number.
  - The generator’s site address (if different than mailing address).
  - The name and EPA ID number for transporters.
  - The designated facility’s name and site address.
  - The designated facility’s phone number.
  - The EPA ID number of the designated facility.
  - The USDOT description of the waste.
  - The container description (number and type).
  - The total quantity of each waste described.
  - The unit of measure.
  - The waste codes representing the waste.
  - Special handling instructions and additional information.
  - The generator’s/offeror’s certification.<sup>4</sup>
- For primary exporters only: The primary exporter must prepare the manifest in accordance with 40 CFR 262.20 and 262.23, except as provided under 40 CFR 262.54(a) through (d):
    - In lieu of the site name, site address and EPA ID number of the designated permitted facility, enter the name and site address of the consignee.
    - In lieu of the name, site address, and EPA ID number of a permitted alternate facility, enter the name and site address of any alternate consignee.
    - In the International Shipments Block, check the export box and enter the point of exit (city and state) from the US.
  - For primary importers only: The primary importer must prepare the manifest in accordance with 40 CFR 262.20 & 262.23, except as provided in 40 CFR 262.60(b) and (d):
    - In place of the generator’s name, address, and EPA ID number, use the name and address of the foreign generator and the importer’s name, address, and EPA ID number.
    - In place of the generator’s signature on the certification statement, the US importer or his agent must sign and date the certification and obtain the signature of the initial transporter.
    - In the International Shipment Block, check the import box and enter the point of entry (city and state) into the US.

## Respondent Activities

### **Paper Manifest**

- Generators perform the following:
  - Complete the manifest for domestic, export, and import shipments; and
  - Complete continuation sheet, if required.

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<sup>4</sup> The generator’s/offeror’s certification in Item 15 of the manifest form references the waste minimization certification codified at 40 CFR 262.27.

## **Electronic Manifest**

- Generators must perform the above activities in accordance with sections 262.20(a)(3) and 262.24 for completing the electronic manifest.

### (c) Compliance with State Program Requirements

Under 40 CFR 262.21(g)(2), generators must determine whether the consignment state regulates any additional wastes (beyond those regulated federally) as hazardous wastes under its state hazardous waste program. Generators must also determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states.

### Data Item

- Information provided by the state on its manifest program.

### Respondent Activities

- Generators must contact the consignment/generator state if needed and submit any copies of the manifest to these states, as applicable.

### (d) Manifest Transmittal and Recordkeeping

Generators must transmit and keep records of the manifest in accordance with 40 CFR 262.23, 262.40, 262.44, 262.54 and 262.60, as appropriate. A generator must sign and give copies of the manifest to the transporter along with the hazardous waste in accordance with 40 CFR 262.23(a) and (b) and retain copies of the manifest in accordance with 40 CFR 262.23(a) & 262.40(a). For shipments of hazardous waste within the US solely by water (bulk shipments only), the generator, as required by 40 CFR 262.23(c), must send three copies of the manifest to the owner/operator of the designated facility or the last water transporter to handle the waste in the US if exported by water. For rail shipments of hazardous waste within the US which originate at the site of generation, the generator, as required under 40 CFR 262.23(d), must send at least three copies of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the US if exported by rail. For exports, the primary exporter must provide the transporter with a EPA Acknowledgment of Consent, and an additional copy of the manifest or shipping papers for delivery to the US Customs official at the point the hazardous waste exits the US, as required by 40 CFR 262.54(h) and (i). In the event an SQG's waste is reclaimed under a contractual agreement pursuant to 40 CFR 262.20(e)(1), the SQG must retain the reclamation agreement for at least three years from the date of termination or expiration of the agreement, as required by 40 CFR 262.20(e)(2).

40 CFR 262.24 establishes the legal equivalence of the e-Manifest to the paper manifest. It provides that electronic manifests that are obtained, completed, and transmitted in accordance with section 262.20(a)(3), and used in accordance with section 262.24 in lieu of EPA Forms 8700-22 and 8700-22A are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete,

sign, provide, use, or retain a manifest. It also addresses other issues related to e-Manifests (e.g., requirements for a printed copy of the manifest). Note that EPA is proposing to amend section 262.24(c) regarding restriction on the use of the manifest. [Note: Refer to “Use of the Electronic Manifest” in this section for additional information.]

#### Data Items

- Paper or electronic manifest.
- Acknowledgement of Consent for exports.
- Reclamation agreement for SQG tolling arrangements.

#### Respondent Activities

##### **Paper Manifest**

- Generators must perform the following:
  - Sign the manifest certification and obtain the signature of the initial transporter and date of acceptance on the manifest in accordance with 40 CFR 262.23(a).
  - Keep a copy of the manifest and give the remaining copies to the initial transporter, in accordance with 40 CFR 262.23(a) & (b).
  - Keep a copy of the manifest returned from the designated facility for at least three years from the date the waste was accepted by the initial waste transporter, in accordance with 40 CFR 262.40(a) or 262.44(a).
  - For shipments solely by water, send three copies of the manifest, dated and signed in accordance with 40 CFR 262.23(a), to the designated facility or the last water transporter to handle the waste in the US, as required by 40 CFR 262.23(c). [Note: Copies of the manifest are not required for each transporter.]
  - For shipments by rail originating at the site of generation, send at least three copies of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the US, as required by 40 CFR 262.23(d).
- Primary exporters must provide the transporter with an EPA Acknowledgment of Consent and an additional copy of the manifest or shipping papers for delivery to the US Customs official at the point the hazardous waste exits the US, as required by 40 CFR 262.54(h) and (i).
- An SQG operating under a tolling agreement must retain a copy of each reclamation agreement, if applicable, for at least three years after the termination or expiration of the agreement, as required by 40 CFR 262.20(e)(2).

##### **Electronic Manifest**

- Generators must perform the above activities in accordance with sections 262.20(a)(3) and 262.24 for completing, signing, providing, using and retaining the electronic manifest. Note that, under proposed section 262.24(c)(1), a generator may sign by hand and retain a paper copy of the electronic manifest, rather than electronically signing it, thereby allowing the transporter and subsequent waste handlers to use the electronic manifest for that shipment.

(e) Use of the Electronic Manifest

*(e1) Legal Equivalence to Paper Manifest*

40 CFR 262.24(a) establishes the legal equivalence of the e-Manifest to paper manifests. It provides that electronic manifests that are obtained, completed, and transmitted in accordance with section 262.20(a)(3), and used in accordance with section 262.24 in lieu of EPA Forms 8700-22 and 8700-22A are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest. It provides that (1) any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of section 262.25(a); (2) any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when an electronic manifest is transmitted to the other person by submission to the system; (3) any requirement in these regulations for a generator to keep or retain a copy of each manifest is satisfied by retention of a signed electronic manifest in the generator's account on the national e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector; (4) no generator may be held liable for the inability to produce an electronic manifest for inspection under this section if the generator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the generator bears no responsibility. [Note: There are no data items or activities associated with section 262.24(a).]

*(e2) Accessing the e-Manifest*

40 CFR 262.24(b) provides that a generator may participate in the electronic manifest system either by accessing the electronic manifest system from its own electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the generator's site by the transporter who accepts the hazardous waste shipment from the generator for offsite transportation. [Note: There are no data items or activities associated with section 262.24(b).]

*(e3) Restriction on Use of Electronic Manifests*

EPA is proposing to amend 40 CFR 262.24(c) to provide that a generator may use an electronic manifest for the tracking of waste shipments involving any RCRA hazardous waste only if it is known at the time the manifest is originated that all waste handlers named on the manifest participate in the use of the electronic manifest, except that a generator may sign by hand and retain a paper copy of the manifest signed by hand by the initial transporter, in lieu of executing the generator copy electronically, thereby enabling the transporter and subsequent waste handlers to execute the remainder of the manifest copies electronically. [Note: Refer to “Manifest Transmittal and Recordkeeping” in this section for generator data items and activities associated with this proposed provision.]

*(e4) Requirement for One Printed Copy*

40 CFR 262.24(d) provides that, to the extent the Hazardous Materials regulation on shipping papers for carriage by public highway requires shippers of hazardous materials to supply a paper document for compliance with 49 CFR 177.817, a generator originating an electronic manifest must also provide the initial transporter with one printed copy of the electronic manifest. [Note: Refer to “Manifest Transmittal and Recordkeeping” in this section for generator data items and activities associated with transmitting a paper manifest with the e-Manifest.]

*(e5) Special Procedures when Electronic Manifest is Unavailable*

40 CFR 262.24(e) provides that, if a generator has prepared an electronic manifest for a hazardous waste shipment, but the electronic manifest system becomes unavailable for any reason prior to the time that the initial transporter has signed electronically to acknowledge the receipt of the hazardous waste from the generator, then the generator must obtain and complete a paper manifest and if necessary, a continuation sheet (EPA Forms 8700-22 and 8700-22A) in accordance with the manifest instructions in the appendix to Part 262 and use these paper forms from this point forward in accordance with the requirements of 40 CFR 262.23. [Note: Refer to “Manifest Completion” in this section for generator data items and activities associated with paper manifest completion.]

*(e6) Special Procedures for Electronic Signature Methods Undergoing Tests*

40 CFR 262.24(f) provides that, if a generator has prepared an electronic manifest for a hazardous waste shipment, and signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the generator shall also sign with an ink signature the generator/offeror certification on the printed copy of the manifest provided under section 262.24(d). [Note: Refer to “Manifest Transmittal and Recordkeeping” in this section for generator data items and activities associated with electronically signing a manifest.]

*(e7) Imposition of User Fee*

40 CFR 262.24(g) provides that a generator who is a user of the electronic manifest may be assessed a user fee by EPA for the origination of each electronic manifest. EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall

be determined based on current and projected system costs and level of use of the electronic manifest system.

(f) Electronic Manifest Signatures

40 CFR 262.25(a) provides that electronic signature methods for the e-Manifest system shall (1) be a legally valid and enforceable signature under applicable EPA and other federal requirements pertaining to electronic signatures; and (2) be a method that is designed and implemented in a manner that EPA considers to be as cost-effective and practical as possible for the users of the manifest. [Note: There are no data items or activities associated with section 262.25(a).]

(g) Undeliverable Shipments

Generators must provide instructions to the transporter on how to deal with shipments that cannot be delivered to the designated or the alternate TSDF. For shipments that a transporter is unable to deliver to the designated facility or the alternate facility, generators must designate another facility or instruct the transporter to return the waste, as required by 40 CFR 262.20(d) and 262.54(g)(3).

Data Item

- Instructions to the transporter on how to deal with shipments that cannot be delivered to the designated or the alternate TSDF.

Respondent Activity

- For shipments that a transporter is unable to deliver to the designated facility or the alternate facility, generators must designate another facility or instruct the transporter to return the waste.

(h) Rejected Waste and Container Residues

Under 40 CFR 262.34(j), a generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of 40 CFR 264.72 or 265.72 may accumulate the returned waste onsite, as specified. Upon receipt of the returned shipment, the generator must sign the manifest that accompanies the rejected load or residue.

Data Item

- A paper or electronic manifest.

Respondent Activities

**Paper Manifest**

- Generators must perform the following activities:
  - Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest.
  - Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.
  - Provide the transporter a copy of the manifest.
  - Within 30 days of delivery, send a copy to the designated TSDF that returned the shipment to the generator.
  - Retain a copy.

### **Electronic Manifest**

- Generators must perform the above activities in accordance with sections 262.20(a)(3) and 262.24 for completing, signing, providing, using and retaining the electronic manifest.
  - (i) Exception Reports: Completion, Submission, and Recordkeeping
    - (i1) *Large Quantity Generators*

In the event a large quantity generator (LQG) does not receive a copy of the signed manifest from the designated facility owner/operator within 35 days of the date the waste was accepted by the initial transporter, the LQG must contact the transporter and/or the owner/operator of the designated facility to determine the status of the hazardous waste. The LQG must submit an exception report to EPA if he/she has not received a copy of the signed manifest from the designated facility owner/operator within 45 days of the date the waste was accepted by the initial transporter and must retain a copy of the exception report for at least three years from the due date of the report, in accordance with 40 CFR 262.42(a) and 262.40(b).

### Data Item

- An exception report containing the following data:
  - A legible copy of the manifest for which the generator does not have confirmation of delivery, as required by 40 CFR 262.42(a)(2)(i).
  - A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts, as required by 40 CFR 262.42(a)(2)(ii).

### Respondent Activities

- LQGs must perform the following:



- Prepare and submit a signed cover letter to EPA explaining the generator’s efforts to locate the hazardous waste and the results of those efforts, along with a legible copy of the manifest, in accordance with 40 CFR 262.42(a)(2)(i) and (ii).
- Keep a copy of each exception report, as required by 40 CFR 262.40(b).

(i2) *Small Quantity Generators*

In the event an SQG does not receive a copy of the signed manifest from the owner/operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter, he/she must submit to the EPA Regional Administrator a legible copy of the manifest with some indication that he has not received confirmation of delivery, in accordance with 40 CFR 262.42(b).

Data Item

- A legible copy of the manifest with some indication that the SQG has not received confirmation of delivery.

Respondent Activity

- SQGs must submit a legible copy of the manifest with some indication that the waste has not been delivered.

**Hazardous Waste Transporters**

(a) e-Manifest Setup

Facilities must register their employees with the national system before the employees can prepare or transmit an e-Manifest. The employees must update their registration information if it changes. In addition, facilities must comply with 40 CFR Part 3 requirements for identity-proofing. Section 3.2000(b)(5)(vii) requires that the identity of the individual uniquely entitled to use the device and their relation to any entity for which he or she will sign electronic documents must be determined with legal certainty by EPA or state/local, as applicable. In the case of priority reports, this determination must be made before the electronic document is received, by means of:

- Identifiers or attributes that are verified by attestation of disinterested individuals to be uniquely true of the individual in whose name the application is submitted, based on information or objects of independent origin, at least one item of which is not subject to change without governmental action or authorization.
- A method of determining identity no less stringent than the one above.
- Collection of either a subscriber agreement or a certification from a Local Registration Authority (LRA) that such an agreement has been received and securely stored.

Data Items

- Online registration information.
- Data for identity proofing (e.g., subscriber agreement).

### Respondent Activities

- Facility employees must perform the following:
  - Register and maintain their account; and
  - If applicable, follow identity-proofing requirements:
    - o Comply with subscriber agreement provisions;
    - o Comply with LRA provisions; or
    - o Comply with requirements for identifier, attribute, or alternative method.

#### (b) Manifest Completion, Transmittal, and Recordkeeping

40 CFR 263.20, 263.21 & 263.22 detail the completion, transmittal, and recordkeeping requirements of manifests or shipping papers for hazardous waste transporters, including those exporting hazardous waste outside the US.

40 CFR 263.20(a)(4) provides that electronic manifests that are obtained, completed, and transmitted in accordance with section 262.20(a)(3) and used in accordance with section 263.20(a)(4) in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest. Section 263.20(a)(5)-(8) address other issues related to the e-Manifest (e.g., special procedures for electronic signatures undergoing tests). [Note: Refer to “Use of the Electronic Manifest” in this section for additional information.]

#### *(b1) Hazardous Waste Transporters (except as exempted by 40 CFR 263.20(e) and (f))*

40 CFR 263.20(a)(1) provides that a transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest form (EPA Form 8700-22, and if necessary, EPA Form 8700-22A) signed in accordance with the requirement of section 262.23, or is provided with an electronic manifest that is obtained, completed, and transmitted in accordance with section 262.20(a)(3), and signed with a valid and enforceable electronic signature as described in section 262.25.

Except for certain water and rail transporters exempted under 40 CFR 263.20(e)&(f), transporters transporting hazardous waste outside the US (40 CFR 263.20(g)) and transporters transporting hazardous waste pursuant to a reclamation agreement (40 CFR 263.20(h)), section 263.20(b), (c),(d) require transporters to sign and date the manifest acknowledging acceptance of the waste from the generator before transporting the hazardous waste. Before leaving the property, the transporter must return or transmit a signed copy of the manifest to the generator. In addition, the transporter must ensure that a copy of the manifest or other shipping paper accompanies the shipment and is readily available and recognizable.

A transporter who delivers a hazardous waste to another transporter or to the designated facility must obtain the date of delivery and the signature of the transporter or designated facility; retain a copy in accordance with 40 CFR 263.22; and give the remaining copies of the manifest to the accepting transporter or designated facility, as required at 40 CFR 263.20(d).

#### Data Item

- A paper or electronic manifest.
- A paper shipping paper.

#### Respondent Activities

##### **Paper Manifest**

- Transporters must perform the following:
  - Sign and date the manifest, as required by 40 CFR 263.20(b).
  - Return a signed copy of the manifest to the generator, as required under 40 CFR 263.20(b).
  - Ensure that the manifest (or other shipping paper) accompanies the waste to its destination, as required by 40 CFR 263.20(c).
  - In delivering the hazardous waste and manifest to another transporter or to the designated facility, perform the following activities, as required by 40 CFR 263.20(d):
    - Obtain the date of delivery and signature of that transporter or the owner/operator of the facility or alternate facility designated on the manifest, pursuant to 40 CFR 263.20(d)(1).
    - Retain a copy of the manifest pursuant to 40 CFR 263.22(a).
    - Give remaining copies of the manifest to the accepting transporter or facility, in accordance with 40 CFR 263.20(d)(3).

##### **Electronic Manifest**

- Transporters must perform the above activities in accordance with section 263.20(a) (4)- (8), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

*(b2) Water (Bulk Shipment) Transporters Regulated under 40 CFR 263.20(e)*

Water (bulk shipment) transporters who are regulated under 40 CFR 263.20(e) must sign and date the manifest upon receipt of the hazardous waste; must ensure that a shipping paper containing the generator, waste, and facility information, and a EPA Acknowledgment of Consent for exports, accompany the waste during transportation; must obtain the signature of the facility owner/operator on the manifest or shipping paper; and must retain a copy of the manifest or shipping paper for three years.

## Data Items

- Paper or electronic manifest.
- Copies of the shipping paper containing all the information on the manifest except the EPA ID numbers, the generator certification, and required signatures, as required under 40 CFR 263.20(e).
- An EPA Acknowledgment of Consent (for exporters only), as required by 40 CFR 263.20(e)(2).

## Respondent Activities

### **Paper Manifest**

- The person delivering hazardous waste to the initial water transporter must:
  - Obtain the date of delivery and signature of the initial water transporter on the manifest, in accordance with 40 CFR 263.20(e)(4).
  - Forward the manifest to the designated facility, in accordance with 40 CFR 263.20(e)(4).
- Bulk water transporters subject to section 263.20(e) must perform the following activities:
  - Ensure that the shipping paper (and Acknowledgment of Consent, for exports) accompanies the waste to its destination, as required by 40 CFR 263.20(e)(2).
  - If the delivering (water) transporter, obtain the date of delivery and signature of the owner/operator of the designated facility on either the manifest or shipping paper, as required by 40 CFR 263.20(e)(3).
  - If the initial water transporter, sign and date the manifest and return it to the delivering transporter so that the manifest can be forwarded to the designated facility owner/operator, as required by 40 CFR 263.20(e)(4).
  - Retain a copy of the manifest or shipping paper, as required by 40 CFR 263.22(b).

### **Electronic Manifest**

- Transporters must perform the above activities in accordance with section 263.20(a) (4)- (8), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

*(b3) Rail Transporters Regulated under 40 CFR 263.20(f)*

Under 40 CFR 263.20(f)(1), initial rail transporters must sign and date the manifest acknowledging acceptance of the hazardous waste; return or transmit a signed copy of the manifest to the non-rail transporter; and forward at least three copies of the manifest to the next non-rail transporter, the designated facility, if the shipment is delivered to that facility by rail, or the last rail transporter designated to handle the waste in the US; and retain a copy of the manifest and rail shipping paper in accordance with 40 CFR 263.22.

Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA ID numbers, generator certification, and signatures) and, for exports, a EPA Acknowledgment of Consent accompanies the hazardous waste at all times, as required by 40 CFR 263.20(f)(2). When delivering hazardous waste to the designated facility, a rail transporter must obtain the date of delivery and signature of the owner or operator of the designated facility on the manifest, or a signature on the shipping paper (if the manifest has not been received by the facility) and retain a copy of the manifest or signed shipping paper, as required under 40 CFR 263.20(f)(3). When delivering hazardous waste to a non-rail transporter, a rail transporter must obtain the date of delivery and the signature of the next non-rail transporter on the manifest and retain a copy of the manifest, as required under 40 CFR 263.20(f)(4). Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest and provide a copy to the rail transporter, as required by 40 CFR 263.20(f)(5).

Data Items

- A paper or electronic manifest.
- A shipping paper containing all the information on the manifest, except the EPA ID numbers, the generator certification, and required signatures.
- An EPA Acknowledgment of Consent (for exports only).

Respondent Activities

**Paper Manifest**

- When accepting waste from a non-rail transporter, sign and date the manifest, as required by 40 CFR 263.20(f)(1)(i) and return or transmit a signed copy of the manifest to the non-rail transporter, as required by 40 CFR 263.20(f)(1)(ii).
- Forward at least three copies of the manifest to either the next non-rail transporter, the designated facility, or the last rail transporter designated to handle the waste in the US, as required by 40 CFR 263.20(f)(1)(iii).
- Ensure a shipping paper containing all the information required on the manifest excluding the EPA ID number, generator certification, and signatures (and for exports an Acknowledgment of Consent) accompanies the waste, as required under 40 CFR 263.20(f)(2).

- When delivering hazardous waste to the designated facility or to the next non-rail transporter, obtain the signature and date of delivery of the facility or non-rail transporter on the manifest, as required under 40 CFR 263.20(f)(3)(i) or (f)(4)(i).
- Retain a copy of the manifest and/or rail shipping paper, as required under 40 CFR 263.20(f)(1)(iv), 263.20(f)(3)(ii), 263.20(f)(4)(ii) and 263.22, as applicable.
- Before accepting hazardous waste from a rail transporter, sign and date the manifest and provide a copy to the rail transporter, as required under 40 CFR 263.20(f)(5).

### **Electronic Manifest**

- Transporters must perform the above activities in accordance with section 263.20(a) (4)- (8), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

*(b4) Transporters Who Import or Export Hazardous Wastes (40 CFR 263.20(g) & (i))*

Under 40 CFR 263.20(g), transporters who either transport hazardous waste into (import) or out of (export) the US, must sign and date the manifest to indicate the date that the shipment arrived (import) or left (export) the US, respectively; retain one copy in accordance with 40 CFR 263.22; for exports return a signed copy to the generator and provide a copy of the exported waste manifest to a US Customs official at the point of departure from the US. In addition for exports, the transporter also must ensure that a copy of the EPA Acknowledgment of Consent accompanies the waste, as required by 40 CFR 263.20(a).

### Data Items

- A paper or electronic manifest.
- Shipping paper.
- EPA Acknowledgment of Consent.

### Respondent Activities

#### **Paper Manifest**

- For imports and exports, sign and date the manifest in the International Shipments block to indicate the date that the shipment entered or left the US, respectively, as required by 40 CFR 263.20(g)(1).
- For imports and exports, retain a copy of the manifest, as required by 40 CFR 263.20(g)(2).
- For exports, return a signed copy of the manifest to the generator, as required by 40 CFR 263.20(g)(3).
- For exports, give a copy of the manifest to a US Customs official at the point of departure from the US, as required by 40 CFR 263.20(g)(4).
- For exports, ensure that copies of the manifest and EPA Acknowledgment of Consent accompanies the waste, as required by 40 CFR 263.20(a).

## **Electronic Manifest**

- Transporters must perform the above activities in accordance with section 263.20(a) (4)- (8), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

### *(b5) Transporters Who Transport Hazardous Waste Pursuant to a Reclamation Agreement (263.20(h))*

40 CFR 263.20(h) provides that transporters can be exempt from the requirements of 40 CFR 263.20 & 263.22 when transporting a SQG's waste pursuant to a reclamation agreement in accordance with 40 CFR 262.20(e). These transporters are required to record data items on a log or shipping papers, carry the record to the reclamation facility, and retain these records, as required by 40 CFR 263.20(h).

### Data Items

- A reclamation agreement that includes the following
  - The name, address, and EPA ID number of the hazardous waste generator.
  - The quantity of waste accepted.
  - All USDOT-required shipping information.
  - The date the waste is accepted.

### Respondent Activities

- Record the waste information on a log or shipping paper, as required by 40 CFR 263.20(h)(2).
- Carry the record when transporting waste to the reclamation facility, as required by 40 CFR 263.20(h)(3).
- Retain the records for at least three years after termination or expiration of the agreement, as required by 40 CFR 263.20(h)(4).

### *(b6) Undeliverable Shipments*

EPA is proposing to amend 40 CFR 263.21 as follows.

Existing section 263.21(a) provides that the transporter must deliver the entire quantity of hazardous waste which he has accepted from a generator or a transporter to the designated facility listed on the manifest; the alternate designated facility, the next designated transporter; or the place outside the U.S. designated by the transporter.

Proposed section 263.21(b)(1) would provide that, if the hazardous waste cannot be delivered to the designated TSDf, alternate TSDf or place outside the U.S. because of an emergency condition other than rejection of the waste by the designated facility or alternate designated facility, then the transporter must contact the generator for further instructions and revise the

manifest according to the generator's instructions. Proposed section 263.21(b)(2) would provide that, if the hazardous waste is not delivered to the next designated transporter and the current transporter is without contractual authorization from the generator to act as the generator's agent with respect to transporter additions or substitutions, then the current transporter must contact the generator for further instructions prior to making any revisions to the transporter designations on the manifest. The current transporter may thereafter make such revisions as specified. Proposed section 263.21(b)(3) would provide that, if the hazardous waste is not delivered to the next designated transporter and the current transporter has authorization from the generator to act as the generator's agent, then the current transporter may change the transporter(s) designated on the manifest, or add a new transporter, during transportation without the generator's prior, explicit approval. The current transporter must be authorized by a contractual provision that provides explicit authority for the transporter to make such changes on behalf of the generator. The transporter must describe such authorization in Item 14 of each manifest for which such a change is made. In addition, the change in designated transporters must be necessary to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety.

#### Data Items

- A paper or electronic manifest that has been revised according to the generator's instructions.
- Contract authorization provision under proposed section 263.21(b)(3).

#### Respondent Activities

- For undeliverable shipments under proposed section 263.21(b)(1) or (2), a transporter must contact the generator and revise the manifest according to the generator's instructions.
- For undeliverable shipments under proposed section 263.21(b)(3), a transporter must:
  - Establish a contract provision authorizing the transporter to make revisions as specified; and
  - Revise the manifest without contacting the generator.

#### *(b7) Rejected Waste and Container Residues*

Under 40 CFR 263.21(b)(2), if a hazardous waste is rejected or a container residue is identified by the designated facility listed on the manifest while the transporter is on the facility's premises, then the transporter must comply with the appropriate procedures:

- Partial load rejections: The transporter must obtain the facility's signature and date, the manifest tracking number of the new form, and a description/indication of the rejected waste in the discrepancy block on the original manifest. The transporter must retain this copy of the manifest in accordance with 40 CFR 263.22 and give the remaining copies to the designated facility. If the transporter is forwarding the



shipment to the alternate facility or returning it to the generator, the transporter must obtain the new manifest for the shipment.

- Full load rejections or container residues: The transporter must obtain the original manifest that includes the facility's signature and date, name and address of the alternate facility or generator, and a description of the rejected load or container residue in the discrepancy block as appropriate. The transporter must retain this copy of the manifest in accordance with 40 CFR 263.22 and give a copy to the facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment.

#### Data Item

- A paper or electronic manifest.

#### Respondent Activities

##### **Paper Manifest**

- For partially rejected loads made while the transporter is onsite, obtain the amended manifest from the facility, keep a copy, and, if receiving the rejected waste, obtain the new manifest.
- For fully rejected loads made or container residues identified while the transporter is onsite, obtain the original manifest, as amended, from the facility.

##### **Electronic Manifest**

- Transporters must perform the above activities in accordance with section 263.20(a) (4)- (8), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

(c) Use of the Electronic Manifest

(c1) *Legal Equivalence to Paper Manifest*

40 CFR 263.20(a)(4) provides that electronic manifests that are obtained, completed, and transmitted in accordance with section 262.20(a)(3) and used in accordance with section 263.20 in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest. It provides that (1) any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of section 262.25(a); (2) any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submission

to the system; (3) any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the Hazardous Materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with 49 CFR 177.817, a hazardous waste transporter must carry one printed copy of the electronic manifest on the transport vehicle; (4) any requirement in these regulations for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector; and (5) no transporter may be held liable for the inability to produce an electronic manifest for inspection under this section if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the EPA system for which the transporter bears no responsibility. [Note: There are no data items or activities associated with section 263.20(a)(4).]

*(c2) Accessing the e-Manifest*

40 CFR 263.20(a)(5) provides that a transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility. [Note: There are no data items or activities associated with section 263.20(a)(5).]

*(c3) Special Procedures when Electronic Manifest is Not Available*

40 CFR 263.20(a)(6) provides that, if after a manifest has been originated electronically and signed electronically by the initial transporter, and the electronic manifest system should become unavailable for any reason, then the generator must perform the activities spelled out in section 263.20(a)(6)(i)-(iv). These procedures include the following:

- The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to section 263.20(a)(4)(iii)(A) or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for their files, plus two additional copies that will be delivered to the designated facility with the hazardous waste. (263.20(a)(6)(i))
- On each printed copy, the transporter shall include a notation in the Special Handling and Additional Description space (Item 14) that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system, shall include (if not pre-printed on the replacement manifest) the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and shall also include a brief explanation why the electronic manifest was not available for completing the tracking of the shipment electronically. (263.20(a)(6)(ii))

- A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste must ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy. (263.20(a)(6)(iii))
- From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests. (263.20(a)(6)(iv))

*(c4) Special Procedures for Electronic Signature Methods Undergoing Tests*

40 CFR 263.20(a)(7) provides that, if a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with section 263.20(a)(4)(iii) (A). This printed copy bearing the generator's and transporter's ink signatures shall also be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner/operator of the designated facility has signed this printed manifest copy with its ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials. [Note: Refer to "Manifest Completion, Transmittal and Recordkeeping" in this section for transporter data items and activities associated with signing a manifest. Refer to "Manifest Completion, Transmittal and Recordkeeping" in the Designated Treatment, Storage and Disposal Facility section for facility data items and activities associated with recordkeeping the paper copy.]

*(c5) Imposition of User Fee for Electronic Manifest Use*

40 CFR 263.20(a)(8) provides that a transporter who is a user of the electronic manifest may be assessed a user fee by EPA for the origination or processing of each electronic manifest. EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system.

Data Items

- Copies of the printed manifest or a new paper manifest.

Respondent Activities

As required by section 263.20(a)(6), the transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall perform the following:

- Reproduce sufficient copies of the printed manifest that is carried on the transport vehicle and complete it as specified; or

- Obtain and complete another paper manifest as specified;
- Retain a copy of the manifest; and
- Give remaining copies of the manifest to the accepting transporter or facility.

(d) Notification of Discharge of Hazardous Waste

In the event of a discharge of hazardous waste during transportation, 40 CFR 263.30(a) requires the transporter to take appropriate immediate action to protect human health and the environment, for example, notifying local authorities. 40 CFR 263.30(c) requires an air, rail, highway, or water transporter who has discharged hazardous waste to give notice, if required by 49 CFR 171.15, to NRC and to report in writing to USDOT as required by 49 CFR 171.16. 40 CFR 263.30(d) requires a water (bulk shipment) transporter who has discharged hazardous waste to give the same notice as required by 33 CFR 153.203 for oil and hazardous substances, if not already required under 33 CFR 153.203. Water (bulk shipment) transporters, as soon as they have knowledge of any discharge of hazardous waste, must immediately notify NRC, US Coast Guard, as required by 33 CFR 153.203. If the direct reporting to the NRC is not practicable, reports may be made to the US Coast Guard or EPA predesignated OSC for the geographic area where the discharge occurs. If it is not possible to notify the NRC or the predesignated OSC immediately, reports may be made immediately to the nearest US Coast Guard unit, provided the transporter notifies the NRC as soon as possible.

Data Item

- Notification of a discharge of hazardous waste

Respondent Activities

- In the event of a discharge of hazardous waste during transportation, the transporter must take appropriate action to protect human health and the environment, including notification of the discharge to local authorities, as required by 40 CFR 263.30(a).
- Water (bulk shipment) transporters must immediately notify NRC of the discharge or, if it is not practicable to notify the NRC, a predesignated OSC can be notified. If the OSC is notified, the transporter must notify the NRC of the discharge as soon as possible, as required by 40 CFR 263.30(d) and 33 CFR 153.203.

[Note: This ICR does not include hour and cost burden estimates for activities associated with the 49 CFR Part 171 notification requirements referenced in 40 CFR Part 263 since Part 263 does not add any notification requirements to those already in Part 171.]

## Designated Treatment, Storage and Disposal Facilities

### (a) e-Manifest Setup

Facilities must register their employees with the national system before the employees can prepare or transmit an e-Manifest. The employees must update their registration information if it changes. In addition, facilities must comply with 40 CFR Part 3 requirements for identity-proofing. Section 3.2000(b)(5)(vii) requires that the identity of the individual uniquely entitled to use the device and their relation to any entity for which he or she will sign electronic documents must be determined with legal certainty by EPA or state/local, as applicable. In the case of priority reports, this determination must be made before the electronic document is received, by means of:

- Identifiers or attributes that are verified by attestation of disinterested individuals to be uniquely true of the individual in whose name the application is submitted, based on information or objects of independent origin, at least one item of which is not subject to change without governmental action or authorization.
- A method of determining identity no less stringent than the one above.
- Collection of either a subscriber agreement or a certification from a Local Registration Authority (LRA) that such an agreement has been received and securely stored.

### Data Items

- Online registration information.
- Data for identity proofing (e.g., subscriber agreement).

### Respondent Activities

- Facility employees must perform the following:
  - Register and maintain their account; and
  - If applicable, follow identity-proofing requirements:
    - Comply with subscriber agreement provisions;
    - Comply with LRA provisions; or
    - Comply with requirements for identifier, attribute, or alternative method.

(b) Transmitting the Manifest and Reporting to EPA

(b1) *Manifest Completion, Transmittal and Recordkeeping*

40 CFR 264.71(a),(b) and 40 CFR 265.71(a),(b) set forth completion, transmittal, and recordkeeping requirements for TSDFs that receive hazardous waste accompanied by a manifest or shipping paper. 40 CFR 264.71(a),(b) and 40 CFR 265.71(a),(b) provide that, if a facility receives hazardous waste accompanied by a manifest (or shipping paper, for certain rail or water shipments), the TSDF or his/her agent must sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received; note any significant discrepancies in the manifest on each copy; immediately return to the transporter a signed copy; within 30 days of delivery, send the manifest (e.g., paper or scanned version) to the e-Manifest system for purposes of data entry and processing; within 30 days of delivery send a copy of the manifest to the generator; and retain a copy for at least three years from the date of delivery.

40 CFR 264.71(f) and 265.71(f) provide that electronic manifests that are obtained, completed, and transmitted in accordance with section 262.20(a)(3) and used in accordance with section 264.71(f) or 265.71(f) in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest. Sections 264.71(g)-(k) and 265.71(g)-(k) address other issues related to the e-Manifest (e.g., special procedures for electronic signature methods undergoing tests). [Note: Refer to “Use of the Electronic Manifest” in this section for additional information.]

Data Item

- Paper or electronic manifest.
- Shipping paper.

Respondent Activities

**Paper Manifest**

- Complete, transmit, and retain copies of the manifest, as required by 40 CFR 264.71(a),(b) or 40 CFR 265.71(a),(b) and the manifest instructions:
  - Enter the name of the person accepting the waste and sign and date each copy of the manifest (or shipping paper, if applicable).
  - Complete the management method codes.
  - Note any discrepancies (as defined in 40 CFR 264.72(a)) on each copy of the manifest (or shipping paper, if applicable).
  - Immediately give the transporter at least one copy of the manifest (or shipping paper).
  - Within 30 days of delivery, send a copy (Page 3) of the manifest to the generator.

- Within 30 days of delivery, send the top copy (Page 1) of the manifest to the e-Manifest system for purposes of data entry and processing. In lieu of mailing this paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted to EPA must be submitted in data file and image file formats that are acceptable to EPA and that are supported by EPA’s electronic reporting requirements and by the electronic manifest system.
- Retain a copy of the manifest (or shipping paper) for at least three years from the date of delivery.

[Note: Although the noting of manifest or shipping paper discrepancies is mentioned above, it is burdened in the subsection entitled “Discrepancy Reports.”]

### **Electronic Manifest**

- Designated TSDFs must perform the above activities in accordance with section 264.71(f)-(k) or 265.71(f)-(k), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

#### *(b2) Compliance with State Program Requirements*

Under 40 CFR 264.71(e) and 40 CFR 265.71(e), TSDFs must determine whether the consignment state for a shipment regulates any additional hazardous wastes (beyond those regulated federally). TSDFs must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

#### Data Item

- Information provided by the state on its manifest program.

#### Respondent Activities

- Contact the consignment/generator state if needed and submit any copies of the manifest to these states, as applicable.

#### *(b3) Discrepancy Reports*

40 CFR 264.72 and 265.72 provide that, upon discovering a significant discrepancy, TSDFs must attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved within 15 days after receiving the waste, the owner/operator must immediately submit to EPA a copy of the manifest or shipping paper in question, as well as a letter describing the discrepancy and attempts to reconcile it.

#### Data Items

- A copy of the manifest or shipping paper in question.
- A letter describing the manifest discrepancy and the facility's efforts to reconcile it.

#### Respondent Activities

- Attempt to reconcile any discrepancies, as required by 40 CFR 264.72(c) or 265.72(c).
- Prepare and submit a letter to EPA describing the discrepancy and attempts to reconcile it, along with a copy of the manifest or shipping paper at issue, as required by 40 CFR 264.72(c) or 265.72(c).

#### (c) Rejected Waste and Container Residues

40 CFR 264.72 and 40 CFR 265.72 provide that the TSDF must forward rejected waste or container residues to an alternate facility that can accept the waste. If the TSDF is unable to locate an alternate facility to take the waste, then the TSDF may return the shipment to the original generator. 40 CFR 264.72(d) through (g) and 40 CFR 265.72(d) through (g) describe manifest procedures for TSDFs that originate a rejected waste or container residue.

##### *(c1) Rejection of Waste after the Transporter Leaves the Facility*

For full or partial load rejections and residues that are to be sent offsite to an alternate facility or back to the generator after the transporter has left the facility, the facility is required to prepare a new manifest, as required by 40 CFR 264.72(d), (e)(1)-(6), or (f)(1)-(6) or 40 CFR 265.72(d), (e)(1)-(6), or (f)(1)-(6).

In addition, if a facility rejects a waste or identifies a container residue that exceeds the quantity limits for "empty" containers set forth in 40 CFR 261.7(b) after it has signed, dated, and returned a copy of the manifest to the transporter, the facility must comply with 40 CFR 264.72(g) or 265.72(g). The facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within 30 days, send a copy of the amended manifest to the delivering transporter and to the generator.

#### Data Items

- Instructions provided by the generator.
- Original paper or electronic manifest.
- New paper or electronic manifest.
- Shipping paper.

#### Respondent Activities



## **Paper Manifest**

- Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste, as required by 40 CFR 264.72(d) or 265.72(d).
- Prepare a new manifest for rejected loads or container residues sent to the alternate designated facility or back to the generator:
  - Write the facility's EPA ID, name, and address in the appropriate blocks of the new manifest (i.e. Items 1 and 5), as required by 40 CFR 264.72(e)(1) or (f)(1) or 265.72(e)(1) or (f)(1).
  - Write the name of the alternate designated facility/initial generator and the facility's/generator's EPA ID number in the designated facility block (Item 8) of the new manifest, as required by 40 CFR 264.72(e)(2) or (f)(2) or 265.72(e)(2) or (f)(2).
  - Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment, as required by 40 CFR 264.72(e)(3) or (f)(3) or 265.72(e)(3) or (f)(3).
  - Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a), as required by 40 CFR 264.72(e)(4) or (f)(4) or 265.72(e)(4) or (f)(4).
  - Write the USDOT description for the rejected load or the residue in the Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volume(s) of waste, as required by 40 CFR 264.72(e)(5) or (f)(5) or 265.72(e)(5) or (f)(5).
  - Sign the Generator's/Offeror's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition, as required by 40 CFR 264.72(e)(6) or (f)(6) or 265.72(e)(6) or (f)(6).
- Amend the facility's copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest, as required by 40 CFR 264.72(g) or 265.72(g).
- Copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, as required by 40 CFR 264.72(g) or 265.72(g).
- Re-sign and date the manifest, as required by 40 CFR 264.72(g) or 265.72(g).
- Retain the amended manifest for at least three years from the date of the amendment, as required by 40 CFR 264.72(g) or 265.72(g).
- Within 30 days, send a copy of the amended manifest to the delivering transporter and to the generator, as required by 40 CFR 264.72(g) or 265.72(g).

## **Electronic Manifest**

- Designated TSDFs must perform the above activities in accordance with section 264.71(f)-(k) or 265.71(f)-(k), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

*(c2) Rejection of Waste while the Transporter Remains Present at the Facility*

For container residues and full load rejections that are made while the transporter remains present at the facility, the facility may forward the shipment to the alternate facility or return the shipment to the generator using the original manifest, as specified in 40 CFR 264.72(e)(7) or (f)(7) or 40 CFR 265.72(e)(7) or (f)(7).

Data Item

- Original paper or electronic manifest.
- Shipping paper.

Respondent Activities

**Paper Manifest**

- Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste, as required by 40 CFR 264.72(d) or 265.72(d).
- Complete Item 18a and 18b of the original manifest, as applicable, by supplying the information on the next destination facility or the generator in the Alternate Facility space.
- Retain a copy of the manifest.
- Give the remaining copies back to the transporter.

**Electronic Manifest**

- Designated TSDFs must perform the above activities in accordance with section 264.71(f)-(k) or 265.71(f)-(k), as applicable, for completing, signing, providing, using and retaining the electronic manifest.

*(d) Use of the Electronic Manifest*

*(d1) Legal Equivalence to Paper Manifest*

40 CFR 264.71(f) and 265.71(f) provide that electronic manifests that are obtained, completed, and transmitted in accordance with section 262.20(a)(3), and used in accordance with section 264.71 or 265.71 in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest. It provides that (1) any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with

or obtaining a valid and enforceable electronic signature within the meaning of section 262.25(a); (2) any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person; (3) any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment; (4) any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector; and (5) no owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this section if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility. [Note: There are no data items or activities associated with these provisions.]

*(d2) Accessing the e-Manifest*

40 CFR 264.71(g) and 265.71(g) provide that an owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility. [Note: There are no data items or activities associated with these provisions.]

*(d3) Special Procedures when Electronic Manifest is Not Available*

40 CFR 264.71(h) and 265.71(h) provide that, if a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:

- Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the replacement manifest;
- The owner or operator of the facility must give back to the final transporter one copy of the replacement manifest;
- Within 30 days of delivery of the waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the replacement manifest to the generator, and send an additional signed and dated copy of the replacement manifest to the electronic manifest system; and
- The owner or operator of the facility must retain at the facility one copy of the replacement manifest for at least three years from the date of delivery.

[Note: Refer to “Manifest Completion, Transmittal and Recordkeeping” in this section for the facility data items and activities associated with signing, transmitting and recordkeeping of the replacement paper manifests.]

*(d4) Special Procedures for Electronic Signature Methods Undergoing Tests*

40 CFR 264.71(i) and 265.71(i) provide that, if an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility’s certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste. [Note: Refer to “Manifest Completion, Transmittal and Recordkeeping” in this section for facility data items and activities associated with signing and recordkeeping of the manifest.]

*(d5) Imposition of User Fee for Electronic Manifest Use*

40 CFR 264.71(j) and 265.71(j) provide that an owner or operator who is a user of the electronic manifest format may be assessed a user fee by EPA for the origination or processing of each electronic manifest. An owner or operator may also be assessed a user fee by EPA for the collection and processing of paper manifest copies that owners or operators must submit to the electronic manifest system operator under section 264.71(a)(2)(v) or 265.71(a)(2)(v). EPA shall maintain and update from time-to-time the current schedule of electronic manifest system user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system.

*(d6) Electronic Manifest Signatures*

40 CFR 264.71(k)(1) and 265.71(k)(1) provide that electronic manifest signatures shall meet the criteria described in section 262.25(a). [Note: There are no data items or activities associated with this provision.]

*(d7) Post-Receipt Manifest Data Corrections*

EPA is proposing to add sections 264.71(l) and 265.71(l) to address post-receipt manifest data corrections. These proposed sections would provide that, after facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections must be completed by the receiving facilities within 90 days of the receipt of manifested shipments of hazardous waste. As specified by 264.71(l)(1) and 265.71(l)(1), receiving facilities must enter all corrections to manifest data by electronic submission, either by directly entering corrected data to a web based service provided in e-Manifest for such corrections, or by an upload of a data file (e.g., XML file) containing data corrections relating to one or more previously submitted manifests. Sections 264.71(l)(2) and (3) and 265.71(l)(2) and (3) require each correction submission to include specified information. Sections 264.71(l)(4) and 265.71(l)(4) specify timeframes for implementing corrections and give an opportunity for other interested

persons to respond to the facility's submission with any comments or suggested changes. Sections 264.71(l)(5) and 265.71(l)(5) provide that manifest data corrections may be initiated by notice of a suspected data error provided to the facility by other interested persons and sets forth procedures for the designated TSDF to address these comments and suggested changes.

#### Data Items

- Notice of suspected errors.
- Corrections to paper or electronic manifest.
- Comments on facility corrections from other interested persons.

#### Respondent Activities

- For corrections initiated by the designated TSDF, the facility must:
    - Identify errors, make corrections and enter corrections into system; and
    - Receive notices from other interested persons if any, reconcile comments, and alter or affirm original correction.
  - For corrections initiated by other interested persons, the facility must review notices of suspected errors, resolve errors and provide responses.
- (e) Unmanifested Waste Report: Completion and Submission

Pursuant to 40 CFR 264.76 and 265.76, if the TSDF accepts a hazardous waste for treatment, storage, or disposal from any offsite source without an accompanying manifest or a shipping paper as described in 40 CFR 263.20(e)(2), and the waste is not excluded from the manifest requirement, the facility owner/operator must prepare and submit a letter to EPA.

#### Data Item

- An unmanifested waste report that includes:
  - The EPA ID number, name, and address of facility.
  - The date the facility received the waste.
  - The EPA ID number, name, and address of generator and transporter, if available.
  - A description and quantity of each unmanifested hazardous waste the facility received.
  - The method of treatment, storage, or disposal for each hazardous waste.
  - The certification signed by the owner/operator of the facility or his authorized representative.
  - A brief explanation of why the waste was unmanifested, if known.

#### Respondent Activity

- Prepare and submit to EPA a letter of the unmanifested waste within 15 days after receiving the waste.

## **5. AGENCY ACTIVITIES, COLLECTION METHODOLOGY & INFORMATION MANAGEMENT**

This section discusses how EPA will collect the information, what activities EPA will perform once the information has been received, and how EPA will manage the information it collects under the manifest system. It also discusses how the information collection requirements will affect small entities.

### **5A. Agency Activities**

Agency activities associated with the manifest requirements include the review of exception reports, discrepancy reports, and unmanifested waste reports. The Agency reviews these reports to identify potentially non-compliant or otherwise unresolved activities that warrant Agency attention. For example, upon receipt of an exception report, the Agency may conduct a follow-up investigation to assist the generator in locating the shipment. The Agency keeps these reports on file. In addition, EPA requires manifest form printers to register with EPA, as provided under 40 CFR 262.21. The Agency will need to review, process, and keep records of the data submitted.

In addition, EPA intends to develop and operate the e-Manifest system. Agency activities will include, for example, system development, operation and maintenance, paper manifest processing, operating a call center, and billing of user fees.

### **5B. Collection Methodology & Management**

EPA intends to collect both paper and electronic manifests during operation of the e-Manifest. The system will be structured so that electronic manifest submissions will be in the expected format and with minimal errors (e.g., via automated data validations/quality checks, pull-down menus and other user support tools). Paper manifests may be submitted to the system as paper copies, image files, or image files with data string files. The national operator will quality-check the forms, resolve errors, key-punch data into the system if needed, and store all forms as image files. In addition, the proposed rule requires designated TSDFs to be responsible for manifest data corrections that they or other interested persons identify. Manifest data corrections must be uploaded electronically to the system within specified timeframes. Data in the system will be available to the states and other members of the public.

Under the current paper-based manifest system, EPA does not collect much information. Under 40 CFR 262.21, EPA reviews applications from interested parties to print the hazardous waste manifest and continuation sheet for use and/or distribution. EPA first reviews an initial application describing the applicant and its printing capabilities. After the initial application is approved, EPA sends electronic files of the manifest and continuation sheet to the applicant and requests several form samples for evaluation. If the forms are satisfactory, EPA approves the applicant to produce the manifest. EPA maintains all approved applications on file.

In addition, waste handlers submit letters to EPA or authorized states when warranted (e.g., exception or discrepancy reports). EPA and the states review the reports to understand the situation, take follow up action as needed, and keep records.

### **5C. Small Entity Flexibility**

The current regulations require both large and small quantity generators of hazardous waste to use the manifest to track shipments of hazardous waste. However, the Agency has found that most small businesses do not generate hazardous waste either at all or in large enough quantities to make them subject to regulation and, therefore, are not affected by the manifest requirements. Generators of less than 100 kg/month (conditionally exempt small quantity generators) are exempted from manifest requirements. Other waste types (e.g., universal wastes) and classes of waste handlers also are exempt from the manifest regulations.

Following are some provisions that benefit both small and large waste handlers.

#### **(1) Contractual Reclamation Agreements**

A small quantity generator (SQG) is exempt from the manifest requirements when his hazardous waste is reclaimed under a contractual agreement, and he complies with limited requirements, including recordkeeping of the contractual agreement, as required by 40 CFR 262.20(e)(2).

#### **(2) Exception Reports**

The exception report requirements, under 40 CFR 262.42, for SQGs are less stringent than those for large quantity generators (LQGs). A SQG is only required to submit to EPA a legible copy of the manifest with some indication he/she has not received confirmation of delivery and has 60 days to fulfill this requirement. LQGs, on the other hand, are required to contact the transporter or facility owner/operator if he/she has not received a copy of the manifest within 35 days. In addition, if 45 days have passed and the LQG still has not received a signed copy of the manifest, he/she must submit a copy of the manifest as well as a cover letter explaining the generator's efforts to locate the hazardous waste. Hence, the exception report requirements for SQGs are not as burdensome.

#### **(3) e-Manifest System Flexibility**

EPA envisions that the e-Manifest system will be designed to maximize flexibility for both large and small entities. For example, EPA envisions offering various methods to simplify the process of preparing and transmitting the electronic manifest. This includes, for example, allowing a generator to sign and keep a paper copy of the manifest, while allowing the transporter and designated TSDf to transact the manifest electronically for the shipment (see section 262.24(c) of the proposed rule). This would allow the generator to participate in the e-Manifest system without having to comply with electronic signature requirements. Entities will be able to choose the method that best suits their needs and capabilities. In addition, the e-Manifest will be optional. Entities need not use the e-Manifest system if they do not want to.

## **5D. Collection Schedule**

No information collection in this ICR requires collection by EPA more frequently than quarterly, except that some designated TSDFs will likely submit manifest data to the national system more often than quarterly. For example, 40 CFR 264.71(a)(2)(v) and 265.71(a)(2)(v) require that, within 30 days of delivery of a shipment, the designated TSDF must send a copy of the paper manifest to the e-Manifest system for purposes of data entry and processing. These provisions were established in accordance with section 2(g)(1)(B) of the Hazardous Waste Electronic Manifest Establishment Act, which authorizes EPA to collect for data processing purposes any paper manifests that continue in use after the implementation of electronic manifests, so that there will be one unified data system managing the data from both electronic and paper manifests. Under these provisions, a TSDF that receives shipments each month will be required to submit manifests on a monthly basis. EPA believes this collection schedule is necessary for several reasons (e.g., to allow for the prompt collection of user fees). See Section 3D of this document and the preamble to the proposed fee rule for additional information.

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## 6. ESTIMATE OF BURDEN HOURS & COST

In this section, EPA estimates the total annual respondent and Agency hour and cost burden for all information collection requirements covered in this ICR. Exhibits 1 through 23 estimate the annual respondent burden associated with these information collection requirements. Exhibit 24 presents the total aggregate annual cost burden to all respondents under the information collection requirements covered in this ICR. Exhibit 25 estimates Agency hour and cost burden. For purposes of analysis, EPA has modeled the timeframe for this ICR from 2018 (i.e., the anticipated start of e-Manifest system operation) through 2020.

### 6A. Estimating the Respondent Universe

The Regulatory Impact Analysis (RIA) for the proposed fee rule<sup>5</sup> estimates the total annual number of respondents that will use paper and electronic manifests.<sup>6</sup> This ICR uses these estimates as the basis for estimating burden; however, because ICRs need not estimate burden for federally owned and operated facilities, EPA eliminated such facilities from the RIA's estimates for use in this ICR. Table 1 shows the adjusted estimates. In total, EPA estimates that 56,306 waste handlers will operate under the hazardous waste manifest regulations annually.<sup>7</sup>

**Table 1**  
**Annual Number of Respondents in ICR**

Type of Respondent	Number of Respondents
LQGs - Shippers	13,891
Commercial TSDFs – Shippers*	405
Captive TSDFs - Shippers	1,723
SQGs - Shippers (without Reclamation Agreements)	34,623
SQGs - Shippers (with Reclamation Agreements)	5,168
Transporter Companies	496
TSDFs – Receivers*	405
<b>Total</b>	<b>56,306</b>

\* This ICR assumes that “commercial TSDF shippers” are the same facilities as “TSDF receivers” (i.e., facilities that both ship and receive wastes) and therefore counts them once to avoid duplication.

5 The RIA is titled “Regulatory Impact Analysis, EPA’s 2015 Proposed Rule Establishing User Fees for the RCRA Electronic Hazardous Waste Manifest System (e-Manifest).”

6 Refer to Section 2.3 of the RIA for these estimates. Note that the RIA estimates the SQG universe based on the estimation approaches and results in EPA’s Economic Analysis (EA) of its 2015 Hazardous Waste Generator Improvements proposed rule (80 FR 57918; September 25, 2015). In the EA, EPA pioneered methodologies to estimate active SQGs using data files that underpin the RCRA Biennial Report.

7 For purposes of this ICR, EPA assumes that the “commercial TSDF shippers” in the table are the same facilities as the “TSDF receivers.” Commercial TSDFs receive offsite shipments as part of their operations and also make offsite shipments (e.g., for wastes generated onsite). On the other hand, EPA assumes that captive TSDFs (i.e., facilities that only receive hazardous waste from within their own company) generally receive wastes from onsite sources only and make offsite shipments.

The RIA also estimates the average number of manifests prepared by each generator annually for federally regulated hazardous waste.<sup>8</sup> Based on these data, this ICR estimates that generators will offer 1.4 million manifests into transportation for federally regulated hazardous waste annually, as shown in Table 2.

**Table 2  
Annual Number of Manifests Prepared by Generators**

Type of Respondent	Number of Respondents	Annual Number of Manifests Completed per Respondent	Total Annual Number of Manifests Completed
LQGs - Shippers	13,891	63	875,133
Commercial TSDFs - Shippers	405	192	77,760
Captive TSDFs - Shippers	1,723	20	34,460
SQGs - Shippers (without Reclamation Agreements)	34,623	12	415,476
<b>Total</b>			<b>1,402,829</b>

Table 3 presents the annual adoption rates for the electronic manifest as estimated in the RIA.<sup>9</sup> It shows that, on average over the 3-year life of this ICR, 72% of manifests will be paper and 28% will be electronic.

**Table 3  
Percent Rate of Paper and e-Manifesting during ICR**

	Year 1	Year 2	Year 3	3-Year Average
Paper manifests	95%	75%	45%	72%
Electronic manifests	5%	25%	55%	28%

Because this ICR needs to estimate the average annual respondent burden over its 3-year life, EPA estimated the average annual number of paper and electronic that will be offered into transportation during these 3 years. This is reflected in Table 4. The table presents the total number of paper and electronic manifests in each year of this ICR and the average annual number over the 3 years. Specifically, it shows that there will be about one million paper manifests and about 400,000 electronic manifests on average annually. The exhibits in this ICR reflect the 3-year average annual estimates.

<sup>8</sup> Refer to Section 3.2 of the RIA for these estimates.

<sup>9</sup> Refer to Section 5.1.3 of the RIA for these estimates.

**Table 4**  
**Annual Number of Manifests, by Type**

Type of Generator	Paper Manifest	Electronic Manifest		Total Manifests (Paper and Electronic)
		PIN/Password	Digitized Electronic Signature	
<b>Year 1</b>				
LQGs	831,376	10,939	32,817	875,133
Commercial TSDFs	73,872	972	2,916	77,760
Captive TSDFs	32,737	431	1,292	34,460
SQGs	394,702	5,193	15,580	415,476
<b>Total</b>	<b>1,332,687</b>	<b>17,535</b>	<b>52,606</b>	<b>1,402,829</b>
<b>Year 2</b>				
LQGs	656,350	54,696	164,087	875,133
Commercial TSDFs	58,320	4,860	14,580	77,760
Captive TSDFs	25,845	2,154	6,461	34,460
SQGs	311,607	25,967	77,902	415,476
<b>Total</b>	<b>1,052,122</b>	<b>87,677</b>	<b>263,030</b>	<b>1,402,829</b>
<b>Year 3</b>				
LQGs	393,810	120,331	360,992	875,133
Commercial TSDFs	34,992	10,692	32,076	77,760
Captive TSDFs	15,507	4,738	14,215	34,460
SQGs	186,964	57,128	171,384	415,476
<b>Total</b>	<b>631,273</b>	<b>192,889</b>	<b>578,667</b>	<b>1,402,829</b>
<b>3-Year Average</b>				
LQGs	627,179	61,989	185,966	875,133
Commercial TSDFs	55,728	5,508	16,524	77,760
Captive TSDFs	24,696	2,441	7,323	34,460
SQGs	297,758	29,430	88,289	415,476
<b>Total</b>	<b>1,005,361</b>	<b>99,367</b>	<b>298,101</b>	<b>1,402,829</b>

EPA envisions that the national e-Manifest system will be operated within the Agency's Central Data Exchange (CDX). EPA expects the electronic manifest to be signed using either of two methods. One involves use of a PIN/Password (e.g., a witnessed signature approach). The other involves use of a digitized signature.<sup>10</sup> These signature methods are reflected in Table 4 as well as the exhibits.

Further, the RIA estimates that electronic manifests will streamline a number of activities that are normally performed with paper manifests. For example, the RIA estimates that manifest completion and transmittal will experience an 80% burden reduction when associated with

<sup>10</sup> See the final e-Manifest rule for additional information on these methods. This ICR assumes that a percentage of generators will ask the transporter to sign the generator certification block on behalf of the generator and thereby not sign the form themselves.

electronic manifests.<sup>11</sup> This ICR reflects these effects, where appropriate. It also reflects that recordkeeping of electronic manifests is negligible, since electronic manifests will be transacted within the national system.

## **6B. Estimating Respondent Costs**

Following is a discussion of respondent labor, capital and operation and maintenance (O&M) costs used in Exhibits 1 through 23.

### **Labor Costs**

EPA estimates an average hourly respondent labor cost of \$96.98 for legal staff, \$81.73 for managerial staff, \$40.44 for technical staff, and \$22.40 for clerical staff. These rates were taken from the RIA.

### **Capital Costs**

Capital costs usually include any produced physical good needed to provide the needed information, such as machinery, computers, and other equipment. For this ICR, capital costs include file cabinet costs. As shown in Exhibit 24, EPA estimates the total average annual capital cost to all hazardous waste handlers under the manifest system, collectively, to be \$117,662. EPA took the following steps to derive the capital costs associated with the purchase of file cabinets:

1. *Estimate the total annual volume of paper manifests required to be retained by all waste handlers.* Under the manifest system, generators, transporters, and designated TSDFs must keep copies of manifests and other manifest-related documents for a period of three years. Thus, at any given time during the effective period of this ICR, the hazardous waste industry is keeping paper copies of three years' worth of manifest-related documents. In total, EPA estimates that waste handlers (i.e., generators, transporters, and designated TSDFs) will need to keep copies of 12,231,313 manifests and reports annually.
2. *Ascertain the number of standard-size file cabinets that would provide the needed capacity and estimate aggregate cost to waste handlers.* EPA estimates that a standard-size, five-drawer, lateral file cabinet holds approximately 16,000 documents. Thus, for storing 12,231,313 paper manifests and reports, waste handlers would need 764 file cabinets (i.e., 12,231,313/16,000) each year. These 764 file cabinets represent the total capacity needed by the industry, collectively, to store all of its paper manifests and reports. EPA estimates that the cost of one file cabinet is \$829.99<sup>12</sup> and for all 764 file cabinets is \$634,112.

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<sup>11</sup> Refer to Section 5.4 of the RIA for additional information.

<sup>12</sup> Standard-size, five-drawer, lateral file cabinet cost based on current market price, as of April 20, 2015.

3. *Annualize the aggregate cost of standard-size file cabinets using a net present value formula.* EPA used the following present value formula to annualize the cost of file cabinets over the three-year effective life of this ICR:

$$\text{Annualized Net Present Value} = \$634,112 \times [1/(\sum 1/(1+k)^t)]$$

where  $k$  = discount rate of 7%;  
 $t$  = life of equipment (7 years).<sup>13</sup>

In total, EPA estimates that the hazardous waste industry will need to pay an annual cost of \$117,662 for the 764 file cabinets.

### **Operation and Maintenance (O&M) Costs**

O&M costs are those costs associated with a paperwork requirement incurred continually over the life of the ICR. They are defined by the Paperwork Reduction Act of 1995 as “the recurring dollar amount of costs associated with O&M or purchasing services.” For this ICR, O&M costs include:

- Printing cost for sample manifests: EPA estimates that respondents will incur a cost of \$641 for each set of manifest form samples. These respondents are expected to contract with a printing company. Hence, the fee of \$641 is considered a lump-sum cost. This O&M cost was obtained from a previously approved ICR (i.e., EPA ICR Number 0801.18, dated January 2012) and updated to 2015 levels using Consumer Price Indexes developed by the Bureau of Labor Statistics.<sup>14</sup>
- Purchase blank paper manifest forms from EPA-registered printer: EPA estimates that respondents will incur a cost of \$0.42 for each blank paper manifest and \$0.42 for each blank manifest continuation sheet they purchase from an EPA-registered printer<sup>15, 16</sup>
- Mailing costs: EPA estimates that respondents will incur a cost of \$0.52 to mail a one-ounce package (\$0.49 for postage and \$0.03 for standard-size envelope)<sup>17, 18</sup> EPA also estimates that respondents will incur a cost of \$5.26 for mailing a larger package

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13 Based on an OMB-approved discount rate of seven percent (OMB Circular A-94).

14 Bureau of Labor Statistics, Historical Consumer Price Index for All Urban Consumers (CPI-U): U. S. city average, all items. Available online at: <http://www.bls.gov/cpi/cpid1503.pdf>, last accessed on April 20, 2015.

15 Uniform manifest form cost based on current market price, as of April 20, 2015.

16 Continuation sheet cost based on current market price, as of April 20, 2015.

17 U.S. Postal Service, “First-Class Mail - Retail.” Available online at: <https://www.usps.com/business/first-class-mail-for-business.htm?>, last accessed on April 20, 2015.

18 Standard-size envelope cost based on current market price, as of April 20, 2015 (i.e., box of 500 standard business gummed envelopes at \$15.79).

(i.e., a five-ounce package) by certified mail (\$1.82 for postage, \$3.30 for the certified-mail fee, and \$0.14 for a catalog envelope).<sup>19, 20, 21</sup>

- **Photocopying costs:** EPA estimates that respondents will incur a cost of \$0.10 for each photocopy they make.
- **Long distance telephone call costs:** EPA estimates that respondents will incur a cost of \$2.00 for each long distance telephone call they make.

O&M costs also include the fees assessed to manifest users. See the subsection, “(d8) Manifest User Fees,” in Section 6D of this document for additional information.

### **6C. Estimating Agency Hour and Cost Burden**

EPA estimates the Agency hour and cost burden associated with the information collection requirements covered in this ICR in Exhibit 25.

#### **Labor Costs**

As shown in the exhibits, EPA estimates an average hourly labor cost of \$88.30 for legal staff (GS-15, Step 5), \$77.92 for managerial staff (GS-15, Step 1), \$56.05 for technical staff (GS-13, Step 1), and \$23.92 for clerical staff (GS-06, Step 1). To derive these hourly estimates, EPA referred to the *2015 General Schedule (Base)* for hourly rates.<sup>22</sup> This publication summarizes the unloaded (base) hourly rate for various labor categories in the Federal Government. EPA then applied the standard government overhead factor of 1.6 to the unloaded rate to derive loaded hourly rates.

#### **Capital and Operation & Maintenance Costs**

The RIA estimates annual costs to EPA for developing and operating the national e-Manifest system and related activities. The RIA addresses the following cost elements:

- System development;
- Operation & maintenance;
- Paper manifest processing O&M;
- Call Center;
- Costs under the Cross Media Electronic Reporting Rule (i.e., 40 CFR Part 3);
- Billing;

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19 U.S. Postal Service, “First-Class Mail - Retail.” Available online at: <https://www.usps.com/business/first-class-mail-for-business.htm>?, last accessed on April 20, 2015.

20 U.S. Postal Service, “Domestic Insurance & Extra Services.” Available online at: <https://www.usps.com/business/add-extra-services.htm>?, last accessed on April 20, 2015.

21 Catalog envelope cost based on current market price, as of April 20, 2015 (i.e., box of 250 brown kraft catalog envelopes (9" x 12") at \$35.39).

22 U.S. Office of Personnel Management, “Salary Table 2015-GS, Incorporating the 1% General Schedule Increase Effective January 2015,” Hourly Rate. Available online at: [http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2015/GS\\_h.pdf](http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2015/GS_h.pdf), last accessed on April 20, 2015.

- Other program costs;
- Additional indirect costs; and
- Manifest processing costs.<sup>23</sup>

The RIA estimates costs based on an assumption that the national system would be designed and operated to handle manifests for both federal and state regulated hazardous wastes (i.e., 3.2 million manifests annually). This ICR, on the other hand, addresses manifests for federally regulated hazardous waste only (i.e., 1.4 million manifests annually). Therefore, EPA summed up the annual costs of the relevant elements above (for Years 1 through 3 of the system), divided them by 3 years to derive the average annual cost, and multiplied them by 43% (i.e.,  $1.4/3.2 = 43\%$ ) to estimate the total costs attributable to manifests for federally regulated hazardous wastes only. Finally, EPA estimated that two-thirds of these costs are for capital and O&M and one-third is for labor.

Exhibit 25 presents EPA's costs for all applicable activities.

#### **6D. Estimating Respondent Hours and Costs**

Refer to Sections 6A and 6B of this document for many of the assumptions reflected in the exhibits.

##### (a) Registrant Organization Requirements

###### *(a1) Reading the Regulations*

Exhibit 1 presents the total annual hour and cost burden to registrant organizations in reading the manifest regulations at 40 CFR 262.21. EPA expects that on average, one registrant organization will read 40 CFR 262.21 regulations each year.

###### *(a2) Applying to the Registry*

EPA estimates that each year, one entity will register with EPA to print its own forms.

###### *(a3) Updating General Information in the Approved Application*

EPA estimates that, each year, three registrant organizations will revise and submit their approved application to EPA, along with an indication or explanation of the update, under 40 CFR 262.21(h)(1).

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<sup>23</sup> Refer to Sections 5.2 and 5.3 of the RIA for additional information. Note that the capital and O&M costs in this ICR do not include the "additional program costs" in Exhibit 5-5 or "manifest processing costs" in Exhibit 5-7 of the RIA. It is assumed that these costs are for Agency and contractor labor and are therefore reflected in Exhibit 25 as labor costs.

*(a4) Requesting Approval for a New Tracking Number Suffix*

EPA estimates that no approved registrant organization will request a new tracking number suffix during the 3-year period covered by this ICR. Because each manifest tracking number consists of the three-letter suffix and nine digits, each registrant will be able to generate more than 999 million forms using its original suffix. EPA does not expect a registrant to request a new suffix for many years.

*(a5) Requesting Approval for Changes to Printing Specifications or Use of a New Printer*

EPA estimates that one registrant organization annually will request approval for changes to its form or for the use of a new printer under 40 CFR 262.21(e).

*(a6) Typesetting the Manifest Form Subsequent to its Approval*

EPA estimates that no registrant organization will typeset its manifest form, instead of using the electronic file of the forms provided by EPA, during the 3-year period covered by this ICR. Upon approval of a registrant's application under 40 CFR 262.21(c), EPA will provide it with an electronic file of the manifest, continuation sheet, and instructions and ask it to use these files to develop the forms. In its consultations, EPA found that printers intend to share these files among their printing establishments so that none will need to typeset the form. Typesetting the form would be unappealing to registrants because of the level of effort required in comparison with using the electronic files.

*(a7) Requesting an Exemption*

EPA estimates that no registrant organizations will submit a request for an exemption under 40 CFR 262.21(j). EPA expects each registrant to be forward looking when originally registering under 40 CFR 262.21(b) through (e), and carefully select the appropriate paper type, paper weight, and other aspects of the form.

*(a8) Notifying EPA of a Printing Specification Violation*

EPA estimates that one registrant organization will notify EPA that it has duplicated tracking numbers on forms used or distributed to other parties. Registrants must print their forms according to their approved applications, which will lay out procedures for tightly controlling their tracking numbers and ensuring that each manifest has a unique number.

*(a9) Revising the Approved Manifest if Requested by EPA*

EPA estimates that no registrant organization will need to submit revised manifest form samples, per EPA's request, during the 3-year period covered by this ICR. EPA will carefully review each registrant's forms under 40 CFR 262.21(e) to determine if they satisfy the requirements of 40 CFR 262.21(f). EPA does not expect to identify problems in forms that have been approved.



*(a10) Responding to Suspension and Revocation Procedures*

EPA does not expect to conduct suspension or revocation procedures during the 3-year period covered by this ICR. The registration process under 40 CFR 262.21(b) through (e) will ensure that each approved registrant is capable of tightly controlling its tracking numbers and printing forms consistent with the approved samples and the print specifications. Therefore, EPA anticipates it will rarely invoke its suspension and revocation procedures.

*(b) Generator Requirements*

*(b1) Reading the Regulations*

Exhibit 2 presents the total annual hour and cost burden to hazardous waste generators in reading the manifest regulations at 40 CFR 262. In total, EPA expects each generator to read Part 262 each year.

*(b2) e-Manifest Setup*

As reflected in Exhibit 3, this ICR estimates that LQGs, captive TSDFs and SQGs that use electronic signatures will register with the CDX and that those who use digitized signatures will perform identity-proofing.<sup>24</sup> This ICR estimates that electronic manifesting is performed by 28% of these facilities.<sup>25</sup> This ICR further estimates that, on average, 70% of LQGs and SQGs are small firms (i.e., 20 employees or fewer) with 3 employees each who will perform these activities. In addition, this ICR estimates that 30% are medium-size or large firms (i.e., more than 20 employees) with 6 employees each who will perform these activities. Finally, this ICR estimates that each captive TSDF has 5 employees each who will perform these activities. Because these are one-time activities during the 3-year life of this ICR, this ICR has annualized these employees over 3 years.<sup>26</sup>

*(b3) Manifest Completion*

Exhibits 4 and 5 present the total annual hour and cost burden for generators to complete their manifests. The exhibits reflect that designated TSDFs often provide assistance to their generator customers in preparing manifests for shipments to their facility. For purposes of analysis, this ICR assumes that a percentage of LQGs and SQGs rely on the designated TSDFs' assistance in manifest preparation, while the remaining LQGs and SQGs, as well as all TSDFs acting as generators, prepare their manifests themselves, as follows:

- **Completing the Manifest without the Assistance of Designated TSDF:** Based on consultations with hazardous waste generators and the states, EPA estimates that about 58% of LQG manifests and 20% of SQG manifests accompanying hazardous waste shipments are prepared without the assistance of the designated TSDF. This is

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24 EPA believes that the conduct of the PIN/Password method is compliant with EPA's identity-proofing provisions.

25 This 28% average reflects the average annual adoption rate of electronic manifesting over the 3-year life of this ICR. See Table 3 of this document for additional information.

26 Refer to Exhibit 17 for burden to commercial TSDFs (who are shippers and receivers) for these activities.

reflected in Exhibit 4. In addition, EPA estimates that about 5% of manifests include continuation sheets.

- **Completing the Manifest With the Assistance of Designated TSDF:** As discussed, EPA recognizes that many LQGs and SQGs rely on the assistance of the designated TSDF to complete the manifest form. Because the designated TSDF normally fills out most of the manifest form for the generator, the collaborative effort significantly reduces the burden on generators. Based on its consultations, EPA estimates that about 42% of manifests from LQGs and 80% of manifests from SQGs are jointly completed with the designated TSDF. This is reflected in Exhibit 5. [Note: Refer to Exhibit 18 for the hour and cost burden for designated TSDFs to assist LQGs and SQGs in completing their manifests.]

Further, Exhibits 4 and 5 reflect the annualized number of paper and e-Manifests shown in Table 4.

#### *(b4) Compliance with State Program Requirements*

40 CFR 262.21(g)(2) provides that generators must determine whether they are required to comply with requirements specific to state hazardous waste manifest programs. Exhibit 6 reflects EPA's assumption that each generator must contact, on average, three state manifest programs each year. Because these activities are already required under state-specific hazardous waste programs, they are not burdened in this ICR.

#### *(b5) Manifest Transmittal and Recordkeeping*

As shown in Exhibit 7, EPA estimates that LQGs, TSDFs acting as generators, and SQGs will send 91% of their manifests with highway shipments, 3% with water shipments and 6% with rail shipments. In addition, EPA estimates that, each year, LQGs, TSDFs acting as generators, and SQGs will send 21,096 manifests with exports of hazardous waste and 14,029 manifests with imports of hazardous waste. Finally, EPA estimates that approximately 5,168 SQGs ship their hazardous waste offsite under a reclamation agreement, pursuant to 40 CFR 262.20. These SQGs are required to keep a copy of the contractual agreement under which their hazardous waste is shipped to the recycling facility. Exhibit 7 also reflects the annualized number of paper and e-Manifests shown in Table 4.

Exhibit 7 reflects that a percentage of LQGs and SQGs will ask the transporter to sign the electronic manifest on their behalf (i.e., generator certification block), relieving them of the need to sign it themselves. This ICR estimates that 33% of LQG and SQG electronic manifests will be signed on behalf of the generator (excluding electronic manifests addressed under proposed section 262.24(c)(1) as described below).

Exhibit 7 also reflects that a percentage of LQGs and SQGs will perform the procedures at proposed section 262.24(c)(1) for their electronic manifests. Proposed section 262.24(c)(1) provides that a generator may sign by hand and retain a paper copy of the electronic manifest, rather than electronically signing it, thereby allowing the transporter and subsequent waste

handlers to use the electronic manifest for that shipment. EPA believes that LQGs and SQGs that rely on the designated TSDF's assistance for manifest preparation will find this provision appealing. As reflected in the exhibit, EPA estimates that 20% of LQG electronic manifests and 50% of SQG electronic manifests prepared by the designated TSDF will be transacted under the proposed procedures annually. EPA does not expect TSDF shippers to use the "on behalf of" or proposed 262.21(c) procedures because they will have the expertise to sign them electronically.

*(b6) Undeliverable Shipments*

This ICR estimates that 1% of all manifests offered into transportation (paper and electronic) cannot be delivered to the designated facility listed on the manifest, alternate designated facility if appropriate, or the place outside the United States designated by the generator (for an emergency other than rejected loads). As reflected in Exhibit 8, the generator must provide further instructions to the transporter under section 262.20(d).

In addition, this ICR estimates that 20% of all manifests offered into transportation cannot be delivered to the next designated transporter. As reflected in Exhibit 8, this ICR estimates that 50% of generators will incorporate a provision into their contracts authorizing the transporter to revise their manifests without contacting them, as provided by proposed section 263.21(b)(3). Because incorporating the provision is a one-time activity during the 3-year life of this ICR, this ICR annualizes the number of generators over 3 years (i.e.,  $(50,642 \text{ generators} \times 50\%) / 3 \text{ years} = 8,440 \text{ generators/yr}$ ).

Based on the above assumptions, this ICR estimates that 50% of manifests that cannot be delivered to the next designated transporter (which equates to 10% of all manifests, i.e.,  $20\% \times 50\% = 10\%$ ) will be carried by transporters that do not have such contract authority, while the remaining 50% will be carried by transporters that do. Exhibit 8 reflects that generators must provide additional instructions for manifests carried by transporters that do not have such contract authority.

*(b7) Rejected Waste and Container Residues*

As shown in Exhibit 9, EPA estimates that, each year, a total of 414 shipments initiated by generators will be rejected by designated TSDFs and sent back to the generator. Upon receipt of the rejected shipments, generators must sign the manifest that accompanies the rejected load or residue. Further, Exhibit 9 reflects the annualized number of paper and e-Manifests shown in Table 4.

*(b8) Exception Reports: Completion, Submission, and Recordkeeping*

EPA estimates that, on average, LQGs, TSDFs acting as generators, and SQGs will need to develop an exception report under 40 CFR 262.42 for approximately 1.4% of the manifests sent offsite. This assumption is reflected in Exhibit 10.

(c) Transporter Requirements

(c1) *Reading the Regulations*

As shown in Exhibit 11, EPA estimates that 496 transporter companies are subject to the RCRA manifest system. EPA expects that each company will read the manifest regulations once a year.

(c2) *e-Manifest Setup*

The RIA estimates that all truck drivers will eventually register with the CDX and perform identity-proofing (e.g., subscriber agreements) for their electronic signatures. This includes 9,947 hazardous waste trucks with 2 drivers each.<sup>27</sup> During the 3-year life of this ICR, it is assumed that 28% of trucks will adopt electronic manifesting and perform these activities.<sup>28</sup> Because these are one-time activities during the 3-year life of this ICR, this ICR has annualized these employees over 3 years, as shown in Exhibit 12.

(c2) *Manifest Completion, Transmittal, and Recordkeeping*

Exhibit 13 examines the manifesting hour and cost burden for transporters transporting domestic and international shipments of hazardous waste. EPA estimates that, of the manifests completed and transmitted each year for domestic and import shipments, approximately 91% will accompany highway shipments, 3% will accompany water shipments, and 6% will accompany rail shipments. EPA further estimates that 21,096 manifests will accompany exports of hazardous waste to non-designated OECD countries and 14,029 manifests will accompany imports of hazardous waste. In addition, EPA estimates that transporters transporting hazardous waste shipments under a reclamation agreement will need to comply with 40 CFR 263.20(h).

Exhibit 13 also addresses undeliverable shipments. This ICR estimates that 1% of all manifests offered into transportation (paper and electronic) cannot be delivered to the designated facility listed on the manifest, alternate designated facility if appropriate, or the place outside the United States designated by the generator (for an emergency other than rejected loads). As reflected in Exhibit 13, the transporter must contact the generator for further instructions pursuant to section 263.21(b)(1), as amended by the proposed rule.

In addition, this ICR estimates that 20% of all manifests offered into transportation cannot be delivered to the next designated transporter. As reflected in Exhibit 13, this ICR estimates that 50% of transporter companies will incorporate a provision into their contracts authorizing the transporter to revise the manifest without contacting the generator, as provided by proposed section 263.21(b)(3). Because this is a one-time activity during the 3-year life of this ICR, this ICR annualizes the number of transporter companies over 3 years (i.e.,  $(496 \text{ transporter companies} \times 50\%) / 3 \text{ years} = 83 \text{ companies/yr}$ ).

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<sup>27</sup> Refer to Section 5.4.2 of the RIA for these estimates.

<sup>28</sup> This 28% average reflects the average annual adoption rate of electronic manifesting over the 3-year life of this ICR. See Table 3 of this document for additional information.

Based on the above assumptions, this ICR estimates that 50% of manifests that cannot be delivered to the next designated transporter (which equates to 10% of all manifests, i.e., 20% x 50% = 10%) will be carried by transporters that do not have such contract authority, while the remaining 50% will be carried by transporters that do. Exhibit 13 reflects that transporters without such contract authority must contact the generator for each undeliverable manifest, as provided at proposed section 263.21(b)(2).

Finally, Exhibit 13 addresses rejected loads and container residues.

*(c4) Replacement Manifests*

Exhibit 14 estimates that 1% of electronic manifests carried by highway transporters will require replacement manifests. EPA assumes that all of electronic manifests will be replaced by reproducing 3 paper copies. All replacement manifests are processed by subsequent waste handlers according to the paper manifest requirements.

*(c5) Notification of Discharge of Hazardous Waste*

Based on the *Statistical Abstract of the United States*, EPA estimates that approximately 15,000 accidents per year involve transporters of hazardous substances. EPA has used its best judgment to estimate that 5% of these accidents involve transporters of hazardous waste annually (i.e., hazardous waste is a subset of hazardous substances). These transporters will be required to notify local authorities of the discharge as required under 40 CFR 263.30. This is reflected in Exhibit 15.

In addition, based on data from the National Response Center (NRC), EPA estimates that the NRC receives approximately 4,500 notifications of marine source incidents for discharges of oil or hazardous substances annually. NRC data also indicate that about 66% of these incidents involved oil discharges and 33% involved hazardous substances discharges. Of the discharges of hazardous substances, EPA estimates that 5% involve water transporters transporting hazardous waste. These transporters must notify NRC or EPA under 33 CFR Part 153. The purpose of 33 CFR Part 153 is to prescribe regulations concerning notification to the US Coast Guard of the discharge of oil or hazardous substances as required by the Federal Water Pollution Control Act, as amended; the procedures for the removal of a discharge of oil; and the costs that may be imposed or reimbursed for the removal of a discharge of oil or hazardous substances.

*(d) Designated Treatment, Storage, and Disposal Facility Requirements*

*(d1) Reading the Regulations*

Exhibit 16 reflects that 405 designated TSDFs will read the manifest regulations once a year.

(d2) *e-Manifest Setup*

The RIA estimates that all designated (i.e., commercial) TSDFs will register with the CDX and perform identity-proofing for their electronic signatures (e.g., subscriber agreements). This includes 405 facilities with 5 employees each.<sup>29</sup> During the 3-year life of this ICR, it is assumed that 28% of designated TSDFs will adopt electronic manifesting and perform these activities.<sup>30</sup> Because these are one-time activities during the 3-year life of this ICR, this ICR has annualized these employees over 3 years, as shown in Exhibit 17.

(d3) *Completing the Manifest (assisting the generators)*

Exhibit 18 presents EPA's estimates that approximately 42% and 80% of manifests from LQGs and SQGs, respectively, are completed jointly with the designated TSDF. In addition, EPA estimates that 5% of these manifests include continuation sheets. The exhibit reflects the annualized number of paper and e-Manifests shown in Table 4.

(d4) *Transmitting the Manifest and Reporting to EPA*

Exhibit 19 presents the burden to designated TSDFs for receiving and completing manifests that are not exported out of the U.S. or rejected and that do not result in a container residue. As part of these activities, the designated TSDF must send the top copy (Page 1) of the paper manifest to the e-Manifest system for purposes of data entry and processing. In lieu of mailing the paper copy, the TSDF may transmit an image file of Page 1 of the manifest or both a data string file and the image file corresponding to Page 1 of the manifest.

The RIA estimates the annual submittal rate for each method as shown in Table 5.<sup>31</sup> The table shows that, on average annually during the 3-year life of this ICR, 34% of paper manifests will be submitted as paper copies, 12% as image files, and 26% as data string files and image files. The remaining 28% will be transacted electronically within the system.

**Table 5**  
**Annual Manifest Submittal Rates**

<b>Submittal Method</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>3-Year Average*</b>
Paper copies	52.75%	37.50%	11.25%	34.00%
Image files	4.75%	18.75%	11.25%	12.00%
Data string files and image files	37.50%	18.75%	22.50%	26.00%
Total (paper only)	95.00%	75.00%	45.00%	72.00%
Electronic	5.00%	25.00%	55.00%	28.00%

\*Column includes rounding.

Based on these assumptions, Exhibit 19 estimates that 34% of TSDFs will submit paper copies (@ 6 hours/yr), 12% will submit image files (@ 6 hours/yr), and 26% will submit data string

29 Refer to Section 5.4.2 of the RIA for these estimates.

30 This 28% average reflects the average annual adoption rate of electronic manifesting over the 3-year life of this ICR. See Table 3 of this document for additional information.

31 Refer to Section 5.1.3 of the RIA for these estimates.

files and image files (@12 hours/yr). Note that this burden includes all paper manifests received by the TSDf during the year, including manifests associated with rejected loads and container residues.<sup>32</sup>

*(d5) Compliance with State Program Requirements*

40 CFR 264.71(e) and 265.71(e) provides that TSDFs must determine whether they are required to comply with requirements specific to state hazardous waste manifest programs. EPA assumes that each TSDf must contact, on average, three state manifest programs each year. Because these activities are already required under state hazardous waste programs, they are not burdened in this ICR. This is reflected in Exhibit 19.

*(d6) Discrepancy Reports*

As shown in Exhibit 19, EPA estimates that approximately 25% of manifests accepted by the designated TSDf require reconciling discrepancies between the manifest data and the shipment (e.g. by phoning the generator). EPA further estimates that about 0.4% of manifests accepted by the designated TSDf will require a discrepancy report under 40 CFR 264.72 or 265.72.

*(d7) Rejected Waste and Container Residues*

As shown in Exhibit 20, EPA estimates that each year designated TSDFs will reject a shipment or identify a container residue after the transporter has left the TSDFs' premises for 20,724 hazardous waste shipments received. EPA estimates that each year designated TSDFs will fully reject or identify a container residue while the transporter is on the TSDFs' premises for 20,724 hazardous waste shipments received. EPA also estimates that each year designated TSDFs will forward 41,034 shipments to an alternate TSDf. (As discussed earlier, Exhibit 19 reflects TSDf burden for submittal of manifests to the national system for these problem shipments.) Exhibit 20 also reflects the annualized number of paper and e-Manifests shown in Table 4.

*(d8) Manifest User Fees*

The proposed rule sets forth a methodology and requirements for assessing user fees for paper and electronic manifests. As proposed, the national system would collect fees directly from designated TSDFs, taking into account the submittal method and number of forms. Table 6 presents the annual number of manifests submitted by each method, as estimated in this ICR.

**Table 6  
Annual Submittal Rates and Number Manifests**

<b>Submittal Method</b>	<b>3-Year Annual Average Percentage*</b>	<b>Annual Number of Manifests Submitted</b>
Paper copies	34%	476,962
Image files	12%	168,339

<sup>32</sup> In other words, Exhibit 19 estimates submittal burden based on the number of facilities, not the number of manifests submitted. It is assumed that each facility will collect all manifests received during the month, including those accompanying rejected loads and container residues, and submit them (e.g., in batch form) to the national system.

Submittal Method	3-Year Annual Average Percentage*	Annual Number of Manifests Submitted
Data string files and image files	26%	364,736
Electronic	28%	392,792
Total	100%	1,402,829

\*The 3-year annual average percentages are calculated in Table 5.

Further, the RIA sets forth an estimated fee per manifest based on the submittal method.<sup>33</sup> As proposed, fees will be formulated to recover EPA’s development and operations/maintenance costs and therefore will vary annually. Table 7 presents the estimated annual user fee per manifest for each submittal method as well as the 3-year average. The table shows that TSDFs will be charged \$24.21/form for paper copies, \$18.20/form for image files, \$12.71/form for data string files and image files, and \$10.23/form for electronic manifests on average annually. Exhibit 21 applies these fees to the total annual number of manifests submitted by designated TSDFs (shown in Table 6).<sup>34</sup>

**Table 7  
User Fees Per Manifest, by Submittal Method**

Submittal Method	Year 1	Year 2	Year 3	3-Year Average
Paper copies	\$24.03	\$24.18	\$24.41	\$24.21
Image files	\$17.86	\$18.01	\$18.74	\$18.20
Data string files and image files	\$12.59	\$12.74	\$12.79	\$12.71
Total	\$54.48	\$54.93	\$55.94	\$55.12
Electronic	\$10.05	\$10.21	\$10.43	\$10.23

*(d9) Post-Receipt Manifest Data Corrections*

This ICR estimates that, of all manifests offered into transportation annually, 20% will require designated TSDFs to make data corrections after shipment receipt, as provided by proposed 40 CFR 264.71(l) and 265.71(l).<sup>35</sup> This ICR estimates that 90% of the corrected manifests will be initiated by the TSDF (which equates to 18% of all manifests, i.e., 20% x 90% = 18%). The remaining 10% will be identified by other interested persons (which equates to 2% of all manifests, i.e., 20% x 10% = 2%).<sup>36</sup> These TSDFs must perform the procedures at proposed section 264.71(l) or 265.71(l), such as entering all corrections to manifest data, as well as certification statement, via electronic submission. Further, this ICR estimates that, of the corrections initiated by TSDFs, 5% will lead to the receipt of comments or suggested changes from other interested persons. The facility must reconcile the comments and either alter its

33 Refer to Section 5.5 of the RIA for these estimates.

34 These fees are considered O&M costs for purposes of presentation in Exhibit 24.

35 These corrections are in addition to “significant discrepancies” that TSDFs must address under existing 40 CFR 264.72 or 265.72 procedures. See the preamble to the proposed rule for additional information.

36 For purposes of analysis, this ICR assumes that these comments originate from generators and estimates burden for them in Exhibit 7. EPA notes, however, that it can be expected that some comments will originate from the states and others. In addition, some of a generator’s efforts in providing comments can be considered a standard industry practice, in that generators periodically communicate with designated TSDFs to resolve billing and other disagreements over shipment information.



correction submission accordingly or affirm the accuracy of the initial correction submission. These activities are reflected in Exhibit 22.

*(d10) Unmanifested Waste Reports: Completion and Submission*

As shown in Exhibit 23, EPA estimates that designated TSDFs will need to complete 137 letters for shipments that arrive without a manifest, notifying the Agency of an un-manifested waste shipment, as required under 40 CFR 264.76 or 265.76.

EXHIBIT 1

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR REGISTRANT ORGANIZATIONS <sup>a</sup>

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Registrants	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Read the regulations</b>									
Read the regulations	0.00	0.25	1.00	0.00	1.25	\$0.00	1	1	\$61
<b>Applying to the Registry</b>									
Prepare and submit initial application	0.00	0.25	1.00	0.10	1.35	\$5.26	1	1	\$68
Submit revised initial application to EPA, if requested	0.00	0.10	0.50	0.10	0.70	\$5.26	1	1	\$36
Submit three fully assembled manifests and, if needed, continuation sheets and a description of the form samples	0.00	0.10	0.17	0.10	0.37	\$646.26	1	0	\$663
Submit revised form samples based on EPA comment on the initial samples, if requested	0.00	0.10	0.17	0.10	0.37	\$646.26	1	0	\$663
<b>Updating General Information in the Approved Application</b>									
Revise and submit the application to EPA, along with an indication or explanation of the update	0.00	0.10	0.17	0.10	0.37	\$0.52	3	1	\$54
Respond to the Agency's concerns, if applicable	0.00	0.10	0.17	0.00	0.27	\$0.00	1	0	\$15
<b>Requesting Approval for a New Tracking Number Suffix</b>									
Submit a proposed tracking number suffix, along with the reason for requesting it	0.00	0.10	0.17	0.10	0.37	\$0.52	0	0	\$0
<b>Requesting Approval for Changes to Printing Specifications or Use of a New Printer</b>									
Submit three samples of the manifest form and/or continuation sheet and, if applicable, a brief description of the qualifications of the new printer	0.00	0.10	0.17	0.10	0.37	\$646.26	1	0	\$663
Submit revised manifest form and/or continuation sheet samples to EPA, if requested	0.00	0.10	0.17	0.10	0.37	\$646.26	1	0	\$663
<b>Typesetting the Manifest Form Subsequent to its Approval</b>									
Submit three samples of the manifest or continuation sheet to the registry for approval	0.00	0.00	0.17	0.10	0.27	\$646.26	0	0	\$0
<b>Requesting an Exemption</b>									
Submit documentation to EPA indicating why an exemption is warranted	0.00	0.10	0.17	0.10	0.37	\$0.52	0	0	\$0
<b>Notifying EPA of a Printing Specification Violation</b>									
Notify EPA of duplicated manifest tracking numbers	0.00	0.00	0.25	0.00	0.25	\$2.00	1	0	\$12
<b>Revising the Approved Manifest if Requested by EPA</b>									
Submit revised manifest form samples to EPA, if requested	0.00	0.10	0.17	0.10	0.37	\$646.26	0	0	\$0
<b>Responding to Suspension and Revocation Procedures</b>									
Submit information if requested by EPA	0.00	0.25	0.50	0.00	0.75	\$0.52	0	0	\$0
<b>TOTAL</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>4</b>	<b>\$2,898</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 2

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS<sup>a</sup>  
READING THE REGULATIONS

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Generators	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Read the regulations</b>									
LQGs	0.00	0.25	1.00	0.00	1.25	\$0.00	13,891	17,364	\$845,545
TSDFs	0.00	0.25	1.00	0.00	1.25	\$0.00	2,128	2,660	\$129,531
SQGs	0.00	0.25	1.00	0.00	1.25	\$0.00	34,623	43,279	\$2,107,502
<b>TOTAL (LQGs, TSDFs, and SQGs)</b>	<b>0.00</b>	<b>0.25</b>	<b>1.00</b>	<b>0.00</b>	<b>1.25</b>	<b>\$0.00</b>	<b>50,642</b>	<b>63,303</b>	<b>\$3,082,578</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 3

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS<sup>a</sup>  
E-MANIFEST SET UP

	Hours per TSDF				Hours/ Respondent	O&M Costs/ Respondent	Number of Respondents	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>E-Manifest Set Up: LQGs</b>									
<b>E-Manifest System Account</b>									
Register and maintain account with e-Manifest System	0.00	0.00	0.17	0.00	0.17	\$0.00	3,388	576	\$23,274
<b>E-Manifest System Subscriber Agreements and Local Registration Authorities</b>									
Comply with subscriber agreement provisions	0.00	0.00	0.46	0.00	0.46	\$3.82	0	0	\$0
Comply with Local Registration Authority provisions	0.00	0.00	13.80	0.00	13.80	\$1.56	0	0	\$0
Comply with requirements for identifier, attribute, or alternative method	0.00	0.25	1.00	0.10	1.35	\$0.00	2,541	3,430	\$160,350
<b>E-Manifest Set Up: TSDFs</b>									
<b>E-Manifest System Account</b>									
Register and maintain account with e-Manifest System	0.00	0.00	0.17	0.00	0.17	\$0.00	804	137	\$5,524
<b>E-Manifest System Subscriber Agreements and Local Registration Authorities</b>									
Comply with subscriber agreement provisions	0.00	0.00	0.46	0.00	0.46	\$3.82	0	0	\$0
Comply with Local Registration Authority provisions	0.00	0.00	13.80	0.00	13.80	\$1.56	0	0	\$0
Comply with requirements for identifier, attribute, or alternative method	0.00	0.25	1.00	0.10	1.35	\$0.00	603	814	\$38,058
<b>E-Manifest Set Up: SQGs</b>									
<b>E-Manifest System Account</b>									
Register and maintain account with e-Manifest System	0.00	0.00	0.17	0.00	0.17	\$0.00	8,444	1,435	\$58,009
<b>E-Manifest System Subscriber Agreements and Local Registration Authorities</b>									
Comply with subscriber agreement provisions	0.00	0.00	0.46	0.00	0.46	\$3.82	0	0	\$0
Comply with Local Registration Authority provisions	0.00	0.00	13.80	0.00	13.80	\$1.56	0	0	\$0
Comply with requirements for identifier, attribute, or alternative method	0.00	0.25	1.00	0.10	1.35	\$0.00	6,333	8,549	\$399,669
<b>TOTAL (LQGs, TSDFs, and SQGs)</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>14,365</b>	<b>\$661,610</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 4

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
 COMPLETING THE MANIFEST (WITHOUT ASSISTANCE OF DESIGNATED TSDFs)

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest completion: LQGs</b>									
<b>Paper Manifest</b>									
Complete the manifest	0.00	0.00	0.40	0.10	0.50	\$0.42	363,764	181,882	\$6,853,314
Complete the continuation sheet	0.00	0.00	0.19	0.04	0.23	\$0.42	18,188	4,183	\$163,692
<b>Electronic Manifest</b>									
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$0.00	143,814	15,820	\$562,313
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$0.00	7,191	360	\$13,231
<b>Manifest completion: Commercial TSDFs who are also generators</b>									
<b>Paper Manifest</b>									
Complete the manifest	0.00	0.00	0.43	0.10	0.53	\$0.42	55,728	29,536	\$1,117,347
Complete the continuation sheet	0.00	0.00	0.18	0.04	0.22	\$0.42	2,786	613	\$23,959
<b>Electronic Manifest</b>									
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$0.00	22,032	2,424	\$86,145
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$0.00	1,102	55	\$2,028
<b>Manifest completion: Captive TSDFs who are also generators</b>									
<b>Paper Manifest</b>									
Complete the manifest	0.00	0.00	0.43	0.10	0.53	\$0.42	24,696	13,089	\$495,154
Complete the continuation sheet	0.00	0.00	0.18	0.05	0.23	\$0.42	1,235	284	\$10,893
<b>Electronic Manifest</b>									
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$0.00	9,764	1,074	\$38,177
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$0.00	488	24	\$898
<b>Manifest completion: SQGs</b>									
<b>Paper Manifest</b>									
Complete the manifest	0.00	0.00	0.40	0.08	0.48	\$0.42	59,552	28,585	\$1,095,161
Complete the continuation sheet	0.00	0.00	0.18	0.03	0.21	\$0.42	2,978	625	\$24,926
<b>Electronic Manifest</b>									
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$0.00	23,544	2,590	\$92,057
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$0.00	1,177	59	\$2,166
<b>TOTAL (LQGs, TSDFs, and SQGs) <sup>b</sup></b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>\$0.00</b>	<b>varies</b>	<b>281,203</b>	<b>\$10,581,461</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 5

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
 COMPLETING THE MANIFEST (WITH ASSISTANCE OF DESIGNATED TSDFs)

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest completion: LQGs</b>									
Complete the manifest	0.00	0.00	0.02	0.01	0.03	\$0.00	367,556	11,027	\$378,583
<b>Manifest completion: SQGs</b>									
Complete the manifest	0.00	0.00	0.02	0.01	0.03	\$0.00	332,382	9,971	\$342,353
<b>TOTAL (LQGs and SQGs)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>	<b>0.01</b>	<b>0.03</b>	<b>\$0.00</b>	<b>varies</b>	<b>20,998</b>	<b>\$720,936</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 6

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
 COMPLIANCE WITH STATE PROGRAM REQUIREMENTS

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Phone Calls	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Compliance with State program requirements: LQGs</b>									
Contact the consignment/generator State if needed and submit any copies of the manifest to these States, as applicable	0.00	0.00	0.00	0.00	0.00	\$0.00	41,673	0	\$0
<b>Compliance with State program requirements: TSDFs who are also generators</b>									
<b>Commercial TSDFs</b>									
Contact the consignment/generator State if needed and submit any copies of the manifest to these States, as applicable	0.00	0.00	0.00	0.00	0.00	\$0.00	1,215	0	\$0
<b>Captive TSDFs</b>									
Contact the consignment/generator State if needed and submit any copies of the manifest to these States, as applicable	0.00	0.00	0.00	0.00	0.00	\$0.00	5,169	0	\$0
<b>Compliance with State program requirements: SQGs</b>									
Contact the consignment/generator State if needed and submit any copies of the manifest to these States, as applicable	0.00	0.00	0.00	0.00	0.00	\$0.00	88,365	0	\$0
<b>TOTAL (LQGs, TSDFs, and SQGs)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>\$0.00</b>	<b>136,422</b>	<b>0</b>	<b>\$0</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 7

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest transmittal and recordkeeping: LQGs</b>									
<b>Paper Manifest</b>									
Sign the manifest certification and obtain the signature of the initial transporter and date of acceptance on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	627,179	6,272	\$250,872
Keep a copy of the manifest and give the remaining copies to the initial transporter	0.00	0.00	0.00	0.10	0.10	\$0.00	627,179	62,718	\$1,404,881
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$0.00	627,179	62,718	\$1,404,881
For shipments solely by water, send three copies of the manifest, dated and signed, to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.16	0.16	\$0.52	18,815	3,010	\$77,142
For shipments by rail originating at the site of generation, send at least three copies of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.16	0.16	\$0.52	37,631	6,021	\$154,287
<b>Electronic Manifest - PIN/Password</b>									
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$0.00	38,044	1,141	\$46,033
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	22,065	221	\$8,826
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDf	0.00	0.00	0.01	0.12	0.13	\$0.00	5,207	677	\$16,090
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	662	20	\$787
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	1,324	40	\$1,576
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	114,131	1,141	\$45,652
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	66,196	662	\$26,478
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDf	0.00	0.00	0.01	0.12	0.13	\$0.00	15,621	2,031	\$48,269
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	3,424	103	\$4,074
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	6,848	205	\$8,149
<b>Exports - All Shipments</b>									
Provide the transporter with an EPA Acknowledgment of Consent and an additional copy of the manifest or shipping papers for delivery to the U.S. Customs official at the point the hazardous waste exits the U.S.	0.00	0.00	0.00	0.25	0.25	\$0.10	9,915	2,479	\$56,516
<b>Notice of Suspected Manifest Data Error</b>									
Provide notice of suspected data error to the designated TSDf	0.00	0.00	0.01	0.01	0.02	\$0.00	17,503	350	\$11,027
<b>Subtotal (for LQGs)</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>149,809</b>	<b>\$3,565,540</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 7 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest transmittal and recordkeeping: Commercial TSDFs</b>									
<b>Paper Manifest</b>									
Sign the manifest certification and obtain the signature of the initial transporter and date of acceptance on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	55,728	557	\$22,291
Keep a copy of the manifest and give the remaining copies to the initial transporter	0.00	0.00	0.00	0.10	0.10	\$0.00	55,728	5,573	\$124,831
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$0.00	55,728	5,573	\$124,831
For shipments solely by water, send three copies of the manifest, dated and signed, to the designated facility or the last water transporter to handle the waste in the U.S. (Domestic and Exports)	0.00	0.00	0.00	0.16	0.16	\$0.52	1,672	268	\$6,855
For shipments by rail originating at the site of generation, send at least three copies of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S. (Domestic and Exports)	0.00	0.00	0.00	0.16	0.16	\$0.52	3,344	535	\$13,711
<b>Electronic Manifest - PIN/Password</b>									
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$0.00	5,508	165	\$6,665
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	5,508	55	\$2,203
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDF	0.00	0.00	0.01	0.12	0.13	\$0.00	0	0	\$0
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	165	5	\$197
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	330	10	\$393
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	16,524	165	\$6,610
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	16,524	165	\$6,610
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDF	0.00	0.00	0.01	0.12	0.13	\$0.00	0	0	\$0
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	496	15	\$590
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	991	30	\$1,179
<b>Exports - All Shipments</b>									
Provide the transporter with an EPA Acknowledgment of Consent and an additional copy of the manifest or shipping papers for delivery to the U.S. Customs official at the point the hazardous waste exits the U.S.	0.00	0.00	0.00	0.25	0.25	\$0.10	1,689	422	\$9,627
<b>Notice of Suspected Manifest Data Error</b>									
Provide notice of suspected data error to the designated TSDF	0.00	0.00	0.01	0.01	0.02	\$0.00	1,555	31	\$980
<b>Subtotal (for Commercial TSDFs)</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>13,569</b>	<b>\$327,573</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 7 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest transmittal and recordkeeping: Captive TSDFs</b>									
<b>Paper Manifest</b>									
Sign the manifest certification and obtain the signature of the initial transporter and date of acceptance on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	24,696	247	\$9,878
Keep a copy of the manifest and give the remaining copies to the initial transporter	0.00	0.00	0.00	0.10	0.10	\$0.00	24,696	2,470	\$55,319
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$0.00	24,696	2,470	\$55,319
For shipments solely by water, send three copies of the manifest, dated and signed, to the designated facility or the last water transporter to handle the waste in the U.S. (Domestic and Exports)	0.00	0.00	0.00	0.16	0.16	\$0.52	741	119	\$3,038
For shipments by rail originating at the site of generation, send at least three copies of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S. (Domestic and Exports)	0.00	0.00	0.00	0.16	0.16	\$0.52	1,482	237	\$6,077
<b>Electronic Manifest - PIN/Password</b>									
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$0.00	2,441	73	\$2,954
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	2,441	24	\$976
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDF	0.00	0.00	0.01	0.12	0.13	\$0.00	0	0	\$0
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	73	2	\$87
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	146	4	\$174
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	7,323	73	\$2,929
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	7,323	73	\$2,929
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDF	0.00	0.00	0.01	0.12	0.13	\$0.00	0	0	\$0
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	220	7	\$261
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	439	13	\$522
<b>Exports - All Shipments</b>									
Provide the transporter with an EPA Acknowledgment of Consent and an additional copy of the manifest or shipping papers for delivery to the U.S. Customs official at the point the hazardous waste exits the U.S.	0.00	0.00	0.00	0.25	0.25	\$0.10	633	158	\$3,608
<b>Notice of Suspected Manifest Data Error</b>									
Provide notice of suspected data error to the designated TSDF	0.00	0.00	0.01	0.01	0.02	\$0.00	689	14	\$434
<b>Subtotal (for Captive TSDFs)</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>5,984</b>	<b>\$144,505</b>

<sup>a</sup> Exhibit contains rounding error.



ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest transmittal and recordkeeping: SQGs</b>									
<b>Paper Manifest</b>									
<b>For Paper Manifest Cycle</b>									
Sign the manifest certification and obtain the signature of the initial transporter and date of acceptance on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	297,758	2,978	\$119,103
Keep a copy of the manifest and give the remaining copies to the initial transporter	0.00	0.00	0.00	0.10	0.10	\$0.00	297,758	29,776	\$666,978
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$0.00	297,758	29,776	\$666,978
For shipments solely by water, send three copies of the manifest, dated and signed, to the designated facility or the last water transporter to handle the waste in the U.S. (Domestic and Exports)	0.00	0.00	0.00	0.16	0.16	\$0.52	8,933	1,429	\$36,625
For shipments by rail originating at the site of generation, send at least three copies of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S. (Domestic and Exports)	0.00	0.00	0.00	0.16	0.16	\$0.52	17,865	2,858	\$73,247
<b>Electronic Manifest - PIN/Password</b>									
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$0.00	11,831	355	\$14,315
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	2,366	24	\$946
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDF	0.00	0.00	0.01	0.12	0.13	\$0.00	11,772	1,530	\$36,375
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	71	2	\$85
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	142	4	\$169
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	35,492	355	\$14,197
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.00	7,098	71	\$2,839
For manifests initiated under 262.24(c)(1), sign the manifest certification by hand, obtain the signature of the initial transporter and date, keep a copy, and receive notice of manifest receipt by designated TSDF	0.00	0.00	0.01	0.12	0.13	\$0.00	35,316	4,591	\$109,125
For shipments solely by water, send copy of the manifest to the designated facility or the last water transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	213	6	\$254
For shipments by rail originating at the site of generation, send copy of the manifest to the next non-rail transporter, the designated facility, or the last rail transporter to handle the waste in the U.S.	0.00	0.00	0.00	0.03	0.03	\$0.52	426	13	\$507
<b>Exports - All Shipments</b>									
Provide the transporter with an EPA Acknowledgment of Consent and an additional copy of the manifest or shipping papers for delivery to the U.S. Customs official at the point the hazardous waste exits the U.S.	0.00	0.00	0.00	0.25	0.25	\$0.10	8,861	2,215	\$50,508
<b>Reclamation Agreements</b>									
Retain a copy of each reclamation agreement	0.00	0.00	0.00	0.10	0.10	\$0.00	5,168	517	\$11,576
<b>Notice of Suspected Manifest Data Error</b>									
Provide notice of suspected data error to the designated TSDF	0.00	0.00	0.01	0.01	0.02	\$0.00	8,310	166	\$5,235
<b>Subtotal (for SQGs)</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>76,666</b>	<b>\$1,809,062</b>
<b>TOTAL (LQGs, TSDFs, and SQGs)</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>246,028</b>	<b>\$5,846,680</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 8

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
UNDELIVERABLE SHIPMENTS

	Hours per TSDF				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Undeliverable shipments (LQGs, TSDFs and SQGs)</b>									
<b>Undeliverable shipments to TSDF or alternate TSDF</b>									
Provide instructions to transporter to revise the manifest	0.00	0.00	0.08	0.00	0.08	\$0.00	14,028	1,122	\$45,452
<b>Undeliverable shipments to next transporter</b>									
Provide instructions to transporter and authorize revisions to the manifest (for generators with no contract provision authorizing transporter revisions)	0.00	0.00	0.08	0.00	0.08	\$0.00	140,283	11,223	\$454,517
Review contract provision authorizing transporter to revise the manifest (for generators establishing contract provision authorizing transporter revisions)	0.01	0.01	0.01	0.00	0.03	\$0.00	8,440	253	\$18,484
<b>TOTAL (LQGs, TSDFs, and SQGs)</b>	<b>varies</b>	<b>0.00</b>	<b>varies</b>	<b>0.00</b>	<b>varies</b>	<b>\$0.00</b>	<b>varies</b>	<b>12,598</b>	<b>\$518,453</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 9

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS <sup>a</sup>  
REJECTED WASTE AND CONTAINER RESIDUES

	Hours per TSDF				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Rejected waste and container residues</b>									
<b>Paper Manifest</b>									
Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	148	1	\$59
Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	148	1	\$59
Provide the transporter a copy of the manifest	0.00	0.00	0.17	0.00	0.17	\$0.00	296	50	\$2,034
Within 30 days of delivery, send a copy to the designated TSDF that returned the shipment to the generator	0.00	0.00	0.00	0.15	0.15	\$0.52	296	44	\$1,149
Retain a copy	0.00	0.00	0.00	0.17	0.17	\$0.00	296	50	\$1,128
<b>Electronic Manifest - PIN/Password</b>									
Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	15	0	\$6
Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	15	0	\$6
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	44	0	\$18
Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	44	0	\$18
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>414</b>	<b>146</b>	<b>\$4,477</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 10

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS<sup>a</sup>  
DEVELOPING EXCEPTION REPORTS

	Hours per Generator				Hours/ Respondent	O&M Costs/ Respondent	Number of Reports	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Exception report completion, submission, and recordkeeping: LQGs</b>									
Prepare and submit a signed cover letter to EPA explaining the generator's efforts to locate the hazardous waste and the results of those efforts, along with a legible copy of the manifest	0.00	0.50	0.50	0.10	1.10	\$0.62	12,360	13,596	\$790,422
Keep a copy of each exception report	0.00	0.00	0.00	0.10	0.10	\$0.10	12,360	1,236	\$28,922
<b>Exception report completion, submission, and recordkeeping: Commercial TSDFs</b>									
Prepare and submit a signed cover letter to EPA explaining the generator's efforts to locate the hazardous waste and the results of those efforts, along with a legible copy of the manifest	0.00	0.50	0.50	0.10	1.10	\$0.62	396	436	\$25,325
Keep a copy of each exception report	0.00	0.00	0.00	0.10	0.10	\$0.10	396	40	\$927
<b>Exception report completion, submission, and recordkeeping: Captive TSDFs</b>									
Prepare and submit a signed cover letter to EPA explaining the generator's efforts to locate the hazardous waste and the results of those efforts, along with a legible copy of the manifest	0.00	0.50	0.50	0.10	1.10	\$0.62	175	193	\$11,192
Keep a copy of each exception report	0.00	0.00	0.00	0.10	0.10	\$0.10	175	18	\$410
<b>Exception report completion, submission, and recordkeeping: SQGs</b>									
Submit a legible copy of the manifest with some indication that the waste has not been delivered	0.00	0.25	0.25	0.00	0.50	\$0.62	2,077	1,039	\$64,720
<b>TOTAL (LQGs, TSDFs, and SQGs)</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>16,558</b>	<b>\$921,918</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 11

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS<sup>a</sup>  
READING THE REGULATIONS

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Transporters	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Read the regulations</b>									
Transporters	0.00	0.25	1.00	0.00	1.25	\$0.00	496	620	\$30,192
<b>TOTAL</b>	<b>0.00</b>	<b>0.25</b>	<b>1.00</b>	<b>0.00</b>	<b>1.25</b>	<b>\$0.00</b>	<b>496</b>	<b>620</b>	<b>\$30,192</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 12

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS <sup>a</sup>  
E-MANIFEST SET UP

	Hours per TSDF				Hours/ Respondent	O&M Costs/ Respondent	Number of Respondents	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>E-Manifest Set Up</b>									
<b>E-Manifest System Account</b>									
Register and maintain account with e-Manifest System	0.00	0.00	0.15	0.00	0.15	\$0.00	1,857	279	\$11,271
<b>E-Manifest System Subscriber Agreements and Local Registration Authorities</b>									
Comply with subscriber agreement provisions	0.00	0.00	0.46	0.00	0.46	\$3.82	464	214	\$10,407
Comply with Local Registration Authority provisions	0.00	0.00	13.80	0.00	13.80	\$1.56	0	0	\$0
Comply with requirements for identifier, attribute, or alternative method	0.00	0.25	1.00	0.10	1.35	\$0.00	1,393	1,880	\$87,886
<b>TOTAL</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>2,373</b>	<b>\$109,564</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 13

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS <sup>a</sup>  
COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest completion, transmittal and recordkeeping: Transporters</b>									
<b>Manifest requirements for highway transporters</b>									
<b>Paper Manifest</b>									
Sign and date the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	914,635	9,146	\$365,854
Return a signed copy of the manifest to the generator	0.00	0.00	0.01	0.00	0.01	\$0.00	914,635	9,146	\$365,854
Ensure that the manifest (or other shipping paper) accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$0.00	914,635	118,903	\$4,810,980
Obtain the date of delivery and signature of that transporter or the owner/operator of the facility or alternate facility designated on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	914,635	9,146	\$365,854
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$0.00	914,635	155,488	\$3,484,759
Give remaining copies of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.00	914,635	9,146	\$365,854
<b>Electronic Manifest - PIN/Password</b>									
Conduct witnessed signature ceremony with generator, enter PIN/Password, and answer challenge question (or, if the manifest is provided by a generator to transporter under 262.24(c)(1), sign by hand)	0.00	0.00	0.03	0.00	0.03	\$0.00	90,400	2,712	\$109,384
Sign on behalf of generator, if applicable	0.00	0.00	0.01	0.00	0.01	\$0.00	24,565	246	\$9,826
Place paper manifest copy on truck	0.00	0.00	0.01	0.00	0.01	\$0.00	90,400	904	\$36,160
Ensure that the next transporter or owner/operator of the facility or alternate facility enters PIN/Password and answers challenge question	0.00	0.00	0.01	0.00	0.01	\$0.00	90,400	904	\$36,160
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Sign e-Manifest (or, if the manifest is provided by a generator to transporter under 262.24(c)(1), sign by hand)	0.00	0.00	0.01	0.00	0.01	\$0.00	271,200	2,712	\$108,480
Sign on behalf of generator, if applicable	0.00	0.00	0.01	0.00	0.01	\$0.00	73,695	737	\$29,478
Place paper manifest copy on truck	0.00	0.00	0.01	0.00	0.01	\$0.00	271,200	2,712	\$108,480
Obtain the date of delivery and signature of that transporter or the owner/operator of the facility or alternate facility designated on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	271,200	2,712	\$108,480
Give copy of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.00	271,200	2,712	\$108,480

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 13 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS <sup>a</sup>  
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest completion, transmittal and recordkeeping: Transporters</b>									
<b>Manifest requirements for person delivering to initial water transporters</b>									
<b>Paper Manifest</b>									
Obtain the date of delivery and signature of the initial water transporter on the manifest	0.00	0.00	0.00	0.01	0.01	\$0.00	30,153	302	\$6,634
Forward the manifest to the designated facility	0.00	0.00	0.00	0.16	0.16	\$0.52	30,153	4,824	\$123,628
<b>Electronic Manifest - PIN/Password</b>									
Ensure that the next transporter or owner/operator of the facility or alternate facility enters PIN/Password and answers challenge question	0.00	0.00	0.00	0.01	0.01	\$0.00	2,980	30	\$656
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Obtain the date of delivery and signature of the initial water transporter on the manifest	0.00	0.00	0.00	0.01	0.01	\$0.00	8,941	89	\$1,967
Forward the manifest to the designated facility	0.00	0.00	0.00	0.16	0.16	\$0.52	8,941	1,431	\$36,658
<b>Manifest requirements for water (bulk shipment) transporters</b>									
<b>Paper Manifest</b>									
Ensure that the shipping paper (and Acknowledgment of Consent, for exports) accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$0.00	30,153	3,920	\$158,605
If the delivering (water) transporter, obtain the date of delivery and signature of the owner/operator of the designated facility on either the manifest or shipping paper	0.00	0.00	0.01	0.00	0.01	\$0.00	30,153	302	\$12,061
If the initial water transporter, sign and date the manifest and return it to the delivering transporter so that the manifest can be forwarded to the designated facility owner/operator	0.00	0.00	0.01	0.00	0.01	\$0.00	30,153	302	\$12,061
Retain a copy of the manifest or shipping paper	0.00	0.00	0.00	0.17	0.17	\$0.00	30,153	5,126	\$114,883
<b>Electronic Manifest - PIN/Password</b>									
Ensure that the shipping paper (and Acknowledgment of Consent, for exports) accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$0.00	2,980	387	\$15,675
If the delivering (water) transporter, ensure that the owner/operator of the designated facility enters PIN/Password and answers challenge question	0.00	0.00	0.01	0.00	0.01	\$0.00	2,980	30	\$1,192
If the initial water transporter, enter PIN/Password and answer challenge question (or, if the manifest is provided by a generator to initial water transporter under 262.24(c)(1), sign by hand)	0.00	0.00	0.01	0.00	0.01	\$0.00	2,980	30	\$1,192
<b>Electronic Manifest - Digitized Electronic Signature</b>									
Ensure that the shipping paper (and Acknowledgment of Consent, for exports) accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$0.00	8,941	1,162	\$47,030
If the delivering (water) transporter, obtain the date of delivery and signature of the owner/operator of the designated facility	0.00	0.00	0.01	0.00	0.01	\$0.00	8,941	89	\$3,576
If the initial water transporter, sign the manifest and return the paper manifest to the delivering transporter so that the manifest can be forwarded to the designated facility owner/operator (or, if the manifest is provided by a generator to initial water transporter under 262.24(c)(1), sign by hand)	0.00	0.00	0.01	0.00	0.01	\$0.00	8,941	89	\$3,576

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 13 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS <sup>a</sup>  
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest completion, transmittal and recordkeeping: Transporters</b>									
<b>Manifest requirements for rail transporters</b>									
<b>Paper Manifest</b>									
When accepting waste from a non-rail transporter, sign and date the manifest and return or transmit a signed copy of the manifest to the non-rail transporter	0.00	0.00	0.01	0.00	0.01	\$0.00	60,306	603	\$24,122
Forward at least three copies of the manifest to either the next non-rail transporter, the designated facility, or the last rail transporter designated to handle the waste in the U.S.	0.00	0.00	0.00	0.16	0.16	\$0.52	60,306	9,649	\$247,254
Ensure a shipping paper containing all the information required on the manifest excluding the U.S. EPA ID number, generator certification, and signatures (and for exports an Acknowledgment of Consent) accompanies the waste	0.00	0.00	0.13	0.00	0.13	\$0.00	60,306	7,840	\$317,210
When delivering hazardous waste to the designated facility or to the next non-rail transporter, obtain the signature and date of delivery of the facility or non-rail transporter on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	60,306	603	\$24,122
Retain a copy of the manifest and/or rail shipping paper	0.00	0.00	0.00	0.17	0.17	\$0.00	60,306	10,252	\$229,766
Before accepting hazardous waste from a rail transporter, sign and date the manifest and provide a copy to the rail transporter	0.00	0.00	0.01	0.00	0.01	\$0.00	60,306	603	\$24,122
<b>Electronic Manifest - PIN/Password</b>									
When accepting waste from a non-rail transporter, enter PIN/Password and answer challenge question (or, if the manifest is provided by a generator to rail transporter under 262.24(c)(1), sign by hand)	0.00	0.00	0.01	0.00	0.01	\$0.00	5,960	60	\$2,384
Ensure a shipping paper containing all the information required on the manifest excluding the U.S. EPA ID number, generator certification, and signatures (and for exports an Acknowledgment of Consent) accompanies the waste	0.00	0.00	0.13	0.00	0.13	\$0.00	5,960	775	\$31,350
When delivering hazardous waste to the designated facility or to the next non-rail transporter, ensure that the facility or non-rail transporter enters PIN/Password and answers challenge question	0.00	0.00	0.01	0.00	0.01	\$0.00	5,960	60	\$2,384
Before accepting hazardous waste from a rail transporter, enter PIN/Password and answer challenge question	0.00	0.00	0.01	0.00	0.01	\$0.00	5,960	60	\$2,384
<b>Electronic Manifest - Digitized Electronic Signature</b>									
When accepting waste from a non-rail transporter, sign the manifest and return the paper copy to the non-rail transporter (or, if the manifest is provided by a generator to rail transporter under 262.24(c)(1), sign by hand)	0.00	0.00	0.01	0.00	0.01	\$0.00	17,881	179	\$7,152
Ensure a shipping paper containing all the information required on the manifest excluding the U.S. EPA ID number, generator certification, and signatures (and for exports an Acknowledgment of Consent) accompanies the waste	0.00	0.00	0.13	0.00	0.13	\$0.00	17,881	2,325	\$94,054
When delivering hazardous waste to the designated facility or to the next non-rail transporter, obtain the signature of the facility or non-rail transporter on the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	17,881	179	\$7,152
Before accepting hazardous waste from a rail transporter, sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	17,881	179	\$7,152

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 13 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS <sup>a</sup>  
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Manifest completion, transmittal and recordkeeping: Transporters</b>									
<b>Manifest requirements for transporters who transport waste into and/or out of the U.S.</b>									
<b>Paper Manifest</b>									
For imports and exports, sign and date the manifest in the International Shipments block to indicate the date that the shipment left the U.S., as required by section 263.20(g)(1)	0.00	0.00	0.01	0.00	0.01	\$0.00	25,175	252	\$10,070
For imports and exports, retain a copy of the manifest, as required by section 263.20(g)(2)	0.00	0.00	0.00	0.17	0.17	\$0.00	25,175	4,280	\$95,917
For imports, give copy of import manifest to TSDF receiving facility	0.00	0.00	0.01	0.00	0.01	\$0.00	10,055	101	\$4,022
For exports, return a signed copy of the manifest to the generator, as required by section 263.20(g)(3)	0.00	0.00	0.00	0.01	0.01	\$0.00	15,120	151	\$3,326
For exports, give a copy of the manifest to a U.S. Customs official at the point of departure from the U.S., as required by section 263.20(g)(4)	0.00	0.00	0.01	0.00	0.01	\$0.10	15,120	151	\$7,560
For exports, ensure that copies of the manifest and EPA Acknowledgment of Consent accompanies the waste, as required by section 263.20(a)	0.00	0.00	0.13	0.00	0.13	\$0.00	15,120	1,966	\$79,531
<b>Electronic Manifest - PIN/Password</b>									
For imports and exports, complete the manifest in the International Shipments block	0.00	0.00	0.01	0.00	0.01	\$0.00	2,488	25	\$995
For exports, give a copy of the manifest to a U.S. Customs official at the point of departure from the U.S., as required by section 263.20(g)(4)	0.00	0.00	0.01	0.00	0.01	\$0.10	1,495	15	\$748
For exports, ensure that the EPA Acknowledgment of Consent accompanies the waste, as required by section 263.20(a)	0.00	0.00	0.13	0.00	0.13	\$0.00	1,495	194	\$7,864
<b>Electronic Manifest - Digitized Electronic Signature</b>									
For imports and exports, complete the manifest in the International Shipments block	0.00	0.00	0.01	0.00	0.01	\$0.00	7,464	75	\$2,986
For imports, give copy of import manifest to TSDF receiving facility	0.00	0.00	0.01	0.00	0.01	\$0.00	2,981	30	\$1,192
For exports, give a copy of the manifest to a U.S. Customs official at the point of departure from the U.S., as required by section 263.20(g)(4)	0.00	0.00	0.01	0.00	0.01	\$0.10	4,483	45	\$2,241
For exports, ensure that copy of the manifest and EPA Acknowledgment of Consent accompanies the waste, as required by section 263.20(a)	0.00	0.00	0.13	0.00	0.13	\$0.00	4,483	583	\$23,581
<b>Manifest requirements for transporters who transport waste pursuant to a reclamation agreement</b>									
Record the waste information on a log or shipping paper	0.00	0.25	0.75	0.00	1.00	\$0.00	5,168	5,168	\$262,328
Carry the record when transporting waste to the reclamation facility	0.00	0.00	0.01	0.00	0.01	\$0.00	5,168	52	\$2,067
Retain the records	0.00	0.00	0.00	0.17	0.17	\$0.00	5,168	879	\$19,690

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 13 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS <sup>a</sup>  
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Undeliverable shipments</b>									
<b>Undeliverable shipments to TSDF or alternate TSDF (263.21(b)(1))</b>									
Contact the generator for further directions and revise the manifest according to the generator's instructions	0.00	0.00	0.08	0.00	0.08	\$2.00	14,028	1,122	\$73,509
<b>Undeliverable shipments to next designated transporter (263.21(b)(2))</b>									
Contact the generator for further directions and revise the manifest according to the generator's instructions	0.00	0.00	0.08	0.00	0.08	\$2.00	140,283	11,223	\$735,083
<b>Undeliverable shipments to next designated transporter (263.21(b)(3))</b>									
Establish contract authority for transporter to revise the manifest without generator instruction	0.02	0.02	0.10	0.03	0.17	\$0.00	83	14	\$688
Revise the manifest	0.00	0.00	0.01	0.00	0.01	\$0.00	140,283	1,403	\$56,113
<b>Rejected waste and container residues</b>									
<b>Paper Manifest</b>									
For partially rejected loads made while the transporter is on site, obtain the amended manifest from the facility, keep a copy, and, if receiving the rejected waste, obtain the new manifest	0.00	0.00	0.10	0.00	0.10	\$0.00	1,485	149	\$5,999
For fully rejected loads made or container residues identified while the transporter is on site, obtain the original manifest, as amended, from the facility	0.00	0.00	0.01	0.00	0.01	\$0.00	14,852	149	\$5,941
<b>Electronic Manifest - PIN/Password</b>									
For partially rejected loads made while the transporter is on site, complete the transaction, as required	0.00	0.00	0.01	0.00	0.01	\$0.00	147	1	\$59
For fully rejected loads made or container residues identified while the transporter is on site, complete the transaction, as required	0.00	0.00	0.01	0.00	0.01	\$0.00	1,468	15	\$587
<b>Electronic Manifest - Digitized Electronic Signature</b>									
For partially rejected loads made while the transporter is on site, complete the transaction, as required	0.00	0.00	0.01	0.00	0.01	\$0.00	440	4	\$176
For fully rejected loads made or container residues identified while the transporter is on site, complete the transaction, as required	0.00	0.00	0.01	0.00	0.01	\$0.00	4,404	44	\$1,762
<b>TOTAL</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>406,897</b>	<b>\$13,378,120</b>

<sup>a</sup> Exhibit contains rounding error.



EXHIBIT 14

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS<sup>a</sup>  
REPLACEMENT MANIFESTS

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Replacement Manifests</b>									
Reproduce sufficient copies of the manifest and complete them, as specified	0.00	0.00	0.08	0.00	0.08	\$0.30	3,616	289	\$12,801
Obtain a new manifest and complete it, as specified	0.00	0.00	0.40	0.00	0.40	\$0.42	0	0	\$0
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$0.00	3,616	615	\$13,777
Give remaining copies of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.00	3,616	36	\$1,446
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>940</b>	<b>\$28,024</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 15

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS<sup>a</sup>  
NOTIFYING OF DISCHARGE OF HAZARDOUS WASTE

	Hours per Transporter				Hours/ Respondent	O&M Costs/ Respondent	Number of Notifications	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Notification of discharge of hazardous waste: Transporters</b>									
Notify local authorities	0.00	0.25	1.00	0.00	1.25	\$0.00	750	938	\$45,653
<b>Notification of discharge of hazardous waste: Water (bulk shipment) Transporters</b>									
Notify NRC, or a predesignated OSC, of the discharge	0.00	0.25	1.00	0.00	1.25	\$0.00	75	94	\$4,565
<b>TOTAL</b>	<b>0.00</b>	<b>varies</b>	<b>1.00</b>	<b>0.00</b>	<b>1.25</b>	<b>\$0.00</b>	<b>varies</b>	<b>1,032</b>	<b>\$50,218</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 16

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)<sup>a</sup>  
READING THE REGULATIONS

	Hours per TSDF				Hours/ Respondent	O&M Costs/ Respondent	Number of TSDFs	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>Read the regulations</b>									
TSDFs	0.00	0.25	1.00	0.00	1.25	\$0.00	405	506	\$24,652
<b>TOTAL</b>	<b>0.00</b>	<b>0.25</b>	<b>1.00</b>	<b>0.00</b>	<b>1.25</b>	<b>\$0.00</b>	<b>405</b>	<b>506</b>	<b>\$24,652</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 17

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 E-MANIFEST SET UP

0

	Hours per TSDF				Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Respondents	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr					
<b>E-Manifest Set Up</b>									
<b>E-Manifest System Account</b>									
Register and maintain account with e-Manifest System	0.00	0.00	0.17	0.00	\$6.87	\$0.00	189	32	\$1,298
<b>E-Manifest System Subscriber Agreements and Local Registration Authorities</b>									
Comply with subscriber agreement provisions	0.00	0.00	0.46	0.00	\$18.60	\$3.82	47	22	\$1,059
Comply with Local Registration Authority provisions	0.00	0.00	13.80	0.00	\$558.07	\$1.56	0	0	\$0
Comply with requirements for identifier, attribute, or alternative method	0.00	0.25	1.00	0.10	\$63.11	\$0.00	142	191	\$8,946
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>245</b>	<b>\$11,303</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 18

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 COMPLETING THE MANIFEST (ASSISTING THE GENERATORS)

	Hours per TSDF				O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Manifest completion: Designated TSDFs</b>								
<b>Paper Manifest</b>								
Complete the manifest	0.00	0.00	0.43	0.10	\$0.42	501,621	265,859	\$10,057,501
Complete continuation sheets	0.00	0.00	0.18	0.04	\$0.42	25,081	5,518	\$215,697
<b>Electronic Manifest</b>								
Complete the manifest	0.00	0.00	0.08	0.03	\$0.00	198,316	21,815	\$775,416
Complete continuation sheets	0.00	0.00	0.04	0.01	\$0.00	9,916	496	\$18,245
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>293,688</b>	<b>\$11,066,859</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 19

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
TRANSMITTING THE MANIFEST AND REPORTING TO EPA

	Hours per TSDF				O&M Costs/ Respondent	Number of Manifests/ Respondents	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Manifest completion, transmittal and recordkeeping: Designated TSDFs</b>								
<b>Paper Manifest</b>								
Enter the name of the person accepting the waste and sign and date each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.01	0.00	\$0.00	964,055	9,641	\$385,622
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	964,055	19,281	\$780,885
Note any discrepancies on each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.08	0.00	\$0.00	241,014	19,281	\$780,885
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	\$0.00	964,055	163,889	\$6,623,058
Within 30 days of delivery, send a copy of the manifest (or shipping paper) to the generator (or to EPA-OECA for import manifests)	0.00	0.00	0.00	0.15	\$0.52	964,055	144,608	\$3,740,534
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	6.00	\$12.65	138	828	\$20,293
Within 30 days of delivery, transmit image files of paper manifests to e-Manifest System	0.00	0.00	0.00	6.00	\$0.00	49	294	\$6,586
Within 30 days of delivery, transmit data string file and image file of paper manifest to e-Manifest System	0.00	0.00	0.00	12.00	\$0.00	105	1,260	\$28,224
Retain a copy of the manifest (or shipping paper) for at least three years from the delivery date (Includes import manifests)	0.00	0.00	0.00	0.17	\$0.00	964,055	163,889	\$3,673,050
<b>Electronic Manifest - PIN/Password</b>								
Enter the name of the person accepting the waste, enter PIN/Password, and answer challenge question	0.00	0.00	0.01	0.00	\$0.00	94,927	949	\$37,971
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	94,927	1,899	\$76,891
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	\$0.00	23,732	1,899	\$76,892
<b>Electronic Manifest - Digitized Electronic Signature</b>								
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	\$0.00	284,782	2,848	\$113,913
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	284,782	5,696	\$230,673
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	\$0.00	71,196	5,696	\$230,675
<b>Compliance with State program requirements: TSDFs who are also generators</b>								
<b>Commercial TSDFs</b>								
Contact the consignment/generator State if needed and submit any copies of the manifest to these States, as applicable	0.00	0.00	0.00	0.00	\$0.00	1,215	0	\$0
<b>Captive TSDFs</b>								
Contact the consignment/generator State if needed and submit any copies of the manifest to these States, as applicable	0.00	0.00	0.00	0.00	\$0.00	5,169	0	\$0
<b>Discrepancy report completion and submission: Designated TSDFs</b>								
Attempt to reconcile any discrepancies	0.00	0.00	0.08	0.00	\$2.00	335,941	26,875	\$1,760,331
Prepare and submit a letter to EPA describing the discrepancy and attempts to reconcile it, along with a copy of the manifest or shipping paper at issue	0.00	0.10	0.17	0.10	\$0.62	5,375	1,989	\$96,267
<b>TOTAL</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>570,822</b>	<b>\$18,662,750</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 20

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per TSDF				O&M Costs/ Respondent	Number of Manifests/ Respondents	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Rejected waste and container residues</b>								
<b>Rejection of Waste after the Transporter Leaves the Facility</b>								
<b>Paper Manifest</b>								
Enter the name of the person accepting the waste and sign and date each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.01	0.00	\$0.00	14,852	149	\$5,941
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	14,852	297	\$12,030
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	\$0.00	14,852	2,525	\$102,033
Within 30 days of delivery, send a copy of the manifest (or shipping paper) to the generator	0.00	0.00	0.00	0.16	\$0.52	14,852	2,376	\$60,893
Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste	0.00	0.00	0.08	0.00	\$2.00	14,852	1,188	\$77,824
Prepare a new manifest for rejected loads or container residues sent to the alternate designated facility or back to the generator	0.00	0.00	0.43	0.10	\$0.00	14,852	7,872	\$291,545
Amend the facility's copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest	0.00	0.00	0.01	0.00	\$0.00	14,852	149	\$5,941
Copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest	0.00	0.00	0.02	0.00	\$0.00	14,852	297	\$12,030
Re-sign and date the manifest	0.00	0.00	0.01	0.00	\$0.00	14,852	149	\$5,941
Retain the amended manifest for at least three years from the date of the amendment	0.00	0.00	0.00	0.17	\$0.00	14,852	2,525	\$56,586
Within 30 days, send a copy of the amended manifest to the delivering transporter and to the generator	0.00	0.00	0.00	0.16	\$0.52	14,852	2,376	\$60,893
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	6.00	\$12.65	0	0	\$0
Within 30 days of delivery, transmit image files of paper manifests to e-Manifest System	0.00	0.00	0.00	6.00	\$0.00	0	0	\$0
Within 30 days of delivery, transmit data string file and image file of paper manifest to e-Manifest System	0.00	0.00	0.00	12.00	\$0.00	0	0	\$0

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 20 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per TSDF				O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Rejected waste and container residues</b>								
<b>Electronic Manifest - PIN/Password</b>								
Enter the name of the person accepting the waste, enter PIN/Password, and answer challenge question	0.00	0.00	0.01	0.00	\$0.00	1,468	15	\$587
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	1,468	29	\$1,189
Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste	0.00	0.00	0.08	0.00	\$2.00	1,468	117	\$7,692
Prepare a new manifest for rejected loads or container residues sent to the alternate designated facility or back to the generator	0.00	0.00	0.09	0.00	\$0.00	1,468	132	\$5,344
Amend the facility's copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest	0.00	0.00	0.01	0.00	\$0.00	1,468	15	\$587
Copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest	0.00	0.00	0.02	0.00	\$0.00	1,468	29	\$1,189
Enter PIN/Password and answer challenge question	0.00	0.00	0.01	0.00	\$0.00	1,468	15	\$587
<b>Electronic Manifest - Digitized Electronic Signature</b>								
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	\$0.00	4,404	44	\$1,762
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	4,404	88	\$3,567
Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste	0.00	0.00	0.08	0.00	\$2.00	4,404	352	\$23,077
Prepare a new manifest for rejected loads or container residues sent to the alternate designated facility or back to the generator	0.00	0.00	0.09	0.00	\$0.00	4,404	396	\$16,031
Amend the facility's copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest	0.00	0.00	0.01	0.00	\$0.00	4,404	44	\$1,762
Copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest	0.00	0.00	0.02	0.00	\$0.00	4,404	88	\$3,567
Re-sign the manifest	0.00	0.00	0.01	0.00	\$0.00	4,404	44	\$1,762

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 20 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per TSDF				O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Rejected waste and container residues</b>								
<b>Rejection of Waste while the Transporter Remains Present at the Facility</b>								
<b>Paper Manifest</b>								
Enter the name of the person accepting the waste and sign and date each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.01	0.00	\$0.00	14,852	149	\$5,941
Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste	0.00	0.00	0.08	0.00	\$2.00	14,852	1,188	\$77,824
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	\$0.00	14,852	1,188	\$48,120
Retain a copy of the manifest (or shipping paper) for at least three years from the date of delivery	0.00	0.00	0.00	0.17	\$0.00	14,852	2,525	\$56,586
Give the remaining copies back to the transporter	0.00	0.00	0.01	0.00	\$0.00	14,852	149	\$5,941
<b>Electronic Manifest - PIN/Password</b>								
Enter the name of the person accepting the waste, enter PIN/Password, and answer challenge question	0.00	0.00	0.01	0.00	\$0.00	1,468	15	\$587
Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste	0.00	0.00	0.08	0.00	\$2.00	1,468	117	\$7,692
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	\$0.00	1,468	117	\$4,756
<b>Electronic Manifest - Digitized Electronic Signature</b>								
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	\$0.00	4,404	44	\$1,762
Contact the generator to obtain the generator's instructions for forwarding the waste to another facility that can manage the waste	0.00	0.00	0.08	0.00	\$2.00	4,404	352	\$23,077
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	\$0.00	4,404	352	\$14,269

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 20 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per TSDF				O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Manifest completion, transmittal and recordkeeping by Alternate TSDFs</b>								
<b>Paper Manifest</b>								
Enter the name of the person accepting the waste and sign and date each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.01	0.00	\$0.00	29,408	294	\$11,763
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	29,408	588	\$23,820
Note any discrepancies on each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.08	0.00	\$0.00	7,352	588	\$23,820
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	\$0.00	29,408	4,999	\$202,033
Within 30 days of delivery, send a copy of the manifest (or shipping paper) to the generator	0.00	0.00	0.00	0.16	\$0.52	29,408	4,705	\$120,573
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	6.00	\$12.65	0	0	\$0
Within 30 days of delivery, transmit image files of paper manifests to e-Manifest System	0.00	0.00	0.00	6.00	\$0.00	0	0	\$0
Within 30 days of delivery, transmit data string file and image file of paper manifest to e-Manifest System	0.00	0.00	0.00	12.00	\$0.00	0	0	\$0
Retain a copy of the manifest (or shipping paper) for at least three years from the date of delivery	0.00	0.00	0.00	0.17	\$0.00	29,408	4,999	\$112,044
<b>Electronic Manifest - PIN/Password</b>								
Enter the name of the person accepting the waste, enter PIN/Password, and answer challenge question	0.00	0.00	0.01	0.00	\$0.00	2,906	29	\$1,162
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	2,906	58	\$2,354
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	\$0.00	727	58	\$2,355
<b>Electronic Manifest - Digitized Electronic Signature</b>								
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	\$0.00	8,720	87	\$3,488
Complete the management method code	0.00	0.00	0.02	0.00	\$0.00	8,720	174	\$7,063
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	\$0.00	2,180	174	\$7,063
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>44,260</b>	<b>\$1,524,453</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 21

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 MANIFEST USER FEES

	Number of Manifests	Fee per Manifest	Total Fees
<b>Manifest User Fees</b>			
<b>Paper Manifest</b>			
Paper manifests	476,962	\$24.21	\$11,547,246.63
Image Files	168,339	\$18.20	\$3,063,778.54
Data String Files and Image Files	364,736	\$12.71	\$4,635,788.71
<b>Electronic Manifest</b>			
All Electronic Manifests	392,792	\$10.23	\$4,018,263.39
<b>TOTAL</b>	<b>1,402,829</b>	<b>varies</b>	<b>\$23,265,077.27</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 22

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 POST-RECEIPT MANIFEST DATA CORRECTIONS

	Hours per TSDF				O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Post-Receipt Manifest Data Corrections</b>								
<b>Corrections initiated by designated TSDF</b>								
Identify errors, make corrections and enter corrections into system	0.00	0.00	0.08	0.00	\$0.00	252,509	20,201	\$818,130
Receive notices from other interested persons if any, reconcile comments, and alter or affirm original correction	0.00	0.00	0.08	0.00	\$0.00	12,625	1,010	\$40,906
<b>Corrections initiated by other interested persons</b>								
Review notices of suspected errors, resolve errors and provide responses	0.00	0.00	0.17	0.00	\$0.00	28,057	4,770	\$192,749
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>varies</b>	<b>0.00</b>	<b>\$0.00</b>	<b>varies</b>	<b>25,981</b>	<b>\$1,051,785</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 23

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs) <sup>a</sup>  
 UNMANIFESTED WASTE REPORTS

	Hours per TSDF				O&M Costs/ Respondent	Number of Shipments	Total Hours	Total Cost
	Legal @ \$96.98/hr	Managerial @ \$81.73/hr	Technical @ \$40.44/hr	Clerical @ \$22.40/hr				
<b>Unmanifested waste report: completion and submission</b>								
Prepare and submit to EPA a letter of the unmanifested waste within 15 days after receiving waste	0.00	0.50	1.00	0.50	\$0.62	137	274	\$12,759
<b>TOTAL</b>	<b>0.00</b>	<b>0.50</b>	<b>1.00</b>	<b>0.50</b>	<b>\$0.62</b>	<b>137</b>	<b>274</b>	<b>\$12,759</b>

<sup>a</sup> Exhibit contains rounding error.



EXHIBIT 24

TOTAL ANNUAL RESPONDENT HOUR AND COST BURDEN BY TYPE OF RESPONDENT AND MANIFESTING ACTIVITY <sup>a</sup>

	Total Hourly Burden	Total Annual Capital Costs	Total Annual O&M Costs	Total Annual Labor Costs	Total Annual Costs
<b>Registrant Organizations</b>					
Reading the regulations	1	\$0	\$0	\$61	\$61
Applying to the registry	2	\$0	\$1,302	\$128	\$1,430
Updating general information in the approved application	1	\$0	\$2	\$67	\$69
Requesting approval for a new tracking number suffix	0	\$0	\$0	\$0	\$0
Requesting approval for changes to printing specifications or use of a new printer	0	\$0	\$1,292	\$34	\$1,326
Typesetting the manifest form subsequent to its approval	0	\$0	\$0	\$0	\$0
Requesting an exemption	0	\$0	\$0	\$0	\$0
Notifying EPA of a printing specification violation	0	\$0	\$2	\$10	\$12
Revising the approved manifest if requested by EPA	0	\$0	\$0	\$0	\$0
Responding to suspension and revocation procedures	0	\$0	\$0	\$0	\$0
<b>Subtotal (Registrant Organizations)</b>	<b>4</b>	<b>\$0</b>	<b>\$2,598</b>	<b>\$300</b>	<b>\$2,898</b>
<b>Generators (LQGs, SQGs, TSDFs acting as generators)</b>					
Reading the regulations	63,303	\$0	\$0	\$3,082,578	\$3,082,578
E-Manifest System account	1,572	\$0	\$0	\$63,533	\$63,533
E-Manifest System subscriber agreements and Local Registration Authorities	12,793	\$0	\$0	\$598,077	\$598,077
Manifest completion (without assistance of designated TSDF)	281,203	\$0	\$222,150	\$10,359,311	\$10,581,461
Manifest completion (with assistance of designated TSDF)	20,998	\$0	\$0	\$720,936	\$720,936
Compliance with State program requirements	0	\$0	\$0	\$0	\$0
Manifest transmittal and recordkeeping	246,028	\$0	\$57,466	\$5,789,214	\$5,846,680
Undeliverable shipments	12,598	\$0	\$0	\$518,453	\$518,453
Rejected waste and container residues	146	\$0	\$154	\$4,323	\$4,477
Exception report completion, submission, and recordkeeping	16,558	\$0	\$10,600	\$911,318	\$921,918
<b>Subtotal (Generators)</b>	<b>655,199</b>	<b>\$0</b>	<b>\$290,370</b>	<b>\$22,047,743</b>	<b>\$22,338,113</b>
<b>Transporters</b>					
Reading the regulations	620	\$0	\$0	\$30,192	\$30,192
E-Manifest System account	279	\$0	\$0	\$11,271	\$11,271
E-Manifest System subscriber agreements and Local Registration Authorities	2,094	\$0	\$1,773	\$96,520	\$98,293
Manifest completion, transmittal, and recordkeeping (domestic + imports + exports)	392,773	\$0	\$53,798	\$12,444,405	\$12,498,203
Undeliverable shipments	13,762	0	\$308,623	\$556,770	\$865,393
Rejected waste and container residues	362	\$0	\$0	\$14,524	\$14,524
Replacement manifests	940	\$0	\$1,085	\$26,939	\$28,024
Notification of discharge of hazardous waste	1,032	\$0	\$0	\$50,218	\$50,218
<b>Subtotal (Transporters)</b>	<b>411,862</b>	<b>\$0</b>	<b>\$365,279</b>	<b>\$13,230,839</b>	<b>\$13,596,118</b>
<b>Designated TSDFs</b>					
Reading the regulations	506	\$0	\$0	\$24,652	\$24,652
E-Manifest System account	32	\$0	\$0	\$1,298	\$1,298
E-Manifest System subscriber agreements and Local Registration Authorities	213	\$0	\$180	\$9,825	\$10,005
Manifest completion (assisting the generators)	293,688	\$0	\$221,215	\$10,845,644	\$11,066,859
Manifest transmittal and recordkeeping (domestic + imports)	541,958	\$0	\$503,055	\$16,303,097	\$16,806,152
Compliance with State program requirements	0	\$0	\$0	\$0	\$0
Discrepancy report completion and submission	28,864	\$0	\$675,215	\$1,181,383	\$1,856,598
Rejected waste and container residues	44,260	\$0	\$113,634	\$1,410,819	\$1,524,453
Manifest User Fees	0	\$0	\$23,265,077	\$0	\$23,265,077
Post-receipt manifest data corrections	25,981	\$0	\$0	\$1,051,785	\$1,051,785
Unmanifested waste report completion and submission	274	\$0	\$85	\$12,674	\$12,759
<b>Subtotal (Designated TSDFs)</b>	<b>935,776</b>	<b>\$0</b>	<b>\$24,778,461</b>	<b>\$30,841,177</b>	<b>\$55,619,638</b>
<b>Annualized Capital Costs</b>					
E-Manifest System set up costs (hardware, development, and software) - Transporters	--	\$0	--	--	\$0
E-Manifest System set up costs (hardware, development, and software) - TSDFs	--	\$0	--	--	\$0
Paper storage (file cabinets)	--	\$117,662	--	--	\$117,662
<b>Subtotal (Capital Costs)</b>	<b>--</b>	<b>\$117,662</b>	<b>--</b>	<b>--</b>	<b>\$117,662</b>
<b>TOTAL: ALL RESPONDENTS</b>	<b>2,002,841</b>	<b>\$117,662</b>	<b>\$25,436,708</b>	<b>\$66,120,059</b>	<b>\$91,674,429</b>

<sup>a</sup> Exhibit contains rounding error.

EXHIBIT 25

TOTAL ANNUAL AGENCY HOUR AND COST BURDEN <sup>a</sup>

	Hours per Agency Respondent					Hours/ Respondent	Labor Cost/ Respondent	Capital Costs/ Respondent	O&M Costs/ Respondent	Number of Activities	Total Hours	Total Cost
	Legal @ \$88.30/hr	Managerial @ \$77.92/hr	Technical @ \$56.05/hr	Clerical @ \$23.92/hr	Contractor @ \$160.00/hr							
<b>Registrant Organizations</b>												
<b>Applying to the registry</b>												
Review initial application	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	1	1	\$30
Notify registrant of EPA's decision regarding its application	0.00	0.00	0.00	0.10	0.00	0.10	\$2.39	\$0.00	\$0.52	1	0	\$3
Review revised application	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	1	1	\$30
If application is approved, provide electronic file of the manifest, continuation sheet, and manifest instructions to approved registrant and request manifest form samples	0.00	0.00	0.00	0.10	0.00	0.10	\$2.39	\$0.00	\$5.26	1	0	\$7
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	1	1	\$30
Notify registrant of EPA's decision regarding its manifest form samples	0.00	0.00	0.00	0.10	0.00	0.10	\$2.39	\$0.00	\$0.52	1	0	\$3
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	1	1	\$30
<b>Updating General Information in the Approved Application</b>												
Review revised application	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	3	2	\$91
Review documentation submitted by registrant	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	1	1	\$30
<b>Requesting Approval for a New Tracking Number Suffix</b>												
Provide new tracking number suffix to registrant	0.00	0.10	0.25	0.10	0.00	0.45	\$24.20	\$0.00	\$0.52	0	0	\$0
<b>Requesting Approval for Changes to Printing Specifications or Use of a New Printer</b>												
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	1	1	\$30
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	1	1	\$30
<b>Typesetting the Manifest Form Subsequent to its Approval</b>												
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	0	0	\$0
<b>Requesting an Exemption</b>												
Review documentation submitted by registrant	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	0	0	\$0
<b>Notifying EPA of a Printing Specification Violation</b>												
Receive notification that a serious violation of a printing specification	0.00	0.20	0.80	0.00	0.00	1.00	\$60.42	\$0.00	\$0.00	1	1	\$60
<b>Revising the Approved Manifest if Requested by EPA</b>												
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	0	0	\$0
<b>Responding to Suspension and Revocation Procedures</b>												
Review documentation submitted by registrant	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	0	0	\$0

EXHIBIT 25 (CONTINUED)

TOTAL ANNUAL AGENCY HOUR AND COST BURDEN <sup>a</sup>

	Hours per Agency Respondent					Hours/ Respondent	Labor Cost/ Respondent	Capital Costs/ Respondent	O&M Costs/ Respondent	Number of Activities	Total Hours	Total Cost
	Legal @ \$88.30/hr	Managerial @ \$77.92/hr	Technical @ \$56.05/hr	Clerical @ \$23.92/hr	Contractor @ \$160.00/hr							
<b>e-Manifest System</b>												
Develop, operate and maintain e-Manifest system	1,040.00	5,200.00	9,360.00	6,240.00	72,500.00	94,340.00	\$12,770,904.80	\$4,110,212.33	\$4,110,212.33	1	94,340	\$20,991,329
<b>Generators</b>												
<b>Exception report</b>												
Review exception reports: LQGS	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	12,360	6,180	\$373,396
Review exception reports: Commercial TSDFs	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	396	198	\$11,963
Review exception reports: Captive TSDFs	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	175	88	\$5,287
Review exception reports: SQGS	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	2,077	1,039	\$62,746
<b>Transporters</b>												
<b>Notification of discharge</b>												
Receive notifications of discharge	0.00	0.20	0.80	0.00	0.00	1.00	\$60.42	\$0.00	\$0.00	75	75	\$4,532
<b>Designated TSDFs</b>												
<b>Import Manifests</b>												
Receive import manifests	0.00	0.00	0.10	0.00	0.00	0.10	\$5.61	\$0.00	\$0.00	14,029	1,403	\$78,703
<b>Discrepancy report</b>												
Review designated TSDF discrepancy reports	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	5,375	2,688	\$162,379
<b>Unmanifested waste report</b>												
Review designated TSDF unmanifested waste reports	0.00	0.10	0.40	0.00	0.00	0.50	\$30.21	\$0.00	\$0.00	137	69	\$4,139
<b>TOTAL: AGENCY</b>	<b>0.00</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>varies</b>	<b>106,888</b>	<b>\$21,739,574</b>

<sup>a</sup> Exhibit contains rounding error.

## **6E. Bottom Line Burden Hours & Cost**

### **Respondent Tally**

Exhibit 24 shows the total annual hour and cost burden to respondents. As shown in the exhibit, EPA estimates the annual respondent burden to be 2,002,841 hours and \$91,674,429. The bottom line burden to respondents over three years is estimated to be 6,008,523 hours and \$275,023,287.

### **Agency Tally**

Exhibit 25 shows the annual Agency hour and cost burden associated with all the requirements covered in this ICR. As shown in this exhibit, EPA estimates the annual Agency burden to be 106,888 hours and \$21,739,574. The bottom line burden to the Agency over three years is estimated to be 320,664 hours and \$65,218,722.

## **6F. Reasons for Change in Burden**

The currently approved Manifest ICR (0801.20) estimates an annual respondent burden of 3,473,577 hours. This ICR (0801.21) estimates an annual respondent burden of 2,002,841 hours, which is a 1,470,736-hour decrease from the currently approved ICR. This decrease results from both program changes (-545,512 hours) as well as adjustments due to Agency discretion (-925,224 hours), as follows:

- The program changes result from the fact that ICR 0801.20 addresses the existing paper-based manifest system; on the other hand, this ICR addresses the existing paper-based manifest system in addition to electronic manifesting under the e-Manifest final rule (79 FR 7518-7563). This ICR also addresses several amendments in the proposed fee rule. During the 3-year life of this ICR, EPA estimates that 28% of manifests will be prepared and transmitted electronically on average. The RIA of the proposed fee rule indicates that electronic manifesting will result in substantial savings to respondents. For example, it estimates that manifest preparation and transmittal will experience an 80% burden reduction when associated with electronic manifests.<sup>37</sup> This ICR reflects these effects, where appropriate. The e-Manifest rule and proposed fee rule also add a few new requirements; however, their burden is more than offset by the burden decrease from electronic manifests.
- The adjustments due to Agency discretion result from the fact that EPA revised the number of generators, as well as the number of manifests prepared per generator, in this ICR. Whereas ICR 0801.20 estimates 161,720 generators preparing manifests, this ICR estimates 50,642 generators preparing manifests.<sup>38</sup> Table 8 compares these estimates. In particular, the number of SQGs decreased significantly in this ICR. The SQG estimate in this ICR was taken from the RIA of the proposed fee rule. The RIA's estimate is based

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<sup>37</sup> Refer to Section 5.4 of the RIA for additional information.

<sup>38</sup> The number of generators preparing manifests is a key estimate because it affects the estimated number of manifests transmitted, completed, and retained by all waste handlers (i.e., generators, transporters, and designated TSDFs) in the manifest cycle.

on the estimation approaches and results in EPA’s Economic Analysis (EA) of the 2015 Hazardous Waste Generator Improvements proposed rule (80 FR 57918; September 25, 2015). In the EA, EPA pioneered methodologies to estimate active SQGs using data files that underpin the RCRA Biennial Report.<sup>39</sup> In total, ICR 0801.20 estimates that 1.9 million manifests are prepared, transmitted and retained by all waste handlers annually, whereas this ICR estimates 1.4 million manifests annually.

**Table 8. Annual Number of Generators Preparing Manifests in ICR**

<b>Generators</b>	<b>ICR 0801.20</b>	<b>ICR 0801.21</b>
LQGs	14,381	13,891
Commercial TSDFs <sup>a</sup>	367	405
Captive TSDFs <sup>a</sup>	1,101	1,723
SQGs (without Reclamation Agreements) <sup>b</sup>	145,871	34,623
<b>Total</b>	<b>161,720</b>	<b>50,642</b>

<sup>a</sup> In general, TSDFs qualify as either LQGs or SQGs. However, EPA has found that TSDFs acting as generators often face burdens that are different from generators that are not TSDFs. Therefore, EPA has broken them out separately for purposes of examining burden in this analysis.

<sup>b</sup> SQGs shipping under a reclamation agreement pursuant to 40 CFR 262.20(e) are not subject to the requirement for a manifest. The SQG estimate is based on the estimation approaches and results in EPA’s Economic Analysis (EA) of the 2015 Hazardous Waste Generator Improvements proposed rule (80 FR 57918; September 25, 2015).

In addition, this ICR estimates user fees for paper and electronic manifests in accordance with the proposed fee rule (fees are reflected as O&M costs in this ICR). These fees result in an overall increase in costs. The Hazardous Waste Electronic Manifest Establishment Act, P.L. 112-195, authorizes EPA to impose on manifest users “reasonable service fees as the Administrator determines to be necessary to pay costs incurred in developing, operating, maintaining, and upgrading the system, including any costs incurred in collecting and processing data from any paper manifest submitted to the system after the date on which the system enters operation.” ICR 0801.20 does not include user fees because it addresses the current paper-based system which does not impose fees.

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<sup>39</sup> For additional information, see Chapter 2 of the “Economic Assessment of the Potential Costs, Benefits, and Other Impacts of the Improvements to the Hazardous Waste Generator Regulatory Program, As Proposed” (June 2015).

## **6G. Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 1.4 hours per response. Burden means the total time, effort, and financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. EPA-HQ-OLEM-2016-0117, which is available for online viewing at [www.regulations.gov](http://www.regulations.gov), or in person viewing at the RCRA Docket in the EPA Docket Center (EPA/DC), WJC West Building, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA/DC Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202)566-1744, and the telephone number for RCRA Docket is (202)566-0270. An electronic version of the public docket is available at [www.regulations.gov](http://www.regulations.gov). This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OLEM-2016-0117 and OMB Control Number 2050-0039 in any correspondence.