

**Supporting Statement For
Information Collection Request (ICR) Number 0801.22
“Requirements for Generators, Transporters, and Waste
Management Facilities under the RCRA Hazardous Waste Manifest
System – Final Fee Rule (Final Rule)”**

December 8, 2017

TABLE OF CONTENTS

1.	IDENTIFICATION OF THE INFORMATION COLLECTION.....	1
	1A. Title and Number of the Information Collection.....	1
	1B. Short Characterization.....	1
2.	NEED, AUTHORITY & USE FOR THE INFORMATION.....	2
	2A. Need & Authority to Collect Information.....	2
	2B. Practical Utility & Users of the Information.....	3
3.	NONDUPLICATION, CONSULTATIONS & OTHER COLLECTION CRITERIA.....	4
	3A. Nonduplication.....	4
	3B. Public Notice.....	4
	3C. Consultations.....	5
	3D. Effects of Less Frequent Collection.....	6
	3E. General Guidelines.....	7
	3F. Confidentiality.....	7
	3G. Sensitive Questions.....	8
4.	THE RESPONDENTS AND THE INFORMATION COLLECTED.....	8
	4A. Respondent Standard Industrial Classification Codes.....	8
	4B. Information Requested.....	8
5.	AGENCY ACTIVITIES, COLLECTION METHODOLOGY & INFORMATION MANAGEMENT.....	46
	5A. Agency Activities.....	47
	5B. Collection Methodology & Management.....	47
	5C. Small Entity Flexibility.....	47
	5D. Collection Schedule.....	48
6.	ESTIMATE OF BURDEN HOURS & COST.....	49
	6A. Estimating the Respondent Universe.....	50
	6B. Estimating Respondent Costs.....	58
	6C. Estimating Agency Hour and Cost Burden.....	61
	6D. Estimating Respondent Hours and Costs.....	61
	6E. Bottom Line Burden Hours and Cost.....	99
	6F. Reasons for Change in Burden.....	99
	6G. Burden Statement.....	101

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 – Final Fee Rule (Final Rule),” EPA ICR No. 0801.22, 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.¹

EPA is now finalizing a rule establishing the methodology the Agency will use to determine and revise the user fees applicable to the electronic and paper manifests to be submitted to the national electronic manifest system (e-Manifest system) that EPA is developing under the Hazardous Waste Electronic Manifest Establishment Act (called the “final fee rule”). After the e-Manifest system’s implementation date, 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 national system so that EPA can recover the costs of developing and operating the national e-

¹ 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.

Manifest system. EPA is also finalizing several amendments to the regulations governing the use of electronic hazardous waste manifests and the completion of manifests.

This ICR describes the hazardous waste manifest regulations, including the e-Manifest final rule and final fee rule. It also estimates the annual hour and cost burden to respondents and EPA under these requirements for both paper and electronic manifests.²

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 3 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) or other receiving facility 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 facility actually reaches its destination. Thus, the manifest system serves as a self-enforcing mechanism that requires generators, transporters, and owner/operators of designated facilities 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

² An electronic manifest (or e-Manifest) is the electronic format of the hazardous waste manifest that is obtained from EPA's national e-Manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).

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, designated facilities, 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. As envisioned, the public will also have access to data in the e-Manifest system.

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 facility 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 facility, 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 facility 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 designated facility 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 facilities. In addition, generators and designated facilities 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 paper³ 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.

³ 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 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.
- 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.
- On July 26, 2016, EPA published a detailed background discussion of the e-Manifest user fee methodology and related provisions (81 FR 49072, 7/26/16). EPA received more than 20 sets of public comments which were reviewed and considered in preparing the final rule.
- 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 preparing the ICR for the proposed fee rule, EPA contacted 3 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 3 individuals indicated that the ICR's estimates are acceptable and representative. No alternative estimates were offered.

In addition, in July 2017, EPA spoke with Michael Hill of the New York State Department of Environmental Conservation's manifest processing department (518-402-9708). The state program collects, reviews, corrects and enters manifest data into its data system. Mr. Hill discussed some of the manifesting difficulties of interstate shipments involving state hazardous waste and the challenges for generators to retrieve signed copies from out-of-state destination facilities in circumstances where the generator state regulates a state waste but the destination state does not. He also discussed his experiences in the manifest processing center and the types and rates of manifest data errors that his program has encountered. His input is reflected in this ICR's estimates related to the manifesting of interstate shipments of state hazardous waste and post-receipt manifest data corrections.

Finally, EPA referred to the Regulatory Impact Analysis (RIA)⁴ of the final fee rule to obtain updated respondent universe estimates and burden assumptions for electronic manifests and user fees.⁵ The RIA reflects the Agency's knowledge gained from interactions with states and industry for more than a decade.

3D. Effects of Less Frequent Collection

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.

4 This document is titled "Regulatory Impact Analysis, EPA's 2017 Final Rule Establishing User Fees for the RCRA Electronic Hazardous Waste Manifest System (e-Manifest)."

5 Refer to Sections 3.2.2.1 and 3.2.2.2 of the RIA for a summary of some industry consultations.

3E. General Guidelines

This ICR adheres to the guidelines stated in the Paperwork Reduction Act (PRA) 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.

40 CFR 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 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.

Industrial Sector	SIC Code(s)	NAICS Code(s)
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
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 and final fee rule.

There are 4 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.⁶ Note that,

⁶ The final fee rule applies to RCRA Subtitle C TSDFs as well as non-Subtitle C facilities as specified. For

normally, designated facilities 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 3 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:
 - 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.
 - 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

purposes of organization and clarity, the requirements applicable to Subtitle C and non-Subtitle C facilities are addressed together in this section.

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.

- 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 3-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 3 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 3 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 3 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 3 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 3 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 3 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) Manifest Completion

40 CFR 262.20(a)(1) requires generators who transport, or offer for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, or disposal facility who offers for transport a rejected hazardous waste load, to prepare a manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, 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.

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/offerer's certification.⁷
- 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.

Electronic Manifest

- Generators must perform the above activities in accordance with sections 262.20(a)(3) and 262.24 for completing the electronic manifest.
- Read the eManifest User Guide to support use of electronic manifests.

⁷ The generator's/offerer's certification in Item 15 of the manifest references the waste minimization certification codified at 40 CFR 262.27.

(b) 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.

(c) 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 3 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 3 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 a small quantity generator's (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 3 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 amended 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 3 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 3 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 3 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 3 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 40 CFR 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.

- Read the eManifest User Guide to support use of electronic manifests.

(d) Use of the Electronic Manifest

(d1) 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).]

(d2) 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).]

(d3) Restriction on Use of Electronic Manifests

40 CFR 262.24(c) provides 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 provision.]

(d4) 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 1 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.]

(d5) 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.]

(d6) 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.]

(d7) Post-Receipt Manifest Data Corrections

40 CFR 262.24(h) provides that, after facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) named on the manifest. Generators may participate electronically in the post-receipt data corrections process by following the process described in 40 CFR 264.71(l), which applies to corrections made to either paper or electronic manifest records. [Refer to “Post-Receipt Manifest Data Corrections” for designated TSDFs in this section for additional information.]

Data Item

- Each correction submission must include the following information:
 - The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected.

- The Item Number(s) of the original manifest that is the subject of the submitted correction(s).
- For each Item Number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.
- A statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete. The certification statement must be executed with a valid electronic signature.

Respondent Activities

- Off-line generators (i.e., generators that do not have system access) will submit their email address and related contact information to the system to be notified of manifest corrections by other parties.
- Generators with system access may submit a correction or receive a notice of another submitter’s correction and respond with comments to the submitter or submit another correction to the system.
- Read the eManifest User Guide to support use of electronic manifests.

(e) 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).]

(f) 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 designated facility. 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 designated facility.

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.

(g) 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 facility 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.
- Read the eManifest User Guide to support use of electronic manifests.

(h) Exception Reports: Completion, Submission, and Recordkeeping

(h1) *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 3 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).

(h2) *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) 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.]

(a1) 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):
 - o 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).
 - o Retain a copy of the manifest pursuant to 40 CFR 263.22(a).
 - o 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.
- Read the eManifest User Guide to support use of electronic manifests.

(a2) 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 3 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.
- Read the eManifest User Guide to support use of electronic manifests.

(a3) 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 3 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 3 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.
- Read the eManifest User Guide to support use of electronic manifests.

(a4) Transporters Who Import or Export Hazardous Wastes

Under 40 CFR 263.20(g), transporters who transport hazardous waste out of the United States must sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States. The transporter must retain a copy, return a signed copy to the generator, and for paper manifests only, send a copy of the manifest to the e-Manifest system in accordance with the allowable methods specified in 40 CFR 264.71(a)(2)(v). For shipments initiated prior to the AES filing compliance date, when instructed by the exporter to do so, the transporter must give a copy of the paper manifest to a U.S. Customs official at the point of departure from the United States.

Data Items

- A paper or electronic manifest.
- Shipping paper.

Respondent Activities

Paper Manifest

- Complete the International Shipments block.
- Retain a copy of the manifest.
- Return a signed copy of the manifest to the generator.
- Send a copy of paper manifest to e-Manifest if applicable.
- If initiated prior to the AES filing compliance date and at the request of the generator, give a copy of the paper manifest to a US Customs official at the point of departure from the US.

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.
- Read the eManifest User Guide to support use of electronic manifests.

(a5) 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 3 years after termination or expiration of the agreement, as required by 40 CFR 263.20(h)(4).

(a6) Undeliverable Shipments

40 CFR 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.

40 CFR 263.21(b)(1) provides that, if the hazardous waste cannot be delivered to the designated facility, alternate facility 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.

40 CFR 263.21(b)(2) provides 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.

40 CFR 263.21(b)(3) provides 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, provided that the current transporter is authorized by a contractual provision that provides explicit and limited agency authority for the transporter to make such transporter changes on behalf of the generator and the transporter enters in Item 14 of each manifest for which such a change is made, the following statement of its agency authority: "Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf." 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 as specified.
- Instructions from the generator as specified.
- Contract authorization provision under 40 CFR 263.21(b)(3).

Respondent Activities

- For undeliverable shipments under 40 CFR 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 40 CFR 263.21(b)(3), a transporter must:
 - Establish a contract provision authorizing the transporter to make revisions as specified; and
 - Revise the manifest including the statement in Item 14, as specified.

(a7) Rejected Waste and Container Residues

Under 40 CFR 263.21(c), 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:

- For a partial load rejection or for regulated quantities of container residues: The transporter must obtain a copy of the original manifest that includes the facility's date and signature, and the Manifest Tracking Number of the new manifest that will

accompany the shipment, and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter must retain a copy of this manifest in accordance with 40 CFR 263.22, and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must obtain a new manifest to accompany the shipment, and the new manifest must include all of the information required in 40 CFR 264.72(e)(1) through (6) or (f)(1) through (6) or 40 CFR 265.72(e)(1) through (6) or (f)(1) through (6).

- For a full load rejection that will be taken back by the transporter: The transporter must obtain a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and Identification Number for the alternate facility or generator to whom the shipment must be delivered. The transporter must retain a copy of the manifest in accordance with 40 CFR 263.22, and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment and comply with 40 CFR 264.72(e)(1) through (6) or 40 CFR 265.72(e)(1) through (6).

Data Item

- A paper or electronic manifest.

Respondent Activities

Paper Manifest

- For a partial load rejection or for regulated quantities of container residues, obtain a copy of the original manifest, retain a copy, give remaining copies to rejecting facility, and if forwarding or returning the rejection or residue, obtain a new manifest.
- For a full load rejection, obtain a copy of the original manifest, retain a copy, give a copy to rejecting facility, or if the original manifest is not used, obtain a new manifest and comply with applicable requirements.

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.
- Read the eManifest User Guide to support use of electronic manifests.

- (b) Use of the Electronic Manifest

(b1) 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 1 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).]

(b2) 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).]

(b3) 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 transporter 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))

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.

(b4) 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.]

(b5) Post-Receipt Manifest Data Corrections

40 CFR 263.20(a)(9) provides that, after facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) named on the manifest. Transporters may participate electronically in the post-receipt data corrections process by following the process described in 40 CFR 264.71(l), which applies to corrections made to either paper or electronic manifest records. [Refer to “Post-Receipt Manifest Data Corrections” for designated TSDFs in this section for additional information.]

Data Item

- Each correction submission must include the following information:
 - The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected.
 - The Item Number(s) of the original manifest that is the subject of the submitted correction(s).
 - For each Item Number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.
 - A statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete. The certification statement must be executed with a valid electronic signature.

Respondent Activities

- Off-line transporters (i.e., transporters that do not have system access) submit their email address and related contact information to the system to be notified of manifest corrections by other parties.
- Transporters with system access may submit a correction or receive a notice of another submitter’s correction and respond with comments to the submitter or submit another correction to the system.

(c) 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 Facilities⁸

- (a) Transmitting the Manifest and Reporting to EPA

(a1) *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 facility or his/her agent must sign and date each copy of the manifest; note any

⁸ The final fee rule applies to RCRA Subtitle C TSDFs as well as non-Subtitle C facilities as specified. For purposes of organization and clarity, the requirements applicable to Subtitle C and non-Subtitle C facilities are addressed together in this section.

significant discrepancies on each copy; immediately give the transporter at least 1 copy of the manifest; and within 30 days of delivery, send a copy (Page 3) of the manifest to the generator; and retain at the facility a copy of each manifest for at least 3 years from the date of delivery.

In addition, 40 CFR 264.71(a)(2)(v) and 265.71(a)(2)(v) establish options for compliance beginning on June 30, 2018 and on June 30, 2021. Beginning on June 30, 2018, the facility must send the top copy (Page 1) of any paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing, or in lieu of submitting the paper copy to EPA, it may transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Beginning on June 30, 2021, EPA will not accept mailed paper manifests from facilities for processing in e-Manifest. Beginning on June 30, 2021, the requirement to submit the top copy (Page 1) of the paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing may be met by the facility only by transmitting to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or by transmitting to the EPA system both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made to the electronic mail/submission address specified at the e-Manifest program web site's directory of services.

At the time of submission of the upload, a responsible representative of the receiving facility must make a CROMERR⁹ compliant certification that to the representative's knowledge or belief, the submission (e.g., data and images) is accurate and complete representations of the facility's received manifests, and that the facility acknowledges that it is obligated to pay the applicable per manifest fee for each manifest included in the submission, in accordance with 40 CFR 264.1311(b) or (c) or 265.1311(b) or (c).

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). [Refer to "Use of the Electronic Manifest" in this section for additional information.]

40 CFR 260.4(a) provides that, in any case in which the state in which waste is generated, or the state in which waste will be transported to a designated facility, requires that the waste be regulated as a hazardous waste or otherwise be tracked through a hazardous waste manifest, the designated facility that receives the waste shall, regardless of the state in which the facility is located, (1) complete the facility portion of the applicable manifest; (2) sign and date the facility certification; (3) submit to the e-Manifest system a final copy of the manifest for data processing purposes; and (4) pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute

⁹ Cross-Media Electronic Reporting Rule.

procedures, sanctions, and other fee requirements specified in Subpart FF of 40 CFR Part 264. [Refer to “Fees for the Electronic Hazardous Waste Manifest Program” in this section for facility data items and activities associated with these fee-related requirements.]

40 CFR 260.5(b) provides that, in any case in which a state requires a RCRA manifest to be used under state law to track the shipment and transportation of a state-only regulated waste to a receiving facility, the facility receiving such a waste shipment for management shall (1) comply with the provisions of 40 CFR 264.71 (use of the manifest) and 40 CFR 264.72 (manifest discrepancies), and (2) pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in Subpart FF of 40 CFR Part 264. [Refer to “Fees for the Electronic Hazardous Waste Manifest Program” in this section for facility data items and activities associated with these fee-related requirements.]

Data Item

- Paper or electronic manifest.
- Shipping paper.
- A CROMERR compliant certification if applicable.

Respondent Activities

Paper Manifest

- Complete, transmit, and retain copies of the manifest, as required by 40 CFR 260.4, 260.5, 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) or 265.72(a)) on each copy of the manifest (or shipping paper, if applicable).
 - Immediately give the transporter at least 1 copy of the manifest (or shipping paper).
 - Within 30 days of delivery, send a copy (Page 3) of the manifest to the generator.
 - Beginning on June 30, 2018, send the top copy (Page 1) of any paper manifest and any paper continuation sheet to the e-Manifest, or in lieu of submitting the paper copy to EPA, transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery, including a CROMERR compliant certification (if applicable).
 - Beginning on June 30, 2021, transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet or both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet,

within 30 days of the date of delivery, including a CROMERR compliant certification.

- Retain a copy of the manifest (or shipping paper) for at least 3 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 facilities 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.
- Read the eManifest User Guide to support use of electronic manifests.

(a2) Compliance with State Program Requirements

Under 40 CFR 264.71(e) and 40 CFR 265.71(e), designated facilities must determine whether the consignment state for a shipment regulates any additional hazardous wastes (beyond those regulated federally). Facilities 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.

(a3) Discrepancy Reports

40 CFR 264.72 and 265.72 provide that, upon discovering a significant discrepancy, facilities 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).

(b) Rejected Waste and Container Residues

40 CFR 264.72 and 40 CFR 265.72 provide that the facility must forward rejected waste or container residues to an alternate facility that can accept the waste. If the facility is unable to locate an alternate facility to take the waste, then the facility 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 designated facilities that originate a rejected waste or container residue.

(b1) 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 3 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/Officer'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 3 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 facilities 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.
- Read the eManifest User Guide to support use of electronic manifests.

(b2) 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 receiving 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 facilities 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.
- Read the eManifest User Guide to support use of electronic manifests.

(c) Use of the Electronic Manifest

(c1) 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.]

(c2) 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.]

(c3) 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 1 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 1 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 3 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.]

(c4) 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.]

(c5) Imposition of User Fee for Electronic Manifest Use

40 CFR 264.71(j) and 265.71(j) provide that, as prescribed in 40 CFR 264.1311 and 265.1311, and determined in 40 CFR 264.1312 and 265.1312, an owner or operator who is a user of the electronic manifest system shall be assessed a user fee by EPA for the submission and processing of each electronic and paper manifest. EPA shall update the schedule of user fees and publish them to the user community, as provided in 40 CFR 264.1313 and 265.1313. An owner or operator subject to user fees under this section shall make user fee payments in accordance with the requirements of 40 CFR 264.1314 or 265.1314, subject to the informal fee dispute resolution process of 40 CFR 264.1316 or 265.1316, and subject to the sanctions for delinquent payments under 40 CFR 264.1315 or 265.1315. [Refer to “Fees for the Electronic Hazardous Waste Manifest Program” in this section for facility data items and activities associated with these requirements.]

(c6) 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.]

(c7) Post-Receipt Manifest Data Corrections

40 CFR 264.71(l) and 265.71(l) provide that, after facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) shown on the manifest. Interested persons must make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web based service provided in e-Manifest for such

corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests. Each correction submission must include the information specified at 40 CFR 264.71(l)(2) and 265.71(l)(2). In addition, each correction submission must include a statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete, as required by 40 CFR 264.71(l)(3) or 265.71(l)(3). The certification statement must be executed with a valid electronic signature. A batch upload of data corrections may be submitted under one certification statement. Upon receipt by the system of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections. Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as above, and with notice of the corrections to other interested persons shown on the manifest.

Data Item

- Each correction submission must include the following information:
 - The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected.
 - The item number(s) of the original manifest that is the subject of the submitted correction(s).
 - For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.
 - A statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete. The certification statement must be executed with a valid electronic signature.

Respondent Activities

- Off-line facilities (i.e., facilities that do not have system access) must submit their email address and related contact information to the system to be notified of manifest corrections by other parties.
- Facilities with system access may submit a correction or receive a notice of another submitter's correction and respond with comments to the submitter or submit another correction to the system.

- Read the eManifest User Guide to support use of electronic manifests.

(d) Unmanifested Waste Report: Completion and Submission

Pursuant to 40 CFR 264.76 and 265.76, if the facility 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.

(e) Fees for the Electronic Hazardous Waste Manifest Program

(e)(1) Manifest Transactions Subject to Fees

40 CFR 264.1311(a) and 265.1311(a) provide that fees shall be assessed on a per manifest basis for the following manifest submission transactions:

- The submission of each electronic manifest that is electronically signed and submitted to the e-Manifest system by the owners or operators of receiving facilities, with the fee assessed at the applicable rate for electronic manifest submissions.
- The submission of each paper manifest submission to the paper processing center signed by owners or operators of receiving facilities, with the fee assessed according to whether the manifest is submitted to the system by mail, by the upload of an image file, or by the upload of a data file representation of the paper manifest.
- The submission by receiving facilities of final manifest copies, signed by the facility to indicate a partial or total rejection of hazardous wastes, and indicating a return shipment to the original generator in Item 18a of the submitted manifest. This fee is assessed for the return shipment manifest, as identified by its Manifest Tracking

Number in Item 18a, and is assessed at the applicable rate determined by the method of submission.

40 CFR 264.1311(b) and 265.1311(b) provide that receiving facilities may submit image file uploads of completed, ink-signed manifests in lieu of submitting mailed paper forms to the e-Manifest system. Such image file upload submissions may be made for individual manifests received by a facility or as a batch upload of image files from multiple paper manifests received at the facility. The image file upload must be made in an image file format approved by EPA and supported by the e-Manifest system. At the time of submission of an image file upload, a responsible representative of the receiving facility must make a CROMERR compliant certification that to the representative's knowledge or belief, the submitted image files are accurate and complete representations of the facility's received manifests, and that the facility acknowledges that it is obligated to pay the applicable per manifest fee for each manifest included in the submission.

40 CFR 264.1311(c) and 265.1311(c) provide that receiving facilities may submit data file representations of completed, ink-signed manifests in lieu of submitting mailed paper forms or image files to the e-Manifest system. Such data file submissions from paper manifests may be made for individual manifests received by a facility or as a batch upload of data files from multiple paper manifests received at the facility. The data file upload must be made in a data file format approved by EPA and supported by the e-Manifest system. The receiving facility must also submit an image file of each manifest that is included in the individual or batch data file upload. At the time of submission of the data file upload, a responsible representative of the receiving facility must make a CROMERR compliant certification that to the representative's knowledge or belief, the data and images submitted are accurate and complete representations of the facility's received manifests, and that the facility acknowledges that it is obligated to pay the applicable per manifest fee for each manifest included in the submission. [Refer to "Manifest Completion, Transmittal and Recordkeeping" in this section for facility data items and activities associated with these requirements.]

(e)(2) Making User Fee Payments and Sanctions for Delinquent Payments

40 CFR 264.1314(a)-(c) and 265.1314(a)-(c) provide that all required fees shall be paid by the receiving facility in response to an electronic invoice or bill identifying manifest-related services provided the user during the previous month and identifying the fees owed for the enumerated services. All required fees shall be paid to EPA by the facility electronically in U.S. dollars, using one of the electronic payment methods supported by the Department of the Treasury's Pay.gov online electronic payment service, or any applicable additional or successor online electronic payment service offered by the Department of Treasury. All fees for which payments are owed in response to an electronic invoice or bill must be paid within 30 days of the date of the invoice or bill.

40 CFR 264.1315(a)-(c) and 265.1315(a)-(c) provide that, in accordance with 31 U.S.C. 3717(a) (1), delinquent e-Manifest user fee accounts shall be charged a minimum annual rate of interest equal to the average investment rate for Treasury tax and loan accounts (Current Value of Funds Rate or CVFR) for the 12-month period ending September 30th of each year, rounded to the

nearest whole percent. In accordance with 31 U.S.C. 3717(e), e-Manifest user fee accounts that are more than 90 days past due (i.e., not paid by date 120 days from date of invoice) shall be charged an additional penalty of 6% per year assessed on any part of the debt that is past due for more than 90 days, plus any applicable handling charges. A manifest is fully perfected when 1) the manifest has been submitted by the receiving facility to the e-Manifest system, as either an electronic submission or a paper manifest submission, and 2) all user fees arising from the submission of the manifest have been fully paid.

[Note: There are no data items or activities associated with these provisions.]

(e)(3) Informal Fee Dispute Resolution

40 CFR 264.1316(a) and 265.1316(a) provide that users of e-Manifest services that believe their invoice or charges to be in error must present their claims for fee dispute resolution informally using the described process.

40 CFR 264.1316(b) and 265.1316(b) provide that users asserting a billing dispute claim must first contact the system's billing representatives by phone or email at the phone number or email address provided for this purpose on the e-Manifest program's web site or other customer services directory. They must provide the information specified at 40 CFR 264.1316(b)(1) and (2) or 265.1316(b)(1) and (2). EPA's system billing representatives must respond to billing dispute claims within ten days of receipt of a claim.

40 CFR 264.1316(c) and 265.1316(c) provide that fee dispute claimants that are not satisfied by the response to their claim from the system's billing representatives may appeal their claim and initial decision to the Office Director for the Office of Resource Conservation and Recovery. Any appeal from the initial decision of the system's billing representatives must be taken within 10 days of the initial decision of the system's billing representatives. They must provide the information specified at 40 CFR 264.1316(c)(2) or 265.1316(c)(2). The Office Director shall review the record presented to him or her on an appeal and shall determine whether the claimant is entitled to relief from the invoice alleged to be in error, and if so, shall state the amount of the recalculated invoice and the amount of the invoice to be adjusted. The decision of the Office Director on any appeal is final and non-reviewable.

Data Items

- As required by 40 CFR 264.1316(b)(1) or 265.1316(b)(1), information identifying the claimant and the invoice(s) that are affected by the dispute, including:
 - The claimant's name, and the facility at which the claimant is employed.
 - The EPA Identification Number of the affected facility.
 - The date, invoice number, or other information to identify the particular invoice(s) that is the subject of the dispute.
 - A phone number or email address where the claimant can be contacted.

- As required by 40 CFR 264.1316(b)(2) or 265.1316(b)(2), sufficient supporting information to identify the nature and amount of the fee dispute, including:

- If the alleged error results from the types of manifests submitted being inaccurately described in the invoice, the correct description of the manifest types that should have been billed.
 - If the alleged error results from the number of manifests submitted being inaccurately described in the invoice, the correct description of the number of manifests that should have been billed.
 - If the alleged error results from a mathematical error made in calculating the amount of the invoice, the correct fee calculations showing the corrected fee amounts.
 - Any other information from the claimant that explains why the invoiced amount is in error and what the fee amount invoiced should be if corrected.
- As required by 40 CFR 264.1316(c)(2) or 265.1316(c)(2), the following information:
 - The claim materials submitted to the system’s billing representatives.
 - The response provided by the system’s billing representatives to the claim.
 - A brief written statement by the claimant explaining the nature and amount of the billing error, explaining why the claimant believes the decision by the system’s billing representatives is in error, and why the claimant is entitled to the relief requested on its appeal.

Respondent Activities

- Fee dispute claimants may contact the system’s billing representatives by phone or email and provide the specified information under 40 CFR 264.1316(b) or 265.1316(b).
- Fee dispute claimants may appeal the billing representatives’ decision by providing the information specified at 40 CFR 264.1316(c)(2) or 265.1316(c)(2) to the Office Director for the Office of Resource Conservation and Recovery.

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 has been developing the e-Manifest system for system start-up on June 30, 2018. During system operation, Agency activities will include, for example, system maintenance, paper manifest processing, operating a call center, and billing of user fees. Refer to Section 6C of this document and Sections 5.2 and 5.3 of the RIA for additional information.

5B. Collection Methodology & Management

EPA intends to collect paper manifests during operation of the e-Manifest. In addition, the e-Manifest system will be structured so that electronic manifests 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 files. The national operator will review the forms for errors, resolve them, and key-punch data into the system as needed. Refer to Section 6C of this document and Sections 5.3 of the RIA for additional 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

The e-Manifest system is designed to maximize flexibility for both large and small entities. For example, the system offers 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 facility to transact the manifest electronically for the shipment (see section 262.24(c)(1)). 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 receiving facilities 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 receiving facility must send a copy of the paper manifest to the e-Manifest system. 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 facility 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 fees).

6. ESTIMATE OF BURDEN HOURS & COST

This ICR estimates the total annual respondent and Agency hour and cost burden for all information collection requirements covered in this ICR. Specifically, this ICR estimates the burden for generators and other waste handlers to use *paper manifests for federal hazardous waste*. This includes form completion, transmittal to industry third parties, and recordkeeping. For simplification, this ICR refers to these activities collectively as the “manifest cycle” because the manifest travels with the shipment from generator to receiving facility. The facility then confirms shipment receipt by sending a signed copy to the generator (for paper manifests) or transmitting a receipt notification to the generator (for electronic manifests¹⁰). This ICR also burdens designated TSDFs/receiving facilities¹¹ to submit copies to the national system and pay fees for these forms.

This ICR does not estimate the burden to waste handlers for *paper manifest cycles involving state hazardous waste*.^{12, 13, 14} On the other hand, it estimates facility burden to submit copies and pay fees for these forms.

In addition, this ICR estimates the burden for generators and others to participate in the *electronic manifest cycle for federal and state hazardous waste*. It also estimates facility burden to pay fees.

Table 1 summarizes these scope issues for paper and electronic manifests accompanying federal and state hazardous waste.

10 An electronic manifest (or e-Manifest) is the electronic format of the hazardous waste manifest that is obtained from EPA's national e-Manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).

11 The final fee rule establishes provisions applicable to RCRA Subtitle C TSDFs as well as non-Subtitle C facilities, as specified. For purposes of organization and clarity, the burden to Subtitle C and non-Subtitle C facilities is estimated together in this section.

12 The e-Manifest Act extends the scope of the e-Manifest program to wastes subject to manifest tracking under federal and state law.

13 For purposes of this ICR, “state hazardous waste” includes waste types regulated as hazardous by a state but not the federal program. It also includes hazardous wastes that are exempt from federal RCRA manifest requirements but subject to a state’s manifest requirements.

14 5 CFR 1320.3(b)(3) provides that a “collection of information conducted or sponsored by a federal agency that is also conducted or sponsored by a unit of state, local, or tribal government is presumed to impose a federal burden except to the extent that the agency shows that such state, local, or tribal requirement would be imposed even in the absence of a federal requirement.” This provision applies to the paper manifesting of state hazardous waste because such manifesting is occurring under broader-in-scope state programs in the absence of federal requirements to do so.

**Table 1
Scope of Burden Estimates in ICR**

Manifest Activities	Paper Manifests		Electronic Manifests	
	Federal Hazardous Waste	State Hazardous Waste	Federal Hazardous Waste	State Hazardous Waste
Participating in Manifest Cycle*	x		x	x
Submitting Copies to National System **	x	x		
Paying Fees**	x	x	x	x

* This includes form completion, transmittal to industry third parties, and recordkeeping performed by generators, transporters and TSDFs/receiving facilities.

** This is performed by designated TSDFs/receiving facilities.

6A. Estimating the Respondent Universe

EPA referred to the Regulatory Impact Analysis (RIA) for the final fee rule as a starting point for estimating the respondents (i.e., waste handlers) and manifests subject to this ICR. EPA then made adjustments as appropriate to analyze specific requirements.

This section first discusses EPA’s estimates of waste handlers who manifest federal and state hazardous waste, respectively. It then presents the full universe of waste handlers and manifests (federal and state) subject to this ICR.

1) Handlers who Manifest Federal Hazardous Waste

The RIA estimates the annual number of waste handlers that manifest federal hazardous waste.¹⁵ 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 2 shows the adjusted estimates. In total, EPA estimates that 58,879 waste handlers will operate under the federal hazardous waste manifest program annually.¹⁶

**Table 2
Annual Number of Handlers that Manifest Federal Hazardous Waste**

Type of Waste Handler	Number of Facilities
LQGs – Shippers	17,775
Commercial TSDFs – Shippers*	412

¹⁵ Refer to Sections 2.1.2.1 and 2.1.2.2 of the RIA.

¹⁶ 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.

Type of Waste Handler	Number of Facilities
Captive TSDFs – Shippers	844
SQGs - Shippers (without Reclamation Agreements)	34,623
SQGs - Shippers (with Reclamation Agreements)	4,729
Transporters	496
TSDFs – Receivers*	412
Total*	58,879

* This ICR assumes that the “commercial TSDF shippers” ship and receive hazardous waste and are reflected in the estimated number of “TSDFs – receivers” in the table. Therefore this table counts them once to avoid duplication.

The RIA also estimates the average number of manifests prepared by each generator annually for federal hazardous waste.¹⁷ Based on these data, this ICR estimates that 1.5 million manifests are involved in paper and electronic manifest cycles for federal hazardous waste annually, as reflected in Table 3.

**Table 3
Annual Number of Manifests Accompanying Federal Hazardous Waste***

Type of Generator	Number of Generator	Average Annual Number of Manifests Completed per Generator	Total Annual Number of Manifests Completed
LQGs - Shippers	17,775	54	959,850
Commercial TSDFs - Shippers	412	277	114,124
Captive TSDFs - Shippers	844	26	21,944
SQGs - Shippers (without Reclamation Agreements)	34,623	12	415,476
Total	53,654	28	1,511,394

*Table includes rounding error.

Table 4 shows the annual adoption rate for the e-Manifest as estimated in the RIA.¹⁸ This adoption rate is used in this ICR to estimate the number of electronic and paper manifests annually for manifests accompanying federal and state waste. Further, EPA expects electronic manifests 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. This ICR estimates that 75% of electronic manifests will be signed using a PIN/Password while the remaining 25% will be signed using a digitized signature.¹⁹

¹⁷ Refer to Section 3.2 of the RIA for these estimates.

¹⁸ Refer to Section 5.1.3 of the RIA.

¹⁹ These estimates are based on informal industry feedback.

Table 4
Annual Adoption Rate for e-Manifest

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

Based on the above data, Table 5 estimates the annual number of paper and electronic manifests accompanying federal hazardous waste (as well as the respective number of electronic manifests signed by PIN/Password or digitized electronic signature) during each year of this ICR. Because this ICR estimates burden over a 3-year period, the table also calculates the 3-year average annual number of paper and electronic manifests respectively for a total of 1.5 million manifests annually.

Table 5
Annual Number of Manifests Prepared for Federal Wastes, by Type*

Generators Preparing Manifests	Paper Manifest	Electronic Manifest		Total Manifests (Paper and Electronic)
		PIN/Password	Digitized Electronic Signature	
Year 1				
LQGs - Shippers	911,858	35,994	11,998	959,850
Commercial TSDFs - Shippers	108,418	4,280	1,427	114,124
Captive TSDFs - Shippers	20,847	823	274	21,944
SQG - Shippers	394,702	15,580	5,193	415,476
Total	1,435,825	56,677	18,892	1,511,395
Year 2				
LQGs - Shippers	719,888	179,972	59,991	959,850
Commercial TSDFs - Shippers	85,593	21,398	7,133	114,124
Captive TSDFs - Shippers	16,458	4,115	1,372	21,944
SQG - Shippers	311,607	77,902	25,967	415,476
Total	1,133,546	283,386	94,462	1,511,394
Year 3				
LQGs - Shippers	431,933	395,938	131,979	959,850
Commercial TSDFs - Shippers	51,356	47,076	15,692	114,124
Captive TSDFs - Shippers	9,875	9,052	3,017	21,944
SQG - Shippers	186,964	171,384	57,128	415,476
Total	680,128	623,450	207,816	1,511,394

Generators Preparing Manifests	Paper Manifest	Electronic Manifest		Total Manifests (Paper and Electronic)
		PIN/Password	Digitized Electronic Signature	
3-Year Average				
LQGs - Shippers	687,893	203,968	67,989	959,850
Commercial TSDFs - Shippers	81,789	24,251	8,084	114,124
Captive TSDFs - Shippers	15,727	4,663	1,554	21,944
SQG - Shippers	297,758	88,289	29,430	415,476
Total	1,083,166	321,171	107,057	1,511,394

*Table includes rounding error.

2) Handlers who Manifest State Hazardous Waste

The RIA estimates the annual number of handlers that manifest state hazardous waste.²⁰ 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. In total, EPA estimates that 145,048 shippers will manifest state wastes annually as shown in Table 6. The RIA states that these shippers consist of two categories reflecting specific state programs: generators of state (non-federal) hazardous waste and generators of hazardous wastes that are exempt from federal RCRA manifest requirements but subject to state manifest requirements. The RIA further indicates that all state hazardous waste shippers are SQGs or conditionally exempt small quantity generators (CESQGs)²¹ or sites whose manifesting behavior is similar to them.

Table 6
Annual Number of Handlers that Manifest State Hazardous Waste

Type of Waste Handler	Number of Waste Handlers
Shippers (SQG/CESQGs)*	145,048
Receiving Facilities**	1,095
Total**	145,048

*The RIA estimates that all state hazardous waste shippers are SQGs and CESQGs or sites whose manifesting practices are similar to them.

** This ICR assumes that all receiving facilities ship waste offsite during the year and are therefore reflected in the estimated number of shippers in the table. Therefore the table counts them once to avoid duplication.

The RIA estimates that each shipper completes 12 manifests on average for state wastes annually.²² Table 7 shows that these shippers offer 1.7 million manifests into transportation for state wastes annually.

²⁰ Refer to Sections 2.1.2.3 to 2.1.2.5 of the RIA.

²¹ Conditionally exempt small quantity generators are now known as Very Small Quantity Generators.

²² Refer to Section 3.2 of the RIA for these estimates.

Table 7
Annual Number of Manifests Accompanying State Hazardous Waste

Number of Shippers (SQG/CESQGs)*	Number of Manifests per Shipper	Total Annual Number of Manifests
145,048	12	1,740,576

*The RIA estimates that all state hazardous waste shippers are SQGs and CESQGs or sites whose manifesting practices are similar to them.

Based on the above data, Table 8 estimates the annual number of paper and electronic manifests accompanying state hazardous waste (as well as the respective number of electronic manifests signed by PIN/Password or digitized electronic signature) during each year of this ICR. Because this ICR estimates burden over a 3-year period, the table also calculates the 3-year average annual number of paper manifests and electronic manifests respectively for a total of 1.7 million manifests annually.

Table 8
Annual Number of Manifests Prepared for State Hazardous Wastes, by Type*

Generators Preparing Manifests	Paper Manifest	Electronic Manifest		Total Manifests (Paper and Electronic)
		PIN/Password	Digitized Electronic Signature	
Year 1				
LQGs - Shippers	--	--	--	--
Commercial TSDFs - Shippers	--	--	--	--
Captive TSDFs - Shippers	--	--	--	--
SQG/CESQGs – Shippers**	1,653,547	65,272	21,757	1,740,576
Total	1,653,547	65,272	21,757	1,740,576
Year 2				
LQGs - Shippers	--	--	--	--
Commercial TSDFs - Shippers	--	--	--	--
Captive TSDFs - Shippers	--	--	--	--
SQG/CESQGs – Shippers**	1,305,432	326,358	108,786	1,740,576
Total	1,305,432	326,358	108,786	1,740,576
Year 3				
LQGs - Shippers	--	--	--	--
Commercial TSDFs - Shippers	--	--	--	--
Captive TSDFs -	--	--	--	--

Generators Preparing Manifests	Paper Manifest	Electronic Manifest		Total Manifests (Paper and Electronic)
		PIN/Password	Digitized Electronic Signature	
Shippers				
SQG/CESQGs – Shippers**	783,259	717,988	239,329	1,740,576
Total	783,259	717,988	239,329	1,740,576
3-Year Average				
LQGs - Shippers	--	--	--	--
Commercial TSDFs - Shippers	--	--	--	--
Captive TSDFs - Shippers	--	--	--	--
SQG/CESQGs – Shippers**	1,247,413	369,873	123,290	1,740,576
Total	1,247,413	369,873	123,290	1,740,576

*Table includes rounding error.

**The RIA estimates that all state hazardous waste shippers are SQGs and CESQGs or are sites whose manifesting practices are similar to them.

3) Summary of Handlers who Manifest Federal and State Hazardous Waste

Based on the data and assumptions above, Table 9 presents the total annual number of handlers that manifest federal and state hazardous waste, including both electronic and paper manifests. Specifically, Table 9 combines the handler data in Table 2 (federal handlers) and Table 6 (state handlers) to estimate a total of 203,927 handlers subject to this ICR. Note: The table’s “SQG – Shippers (without reclamation agreements)” category includes SQGs manifesting federal hazardous waste as well as all state hazardous waste shippers (i.e., SQGs and CESQGs manifesting state hazardous waste).

Table 9
Annual Number of Handlers that Manifest
Federal and State Hazardous Waste

Type of Waste Handler	Handlers of Federal Hazardous Waste in ICR	Handlers of State Hazardous Waste in ICR	Total
LQGs - Shippers	17,775	--	17,775
Commercial TSDFs - Shippers	412	--	412
Captive TSDFs - Shippers	844	--	844
SQGs - Shippers (without Reclamation Agreements)*	34,623	145,048	179,671
SQGs - Shippers (with Reclamation Agreements)	4,729	--	4,729

Type of Waste Handler	Handlers of Federal Hazardous Waste in ICR	Handlers of State Hazardous Waste in ICR	Total
Transporters	496	--	496
TSDFs/Receivers**	412	1,095	1,507
Total**	58,879	145,048	203,927

* For purposes of estimating burden in this ICR, EPA has combined the number of SQGs manifesting federal waste with the number of SQGs and CESQGs manifesting state waste.

** This ICR assumes that TSDFs/receiving facilities are reflected in the estimated number of shippers in this table and therefore the table counts them once to avoid duplication.

Table 10 presents the total annual number of paper and electronic manifests accompanying federal and state hazardous waste during each year of this ICR. Specifically, Table 10 combines the manifest data in Table 5 (manifests accompanying federal hazardous waste) and Table 8 (manifests accompanying state hazardous waste). Because this ICR estimates burden over a 3-year period, the table also calculates the 3-year average annual number of paper and electronic manifests. In total, this equates to 3.25 million manifests on average annually.

Table 10
Annual Number of Manifests Prepared for Federal and State Hazardous Wastes, by Type*

Generators Preparing Manifests	No. of Paper Manifests		No. of Electronic Manifests (Federal and State)**		Total Manifests (Paper and Electronic)
	Federal Hazardous Waste	State Hazardous Waste	PIN/ Password	Digitized Electronic Signature	
Year 1					
LQGs - Shippers	911,858	--	35,994	11,998	959,851
Commercial TSDFs - Shippers	108,418	--	4,280	1,427	114,124
Captive TSDFs - Shippers	20,847	--	823	274	21,944
SQGs - Shippers***	394,702	1,653,547	80,852	26,951	2,156,052
Total	1,435,825	1,653,547	121,949	40,650	3,251,971
Year 2					
LQGs – Shippers	719,888	--	179,972	59,991	959,850
Commercial TSDFs – Shippers	85,593	--	21,398	7,133	114,124
Captive TSDFs – Shippers	16,458	--	4,115	1,372	21,944
SQGs - Shippers***	311,607	1,305,432	404,260	134,753	2,156,052
Total	1,133,546	1,305,432	609,744	203,248	3,251,970
Year 3					
LQGs – Shippers	431,933	--	395,938	131,979	959,850
Commercial TSDFs – Shippers	51,356	--	47,076	15,692	114,124
Captive TSDFs – Shippers	9,875	--	9,052	3,017	21,944

Generators Preparing Manifests	No. of Paper Manifests		No. of Electronic Manifests (Federal and State)**		Total Manifests (Paper and Electronic)
	Federal Hazardous Waste	State Hazardous Waste	PIN/ Password	Digitized Electronic Signature	
SQGs - Shippers***	186,964	783,259	889,372	296,457	2,156,053
Total	680,128	783,259	1,341,438	447,145	3,251,971
3-Year Average					
LQGs – Shippers	687,893	--	203,968	67,989	959,850
Commercial TSDFs – Shippers	81,789	--	24,251	8,084	114,124
Captive TSDFs – Shippers	15,727	--	4,663	1,554	21,944
SQGs - Shippers***	297,758	1,247,413	458,161	152,720	2,156,052
Total	1,083,166	1,247,413	691,044	230,348	3,251,970

*Table includes rounding error.

** Refer to Tables 5 and 8 for the number of electronic manifests accompanying federal and state hazardous waste respectively.

***For purposes of estimating burden in this ICR, EPA has combined the number of SQG manifests accompanying federal waste with the number of SQG and CESQG manifests accompanying state waste.

As discussed at the beginning of Section 6, this ICR estimates burden to waste handlers based primarily on the three activities shown below. Their respective burden is estimated using the 3-year averages in Table 10.

Table 11 presents the 3-year averages associated with each activity:²³

- Participating in manifest cycle.²⁴ This ICR estimates burden to waste handlers for participating in paper manifest cycles for federal hazardous waste as well as electronic manifest cycles for federal and state hazardous waste. This equates to 2 million manifests on average annually.
- Submitting copies to national system. This ICR estimates burden to waste handlers for submitting all paper copies accompanying federal and state waste to the national system. This equates to 2.33 million manifests on average annually.
- Paying fees. This ICR estimates burden to waste handlers for paying fees for all manifests (paper and electronic) accompanying federal and state waste. This equates to 3.25 million manifests on average annually.

Table 11
3-Year Average Annual Number of Manifests Burdened in this ICR*

²³ Although this ICR uses the 3-year averages in this table as the basis for calculating many of its burden estimates, EPA further refines some of them when analyzing specific requirements based on additional assumptions as appropriate. Refer to Section 6D of this document for additional information.

²⁴ This includes form completion, transmittal to industry third parties, and recordkeeping performed by generators, transporters and TSDFs/receiving facilities.

Manifest Activities	No. of Paper Manifests		No. of Electronic Manifests (Federal and State)		Total Manifests
	Federal Hazardous Waste	State Hazardous Waste	PIN/ Password	Digitized Electronic Signature	
Participating in Manifest Cycle**	1,083,166	--	691,044	230,348	2,004,558
Submitting Copies to National System***	1,083,166	1,247,413	--	--	2,330,579
Paying Fees***	1,083,166	1,247,413	691,044	230,348	3,251,970

*Table includes rounding error. Some of the numbers in this table are further refined based on additional assumptions presented later in this document. See Section 6D.

** This includes form completion, transmittal to industry third parties, and recordkeeping performed by generators, transporters and TSDFs/receiving facilities.

*** This is performed by designated TSDFs/receiving facilities.

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 \$100.86 for legal staff, \$85.00 for managerial staff, \$42.06 for technical staff, and \$23.30 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.²⁵ As shown in Exhibit 23, EPA estimates the total average annual capital cost to all hazardous waste handlers under the manifest system, collectively, to be \$134,140. 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 TSDF/receiving facilities must keep copies of manifests and other

²⁵ In regard to impacts to waste handlers, the RIA considers only the cost savings associated with the use of electronic manifests and the costs associated with CROMERR for TSDF receivers and transporters as non-manifest fee cost impacts to industry from the e-Manifest system. The RIA states that, under certain specifications of the e-Manifest system, industry entities may need to invest in internal system upgrades or hardware in order to use the e-Manifest system. These types of upgrades may range from programming to align existing proprietary systems with the e-Manifest system to a requirement to purchase smartphones or tablets in order to use the e-Manifest system at the point of waste transfer, or while the waste is in transit. The RIA assumes that the e-Manifest system implemented under the rule will not require any such investment in either hardware or software by firms or facilities in the hazardous waste industry. See Section 5.4.3 of the RIA for additional information.

manifest-related documents for a period of 3 years. Thus, at any given time during the effective period of this ICR, the hazardous waste industry is keeping paper copies of 3 years' worth of manifest-related documents. In total, EPA estimates that waste handlers (i.e., generators, transporters, and designated TSD/receiving facilities) will need to keep copies of 13,933,553 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, 5-drawer, lateral file cabinet holds approximately 16,000 documents. Thus, for storing 13,933,553 paper manifests and reports, waste handlers would need 871 file cabinets (i.e., 13,933,553/16,000) each year. These 871 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 \$829.99²⁶ and for all 871 file cabinets is \$722,921.
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 3-year effective life of this ICR:

$$\text{Annualized Net Present Value} = \$722,921 \times [1 / (\sum 1 / (1+k)^t)]$$

where k = discount rate of 7%;
t = life of equipment (7 years).²⁷

In total, EPA estimates that the hazardous waste industry will need to pay an annual cost of \$134,140 for the 871 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 (PRA) 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 \$860 for each set of manifest form samples. These respondents are expected to contract with a printing company. Hence, the fee of \$860 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 2017 levels using Consumer Price Indexes developed by the Bureau of Labor Statistics.²⁸

26 Standard-size, 5-drawer, lateral file cabinet cost based on current market price, as of July 20, 2017.

27 Based on an OMB-approved discount rate of 7% (OMB Circular A-94).

28 CPI Calculator at https://www.bls.gov/data/inflation_calculator.htm, last accessed on July 20, 2017.

- Purchase blank paper manifest forms from EPA-registered printer: EPA estimates that respondents will incur a cost of \$0.55 for each blank paper manifest and \$0.55 for each blank paper continuation sheet they purchase from an EPA-registered printer^{29, 30}
- 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)^{31, 32} EPA also estimates that respondents will incur a cost of \$5.26 for mailing a larger package (i.e., a 5-ounce package) by certified mail (\$1.82 for postage, \$3.35 for the certified-mail fee, and \$0.14 for a catalog envelope).^{33, 34, 35}
- 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 subsection, “(d11) Fees for the Electronic Hazardous Waste Manifest Program,” 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 24.

Labor Costs

EPA estimates an average hourly Agency labor cost of \$89.96 for legal staff, \$79.38 for managerial staff, \$57.11 for technical staff, and \$24.37 for clerical staff. These rates were taken from the RIA. The ICR also estimates an average hourly contractor cost of \$160.

29 Uniform manifest form cost based on current market price for JJ Keller’s forms, as of July 20, 2017, at <https://www.jjkeller.com/shop/Product/Uniform-Hazardous-Waste-Manifest-Pin-Feed-Format>.

30 Continuation sheet cost based on current market price for JJ Keller’s forms, as of July 20, 2017, at: <https://www.jjkeller.com/shop/Product/Uniform-Hazardous-Waste-Manifest-Pin-Feed-Format>.

31 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 July 20, 2017.

32 Standard-size envelope cost based on current market price, as of July 20, 2017 (i.e., box of 500 standard business gummed envelopes at \$15.79).

33 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 July 20, 2017.

34 U.S. Postal Service, “Domestic Insurance & Extra Services.” Available online at: <https://www.usps.com/business/add-extra-services.htm>?, last accessed on July 20, 2017.

35 Catalog envelope cost based on current market price, as of July 20, 2017 (i.e., box of 250 brown kraft catalog envelopes (9" x 12") at \$35.39).

Capital and Operation & Maintenance Costs

The RIA estimates annual costs to EPA for developing, operating and maintaining the e-Manifest system and related activities. The RIA addresses the following cost elements:³⁶

- System development;
- Operations & maintenance;
- Paper manifest processing O&M;
- Call center;
- Cross-Media Electronic Reporting Rule (CROMERR) provisions. This element is not included in this ICR;³⁷
- Billing;
- Additional program costs;
- Additional indirect costs; and
- Manifest processing costs.

In preparing this ICR, EPA summed up the annual costs of the elements above for Years 1 through 3 of system operation, except for the CROMERR costs, and divided the sum by 3 years to derive the 3-year average annual cost. These average annual costs are reflected in Exhibit 23.

6D. Estimating Respondent Hours and Costs

Exhibits 1 through 22 estimate the annual respondent burden associated with these information collection requirements. Exhibit 23 presents the total aggregate annual cost burden to all respondents under the information collection requirements covered in this ICR. For purposes of analysis, EPA has estimated burden for the first 3 years of system operation. Refer to Sections 6A and 6B of this document for respondent universe data used to estimate burden.

(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.

³⁶ Refer to Sections 5.2 and 5.3 of the RIA for these costs.

³⁷ The ICR, “Cross-Media Electronic Reporting Rule,” (EPA ICR No. 2002, OMB Control No. 2025-0003), is currently being renewed and will address Agency and respondent burden under CROMERR for the manifest requirements in this ICR.

(a3) Updating General Information in the Approved Application

EPA estimates that, each year, 3 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).

(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 3-letter suffix and 9 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.

(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 manifesting federal hazardous waste to read Part 262 each year.³⁸

(b2) Manifest Completion

Exhibits 3 and 4 present the total annual hour and cost burden for generators to complete their paper and electronic manifests.^{39, 40} The exhibits reflect that designated facilities 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 large quantity generators (LQGs) and small quantity generators (SQGs)⁴¹ rely on the designated facilities' assistance in manifest preparation, while the remaining LQGs and SQGs, as well as all TSDFs acting as generators, prepare their manifests themselves, as follows:

³⁸ This ICR does not burden generators manifesting state hazardous waste (paper or electronic) for reading the regulations. Such generators perform this activity because of state-specific, broader-in-scope program requirements in the absence of federal requirements to do so.

³⁹ Before using the e-Manifest system, users must establish an account and comply with 40 CFR Part 3 requirements (e.g., for obtaining electronic signatures), as applicable. It is assumed that all generators (federal and state) preparing electronic manifests will perform these activities. The ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003) is currently being renewed and will address these activities and requirements for all applicable waste handlers in this ICR. In addition, a system user must obtain an EPA identification (ID) number if it does not have one already. Although waste handlers under the federal program already have an ID, some handlers of state hazardous waste may not. EPA is preparing a Non-Substantive Change Request for the currently approved ICR, "2017 Hazardous Waste Report, Notification of Regulated Waste Activity, and Part A Hazardous Waste Permit Application and Modification," (EPA EPA ICR No. 0976, OMB Control No. 2050-0024) to adjust the burden for these handlers to submit a Site Identification Form requesting an EPA ID number.

⁴⁰ This ICR assumes that all generators signing the electronic manifest with a digitized electronic signature will be presented with an Electronic Signature Agreement (ESA) in the digitizer pad the first time they sign it. They will sign the ESA once and it will be uploaded to the national system. They also must sign the generator signature block on that manifest and all subsequent manifests.

⁴¹ For purposes of estimating burden throughout this ICR, the universe of SQG manifests includes SQG manifests accompanying federal hazardous waste *as well as* SQG and CESQG manifests accompanying state hazardous waste.

- **Completing the Manifest without the Assistance of Designated Facility:** 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 facility. This is reflected in Exhibit 3. In addition, EPA estimates that about 5% of manifests include continuation sheets. The exhibit also reflects the burden for 30% of generators preparing electronic manifests (2 employees/LQG or SQG; 5 employees per TSDF acting as a generator) to call the EPA help desk each year to ask questions or resolve problems in preparing or transmitting the electronic manifest or otherwise using the system.⁴²
- **Completing the Manifest With the Assistance of Designated Facility:** As discussed, EPA recognizes that many LQGs and SQGs rely on the assistance of the designated facility to complete the manifest form. Because the designated facility 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 facility. This is reflected in Exhibit 4. [Note: Refer to Exhibit 16 for the hour and cost burden for designated facilities to assist LQGs and SQGs in completing their manifests.]

Exhibits 3 and 4 reflect the average annual number of paper and electronic manifests shown in Tables 10 and 11 for the manifest cycle. Note that 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 electronic manifests.⁴³ Exhibits 3 and 4, as well as the other exhibits, reflect these effects where appropriate.

(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. Because these activities are required under state-specific hazardous waste programs, they are not burdened in this ICR as reflected in Exhibit 5.

⁴² This burden represents on-going questions and problem resolution that are separate from their burden for contacting the help desk for system registration or Part 3 compliance issues which are addressed in the ICR, “Cross-Media Electronic Reporting Rule,” (EPA ICR No. 2002, OMB Control No. 2025-0003).

⁴³ Refer to Section 5.4 of the RIA for additional information.

(b5) Manifest Transmittal and Recordkeeping

As shown in Exhibit 6, 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 4,729 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. Note that this ICR reflects that recordkeeping of electronic manifests is negligible, since electronic manifests will be transacted within the national system. Exhibit 6 reflects the annualized number of paper and electronic manifests shown in Tables 10 and 11 for the manifest cycle.

Exhibit 6 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 40 CFR 262.24(c)(1) as described below).

Exhibit 6 also reflects that a percentage of LQGs and SQGs will perform the procedures at 40 CFR 262.24(c)(1) for their electronic manifests. 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 facility'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 facility will be transacted under the procedures annually. EPA does not expect TSDF shippers to use the "on behalf of" or section 262.21(c)(1) procedures because they will have the expertise to sign them electronically.

Finally, Exhibit 6 reflects that all offline generators (federal and state) will submit their email address to the national system to be notified of manifest data corrections. The ICR estimates that each LQG and SQG has two employees and each TSDF acting as a generator has 5 employees who will submit the email address. The number of submittals has been annualized over the 3-year life of this ICR because it is a one-time activity. In addition, the exhibit reflects that generators (federal and state) will enter the system to submit corrections or respond to comments for 2% of their manifests annually (electronic and paper).⁴⁴

⁴⁴ All corrections must be made in the e-Manifest system. Before making a correction, users must establish an account and comply with 40 CFR Part 3 requirements (e.g., for electronic signatures), as applicable. The ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003), is currently being renewed and will address these activities and requirements for all applicable waste handlers in this ICR.

(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 7, 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 7, 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 section 263.21(b)(3). This equates to 47,134 generators (i.e., 53,654 generators of federal waste + (28% x 145,048 generators of state hazardous waste) = 94,267 generators x 50% = 47,134.)⁴⁵ Because incorporating the provision is a one-time activity for each generator during the 3-year life of this ICR, this ICR annualizes the number of generators over 3 years (47,134 generators/3 years=15,711 generators annually.)

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 7 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 8, EPA estimates that, each year, 3% of shipments received by designated facilities will be rejected and, of these, 1% will be returned to the generator (with the other 99% being sent to an alternate designated facility). Upon receipt of the rejected shipments, generators must sign the manifest that accompanies the rejected load or residue. Exhibit 8 reflects the annualized number of paper and electronic manifests shown in Tables 10 and 11.

(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% of the manifests sent offsite. This assumption is reflected in Exhibit 9.⁴⁶

⁴⁵ It is estimated that, during the 3-year life of this ICR, 28% of generators (federal and state) will adopt electronic manifesting on average annually. See Table 4. Consistent with Table 1, this equation encompasses generators who electronically manifest federal and state hazardous waste and generators who paper manifest federal hazardous waste. It assumes 50% will incorporate the contract provision.

⁴⁶ This ICR does not burden generators manifesting state hazardous waste (paper or electronic) for exception reporting. Such generators perform this activity because of state-specific, broader-in-scope program requirements in the absence of federal requirements to do so.

(b9) *Reading the Electronic Manifest System User Guide*

Exhibit 22 presents the total annual hour and cost burden to hazardous waste generators in reading the user guide for the Electronic Manifest System. In total, EPA expects each generator using the electronic manifests for federal hazardous waste to read the user guide.⁴⁷ The estimated number of hazardous waste generators reading the user guide correlates to the estimated adoption rate of the Electronic Manifest System.

(c) *Transporter Requirements*

(c1) *Reading the Regulations*

As shown in Exhibit 10, 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.⁴⁸

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

Exhibit 11 examines the manifesting hour and cost burden for transporters transporting domestic and international shipments of hazardous waste.^{49, 50} EPA estimates that, of the manifests completed and transmitted each year, approximately 91% will accompany highway shipments, 3% will accompany water shipments, and 6% will accompany rail shipments. In addition, EPA estimates that transporters transporting hazardous waste shipments under a reclamation agreement will need to comply with 40 CFR 263.20(h). EPA estimates that 30% of transporters will call the e-Manifest help desk annually for questions or problem resolution. Finally, it is important to note that EPA is not including the tracking of export manifests described in Subpart H of 40 CFR Part 262 in the initial phase of e-Manifest system implementation. Given these

47 This ICR does not burden generators, using electronic manifests for state hazardous waste, for reading the user guide. Such generators perform this activity because of state-specific, broader-in-scope program requirements in the absence of federal requirements to do so.

48 This ICR does not burden transporters manifesting state hazardous waste (paper or electronic) for reading the regulations. Such transporters perform this activity because of state-specific, broader-in-scope program requirements in the absence of federal requirements to do so.

49 Before using the e-Manifest system, users must establish an account and comply with 40 CFR Part 3 requirements (e.g., for electronic signatures), as applicable. It is assumed that all transporters (federal and state) carrying paper or electronic manifests will perform these activities. The ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003), is currently being renewed and will address these activities and requirements for all applicable transporters in this ICR. In addition, each transporter must obtain an EPA identification (ID) number if it does not have one already. Although transporters under the federal program already have an ID, some transporters transporting state hazardous waste may not. EPA is preparing a Non-Substantive Change Request for the currently approved ICR, "2017 Hazardous Waste Report, Notification of Regulated Waste Activity, and Part A Hazardous Waste Permit Application and Modification," (EPA ICR No. 0976, OMB Control No. 2050-0024) to adjust the burden for these transporters to submit a Site Identification Form requesting an EPA ID number.

50 This ICR assumes that all transporters signing the electronic manifest with a digitized electronic signature will be presented with an Electronic Signature Agreement (ESA) in the digitizer pad the first time they sign it. They will sign the ESA once and it will be uploaded to the national system. They also must sign the transporter signature block on that manifest and all subsequent manifests.

considerations, EPA estimates that all electronic manifests in this ICR will track only domestic shipments. EPA further estimates that 15,120 paper manifests will accompany export shipments annually.

Exhibit 11 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 11, the transporter must contact the generator for further instructions pursuant to section 263.21(b)(1).

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 11, 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 section 263.21(b)(3).⁵¹ 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., $(496 \text{ transporter companies} \times 50\%) / 3 \text{ years} = 83 \text{ companies/yr}$).

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 11 reflects that transporters without such contract authority must contact the generator for each undeliverable manifest, as provided at section 263.21(b)(2).

Finally, Exhibit 11 addresses rejected loads and container residues.

(c3) Replacement Manifests

Exhibit 12 estimates that 1% of electronic manifests carried by highway transporters will require replacement manifests. EPA assumes that all electronic manifests will be replaced by reproducing 3 paper copies. All replacement manifests will be processed by subsequent waste handlers according to the paper manifest requirements.

⁵¹ This ICR envisions that transporter companies will use boilerplate language to address this provision and will incur minimal burden for incorporating it into their contracts.

(c4) *Post-Receipt Manifest Data Corrections*

EPA estimates that each transporter company will register its employees with the e-Manifest system and have system access to make corrections.⁵² Exhibit 13 reflects EPA's estimate that transporters will submit corrections or respond with comments for 2% of all manifests (paper and electronic) accompanying federal and state waste annually.

(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 14.

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.

(c6) *Reading the Electronic Manifest System User Guide*

Exhibit 22 presents the total annual hour and cost burden to hazardous waste transporters in reading the user guide for the Electronic Manifest System. In total, EPA expects each transporter company using the electronic manifests for federal hazardous waste to read the user guide.⁵³ The estimated number of hazardous waste transporters reading the user guide correlates to the estimated adoption rate of the Electronic Manifest System.

(d) *Designated Treatment, Storage, and Disposal Facility Requirements*⁵⁴

52 All corrections must be made in the e-Manifest system. Before entering a correction, users must establish a system account and comply with 40 CFR Part 3 requirements (e.g., for electronic signatures), as applicable. The ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003), is currently being renewed and will address these activities and requirements for all transporters in this ICR.

53 This ICR does not burden transporters, using electronic manifests for state hazardous waste, for reading the user guide. Such transporters perform this activity because of state-specific, broader-in-scope program requirements in the absence of federal requirements to do so.

54 The final fee rule establishes provisions applicable to RCRA Subtitle C TSDFs as well as non-Subtitle C facilities as specified. For purposes of organization and clarity, the burden to Subtitle C and non-Subtitle C facilities is estimated together in this section.

(d1) Reading the Regulations

Exhibit 15 reflects that 412 designated TSDFs will read the manifest regulations once a year.⁵⁵

(d2) Completing the Manifest (assisting the generators)

Exhibit 16 presents EPA's estimates that approximately 42% and 80% of manifests from LQGs and SQGs, respectively, are completed jointly with the designated facility. In addition, EPA estimates that 5% of these manifests include continuation sheets. The exhibit reflects the annualized number of their paper and electronic manifests shown in Tables 10 and 11.

(d4) Transmitting the Manifest and Reporting to EPA

Under the final rule, all paper and electronic manifests accompanying federal and state hazardous waste must be completed by the receiving facility.^{56, 57} In accordance with these provisions, Exhibit 17 estimates burden for facility completion of all manifests (paper and electronic) accompanying federal hazardous waste as well as electronic manifests accompanying state hazardous waste.^{58, 59}

In regard to paper manifests accompanying state hazardous waste, EPA recognizes that a number of receiving facilities must complete these forms under existing state requirements. This ICR need not estimate the burden for such paper manifests because these activities are being performed under state-specific, broader-in-scope program requirements in the absence of federal requirements to do so. However, EPA is aware that some shipments of state waste have faced implementation and tracking challenges when they cross state lines, making it unclear if the facility must complete and return the manifest.⁶⁰ The final rule could place incremental burden

55 This ICR does not burden receiving facilities manifesting state hazardous waste (paper or electronic) for reading the regulations. Such facilities perform this activity because of state-specific, broader-in-scope program requirements in the absence of federal requirements to do so.

56 Before using the e-Manifest system, users must establish an account and comply with 40 CFR Part 3 requirements (e.g., for obtaining electronic signatures), as applicable. It is assumed that all facilities (federal and state) will perform these activities. The ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003), is currently being renewed and will address these activities and requirements for all applicable facilities in this ICR. In addition, each facility must obtain an EPA identification (ID) number if it does not have one already. Although facilities under the federal program already have an ID, some facilities receiving state hazardous waste may not. EPA is preparing a Non-Substantive Change Request for the currently approved ICR, "2017 Hazardous Waste Report, Notification of Regulated Waste Activity, and Part A Hazardous Waste Permit Application and Modification," (EPA EPA ICR No. 0976, OMB Control No. 2050-0024) to adjust the burden for these facilities to submit a Site Identification Form requesting an EPA ID number.

57 This ICR assumes that all facilities signing the electronic manifest with a digitized electronic signature will be presented with an Electronic Signature Agreement (ESA) in the digitizer pad the first time they sign it. They will sign the ESA once and it will be uploaded to the national system. They also must sign the facility signature block on that manifest and all subsequent manifests.

58 See Table 1 of this document for clarification of these scope issues.

59 Manifests accompanying exports have been subtracted from the exhibit's manifests estimated to be received and completed by receiving facilities. This includes 15,120 paper manifests. It is assumed that all electronic manifests will accompany domestic shipments only, because EPA is not including the tracking of export manifests described in Subpart H of 40 CFR Part 262 in the initial phase of e-Manifest system implementation.

60 For example, the manifest requirements may not be fully clear for waste shipments that originate in a state with more extensive or broader-in-scope coverage and that are then shipped out-of-state to a destination facility in a state

on these facilities by clarifying that completion is mandatory for all manifests accompanying state waste.

Because of this, Exhibit 17 also estimates burden for facilities to complete paper manifests accompanying state waste that have not been completed under state regulations. EPA estimates that 25% of paper manifests accompanying state waste will now be completed as a result of the final rule.⁶¹ It is assumed that the remaining 75% of paper manifests are already being completed under state regulations and need not be addressed in this ICR. Refer to Table 11 for the 3-year average annual estimates of paper and electronic manifests accompanying federal and state waste.

In addition, facilities must submit copies of the paper manifest to the national system in accordance with 40 CFR 260.4, 260.5, 264.71(a)(v) or 265.71(a)(v). The RIA estimates the annual submittal rate for each method, as shown in Table 12.⁶² 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 files and image files. The remaining 28% will be transacted electronically within the system.

Table 12
Annual Manifest Submittal Rates, by Submittal Method

Submittal Method	Year 1	Year 2	Year 3	3-Year Average*
Paper copies	52.75%	37.50%	11.25%	34%
Image files	4.75%	18.75%	11.25%	12%
Data files and image files	37.50%	18.75%	22.50%	26%
Total (paper only)	95.00%	75.00%	45.00%	72%
Electronic	5.00%	25.00%	55.00%	28%

*Column includes rounding.

Based on these assumptions, Exhibit 17 estimates that 34% of TSDf/receiving facilities will submit paper copies (@ 6 hours/yr), 12% will submit image files (@ 6 hours/yr), and 26% will submit data files and image files (@6.5 hours/yr). Note that this burden includes all paper

where the waste is not regulated as hazardous and does not require a manifest under the law of the destination state. 61 In July 2017, EPA spoke with a representative of the New York State Department of Environmental Conservation's manifest processing department. The state program collects, reviews, corrects and enters manifest data into its data system. He believes that there are clear incentives for generators to make efforts to ensure that receiving facilities complete and return the manifest in such interstate shipment scenarios. In particular, if the generator's state requires the manifesting of state waste, it can be assumed that the generator is bound by the state's regulations to retain the facility's signed copy. Therefore, one can generally expect generators to persuade unresponsive receiving facilities to complete and return them. Because of this, he estimated that facilities are, or should be, completing and returning the majority of manifests even in the absence of the fee rule's provisions. EPA agrees with his input and notes that interstate shipments represent only a portion of all shipments of state hazardous waste. Some shipments begin and end in the same state or travel between two states that regulate the same state-specific waste, obviating inter-state difficulties. Because of these observations, EPA believes 25% is a reasonable estimate of the percentage of manifests accompanying state waste that are not completed under state law by receiving facilities but that must be completed under the final rule.

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

manifests received by the facilities during the year, including manifests associated with rejected loads and container residues.⁶³

(d5) Compliance with State Program Requirements

40 CFR 264.71(e) and 265.71(e) provide that TSDFs must determine whether they are required to comply with requirements specific to state hazardous waste manifest programs. Because these activities are required under state hazardous waste programs, they are not burdened in this ICR. This is reflected in Exhibit 17.

(d6) Discrepancy Reports

As reflected in Exhibit 17, EPA estimates that approximately 25% of manifests accepted by the designated facilities 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 facility will require a discrepancy report under 40 CFR 264.72 or 265.72.

(d7) Rejected Waste and Container Residues

As shown in Exhibit 18, EPA estimates that each year designated facilities will reject a shipment or identify a container residue after the transporter has left the facility' premises for 34,429 hazardous waste shipments received. EPA estimates that each year designated facilities will fully reject or identify a container residue while the transporter is on the facilities' premises for hazardous waste shipments received. EPA also estimates that each year designated facilities will forward shipments to an alternate facility. (As discussed earlier, Exhibit 17 reflects facility burden for submittal of manifests to the national system for these problem shipments.)

⁶³ In other words, Exhibit 17 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 in batch form to the national system.

(d8) Post-Receipt Manifest Data Corrections

Exhibit 19 estimates that each receiving facility (federal and state) will register with the e-Manifest system and have system access for corrections.⁶⁴ The exhibit reflects EPA's estimate that facilities will submit corrections or respond with comments for 30% of all manifests (paper and electronic) accompanying federal and state waste annually.^{65, 66}

(d9) Unmanifested Waste Reports: Completion and Submission

As shown in Exhibit 20, EPA estimates that receiving facilities will need to complete 323 letters for shipments that arrive without a manifest, notifying the Agency of an un-manifested waste shipment.

(d10) Reading the Electronic Manifest System User Guide

Exhibit 22 presents the total annual hour and cost burden to hazardous waste TSDFs in reading the user guide for the Electronic Manifest System. In total, EPA expects each TSDF using the electronic manifests for federal hazardous waste to read the user guide.⁶⁷ The estimated number of TSDFs reading the user guide correlates to the estimated adoption rate of the Electronic Manifest System.

64 All corrections must be made in the e-Manifest system. Before entering a correction, users must establish a system account and comply with 40 CFR Part 3 requirements (e.g., for electronic signatures), as applicable. It is assumed that all receiving facilities will perform these activities and have system access. The ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003), is currently being renewed and will address these activities and requirements for all receiving facilities.

65 In July 2017, EPA spoke with a representative of New York State Department of Environmental Conservation's manifest processing department. The state program collects, reviews, corrects and enters manifest data into their system. He estimated that corrections are needed for at least 30% of forms received by the state. This ICR estimates that generators will make corrections for 2% of manifests, transporters for an additional 2%, and receiving facilities for an additional 30% (34% of all forms). This represents the total annual percentage of manifests that are corrected at the initiation of handlers or at the request of the national system's paper processing center.

66 These corrections are in addition to "significant discrepancies" that facilities must address under 40 CFR 264.72 or 265.72 procedures.

67 This ICR does not burden TSDFs, using electronic manifests for state hazardous waste, for reading the user guide. Such TSDFs perform this activity because of state-specific, broader-in-scope program requirements in the absence of federal requirements to do so.

(d11) Fees for the Electronic Hazardous Waste Manifest Program

Exhibit 21 estimates the annual fees paid by facilities as well as other activities performed in compliance with 40 CFR Part 264 and 265, Subpart FF. The rule sets forth a methodology and requirements for assessing user fees for paper and electronic manifests. The national system will collect fees directly from receiving facilities, taking into account the submittal method and number of forms.

Table 11 estimates that 3,251,970 manifests will be transacted for federal and state waste (electronic and paper manifests) annually. EPA used this estimate as the basis for estimating the annual number of manifests for which fees will be paid. EPA refined the estimate to account for export shipments. Specifically, EPA is not including the tracking of export manifests described in Subpart H of 40 CFR Part 262 in the initial phase of e-Manifest system implementation. As EPA is not accepting the submission of export manifests to the system at this time, the Agency also is not requiring the payment of a fee in connection with export manifests.

Given these considerations, EPA estimates that all electronic manifests in this ICR will track only domestic shipments and a fee will be paid for each electronic manifest. EPA further estimates that 15,120 paper manifests will accompany export shipments annually. EPA will not collect fees for these exports. EPA subtracted these 15,120 paper manifests from the total shown above. As a result, EPA estimates that facilities will pay fees for 3,236,850 paper and electronic manifests annually. Table 13 presents the annual number of manifests for which fees will be paid, by submittal method, as estimated in this ICR.

**Table 13
Annual Submittal Rates and Number Manifests, by Submittal Method***

Submittal Method	3-Year Annual Average Percentage**	Annual Number of Manifests For Which Fees Are Paid
Paper copies	34%	1,088,265
Image files	12%	393,628
Data files and image files	26%	833,565
Electronic	28%	921,392
Total	100%	3,236,850

*Table includes rounding error.

**These average annual percentages are based on the RIA's annual percentages and are calculated in Table 12 of this document. Averages include rounding.

In addition, the RIA sets forth an estimated fee per manifest based on the submittal method.⁶⁸ The fees will be formulated to recover EPA's development and operations/maintenance costs and therefore will vary annually. Table 14 presents the estimated annual user fee per manifest for each submittal method as well as the 3-year average. The table shows that receiving facilities will be charged \$19.62/form for paper copies, \$12.62/form for image files, \$6.65/form for data files and image files, and \$3.78/form for electronic manifests on average annually. Exhibit 21

⁶⁸ Refer to Section 5.5 of the RIA for these estimates.

applies these fees to the total annual number of manifests submitted by receiving facilities shown in Table 13.⁶⁹

Table 14
User Fees Per Manifest, by Submittal Method

Submittal Method	Year 1	Year 2	Year 3	3-Year Average
Paper copies	\$19.48	\$19.56	\$19.81	\$19.62
Image files	\$12.49	\$12.57	\$12.81	\$12.62
Data files and image files	\$6.51	\$6.59	\$6.84	\$6.65
Electronic	\$3.64	\$3.72	\$3.97	\$3.78

Finally, the exhibit estimates the burden to facilities for implementing the informal fee dispute resolution procedures at 40 CFR 264.1316 and 265.1316. EPA estimates that each of the 1,507 receiving facilities will receive 12 monthly invoices annually (18,084 invoices in total). The Agency estimates that facilities will dispute 10% (1,808 disputes). The Agency further estimates that 1% of disputed invoices will be appealed to the Office Director (18 appeals).

⁶⁹ These fees are considered O&M costs for purposes of presentation in Exhibit 21.

EXHIBIT 1

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR REGISTRANT ORGANIZATIONS ^a

	Hours per Registrant				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Registrants	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Read the regulations										
Read the regulations	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	1	1	\$63
Applying to the Registry										
Prepare and submit initial application	0.00	0.25	1.00	0.10	1.35	\$65.64	\$5.31	1	1	\$71
Submit revised initial application to EPA, if requested	0.00	0.10	0.50	0.10	0.70	\$31.86	\$5.31	1	1	\$37
Submit three fully assembled manifests and, if needed, continuation sheets and a	0.00	0.10	0.17	0.10	0.37	\$17.98	\$865.31	1	0	\$883
Submit revised form samples based on EPA comment on the initial samples, if	0.00	0.10	0.17	0.10	0.37	\$17.98	\$865.31	1	0	\$883
Updating General Information in the Approved Application										
Revise and submit the application to EPA, along with an indication or explanation	0.00	0.10	0.17	0.10	0.37	\$17.98	\$0.52	3	1	\$56
Respond to the Agency's concerns, if applicable	0.00	0.10	0.17	0.00	0.27	\$15.65	\$0.00	1	0	\$16
Requesting Approval for a New Tracking Number Suffix										
Submit a proposed tracking number suffix, along with the reason for requesting it	0.00	0.10	0.17	0.10	0.37	\$17.98	\$0.52	0	0	\$0
Requesting Approval for Changes to Printing Specifications or Use of a New Printer										
Submit three samples of the manifest form and/or continuation sheet and, if	0.00	0.10	0.17	0.10	0.37	\$17.98	\$865.31	1	0	\$883
Submit revised manifest form and/or continuation sheet samples to EPA, if	0.00	0.10	0.17	0.10	0.37	\$17.98	\$865.31	1	0	\$883
requested										
Typesetting the Manifest Form Subsequent to its Approval										
Submit three samples of the manifest or continuation sheet to the registry for	0.00	0.00	0.17	0.10	0.27	\$9.48	\$865.31	0	0	\$0
Requesting an Exemption										
Submit documentation to EPA indicating why an exemption is warranted	0.00	0.10	0.17	0.10	0.37	\$17.98	\$0.52	0	0	\$0
Notifying EPA of a Printing Specification Violation										
Notify EPA of duplicated manifest tracking numbers	0.00	0.00	0.25	0.00	0.25	\$10.52	\$2.00	1	0	\$13
Revising the Approved Manifest if Requested by EPA										
Submit revised manifest form samples to EPA, if requested	0.00	0.10	0.17	0.10	0.37	\$17.98	\$865.31	0	0	\$0
Responding to Suspension and Revocation Procedures										
Submit information if requested by EPA	0.00	0.25	0.50	0.00	0.75	\$42.28	\$0.52	0	0	\$0
TOTAL	0.00	varies	varies	varies	varies	varies	varies	varies	4	\$3,788

^a Exhibit contains rounding error.

EXHIBIT 2

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
READING THE REGULATIONS

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Generators	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Read the regulations										
LQGs	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	17,775	22,219	\$1,125,335
TSDFs	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	1,256	1,570	\$79,517
SQGs	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	34,623	43,279	\$2,191,982
TOTAL (LQGs, TSDFs, and SQGs)	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	53,654	67,068	\$3,396,834

^a Exhibit contains rounding error.

EXHIBIT 3

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
COMPLETING THE MANIFEST (WITHOUT ASSISTANCE OF DESIGNATED FACILITIES)

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion: LQGs										
Paper Manifest										
Complete the manifest	0.00	0.00	0.40	0.10	0.50	\$19.15	\$0.55	398,978	199,489	\$7,859,867
Complete the continuation sheet	0.00	0.00	0.19	0.04	0.23	\$8.92	\$0.55	19,949	4,588	\$188,917
Electronic Manifest										
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$4.06	\$0.00	157,735	17,351	\$640,404
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$1.92	\$0.00	7,887	394	\$15,143
Call Help Desk	0.00	0.00	0.50	0.00	0.50	\$21.03	\$2.00	1,732	866	\$39,888
Manifest completion: Commercial TSDFs who are also generators										
Paper Manifest										
Complete the manifest	0.00	0.00	0.43	0.10	0.53	\$20.42	\$0.55	81,789	43,348	\$1,715,115
Complete the continuation sheet	0.00	0.00	0.18	0.04	0.22	\$8.50	\$0.55	4,089	900	\$37,006
Electronic Manifest										
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$4.06	\$0.00	32,335	3,557	\$131,280
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$1.92	\$0.00	1,617	81	\$3,105
Call Help Desk	0.00	0.00	0.50	0.00	0.50	\$21.03	\$2.00	173	87	\$3,985
Manifest completion: Captive TSDFs who are also generators										
Paper Manifest										
Complete the manifest	0.00	0.00	0.43	0.10	0.53	\$20.42	\$0.55	15,727	8,335	\$329,795
Complete the continuation sheet	0.00	0.00	0.18	0.05	0.23	\$8.74	\$0.55	786	181	\$7,302
Electronic Manifest										
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$4.06	\$0.00	6,217	684	\$25,241
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$1.92	\$0.00	311	16	\$597
Call Help Desk	0.00	0.00	0.50	0.00	0.50	\$21.03	\$2.00	354	177	\$8,164
Manifest completion: SQGs										
Paper Manifest										
Complete the manifest	0.00	0.00	0.40	0.08	0.48	\$18.69	\$0.55	59,552	28,585	\$1,145,781
Complete the continuation sheet	0.00	0.00	0.18	0.03	0.21	\$8.27	\$0.55	2,978	625	\$26,266
Electronic Manifest										
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$4.06	\$0.00	122,176	13,439	\$496,035
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$1.92	\$0.00	6,109	305	\$11,729
Call Help Desk	0.00	0.00	0.50	0.00	0.50	\$21.03	\$2.00	6,109	3,054	\$140,687
TOTAL (LQGs, TSDFs, and SQGs) ^b	0.00	0.00	varies	varies	varies	varies	\$0.00	varies	326,062	\$12,826,307

^a Exhibit contains rounding error.

^b Total reflects the number of manifests, i.e. the number of continuation sheets is not reflected.

EXHIBIT 4

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
 COMPLETING THE MANIFEST (WITH ASSISTANCE OF DESIGNATED FACILITIES)

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion: LQGs										
Complete the manifest	0.00	0.00	0.02	0.01	0.03	\$1.07	\$0.00	403,137	12,094	\$431,357
Manifest completion: SQGs										
Complete the manifest	0.00	0.00	0.02	0.01	0.03	\$1.07	\$0.00	726,911	21,807	\$777,795
TOTAL (LQGs and SQGs)	0.00	0.00	0.02	0.01	0.03	\$1.07	\$0.00	varies	33,901	\$1,209,152

^a Exhibit contains rounding error.

EXHIBIT 5

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
 COMPLIANCE WITH STATE PROGRAM REQUIREMENTS

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Phone Calls	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Compliance with State program requirements: LQGs										
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	\$0.00	0	0	\$0
Compliance with State program requirements: TSDFs who are also generators										
Commercial TSDFs										
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	\$0.00	0	0	\$0
Captive TSDFs										
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	\$0.00	0	0	\$0
Compliance with State program requirements: SQGs										
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	\$0.00	0	0	\$0
TOTAL (LQGs, TSDFs, and SQGs)	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00	0	0	\$0

^a Exhibit contains rounding error.

EXHIBIT 6

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest transmittal and recordkeeping: LQGs										
Paper Manifest										
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	\$0.42	\$0.00	687,893	6,879	\$288,915
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	\$2.33	\$0.00	687,893	68,789	\$1,602,791
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.00	687,893	68,789	\$1,602,791
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	\$3.73	\$0.52	20,637	3,302	\$87,707
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	\$3.73	\$0.52	41,274	6,604	\$175,414
Electronic Manifest - PIN/Password										
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$1.26	\$0.00	125,179	3,755	\$157,726
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	72,604	726	\$30,494
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	\$3.22	\$0.00	17,133	2,227	\$55,169
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	\$0.70	\$0.52	2,178	65	\$2,658
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	\$0.70	\$0.52	4,356	131	\$5,314
Electronic Manifest - Digitized Electronic Signature										
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	41,726	417	\$17,525
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	24,201	242	\$10,165
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	\$3.22	\$0.00	5,711	742	\$18,390
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	\$0.70	\$0.52	1,252	38	\$1,527
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	\$0.70	\$0.52	2,504	75	\$3,055
Exports - All Shipments										
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	\$5.83	\$0.10	7,106	1,777	\$42,139
Post-Receipt Manifest Data Corrections										
Submit email (off-line generators)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	8,532	85	\$3,583
Submit a correction or respond with comments	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	19,197	1,536	\$64,502
Subtotal (for LQGs)	0.00	0.00	varies	varies	varies	varies	varies	varies	166,179	\$4,169,865

^a Exhibit contains rounding error.

EXHIBIT 6 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest transmittal and recordkeeping: Commercial TSDFs										
Paper Manifest										
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	\$0.42	\$0.00	81,789	818	\$34,351
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	\$2.33	\$0.00	81,789	8,179	\$190,568
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.00	81,789	8,179	\$190,568
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	\$3.73	\$0.52	2,454	393	\$10,429
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	\$3.73	\$0.52	4,907	785	\$20,855
Electronic Manifest - PIN/Password										
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$1.26	\$0.00	24,251	728	\$30,556
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	24,251	243	\$10,185
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	\$3.22	\$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	\$0.70	\$0.52	728	22	\$889
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	\$0.70	\$0.52	1,455	44	\$1,776
Electronic Manifest - Digitized Electronic Signature										
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	8,084	81	\$3,395
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	8,084	81	\$3,395
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	\$3.22	\$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	\$0.70	\$0.52	243	7	\$296
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	\$0.70	\$0.52	485	15	\$592
Exports - All Shipments										
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	\$5.83	\$0.10	1,210	303	\$7,175
Post-Receipt Manifest Data Corrections										
Submit email (off-line generators)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	0	0	\$0
Submit a correction or respond with comments	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	2,282	183	\$7,669
Subtotal (for Commercial TSDFs)	0.00	0.00	varies	varies	varies	varies	varies	varies	20,061	\$512,699

^a Exhibit contains rounding error.

EXHIBIT 6 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest transmittal and recordkeeping: Captive TSDFs										
Paper Manifest										
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	\$0.42	\$0.00	15,727	157	\$6,605
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	\$2.33	\$0.00	15,727	1,573	\$36,644
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.00	15,727	1,573	\$36,644
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	\$3.73	\$0.52	472	76	\$2,006
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	\$3.73	\$0.52	944	151	\$4,012
Electronic Manifest - PIN/Password										
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$1.26	\$0.00	4,663	140	\$5,875
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	4,663	47	\$1,958
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	\$3.22	\$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	\$0.70	\$0.52	140	4	\$171
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	\$0.70	\$0.52	280	8	\$342
Electronic Manifest - Digitized Electronic Signature										
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	1,554	16	\$653
Provide paper manifest to transporter (only for generators that prepare manifest without TSDF assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	1,554	16	\$653
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	\$3.22	\$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	\$0.70	\$0.52	47	1	\$57
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	\$0.70	\$0.52	93	3	\$113
Exports - All Shipments										
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	\$5.83	\$0.10	454	114	\$2,692
Post-Receipt Manifest Data Corrections										
Submit email (off-line generators)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	1,013	10	\$425
Submit a correction or respond with comments	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	439	35	\$1,475
Subtotal (for Captive TSDFs)	0.00	0.00	varies	varies	varies	varies	varies	varies	3,924	\$100,325

^a Exhibit contains rounding error.

EXHIBIT 6 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
TRANSMITTING THE MANIFEST

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest transmittal and recordkeeping: SQGs										
Paper Manifest										
For Paper Manifest										
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	\$0.42	\$0.00	297,758	2,978	\$125,058
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	\$2.33	\$0.00	297,758	29,776	\$693,776
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.00	297,758	29,776	\$693,776
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	\$3.73	\$0.52	8,933	1,429	\$37,965
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	\$3.73	\$0.52	17,865	2,858	\$75,926
Electronic Manifest - PIN/Password										
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$1.26	\$0.00	184,181	5,525	\$232,068
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	36,836	368	\$15,471
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	\$3.22	\$0.00	183,264	23,824	\$590,111
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	\$0.70	\$0.52	1,105	33	\$1,349
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	\$0.70	\$0.52	2,210	66	\$2,696
Electronic Manifest - Digitized Electronic Signature										
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	61,393	614	\$25,785
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	12,279	123	\$5,157
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	\$3.22	\$0.00	61,088	7,941	\$196,703
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	\$0.70	\$0.52	368	11	\$450
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	\$0.70	\$0.52	737	22	\$899
Exports - All Shipments										
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	\$5.83	\$0.10	6,350	1,588	\$37,656
Reclamation Agreements										
Retain a copy of each reclamation agreement	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.00	4,729	473	\$11,019
Post-Receipt Manifest Data Corrections										
Submit email (off-line generators)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	85,843	858	\$36,054
Submit a correction or respond with comments	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	43,121	3,450	\$144,887
Subtotal (for SQGs)	0.00	0.00	varies	varies	varies	varies	varies	varies	111,713	\$2,926,806
TOTAL (LQGs, TSDFs, and SQGs)	0.00	0.00	varies	varies	varies	varies	varies	varies	301,877	\$7,709,695

^a Exhibit contains rounding error.

EXHIBIT 7

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
UNDELIVERABLE SHIPMENTS

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Undeliverable shipments (LQGs, TSDFs and SQGs)										
Undeliverable shipments to TSDF or alternate TSDF										
Provide instructions to transporter to revise the manifest	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	20,046	1,604	\$67,353
Undeliverable shipments to next transporter										
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	\$3.36	\$0.00	200,456	16,036	\$673,531
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	\$2.28	\$0.00	15,711	471	\$35,822
TOTAL (LQGs, TSDFs, and SQGs)	varies	0.00	varies	0.00	varies	varies	\$0.00	varies	18,111	\$776,706

^a Exhibit contains rounding error.

EXHIBIT 8

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
REJECTED WASTE AND CONTAINER RESIDUES

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Rejected waste and container residues										
Paper Manifest										
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	\$0.42	\$0.00	247	2	\$104
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	\$0.42	\$0.00	247	2	\$104
Provide the transporter a copy of the manifest	0.00	0.00	0.17	0.00	0.17	\$7.15	\$0.00	494	84	\$3,532
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	\$3.50	\$0.52	494	74	\$1,986
Retain a copy	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	494	84	\$1,956
Electronic Manifest - PIN/Password										
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	\$0.42	\$0.00	73	1	\$31
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	\$0.42	\$0.00	73	1	\$31
Electronic Manifest - Digitized Electronic Signature										
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	\$0.42	\$0.00	24	0	\$10
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	\$0.42	\$0.00	24	0	\$10
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	688	248	\$7,764

^a Exhibit contains rounding error.

EXHIBIT 9

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
DEVELOPING EXCEPTION REPORTS

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Reports	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Exception report completion, submission, and recordkeeping: LQGs										
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	\$65.86	\$0.62	9,599	10,559	\$638,141
Keep a copy of each exception report	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.10	9,599	960	\$23,326
Exception report completion, submission, and recordkeeping: Commercial TSDFs										
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	\$65.86	\$0.62	1,141	1,255	\$75,853
Keep a copy of each exception report	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.10	1,141	114	\$2,773
Exception report completion, submission, and recordkeeping: Captive TSDFs										
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	\$65.86	\$0.62	219	241	\$14,559
Keep a copy of each exception report	0.00	0.00	0.00	0.10	0.10	\$2.33	\$0.10	219	22	\$532
Exception report completion, submission, and recordkeeping: SQGs										
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	\$31.77	\$0.62	4,155	2,078	\$134,580
TOTAL (LQGs, TSDFs, and SQGs)	0.00	varies	varies	varies	varies	varies	varies	varies	15,229	\$889,764

^a Exhibit contains rounding error.

EXHIBIT 10

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
READING THE REGULATIONS

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Transporters	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Read the regulations										
Transporters	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	496	620	\$31,402
TOTAL	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	496	620	\$31,402

^a Exhibit contains rounding error.

EXHIBIT 11

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion, transmittal and recordkeeping: Transporters										
Manifest requirements for highway transporters										
Paper Manifest										
Sign and date the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	994,377	9,944	\$417,638
Return a signed copy of the manifest to the generator	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	994,377	9,944	\$417,638
Ensure that the manifest (or other shipping paper) accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$5.47	\$0.00	994,377	129,269	\$5,439,242
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	\$0.42	\$0.00	994,377	9,944	\$417,638
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	994,377	169,044	\$3,937,733
Give remaining copies of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	994,377	9,944	\$417,638
Electronic Manifest - PIN/Password										
Call Help Desk	0.00	0.00	0.75	0.00	0.75	\$31.55	\$2.00	4,178	3,133	\$140,163
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	\$1.26	\$0.00	635,507	19,065	\$800,739
Sign on behalf of generator, if applicable	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	152,371	1,524	\$63,996
Place paper manifest copy on truck	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	635,507	6,355	\$266,913
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	\$0.42	\$0.00	635,507	6,355	\$266,913
Electronic Manifest - Digitized Electronic Signature										
Call Help Desk	0.00	0.00	0.75	0.00	0.75	\$31.55	\$2.00	1,393	1,044	\$46,721
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	\$0.42	\$0.00	211,835	2,118	\$88,971
Sign on behalf of generator, if applicable	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	50,790	508	\$21,332
Place paper manifest copy on truck	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	211,835	2,118	\$88,971
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	\$0.42	\$0.00	211,835	2,118	\$88,971
Give copy of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	211,835	2,118	\$88,971

^a Exhibit contains rounding error.

EXHIBIT 11 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion, transmittal and recordkeeping: Transporters										
Manifest requirements for person delivering to initial water transporters										
Paper Manifest										
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	\$0.23	\$0.00	32,781	328	\$7,540
Forward the manifest to the designated facility	0.00	0.00	0.00	0.16	0.16	\$3.73	\$0.52	32,781	5,245	\$139,319
Electronic Manifest - PIN/Password										
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	\$0.23	\$0.00	20,950	210	\$4,819
Electronic Manifest - Digitized Electronic Signature										
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	\$0.23	\$0.00	6,983	70	\$1,606
Forward the manifest to the designated facility	0.00	0.00	0.00	0.16	0.16	\$3.73	\$0.52	6,983	1,117	\$29,678
Manifest requirements for water (bulk shipment) transporters										
Paper Manifest										
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	\$5.47	\$0.00	32,781	4,262	\$179,312
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	\$0.42	\$0.00	32,781	328	\$13,768
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	\$0.42	\$0.00	32,781	328	\$13,768
Retain a copy of the manifest or shipping paper	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	32,781	5,573	\$129,813
Electronic Manifest - PIN/Password										
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	\$5.47	\$0.00	20,950	2,724	\$114,597
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	\$0.42	\$0.00	20,950	210	\$8,799
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	\$0.42	\$0.00	20,950	210	\$8,799
Electronic Manifest - Digitized Electronic Signature										
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	\$5.47	\$0.00	6,983	908	\$38,197
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	\$0.42	\$0.00	6,983	70	\$2,933
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	\$0.42	\$0.00	6,983	70	\$2,933

^a Exhibit contains rounding error.

EXHIBIT 11 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion, transmittal and recordkeeping: Transporters										
Manifest requirements for rail transporters										
Paper Manifest										
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	\$0.42	\$0.00	65,564	656	\$27,537
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	\$3.73	\$0.52	65,564	10,490	\$278,647
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	\$5.47	\$0.00	65,564	8,523	\$358,635
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	\$0.42	\$0.00	65,564	656	\$27,537
Retain a copy of the manifest and/or rail shipping paper	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	65,564	11,146	\$259,633
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	\$0.42	\$0.00	65,564	656	\$27,537
Electronic Manifest - PIN/Password										
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	\$0.42	\$0.00	41,902	419	\$17,599
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	\$5.47	\$0.00	41,902	5,447	\$229,204
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	\$0.42	\$0.00	41,902	419	\$17,599
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	\$0.42	\$0.00	41,902	419	\$17,599
Electronic Manifest - Digitized Electronic Signature										
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	\$0.42	\$0.00	13,967	140	\$5,866
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	\$5.47	\$0.00	13,967	1,816	\$76,399
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	\$0.42	\$0.00	13,967	140	\$5,866
Before accepting hazardous waste from a rail transporter, sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	13,967	140	\$5,866

^a Exhibit contains rounding error.

EXHIBIT 11 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion, transmittal and recordkeeping: Transporters										
Manifest requirements for transporters who transport waste into and/or out of the U.S.										
Paper Manifest										
Complete the manifest in the International Shipments block	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	15,120	151	\$6,350
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	15,120	2,570	\$59,875
Return a signed copy of the manifest to the generator	0.00	0.00	0.00	0.01	0.01	\$0.23	\$0.00	15,120	151	\$3,478
Send a copy to e-Manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.49	15,120	151	\$13,759
If applicable, provide a manifest copy to U.S. Customs Official at the point of departure from the US	0.00	0.00	0.13	0.00	0.13	\$5.47	\$0.00	15,120	1,966	\$82,706
Electronic Manifest - PIN/Password										
Complete the manifest in the International Shipments block	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	0	0	\$0
Electronic Manifest - Digitized Electronic Signature										
Complete the manifest in the International Shipments block	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	0	0	\$0
Manifest requirements for transporters who transport waste pursuant to a reclamation agreement										
Record the waste information on a log or shipping paper	0.00	0.25	0.75	0.00	1.00	\$52.80	\$0.00	4,729	4,729	\$249,691
Carry the record when transporting waste to the reclamation facility	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	4,729	47	\$1,986
Retain the records	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	4,729	804	\$18,727

^a Exhibit contains rounding error.

EXHIBIT 11 (CONTINUED)

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
 COMPLETING AND TRANSMITTING THE MANIFEST

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Undeliverable shipments										
Undeliverable shipments to TSDF or alternate TSDF (263.21(b)(1))										
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	\$3.36	\$2.00	20,046	1,604	\$107,444
Undeliverable shipments to next designated transporter (263.21(b)(2))										
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	\$3.36	\$2.00	200,456	16,036	\$1,074,443
Undeliverable shipments to next designated transporter (263.21(b)(3))										
Establish contract authority for transporter to revise the manifest without generator instruction	0.02	0.02	0.10	0.03	0.17	\$8.62	\$0.00	83	14	\$715
Revise the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	200,456	2,005	\$84,191
Rejected waste and container residues										
Paper Manifest										
For a partial load rejection or for regulated quantities of container residues, obtain a copy of the original manifest, retain a copy, give remaining copies to rejecting facility, and if forwarding or returning the rejection or residue, obtain a new	0.00	0.00	0.10	0.00	0.10	\$4.21	\$0.00	2,468	247	\$10,390
For a full load rejection, obtain a copy of the original manifest, retain a copy, give a copy to rejecting facility, or if the original manifest is not used, obtain a new manifest and comply with applicable requirements	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	24,675	247	\$10,364
Electronic Manifest - PIN/Password										
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	\$0.42	\$0.00	732	7	\$307
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	\$0.42	\$0.00	7,316	73	\$3,073
Electronic Manifest - Digitized Electronic Signature										
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	\$0.42	\$0.00	244	2	\$102
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	\$0.42	\$0.00	2,438	24	\$1,024
TOTAL	varies	varies	varies	varies	varies	varies	varies	varies	478,093	\$16,790,218

^a Exhibit contains rounding error.

EXHIBIT 12

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
REPLACEMENT MANIFESTS

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Replacement manifests										
Reproduce sufficient copies of the manifest and complete them, as specified	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.30	8,473	678	\$31,011
Obtain a new manifest and complete it, as specified	0.00	0.00	0.40	0.00	0.40	\$16.82	\$0.55	0	0	\$0
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	8,473	1,440	\$33,553
Give remaining copies of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	8,473	85	\$3,559
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	2,203	\$68,123

^a Exhibit contains rounding error.

EXHIBIT 13

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TRANSPORTERS ^a
POST-RECEIPT MANIFEST DATA CORRECTIONS

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Submittals	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Post-receipt manifest data corrections										
Submit email (off-line transporters)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	0	0	\$0
Submit a correction or respond with comments	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	40,091	3,207	\$134,706
TOTAL	0.00	0.00	varies	0.00	varies	varies	\$0.00	varies	3,207	\$134,706

^a Exhibit contains rounding error.

EXHIBIT 14

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
NOTIFYING OF DISCHARGE OF HAZARDOUS WASTE

	Hours per Transporter				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Notifications	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Notification of discharge of hazardous waste: Transporters										
Notify local authorities	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	750	938	\$47,483
Notification of discharge of hazardous waste: Water (bulk shipment) Transporters										
Notify NRC, or a pre-designated OSC, of the discharge	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	75	94	\$4,748
TOTAL	0.00	varies	1.00	0.00	1.25	\$63.31	\$0.00	varies	1,032	\$52,231

^a Exhibit contains rounding error.

EXHIBIT 15

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

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of TSDFs	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Read the regulations										
TSDFs	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	412	515	\$26,084
TOTAL	0.00	0.25	1.00	0.00	1.25	\$63.31	\$0.00	412	515	\$26,084

^a Exhibit contains rounding error.

EXHIBIT 16

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

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion: Designated TSDFs/Receiving Facilities										
Paper Manifest										
Complete the manifest	0.00	0.00	0.43	0.10	0.53	\$20.42	\$0.55	527,121	279,374	\$11,053,728
Complete continuation sheets	0.00	0.00	0.18	0.04	0.22	\$8.50	\$0.55	26,356	5,798	\$238,522
Electronic Manifest										
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$4.06	\$0.00	602,927	66,322	\$2,447,884
Complete continuation sheets	0.00	0.00	0.04	0.01	0.05	\$1.92	\$0.00	30,146	1,507	\$57,880
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	353,001	\$13,798,014

^a Exhibit contains rounding error.

EXHIBIT 17
 ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
 TRANSMITTING THE MANIFEST AND REPORTING TO EPA

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests/ Respondents	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion, transmittal and recordkeeping: Designated TSDFs/Receiving Facilities										
Paper Manifest										
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	0.01	\$0.42	\$0.00	1,379,899	13,799	\$579,558
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	1,379,899	27,598	\$1,159,115
Note any discrepancies on each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	344,975	27,598	\$1,159,116
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	0.17	\$7.15	\$0.00	1,379,899	234,583	\$9,866,280
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	0.15	\$3.50	\$0.52	1,379,899	206,985	\$5,547,195
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	6.00	6.00	\$139.80	\$6.65	369	2,213	\$54,027
Within 30 days of delivery, transmit image files of paper manifests to e-Manifest System	0.00	0.00	0.00	6.00	6.00	\$139.80	\$0.00	130	781	\$18,203
Within 30 days of delivery, transmit data file and image file of paper manifest to e-Manifest System	0.00	0.00	0.00	6.50	6.50	\$151.45	\$0.00	282	1,834	\$42,726
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	0.17	\$3.96	\$0.00	1,379,899	234,583	\$5,464,401
Electronic Manifest - PIN/Password										
Call Help Desk	0.00	0.00	1.00	0.00	1.00	\$42.06	\$2.00	1,582	1,582	\$69,719
Enter the name of the person accepting the waste, enter PIN/Password, and answer challenge question	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	691,043	6,910	\$290,238
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	691,043	13,821	\$580,476
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	172,761	13,821	\$580,477
Electronic Manifest - Digitized Electronic Signature										
Call Help Desk	0.00	0.00	1.00	0.00	1.00	\$42.06	\$2.00	527	527	\$23,240
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	230,347	2,303	\$96,746
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	230,347	4,607	\$193,491
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	57,587	4,607	\$193,492
Compliance with State program requirements: TSDFs who are also generators										
Commercial TSDFs										
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	\$0.00	0	0	\$0
Captive TSDFs										
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	\$0.00	0	0	\$0
Discrepancy report completion and submission: Designated TSDF/Receiving Facilities										
Attempt to reconcile any discrepancies	0.00	0.00	0.08	0.00	0.08	\$3.36	\$2.00	575,322	46,026	\$3,083,726
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	0.37	\$17.98	\$0.62	9,205	3,406	\$171,213
TOTAL	0.00	varies	varies	varies	varies	varies	varies	varies	847,584	\$29,173,439

^a Exhibit contains rounding error.

EXHIBIT 18
 ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests/ Respondents	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Rejected waste and container residues										
Rejection of Waste after the Transporter Leaves the Facility										
Paper Manifest										
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	0.01	\$0.42	\$0.00	24,675	247	\$10,364
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	24,675	494	\$20,727
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	0.17	\$7.15	\$0.00	24,675	4,195	\$176,426
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	0.16	\$3.73	\$0.52	24,675	3,948	\$104,869
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	0.08	\$3.36	\$2.00	24,675	1,974	\$132,258
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	0.53	\$20.42	\$0.00	24,675	13,078	\$503,864
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	0.01	\$0.42	\$0.00	24,675	247	\$10,364
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	0.02	\$0.84	\$0.00	24,675	494	\$20,727
Re-sign and date the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	24,675	247	\$10,364
Retain the amended manifest for at least three years from the date of the amendment	0.00	0.00	0.00	0.17	0.17	\$3.96	\$0.00	24,675	4,195	\$97,713
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	0.16	\$3.73	\$0.52	24,675	3,948	\$104,869
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	6.00	6.00	\$139.80	\$6.65	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	6.00	\$139.80	\$0.00	0	0	\$0
Within 30 days of delivery, transmit data file and image file of paper manifest to e-Manifest System	0.00	0.00	0.00	12.00	12.00	\$279.60	\$0.00	0	0	\$0

^a Exhibit contains rounding error.

EXHIBIT 18 (CONTINUED)
 ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Rejected waste and container residues										
Electronic Manifest - PIN/Password										
Enter the name of the person accepting the waste, enter PIN/Password, and answer challenge question	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	7,316	73	\$3,073
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	7,316	146	\$6,145
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	0.08	\$3.36	\$2.00	7,316	585	\$39,214
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	0.09	\$3.79	\$0.00	7,316	658	\$27,728
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	0.01	\$0.42	\$0.00	7,316	73	\$3,073
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	0.02	\$0.84	\$0.00	7,316	146	\$6,145
Enter PIN/Password and answer challenge question	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	7,316	73	\$3,073
Electronic Manifest - Digitized Electronic Signature										
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	2,438	24	\$1,024
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	2,438	49	\$2,048
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	0.08	\$3.36	\$2.00	2,438	195	\$13,068
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	0.09	\$3.79	\$0.00	2,438	219	\$9,240
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	0.01	\$0.42	\$0.00	2,438	24	\$1,024
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	0.02	\$0.84	\$0.00	2,438	49	\$2,048
Re-sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	2,438	24	\$1,024

^a Exhibit contains rounding error.

EXHIBIT 18 (CONTINUED)
 ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Rejected waste and container residues										
Rejection of Waste while the Transporter Remains Present at the Facility										
Paper Manifest										
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	0.01	\$0.42	\$0.00	24,675	247	\$10,364
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	0.08	\$3.36	\$2.00	24,675	1,974	\$132,258
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	24,675	1,974	\$82,908
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	0.17	\$3.96	\$0.00	24,675	4,195	\$97,713
Give the remaining copies back to the transporter	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	24,675	247	\$10,364
Electronic Manifest - PIN/Password										
Enter the name of the person accepting the waste, enter PIN/Password, and	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	7,316	73	\$3,073
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	0.08	\$3.36	\$2.00	7,316	585	\$39,214
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	7,316	585	\$24,582
Electronic Manifest - Digitized Electronic Signature										
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	2,438	24	\$1,024
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	0.08	\$3.36	\$2.00	2,438	195	\$13,068
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	2,438	195	\$8,192

^a Exhibit contains rounding error.

EXHIBIT 18 (CONTINUED)
 ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
 REJECTED WASTE AND CONTAINER RESIDUES

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest completion, transmittal and recordkeeping by Alternate TSDf/Receiving Facilities										
Paper Manifest										
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	0.01	\$0.42	\$0.00	48,856	489	\$20,520
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	48,856	977	\$41,039
Note any discrepancies on each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	12,214	977	\$41,039
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	0.17	\$7.15	\$0.00	48,856	8,306	\$349,320
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	0.16	\$3.73	\$0.52	48,856	7,817	\$207,638
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	6.00	6.00	\$139.80	\$6.65	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	6.00	\$139.80	\$0.00	0	0	\$0
Within 30 days of delivery, transmit data file and image file of paper manifest to e-Manifest System	0.00	0.00	0.00	12.00	12.00	\$279.60	\$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	0.17	\$3.96	\$0.00	48,856	8,306	\$193,470
Electronic Manifest - PIN/Password										
Enter the name of the person accepting the waste, enter PIN/Password, and answer challenge question	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	14,486	145	\$6,084
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	14,486	290	\$12,168
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	3,622	290	\$12,170
Electronic Manifest - Digitized Electronic Signature										
Enter the name of the person accepting the waste and sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	4,828	48	\$2,028
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.84	\$0.00	4,828	97	\$4,056
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	1,207	97	\$4,056
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	73,538	\$2,626,820

^a Exhibit contains rounding error.

EXHIBIT 19
ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
POST-RECEIPT MANIFEST DATA CORRECTIONS

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Submittals	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Post-receipt manifest data corrections										
Submit email (off-line facilities)	0.00	0.00	0.01	0.00	0.01	\$0.42	\$0.00	0	0	\$0
Submit a correction or respond with comments	0.00	0.00	0.08	0.00	0.08	\$3.36	\$0.00	975,591	78,047	\$3,277,986
TOTAL	0.00	0.00	varies	0.00	varies	varies	\$0.00	varies	78,047	\$3,277,986

^a Exhibit contains rounding error.

EXHIBIT 20
ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
UNMANIFESTED WASTE REPORTS

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Shipments	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Unmanifested waste report: completion and submission										
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	2.00	\$96.21	\$0.62	323	646	\$31,276
TOTAL	0.00	0.50	1.00	0.50	2.00	\$96.21	\$0.62	323	646	\$31,276

^a Exhibit contains rounding error.

EXHIBIT 21
ESTIMATED ANNUAL HOUR AND COST BURDEN FOR DESIGNATED TREATMENT, STORAGE, AND DISPOSAL FACILITIES (TSDFs)/RECEIVING FACILITIES) a
FEES FOR THE ELECTRONIC HAZARDOUS WASTE MANIFEST PROGRAM (TSDf/RECEIVING FACILITIES) a

	Hours per Facility				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Manifests/ Respondents	Total Hours	Total Cost
	Legal @ \$100.86/hr	Managerial @ \$85.00/hr	Technical @ \$42.06/hr	Clerical @ \$23.30/hr						
Manifest transactions subject to fees										
Paper Manifest										
Pay fees for paper manifests	0.00	0.00	0.00	0.00	0.00	\$0.00	\$19.62	1,088,265	0	\$21,351,759
Pay fees for image files of paper manifest	0.00	0.00	0.00	0.00	0.00	\$0.00	\$12.62	393,628	0	\$4,967,585
Pay fees for data files and image files of paper manifests	0.00	0.00	0.00	0.00	0.00	\$0.00	\$6.65	833,565	0	\$5,543,207
Electronic Manifest										
Pay fees for electronic manifests	0.00	0.00	0.00	0.00	0.00	\$0.00	\$3.78	921,392	0	\$3,482,860
Informal fee dispute resolution										
Contact system's billing representatives and provide specified information	0.00	1.00	2.00	1.00	4.00	\$192.42	\$0.00	1,808	7,234	\$347,972
Provide specified information to appeal the billing representative's decision if applicable	0.00	1.00	2.00	1.00	4.00	\$192.42	\$0.00	18	72	\$3,480
TOTAL	0.00	varies	varies	varies	varies	varies	varies	varies	7,306	\$35,696,863

^a Exhibit contains rounding error.

EXHIBIT 22
 ESTIMATED LABOR HOUR AND COST
 BURDEN FOR READING THE ELECTRONIC
 MANIFEST USER GUIDE

Legal @ \$100.86/hr Managerial @ \$85.00/hr Technical @ \$42.06/hr Clerical @ \$23.30/hr Hours/ Respondent Labor Cost/ Respondent O&M Costs/ Respondent Number of Entities

Reading the eManifest User Guide								
Generators	0.00	0.50	1.50	0.00	2.00	\$105.59	\$0.00	53654
Transporters	0.00	0.50	1.50	0.00	2.00	\$105.59	\$0.00	496
TSDFs	0.00	0.50	1.50	0.00	2.00	\$105.59	\$0.00	412
TOTAL (Generators, Transporters and TSDFs)	0.00	0.50	1.50	0.00	2.00	\$105.59	\$0.00	54562

EXHIBIT 22 (Continued)
 ESTIMATED LABOR HOUR AND COST
 BURDEN FOR READING THE ELECTRONIC
 MANIFEST USER GUIDE

Adoption rate - Year 1 Number adopted - Year 1 Year 1 Hours Year 1 Labor Cost Adoption rate - Year 2 Number adopted - Year 2 Year 2 Hours Year 2 Labor Cost Adoption rate - Year 3 Number adopted - Year 3 Year 3 Hours Year 3 Labor Cost

Reading the eManifest User Guide												
Generators	5%	2682.7	5365.4	\$566,533	25%	13413.5	26827	\$2,832,663	55%	29509.7	59019	\$6,231,858
Transporters	5%	24.8	49.6	\$5,237	25%	124	248	\$26,186	55%	272.8	545.6	\$57,610
TSDFs	5%	20.6	41.2	\$4,350	25%	103	206	\$21,752	55%	226.6	453.2	\$47,853
TOTAL (Generators, Transporters and TSDFs)	5%	2728.1	5456.2	\$576,120	25%	13640.5	27281	\$2,880,601	55%	30009.1	60018	\$6,337,322

EXHIBIT 22 (Continued)
 ESTIMATED LABOR HOUR AND COST
 BURDEN FOR READING THE ELECTRONIC
 MANIFEST USER GUIDE

Total Hours Total Labor Costs Three Year Average Hours Three Year Average Labor Costs

Reading the eManifest User Guide				
TOTALS	92755	\$9,794,043	30918	\$3,264,681

EXHIBIT 23

TOTAL ANNUAL RESPONDENT HOUR AND COST BURDEN BY TYPE OF RESPONDENT AND MANIFESTING ACTIVITY ^a

	Total Hourly Burden	Total Annual Capital Costs	Total Annual O&M Costs	Total Annual Labor Costs	Total Annual Costs
Registrant Organizations					
Reading the regulations	1	\$0	\$0	\$63	\$63
Applying to the registry	2	\$0	\$1,740	\$134	\$1,874
Updating general information in the approved application	1	\$0	\$2	\$70	\$72
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	\$1,730	\$36	\$1,766
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	\$11	\$13
Revising the approved manifest if requested by EPA	0	\$0	\$0	\$0	\$0
Responding to suspension and revocation procedures	0	\$0	\$0	\$0	\$0
Subtotal (Registrant Organizations)	4	\$0	\$3,474	\$314	\$3,788
Generators (LQGs, SQGs, TSDFs acting as generators)					
Reading the regulations	67,068	\$0	\$0	\$3,396,834	\$3,396,834
Manifest completion (without assistance of designated TSDF)	326,062	\$0	\$337,854	\$12,488,453	\$12,826,307
Manifest completion (with assistance of designated TSDF)	33,901	\$0	\$0	\$1,209,152	\$1,209,152
Compliance with State program requirements	0	\$0	\$0	\$0	\$0
Manifest transmittal and recordkeeping	301,877	\$0	\$61,659	\$7,648,036	\$7,709,695
Undeliverable shipments	18,111	\$0	\$0	\$776,706	\$776,706
Rejected waste and container residues	248	\$0	\$257	\$7,507	\$7,764
Exception report completion, submission, and recordkeeping	15,229	\$0	\$10,466	\$879,298	\$889,764
Read eManifest User Guide	30,404	\$0	\$0	\$3,210,351	\$3,210,351
Subtotal (Generators)	792,900	\$0	\$410,236	\$29,616,337	\$30,026,573
Transporters					
Reading the regulations	620	\$0	\$0	\$31,402	\$31,402
Manifest completion, transmittal, and recordkeeping (domestic + imports + exports)	457,834	\$0	\$73,319	\$15,424,846	\$15,498,165
Undeliverable shipments	19,659	0	\$441,003	\$825,790	\$1,266,793
Rejected waste and container residues	600	\$0	\$0	\$25,260	\$25,260
Replacement manifests	2,203	\$0	\$2,542	\$65,581	\$68,123
Post-receipt manifest data corrections	3,207	\$0	\$0	\$134,706	\$134,706
Notification of discharge of hazardous waste	1,032	\$0	\$0	\$52,231	\$52,231
Read eManifest User Guide	281	\$0	\$0	\$29,678	\$29,678
Subtotal (Transporters)	485,436	\$0	\$516,864	\$16,589,494	\$17,106,358
Designated TSDF/Receiving Facilities					
Reading the regulations	515	\$0	\$0	\$26,084	\$26,084
Manifest completion (assisting the generators)	353,001	\$0	\$304,413	\$13,493,601	\$13,798,014
Manifest transmittal and recordkeeping (domestic + imports)	798,152	\$0	\$724,221	\$25,194,279	\$25,918,500
Compliance with State program requirements	0	\$0	\$0	\$0	\$0
Discrepancy report completion and submission	49,432	\$0	\$1,156,351	\$2,098,588	\$3,254,939
Rejected waste and container residues	73,538	\$0	\$188,783	\$2,438,037	\$2,626,820
Post-receipt manifest data corrections	78,047	\$0	\$0	\$3,277,986	\$3,277,986
Unmanifested waste report completion and submission	646	\$0	\$200	\$31,076	\$31,276
Fees for the electronic hazardous waste manifest program	7,306	\$0	\$35,345,411	\$351,452	\$35,696,863
Read eManifest User Guide	233	\$0	\$0	\$24,652	\$24,652
Subtotal (Designated TSDF/Receiving Facilities)	1,360,870	\$0	\$37,719,379	\$46,935,755	\$84,655,134
Annualized Capital Costs					
Paper storage (file cabinets)	--	\$134,140	--	--	\$134,140
Subtotal (Capital Costs)	--	\$134,140	--	--	\$134,140

EXHIBIT 24
TOTAL ANNUAL AGENCY HOUR AND COST BURDEN ^a

	Hours per Agency Respondent					Hours/ Respondent	Labor Cost/ Respondent	Capital Costs/ Respondent	O&M Costs/ Respondent	Number of Activities	Total Hours	Total Cost
	Legal @ \$89.96/hr	Managerial @ \$79.38/hr	Technical @ \$57.11/hr	Clerical @ \$24.37/hr	Contractor @ \$160.00/hr							
Registrant Organizations												
Applying to the registry												
Review initial application	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1	1	\$31
Notify registrant of EPA's decision regarding its application	0.00	0.00	0.00	0.10	0.00	0.10	\$2.44	\$0.00	\$0.52	1	0	\$3
Review revised application	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1	1	\$31
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	\$2.44	\$0.00	\$5.31	1	0	\$7
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1	1	\$31
Notify registrant of EPA's decision regarding its manifest form samples	0.00	0.00	0.00	0.10	0.00	0.10	\$2.44	\$0.00	\$0.52	1	0	\$3
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1	1	\$31
Updating General Information in the Approved Application												
Review revised application	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	3	2	\$92
Review documentation submitted by registrant	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1	1	\$31
Requesting Approval for a New Tracking Number Suffix												
Provide new tracking number suffix to registrant	0.00	0.10	0.25	0.10	0.00	0.45	\$24.65	\$0.00	\$0.52	0	0	\$0
Requesting Approval for Changes to Printing Specifications or Use of a New Printer												
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1	1	\$31
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1	1	\$31
Typesetting the Manifest Form Subsequent to its Approval												
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	0	0	\$0
Requesting an Exemption												
Review documentation submitted by registrant	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	0	0	\$0
Notifying EPA of a Printing Specification Violation												
Receive notification that a serious violation of a printing specification	0.00	0.20	0.80	0.00	0.00	1.00	\$61.56	\$0.00	\$0.00	1	1	\$62
Revising the Approved Manifest if Requested by EPA												
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	0	0	\$0
Responding to Suspension and Revocation Procedures												
Review documentation submitted by registrant	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	0	0	\$0

EXHIBIT 24 (CONTINUED)
TOTAL ANNUAL AGENCY HOUR AND COST BURDEN ^a

	Hours per Agency Respondent					Hours/ Respondent	Labor Cost/ Respondent	Capital Costs/ Respondent	O&M Costs/ Respondent	Number of Activities	Total Hours	Total Cost
	Legal @ \$89.96/hr	Managerial @ \$79.38/hr	Technical @ \$57.11/hr	Clerical @ \$24.37/hr	Contractor @ \$160.00/hr							
e-Manifest System												
Develop, operate and maintain e-Manifest system	5,000.00	5,000.00	10,000.00	5,000.00	159,300.00	184,300.00	\$27,027,650.00	\$3,947,958.00	\$3,947,958.00	1	184,300	\$34,923,566
For Generators												
Exception report												
Review exception reports: LQGs	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	9,599	4,800	\$295,457
Review exception reports: Commercial TSDFs	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	1,141	571	\$35,120
Review exception reports: Captive TSDFs	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	219	110	\$6,741
Review exception reports: SQGs	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	4,155	2,078	\$127,891
For Transporters												
Notification of discharge												
Receive notifications of discharge	0.00	0.20	0.80	0.00	0.00	1.00	\$61.56	\$0.00	\$0.00	75	75	\$4,617
For Designated Facilities												
Import Manifests												
Receive import manifests	0.00	0.00	0.10	0.00	0.00	0.10	\$5.71	\$0.00	\$0.00	20,046	2,005	\$114,463
Discrepancy report												
Review designated facility discrepancy reports	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	9,205	4,603	\$283,330
Unmanifested waste report												
Review designated facility unmanifested waste reports	0.00	0.10	0.40	0.00	0.00	0.50	\$30.78	\$0.00	\$0.00	323	162	\$9,942
TOTAL: AGENCY	0.00	varies	varies	varies	varies	varies	varies	varies	varies	varies	198,714	\$35,801,511

^a Exhibit contains rounding error.

Three Year Burden 596,142 \$107,404,533

6E. Bottom Line Burden Hours and Cost

Respondent Tally

Exhibit 23 shows the total annual hour and cost burden to respondents. As shown in the exhibit, EPA estimates the annual respondent burden to be 2,639,210 hours and \$131,925,993. The bottom line burden to respondents over 3 years is estimated to be 7,917,630 hours and \$395,777,979.

Agency Tally

Exhibit 24 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 198,714 hours and \$35,801,511. The bottom line burden to the Agency over 3 years is estimated to be 596,142 hours and \$107,404,533.

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 (0801.22) estimates an annual respondent burden of 2,639,210 hours, which is an 834,367-hour decrease from the currently approved ICR.

- The adjustments due to Agency discretion result from the fact that EPA revised the number of generators preparing manifests for federal hazardous waste shipments as well as the number of manifests per generator in this ICR. Whereas ICR 0801.20 estimates 161,720 generators preparing manifests for federal wastes, this ICR estimates 53,654 generators preparing manifests for federal waste.⁷⁰

Table 15 compares these estimates. In particular, the number of SQGs shipping federal waste decreased significantly. This SQG estimate was taken from the RIA, which estimates the size of the SQG universe based on the estimation approaches and results in EPA's 2015 Improvements to the Hazardous Waste Generator Regulatory Program proposed rule RIA.⁷¹ In that RIA, EPA pioneered two methodologies to estimate active SQGs under the federal program; both estimates use the data files that underpin the RCRA Hazardous Waste Report.

In total, ICR 0801.20 estimates that 1.8 million manifests are transacted for federal waste annually whereas this ICR estimates 1.5 million manifests annually, a decrease of approximately 300,000 forms.

⁷⁰ 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 facilities) in the manifest cycle.

⁷¹ The 2015 Improvements to the Hazardous Waste Generator Regulatory Program proposed rule RIA can be found in the docket for that rulemaking at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-RCRA-2012-0121-0002>.

Table 15
Annual Number of Generators Preparing Manifests for Federal Hazardous Waste in ICR

Generators	ICR 0801.20	ICR 0801.22
LQGs	14,381	17,775
Commercial TSDFs*	367	412
Captive TSDFs*	1,101	844
SQGs (without Reclamation Agreements)**	145,871	34,623***
Total	161,720	53,654

*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.

** 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 in this ICR was taken from the RIA, which estimates the size of the SQG universe based on the estimation approaches and results in EPA’s 2015 Improvements to the Hazardous Waste Generator Regulatory Program proposed rule RIA.

- 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. The RIA estimates an adoption rate for the e-Manifest of 28% on average annually during the 3-year life of this ICR. Therefore, EPA estimates that 28% of manifests accompanying federal waste will be transacted electronically in ICR 801.22 on average annually. The RIA 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.⁷² This ICR reflects these effects, where appropriate.

These savings are partially offset, however, because the e-Manifest Act extends the scope of the e-Manifest program to wastes subject to manifest tracking under state law. As such, the scope of this ICR was broadened to include electronic manifests accompanying state hazardous waste.⁷³ In addition to the 1.5 million paper and electronic manifests accompanying federal wastes, this ICR estimates burden for almost 500,000 electronic manifests for state wastes to be transacted, for a total of about 2 million manifests annually. The final fee rule also adds some requirements for paper and electronic manifests (e.g., post-receipt correction of manifest data).

Further, ICR 801.22 estimates user fees for paper and electronic manifests in accordance with the final 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.”

⁷² Refer to Section 5.4 of the RIA for additional information.

⁷³ This ICR does not estimate burden for paper manifests accompanying state hazardous waste, except as otherwise specified at the beginning of Section 6 of this document and in Section 6D.

ICR 0801.20 did not include user fees because it addressed the paper-based system which did not impose fees.

6G. Burden Statement

The public reporting and recordkeeping burden per response for this collection of information is estimated to average 60 minutes per paper manifest and 10 minutes per electronic manifest for generators; 20 minutes per paper manifest and 5 minutes per electronic manifest for transporters; and 30 minutes per paper manifest and 5 minutes per electronic manifest for owners and operators of receiving facilities designated on the manifest. Table 16 presents these estimates.⁷⁴ 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 the paper form 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 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.

**Table 16
Public Reporting and Recordkeeping Burden per Response**

Waste Handlers	Time per Response (minutes)	
	Paper Manifest	Electronic Manifest
Generators	60	10
Transporters	20	5
Designated Facilities	30	5

The burden for reading the e-Manifest User Guide is estimated to be 2 hours per reader per year. See exhibit 22.

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-2016-0177, which is available for online viewing at 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. This site can be used to submit or view

⁷⁴ An electronic manifest (or e-Manifest) is the electronic format of the hazardous waste manifest that is obtained from EPA’s national e-Manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).

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-2016-0177 and OMB Control Number 2050-0039 in any correspondence.