

**Supporting Statement For
Information Collection Request (ICR) Number 0801.23
“Requirements for Generators, Transporters, and Waste
Management Facilities under the RCRA Hazardous Waste Manifest
System”**

May 9, 2019

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1. IDENTIFICATION OF THE INFORMATION COLLECTION

1A. Title and Number of the Information Collection

This ICR is entitled, “Requirements for Generators, Transporters, and Waste Management Facilities under the RCRA Hazardous Waste Manifest System,” EPA ICR No. 0801.23, 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 establishing requirements that 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). 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 are available to manifest users as an alternative to the paper manifest forms.

On January 3, 2018, EPA finalized a rule that set forth a new 5-part manifest and continuation sheet and established the fee methodology that EPA uses to determine the user fees applicable to the electronic and paper manifests submitted to the national system (83 FR 420). EPA launched the e-Manifest system on June 30, 2018. Designated TSDFs and other receiving facilities must submit a copy of each paper manifest to the e-Manifest and pay a user fee for each paper or electronic manifest.

This ICR describes the hazardous waste manifest regulations, e-Manifest system and user fees. It also estimates the annual burden and cost to respondents and EPA under these requirements and systems for both paper and electronic manifests.

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 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. Non-duplication

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 paper¹ 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

In compliance with the Paperwork Reduction Act of 1995, EPA solicited public comments on this ICR through an announcement in the Federal Register on February 8, 2019 (84 FR 2854). EPA received no comments on this ICR’s draft hourly burden or cost estimates. However, EPA received 10 comments from industry and state stakeholders regarding the proposed manifest form changes detailed in the notice. EPA has not modified the manifest form or continuation sheet at this time as the Agency is currently evaluating the comment submissions. EPA, however, intends to address form modifications in the future.

3C. Consultations

In May 2019, EPA contacted three designated TSDFs to request their input on this ICR’s burden estimates and assumptions. The purpose of the consultations was to determine if the estimates and assumptions should be updated or revised in preparing ICR 0801.23. The table identifies these organizations and their points of contact (POCs).

POC Name	Organization Name	Phone Number	Email
James Baker	Veolia	973-691-7330	tom.baker@veolia.com
Tita LaGrimas	Tradebe	219-354-2352	tita.lagrimas@tradebe.com
Ben Smith	Clean Harbors, Inc.	847-468-6725	smith.ben@cleanharbors.com

¹ 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 Part 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 Part 172, Subpart C.

EPA contacted these organizations because of their broad and substantial knowledge of industry practices and burdens under the manifest regulations and e-Manifest. They work closely with generators, transporters and other TSDFs of all sizes and in various industry sectors and therefore can provide input that is representative of the industry generally.

The table below summarizes the POCs' input. Specifically, the first column indicates the parameters for which EPA requested input. The second column presents the corresponding estimate in ICR 801.22 as a point of reference. The next three columns present the POCs' estimates. The last column presents the final estimate incorporated into ICR 0801.23, which is the average of the POCs' estimates. For example, based on POC input, EPA adjusted its estimate of the percentage of manifests prepared by the designated TSDF on behalf of generators from 56% to 87% in ICR 0801.23.

Parameter	ICR 801.22	ICR 0801.23			
		POC 1	POC 2	POC 3	Final (average)
1. % manifests prepared by designated TSDF on behalf of generator	56%	90%	95%	75%	87%
2. % manifests prepared by generators without TSDF assistance	44%	10%	5%	25%	13%
3. Time (minutes) for designated TSDF to send manifest copy back to generator	10	5	10	--	8
4. Time (hours) for designated TSDF to submit paper-based manifests to e-Manifest annually					
Mailed paper-based manifests	6	52*	304	--	178
Image file uploads	6	89*	143	--	116
Data file & image uploads	6.5	177*	179	--	178
5. % manifests received by designated TSDFs annually that require:					
Noting a discrepancy	25%	2%	20%	13%	12%
Discrepancy report	0.4%	1%	5%	1%	2%
Rejected load or container residue	3%	0.5%	0.5%	0.5%	0.5%
6. Time (minutes) for designated TSDF to make a post-receipt manifest data correction under 40 CFR 264.71(l)	5	10	10	40	20

* Includes time for planning and technical support for interfacing with e-Manifest (e.g., staff meetings, system trouble-shooting) as well as for submitting/uploading forms to e-Manifest.

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.

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. 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.

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 provided under section 260.2(c) and (d), 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.

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.

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 for the e-Manifest system and user fees.

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.² Note that,

² The final fee rule applies to RCRA Subtitle C TSDFs as well as non-Subtitle C facilities as specified. For purposes

normally, designated facilities also generate hazardous waste and therefore qualify as hazardous waste generators.

The respondents in each category are expected to read the manifest regulations and, for electronic manifests, the e-Manifest User Guide each year.

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

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

tightly controlled and remain unique. If computer systems or other infrastructure will be used to maintain, track, or assign numbers, these should be indicated. The application must indicate how the printer will pre-print a unique number on each form. The application must explain the quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time.

- 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.

Section 262.20(b) provides that a generator must designate on the manifest one facility which is permitted to handle the waste described on the manifest. Section 262.20(c) provides that a generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

In addition, 40 CFR 262.83(c) and 262.84(c) establish special manifesting completion requirements for hazardous waste exporters and importers, respectively, and state that they are also subject to the manifest requirements of Part 262 as applicable. [Note: In regard to exporters and importers, this ICR addresses the manifest requirements applicable to their manifests under Part 262, Subpart B as well as the requirements of sections 262.83(c) and 262.84(c) which are found in Part 262, Subpart H. The ICR, “Hazardous Waste Generator Standards” (EPA ICR Number 820, OMB Control 2050-0035), addresses the other Subpart H requirements applicable to exporters and importers. Throughout this Manifest ICR, EPA uses the term “generator” to apply to any person who is required to prepare a manifest for a domestic, export or import shipment.]

Generators completing paper and electronic manifests must comply with all other manifest requirements of Part 262 as applicable, including sections 262.22, 262.23, 262.24, 262.25, and 262.27 as well as the instructions associated with the manifest and continuation sheet.

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 phone number.
 - The EPA ID number of the designated facility.
 - The USDOT description of the waste.
 - The container description (number and type).
 - The total quantity of each waste described.
 - The unit of measure.
 - The waste codes representing the waste.
 - Special handling instructions and additional information.
 - The generator’s/offeror’s certification.³

- For exporters only: The exporter must comply with the manifest requirements of 40 CFR 262.20 through 262.23, except as provided under 40 CFR 262.83(c):
 - In lieu of the name, site address and EPA ID number of the designated permitted facility, enter the name and site address of the foreign receiving facility.
 - In the International Shipments block, check the export box and enter the U.S. port of exit (city and State) from the United States.
 - List the consent number from the AOC for each hazardous waste listed on the manifest, matched to the relevant list number for the hazardous waste from block 9b.
 - If additional space is needed, use a Continuation Sheet(s) (EPA Form 8700–22A).

- For importers only: When importing hazardous waste, the importer must meet all the requirements of 40 CFR 262.20 for the manifest except as provided at 40 CFR 262.84(c):

³ The generator’s/offeror’s certification in Item 15 of the manifest references the waste minimization certification codified at 40 CFR 262.27.

- In place of the generator's name, address and EPA identification number, enter the name and address of the foreign generator and the importer's name, address and EPA identification number.
- In place of the generator's signature on the certification statement, enter the importer's or his agent's signature and date.
- In the International Shipments block, check the import box and enter the point of entry (city and State) into the United States.

Respondent Activities

Paper Manifest

- Generators must 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 for completing the electronic manifest.

(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, 262.83(c) and 262.84(c) as appropriate. A generator must sign, date and give copies of the manifest to the transporter along with the hazardous and retain copies of the manifest. 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 shipments of hazardous waste to a designated facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, the generator must assure that the designated facility agrees to sign and return the manifest to the generator, and that any out-of-state transporter signs and forwards the manifest to the designated facility, as required under 40 CFR 262.23(e). In addition, 40 CFR 262.84(c)(4) requires the importer to provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with 40 CFR 264.71(a)(3) and 265.71(a)(3).

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.
- 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) and 262.84(c).
 - Keep a copy of the manifest and give the remaining copies to the initial transporter, in accordance with 40 CFR 262.23(a) & (b) and 262.84(c).
 - 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).
- For shipments of hazardous waste to a designated facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, contact the designated facility to assure it agrees to sign and return the manifest to the generator and that any out-of-state transporter signs and forwards the manifest to the designated facility, as required under 40 CFR 262.23(e).
- Importers of hazardous waste must provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with 40 CFR 264.71(a)(3) and 265.71(a)(3), as required by 40 CFR 262.84(c)(4).
 - 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 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.

(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.

(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

If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste, as required by 40 CFR 262.20(d). 40 CFR 262.84(c)(5) provides that, in lieu of the requirements of section 262.20(d), where an import shipment cannot be delivered for any reason to the receiving facility, the importer must instruct the transporter in writing via fax, email or mail to (i) return the hazardous waste to the foreign exporter or designate another facility within the United States; and (ii) revise the manifest in accordance with the importer’s instructions.⁴

⁴ Refer to the ICR, “Hazardous Waste Generator Standards” (EPA ICR Number 820, OMB Control 2050-0035), for procedures for addressing undeliverable export shipments under 40 CFR 262.83.

Data Items

- Instructions to the transporter on how to deal with shipments that cannot be delivered to the designated or the alternate designated facility.
- For imports: Instructions to the transporter in writing via fax, email or mail, as specified.

Respondent Activities

- 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 section 262.20(d).
- In lieu of the requirements of section 262.20(d), where an import shipment cannot be delivered for any reason to the receiving facility, the importer must instruct the transporter in writing via fax, email or mail to (i) return the hazardous waste to the foreign exporter or designate another facility within the United States; and (ii) revise the manifest in accordance with the importer's instructions.

(g) Rejected Waste and Container Residues

Under 40 CFR 262.23(f), for rejected shipments of hazardous waste or container residues contained in non-empty containers that are returned to the generator by the designated facility (following the procedures of 40 CFR 264.72(f) or 265.72(f)), the generator must sign either (i) Item 20 of the new manifest if a new manifest is used for the returned shipment; or (ii) Item 18c of the original manifest if the original manifest is used for the returned shipment. The generator must provide the transporter a copy of the manifest and, within 30 days of delivery of the rejected shipment or container residues contained in non-empty containers, the generator must send a copy of the manifest to the designated facility that returned the shipment to the generator and retain at the generator's site a copy of each manifest for at least three years from the date of delivery.

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.

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

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).

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).

As required by 40 CFR 262.42(c), for rejected shipments of hazardous waste or container residues contained in non-empty containers that are forwarded to an alternate facility by a designated facility using a new manifest (following the procedures of 40 CFR 264.72(e)(1) through (6) or 40 CFR 265.72(e)(1) through (6)), the generator must comply with the requirements of 40 CFR 262.42(a) or (b), as applicable, for the shipment forwarding the material from the designated facility to the alternate facility instead of for the shipment from the generator to the designated facility. For purposes of paragraph (a) or (b) for a shipment forwarding such waste to an alternate facility by a designated facility, the copy of the manifest received by the generator must have the handwritten signature of the owner or operator of the alternate facility in place of the signature of the owner or operator of the designated facility. The 35/45/60-day timeframes begin the date the waste was accepted by the initial transporter forwarding the hazardous waste shipment from the designated facility to the alternate facility.⁵

Data Item

⁵ Refer to the ICR, “Hazardous Waste Generator Standards” (EPA ICR Number 820, OMB Control 2050-0035), for exception reporting of exports under 40 CFR 262.83(h).

- For LQGs: An exception report containing the following data:
 - A legible copy of the manifest for which the generator does not have confirmation of delivery.
 - 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.
- For SQGs: A legible copy of the manifest with some indication that the SQG has not received confirmation of delivery.

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).
- 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. Section 263.20(a)(2) provides that, for exports of hazardous waste subject to the requirements of Subpart H of 40 CFR Part 262, a transporter may not accept hazardous waste without a manifest signed by the generator in accordance with section 263.20, as appropriate, and for exports occurring under the terms of a consent issued by EPA on or after December 31, 2016, a movement document that includes all information required by 40 CFR 262.83(d).

40 CFR 263.20(b) provides that, before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property. Section 263.20(c) requires the transporter to ensure that the manifest accompanies the hazardous waste. Section 263.20(d) provides that a transporter who delivers a hazardous waste to another transporter or to the designated facility must obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest and retain one copy of the manifest in accordance with section 263.22. The transporter must give the remaining copies of the manifest to the accepting transporter or designated facility.

Data Item

- A paper or electronic manifest.

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 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.

(a2) Water (Bulk Shipment) Transporters Regulated under 40 CFR 263.20(e)

40 CFR 263.20(e) provides that the requirements of section 263.20 (c), (d) and (f) do not apply to water (bulk shipment) transporters if they comply with the section 263.20(e) procedures. They must sign and date the manifest upon receipt of the hazardous waste. They must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) accompanies the hazardous waste. The delivering transporter must obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper. The person delivering the hazardous waste to the initial water (bulk shipment) transporter must obtain the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forward it to the designated facility. A copy of the shipping paper or manifest must be retained by each water (bulk shipment) transporter in accordance with section 263.22.

Data Items

- Paper or electronic manifest.
- A shipping paper.

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 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.

(a3) Rail Transporters Regulated under 40 CFR 263.20(f)

40 CFR 263.20(f) provides that, for shipments involving rail transportation, the requirements of section 263.20 (c), (d) and (e) do not apply and the requirements at section 263.20(f) do apply. 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 identification numbers, generator certification, and signatures) accompanies the hazardous waste at all times.

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.

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.

Data Items

- A paper or electronic manifest.

- A shipping paper.

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 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.

(a4) Transporters Who 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. They must retain one copy in accordance with section 263.22(d) and return a signed copy of the manifest to the generator. For paper manifests only, they must (i) 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) and (ii) for shipments initiated prior to the AES filing compliance date,⁶ when instructed by the exporter to do so, give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

Data Items

- A paper or electronic manifest.

Respondent Activities

⁶ The AES filing compliance date was December 31, 2017.

Paper Manifest

- For exports, transporters must perform the following:
 - Sign and date the manifest in the International Shipments block.
 - Retain one copy in accordance with section 263.22(d).
 - Return a signed copy of the manifest to the generator.
 - For paper manifests only, send a copy of the manifest to the e-Manifest system and for shipments initiated prior to the AES filing compliance date, when instructed by the exporter to do so, give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

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.

(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.

(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 pre-designated OSC for the geographic area where the discharge occurs. If it is not possible to notify the NRC or the pre-designated 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 Facilities⁷

(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 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. 40 CFR 264.71(a)(3) and 265.71(a)(3) provide that the owner or operator of a facility receiving hazardous waste subject to 40 CFR Part 262, Subpart H from a foreign source must additionally list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a Continuation Sheet(s) (EPA Form 8700-22A) and send a copy of the manifest within thirty (30) days of delivery to EPA using the addresses listed in 40 CFR 262.82(e) until the facility can submit such a copy to the e-Manifest system.

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

⁷ 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.

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 CROMERR⁸ 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 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

⁸ Cross-Media Electronic Reporting Rule.

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.
- For imports, list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b.
 - 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.
 - Send a copy of the manifest to EPA as follows:
 - o 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).
 - o 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.
 - o For imports, send a copy of the manifest within thirty (30) days of delivery to EPA using the addresses listed in 40 CFR 262.82(e) until the facility can submit such a copy to the e-Manifest system.
 - 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.

(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.

(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.

(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.

(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 started up the e-Manifest system on June 30, 2018. Agency activities include, among other things, system maintenance, paper manifest processing, operating a call center, and invoicing users.

5B. Collection Methodology & Management

EPA collects paper-based manifests, which may be submitted as mailed paper copies, image files, or image files with data files. The national operator reviews the forms for errors, resolves them, and key-punches data into the system as needed. In addition, the e-Manifest system is structured so that electronic manifests are in the expected format and with minimal errors (e.g., via automated data validations/quality checks, pull-down menus and other user support tools).

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. 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 allows the generator to participate in the e-Manifest system without having to comply with electronic signature requirements. Entities are able to choose the method that best suits their needs and capabilities. In addition, the e-Manifest is optional. Entities need not use the e-Manifest system to prepare and transmit the manifest if they do not want to.

5D. Collection Schedule

Most information collections in this ICR do not require collection by EPA more frequently than quarterly, except for receiving facilities which are required to submit manifest data to the national system. 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 manifests⁹). This ICR also burdens designated TSDFs/receiving facilities¹⁰ 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*.^{11, 12, 13} 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.

9 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).

10 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.

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

12 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.

13 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 reviewed data collected by the e-Manifest system to estimate the number of paper and electronic manifests prepared and offered into transportation annually as well as the number of waste handlers preparing and using these forms.¹⁴ In cases where e-Manifest data were not available for analyzing a particular regulation, EPA referred to the Regulatory Impact Analysis (RIA) prepared for the final fee rule.¹⁵ In addition, EPA incorporated feedback from its limited industry consultations performed for this ICR.

This section first discusses EPA’s estimates of waste handlers who manifest federal and state hazardous waste, respectively. It then discusses the estimated number of manifests that are prepared and offered into transportation annually. These estimates form the basis for most of the burden estimates in this ICR.

1) Handlers who Manifest Federal Hazardous Waste

Based on e-Manifest and RIA data, EPA estimates the annual number of waste handlers that manifest federal hazardous waste, as shown in Table 2. In total, EPA estimates that 55,141 waste handlers will operate under the federal hazardous waste manifest program annually.

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

Type of Waste Handler	Number of Facilities
Generators	53,654
Transporters	1,075
TSDFs – Receivers	412
Total	55,141

¹⁴ The e-Manifest system began operation on June 30, 2018. The e-Manifest is the repository of all paper and electronic manifests used for federal and state hazardous waste shipments.

¹⁵ The RIA is titled, “EPA’s 2017 Final Rule - Establishing User Fees for the RCRA Electronic Hazardous Waste Manifest System (e-Manifest),” dated June 2017.

2) Handlers who Manifest State Hazardous Waste

Based on e-Manifest and RIA data, EPA estimates that 160,536 waste handlers will be involved in the shipment of state-only wastes using the federal manifest annually, as shown in Table 3.

Table 3
Annual Number of Handlers that Manifest State Hazardous Waste

Type of Waste Handler	Number of Facilities
Generators	157,195
Transporters	3,129
TSDFs – Receivers	212
Total	160,536

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

Table 4 presents the total annual number of handlers that manifest federal and state hazardous waste. Specifically, Table 4 combines the handler data in Table 2 (federal handlers) and Table 3 (state handlers) to estimate a total of 215,677 handlers.

Table 4
Annual Number of Handlers that Manifest Federal and State Hazardous Waste

Type of Waste Handler	Number of Facilities
Generators	210,849
Transporters	4,204
TSDFs – Receivers	624
Total	215,677

Of these handlers, EPA estimates that, on average, 12% will use the e-Manifest to track shipments of federal and state hazardous waste using an electronic manifest during the 3-year life of this ICR.¹⁶ This equates to 25,302 generators, 504 transporters and 75 designated facilities.

4) Annual Number of Manifests Offered into Transportation

Based on its analysis of e-Manifest data, EPA estimates that 2 million manifests are prepared and offered into transportation annually. This includes both paper and electronic manifests for domestic, import and export shipments. It includes manifests accompanying federal hazardous waste, state-only hazardous waste covered under 40 CFR 260.5¹⁷ and other wastes whose manifest must be submitted to the e-Manifest (e.g., polychlorinated biphenyls regulated under 40 CFR Part 761).

Table 5 shows the annual adoption rate for waste handlers to prepare and use the electronic manifest to track hazardous waste shipments. During the 3-year life of this ICR, EPA estimates

¹⁶ Refer to Table 5 for EPA's estimate of the adoption rate for electronic manifesting.

¹⁷ Based on e-Manifest data, EPA estimates that state-only wastes account for 35% of all manifests offered into transportation annually.

that 12% of manifests will be prepared and transacted electronically and 88% will be prepared and transacted using the paper form on average annually.¹⁸

Table 5
Annual Adoption Rate for e-Manifest*

Type of Manifest	Year 1	Year 2	Year 3	3-Year Average
Paper manifests	98.00%	90.00%	75.00%	88.00%
Electronic manifests	2.00%	10.00%	25.00%	12.00%

* The 3-year period in the table corresponds with the 3-year life of this ICR, not the life of the e-Manifest system. The system began operation on June 30, 2018.

As discussed at the beginning of Section 6, this ICR estimates burden based primarily on the three activities shown below in accordance with the scope assumptions in Table 1. Table 6 presents the 3-year average number of manifests for each activity:¹⁹

- Participating in manifest cycle.²⁰ 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 1.38 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 1.766 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 2 million manifests on average annually.

Table 6
3-Year Average Annual Number of Manifests in this ICR*

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***	1,147,883	--	234,026	0	1,381,909
Submitting Copies to National System****	1,147,883	618,091	--	--	1,765,974
Paying Fees*****	1,147,883	618,091	234,026	0	2,000,000

18 This is based on EPA’s best judgment based on user rates during the first year of system operation.

19 See Table 1 and accompanying text for further discussion on how this table sums up paper and electronic manifest totals. 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.

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

* See Table 1 and accompanying text for further discussion on how this table sums up paper and electronic manifest totals. This 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. Estimates are based on e-Manifest data.

** EPA estimates that PIN/passwords will be used for all electronic manifests during the 3 years of this ICR.

*** This includes form completion, transmittal to industry third parties, and recordkeeping by generators, transporters and TSDFs/receiving facilities. This ICR does not estimate burden for paper manifests accompanying state hazardous waste during the manifest cycle.

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

Certain manifest requirements in Parts 262 through 265 apply to domestic shipments, export shipments or import shipments respectively. Table 7 presents the total number of manifests in the manifest cycle for domestic, export and import shipments, respectively.²¹

Table 7
Annual Number of Manifests in Manifest Cycle:*
Domestic, Export and Import Shipments

Category	Annual Number of Manifests			
	Domestic	Export	Import	Total
Paper**	1,086,928	32,355	28,600	1,147,883
Electronic	228,026	0***	6,000	234,026
Total	1,314,954	32,355	34,600	1,381,909

*The “manifest cycle” includes form completion, transmittal to industry third parties, and recordkeeping by generators, transporters and TSDFs/receiving facilities. See Table 1 for additional information.

** This category includes paper manifests accompanying federally regulated hazardous waste only. This ICR does not estimate burden for paper manifests accompanying state hazardous waste during the manifest cycle.

*** The electronic manifest is not available for exports at this time.

6B. Estimating Respondent Costs

Following is a discussion of respondent labor, capital and operation and maintenance (O&M) costs used in Exhibits 1 through 22.

Labor Costs

EPA estimates an average hourly respondent labor cost (\$2019) of \$115.16/hr for legal staff, \$100.18/hr for managerial staff, \$47.21/hr for technical staff, and \$29.96/hr for clerical staff. To derive these hourly estimates, EPA referred to the *May 2017 National Occupational Employment and Wage Estimates* published by the U.S. Bureau of Labor Statistics.²² This publication summarizes the unloaded (base) hourly rate for major occupational groups.²³ EPA then applied the standard government overhead factor of 1.6 to the unloaded rate to derive loaded hourly

21 The manifest estimates in Table 7 are consistent with the estimates in Table 6 for the manifest cycle. The purpose of Table 7 is to show the number of manifests for domestic or transboundary shipments.

22 U.S. Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES), *May 2017 National Occupational Employment and Wage Estimates*. Available online at: https://www.bls.gov/oes/2017/may/oes_nat.htm#23-0000.

23 For purposes of this analysis, the following occupational groups of the U.S. Bureau of Labor Statistics (BLS) were used: Legal staff, SOC 23-1011, Lawyers; managerial staff, BLS SOC Code 11-1021, General and Operations Managers; technical staff, BLS SOC Code 17-3027, Mechanical Engineering Technicians; and clerical staff, BLS SOC Code 43-6014, Secretaries and Administrative Assistants, Except Legal, Medical, and Executive.

rates. Finally, EPA updated the loaded hourly rates to December 2018 levels using Employment Cost Indexes developed by the U.S. Bureau of Labor Statistics.²⁴

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 22, EPA estimates the total average annual capital cost to all hazardous waste handlers under the manifest system, collectively, to be \$69,827. 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 paper manifests 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 manifests for domestic, import and export shipments (except that designated TSDFs do not retain manifests for exports). In total, EPA estimates that waste handlers (i.e., generators, transporters, and designated TSDF/receiving facilities) will need to keep copies of 10,233,882 manifests 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 10,233,882 paper manifests, waste handlers would need 640 file cabinets each year. These 640 file cabinets represent the total capacity needed by the industry, collectively, to store all of its paper manifests. EPA estimates that the cost for one file cabinet is \$588²⁶ and for all 640 file cabinets is \$376,320.

24 Bureau of Labor Statistics, *Economic News Release*, "Table 2. Seasonally adjusted: Employment Cost Index for wages and salaries, by ownership, occupational group, and industry." Available online at: <https://www.bls.gov/news.release/eci.t02.htm>.

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.

26 Standard-size, 5-drawer, lateral file cabinet cost based on current market price, as of April 2019 at: https://www.amazon.com/Office-Dimensions-Commercial-Lateral-Cabinet/dp/B00XVI1DRC/ref=sr_1_4?qid=1556586907&refinements=p_n_feature_keywords_two_browse-bin%3A5817589011&s=office-products&sr=1-4.

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:

$$\text{Annualized Net Present Value} = \$376,320 \times [1/(\sum 1/(1+k)^t)]$$

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 \$69,827 for the 640 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 \$900 for each set of manifest form samples. These respondents are expected to contract with a printing company. Hence, the fee of \$900 is considered a lump-sum cost. This O&M cost was obtained from a previously approved ICR (i.e., EPA ICR Number 0801.22) and updated to 2019 levels using Consumer Price Indexes developed by the Bureau of Labor Statistics.²⁸
- Purchase blank paper manifest forms from EPA-registered printer: EPA estimates that respondents will incur a cost of \$0.57 for each blank paper manifest and \$0.57 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 \$0.58 to mail a one-ounce package (\$0.55 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

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 in April 2019.

29 Uniform manifest form cost based on current market price for JJ Keller’s forms, as of April of 2019, at <https://www.jjkeller.com/shop/Product/Uniform-Hazardous-Waste-Manifest-Pin-Feed-Format>. Cost is based on an order of 500 forms.

30 Continuation sheet cost based on current market price for JJ Keller’s forms, as of April 2019, at: <https://www.jjkeller.com/shop/Product/Uniform-Hazardous-Waste-Manifest-Pin-Feed-Format>. Cost is based on an order of 500 forms.

31 U.S. Postal Service, “First-Class Mail - Retail.” Available online at: <https://www.usps.com/business/first-class-mail-for-business.htm?>

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

(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, “(d9) 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 23.

Labor Costs

The hourly Agency labor rates used in this ICR were obtained from the 2019 Salary Tables for federal civilian employees, which are published by the Office of Personnel Management.³⁶ EPA estimates an average hourly labor cost of \$80.59/hr for legal staff, \$75.36/hr for managerial staff, \$55.26/hr for technical staff, and \$22.19/hr for clerical staff. The labor costs are based on the following GS levels and steps: legal labor rates were based on GS Level 15, Step 1, managerial labor rates were based on GS Level 14, Step 4, technical labor rates were based on GS Level 12, Step 5, and clerical labor rates were based on GS Level 5, Step 1. To derive hourly estimates, EPA multiplied hourly rates by the standard government overhead factor of 1.6.

Capital and Operation & Maintenance Costs

EPA is currently formulating its user fees for the coming years, which will be designed to recover EPA’s total annual cost of the e-Manifest system. Total costs include such elements as:

- System development;
- Operations & maintenance;
- Paper manifest processing labor and O&M;
- Call center;

33 U.S. Postal Service, “First-Class Mail - Retail.” Available online at: <https://www.usps.com/business/first-class-mail-for-business.htm?>

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

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

36 See 2019 General Schedule (Base), “SALARY TABLE 2019-GS RATES FROZEN AT 2018 LEVELS EFFECTIVE JANUARY 2019,” available at: https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2019/GS_h.pdf.

- Billing;
- Additional program costs;
- Additional indirect costs; and
- Manifest processing costs.

Table 8 presents EPA’s preliminary annual cost estimate of the e-Manifest over the next 3 years as well as the 3-year average cost. The average cost of \$23,346,212 is reflected in Exhibit 23.

Table 8
Total Annual e-Manifest System Costs*

Year 1	Year 2	Year 3	3-Year Average
\$14,803,622	\$27,617,507	\$27,617,507	\$23,346,212

*The table shows preliminary estimates that are subject to change. They should not be used to estimate actual user fees. EPA is currently formulating user fee amounts.

6D. Estimating Respondent Hours and Costs

Exhibits 1 through 21 estimate the annual respondent burden associated with these information collection requirements. Exhibit 22 presents the total aggregate annual cost burden to all respondents under the information collection requirements covered in this ICR. For purposes of analysis, 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.

(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 Part 262 and, for e-Manifest users, the e-Manifest User Guide.³⁷

(b2) Manifest Completion

Exhibits 3 and 4 present the total annual hour and cost burden for generators to complete their paper and electronic manifests.^{38, 39} Exhibit 3 estimates burden for generators to prepare the manifests on their own (i.e., without the assistance of the designated TSDF). Exhibit 4 estimates the burden for generators whose manifests are prepared by the designated TSDF on their behalf. These generators normally review and complete the manifest as needed (e.g., sign and date it) when the waste is picked up by the transporter.

(b3) 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.

³⁷ 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.

³⁸ 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. Refer to the ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003) for 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. Refer to the ICR, "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) for these handlers to submit a Site Identification Form requesting an EPA ID number.

³⁹ 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.

(b4) Manifest Transmittal and Recordkeeping

As reflected in Exhibit 6, EPA estimates the burden for generators to transmit and keep records of manifests sent with highway shipments (91% of all shipments), bulk shipments within the United States solely by water (3%) and rail shipments within the United States which originate at the site of generation (6%).

(b5) Undeliverable Shipments

As shown in Exhibit 7, EPA estimates generators' burden for shipments (paper and electronic manifests) that 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). Generators must perform the procedures in section 262.20(d). The exhibit also estimates importers' burden for addressing import shipments that cannot be delivered for any reason to the receiving facility, as required by section 262.84(c)(5).

(b6) Rejected Waste and Container Residues

As shown in Exhibit 8, EPA estimates that, each year, 0.5% 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).

(b7) Exception Reports: Completion, Submission, and Recordkeeping

EPA estimates that, on average, LQGs and SQGs will need to develop an exception report under 40 CFR 262.42 for approximately 1% of the manifests offered into transportation. This assumption is reflected in Exhibit 9.

(c) Transporter Requirements

(c1) Reading the Regulations

Exhibit 10 presents the total annual hour and cost burden to hazardous waste transporters in reading the manifest regulations at 40 CFR Part 263 and, for e-Manifest users, the e-Manifest User Guide.⁴⁰

(c2) Manifest Completion, Transmittal, and Recordkeeping

⁴⁰ 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.

Exhibit 11 examines the manifesting burden for transporters transporting domestic and international shipments of hazardous waste.^{41, 42} EPA estimates that, of the manifests offered into transportation each year, approximately 91% will accompany highway shipments, 3% will accompany water shipments, and 6% will accompany rail shipments.

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). 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.

(c4) Post-Receipt Manifest Data Corrections

EPA expects each transporter company to register its employees with the e-Manifest system and have system access to make corrections.⁴³ Exhibit 13 reflects EPA's estimate that transporters will submit corrections or respond with comments for 0.1% of all manifests (paper and electronic) accompanying federal and state waste annually.

41 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. Refer to the ICR, "Cross-Media Electronic Reporting Rule," (EPA ICR No. 2002, OMB Control No. 2025-0003) for 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. Refer to the ICR, "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) for these handlers to submit a Site Identification Form requesting an EPA ID number.

42 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.

43 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), addresses these activities and requirements for all transporters in this ICR.

(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.

(d) *Designated Treatment, Storage, and Disposal Facility Requirements*⁴⁴

(d1) *Reading the Regulations*

Exhibit 15 presents the total annual hour and cost burden to designated TSDFs/destination facilities in reading the manifest regulations at 40 CFR Part 264 or 265 and, for e-Manifest users, the e-Manifest User Guide.⁴⁵

(d2) *Completing the Manifest (assisting the generators)*

Exhibit 16 estimates the burden for designated TSDFs to assist their generator customers in preparing the manifest on their behalf.

(d3) *Transmitting the Manifest and Reporting to EPA*

44 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.

45 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.

Exhibit 17 estimates burden for designated TSDF/destination facility completion of all manifests (paper and electronic) accompanying federal hazardous waste as well as all electronic manifests accompanying state hazardous waste, except for exports.^{46, 47, 48}

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.⁴⁹ The federal regulations could place incremental burden on these facilities by clarifying that completion is mandatory for all manifests accompanying state waste.

Because of this, Exhibit 17 estimates burden for facilities to complete paper manifests accompanying state waste that would not have been completed under state regulations. EPA estimates that 25% of paper manifests accompanying state waste are completed as a result of the federal regulations.⁵⁰ It is assumed that the remaining 75% of paper manifests were already being completed under state regulations and need not be addressed in this ICR.

46 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. Refer to the ICR, “Cross-Media Electronic Reporting Rule,” (EPA ICR No. 2002, OMB Control No. 2025-0003) for 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. Refer to the ICR, “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) for these handlers to submit a Site Identification Form requesting an EPA ID number.

47 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.

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

49 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 where the waste is not regulated as hazardous and does not require a manifest under the law of the destination state.

50 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.

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). Based on e-Manifest data, EPA estimates the annual submittal rate for each method, as shown in Table 9. The table shows that, on average annually during the 3-year life of this ICR, 4% of paper manifests will be submitted as mailed paper copies, 12% as image files, and 72% as data files and image files. The remaining 12% will be transacted electronically within the system.

**Table 9
Annual Manifest Submittal Rates, by Submittal Method**

Submittal Method	Year 1	Year 2	Year 3	3-Year Average
Mailed Paper	6%	5%	0%	4%
Image only	17%	10%	10%	12%
Data & Image	75%	75%	65%	72%
Electronic	2%	10%	25%	12%
Total	100%	100%	100%	100%

Based on these assumptions, Exhibit 17 estimates that 4% of TSDF/receiving facilities will submit mailed paper copies (@178 hours/yr), 12% will submit image files (@ 116 hours/yr), and 72% will submit data files and image files (@ 178 hours/yr). This burden includes all paper manifests received by the facilities during the year including, among others, manifests associated with import shipments, rejected loads and container residues.⁵¹

(d4) 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.

(d5) Discrepancy Reports

As reflected in Exhibit 17, EPA estimates that approximately 12% 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 2% of manifests accepted by the designated facility will require a discrepancy report under 40 CFR 264.72 or 265.72.

(d6) Rejected Waste and Container Residues

As shown in Exhibit 18, EPA estimates the burden for designated facilities to reject a shipment or identify and ship a container residue.

⁵¹ 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 imports, rejected loads and container residues, and submit them in batch form to the national system.

(d7) Post-Receipt Manifest Data Corrections

EPA expects each receiving facility (federal and state) to register with the e-Manifest system and have system access for corrections.⁵² Based on e-Manifest data, EPA estimates that facilities will submit corrections or respond with comments for 2% of manifests (paper and electronic) accompanying federal and state waste annually, as reflected in Exhibit 19.⁵³

(d8) Unmanifested Waste Reports: Completion and Submission

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

(d9) Fees for the Electronic Hazardous Waste Manifest Program

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

Table 10 presents EPA’s preliminary estimate of the total annual cost of the e-Manifest over the 3-year life of this ICR. EPA’s user fees will be formulated to recover these costs.⁵⁴ Exhibit 21 includes the average cost of \$23,346,212 as an approximation of the total user fee amount that designated TSDFs/destination facilities will pay collectively each year on average.⁵⁵

Table 10
Total Annual e-Manifest System Costs*

Year 1	Year 2	Year 3	3-Year Average
\$14,803,622	\$27,617,507	\$27,617,507	\$23,346,212

*The table shows preliminary estimates that are subject to change. They should not be used to estimate actual user fees. EPA is currently formulating user fee amounts.

In addition, the exhibit estimates the burden to facilities for implementing the informal fee dispute resolution procedures at 40 CFR 264.1316 and 265.1316.

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. 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), addresses these activities and requirements for all receiving facilities.

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

54 EPA is currently formulating user fees and they are not available at this time.

55 This is a preliminary estimate and subject to change. It should not be used to estimate actual user fees. EPA is still formulating its user fee amounts.

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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Read the regulations										
Read the regulations	0.00	0.25	1.00	0.00	1.25	\$72.26	\$0.00	1	1	\$72
Applying to the Registry										
Prepare and submit initial application	0.00	0.25	1.00	0.10	1.35	\$75.25	\$5.31	1	1	\$80
Submit revised initial application to EPA, if requested	0.00	0.10	0.50	0.10	0.70	\$36.62	\$5.31	1	1	\$42
Submit three fully assembled manifests and, if needed, continuation sheets and a	0.00	0.10	0.17	0.10	0.37	\$21.04	\$905.31	1	0	\$926
Submit revised form samples based on EPA comment on the initial samples, if	0.00	0.10	0.17	0.10	0.37	\$21.04	\$905.31	1	0	\$926
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	\$21.04	\$0.58	3	1	\$65
Respond to the Agency's concerns, if applicable	0.00	0.10	0.17	0.00	0.27	\$18.04	\$0.00	1	0	\$18
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	\$21.04	\$0.58	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	\$21.04	\$905.31	1	0	\$926
Submit revised manifest form and/or continuation sheet samples to EPA, if	0.00	0.10	0.17	0.10	0.37	\$21.04	\$905.31	1	0	\$926
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	\$11.02	\$905.31	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	\$21.04	\$0.58	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	\$11.80	\$2.00	1	0	\$14
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	\$21.04	\$905.31	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	\$48.65	\$0.58	0	0	\$0
TOTAL	0.00	varies	varies	varies	varies	varies	varies	varies	4	\$3,995

^a Exhibit contains rounding error.

EXHIBIT 2
 ESTIMATED ANNUAL HOUR AND COST BURDEN FOR GENERATORS ^a
 READING THE REGULATIONS AND E-MANIFEST USER GUIDE

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Generators	Total Hours	Total Cost
	Legal @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Read the regulations and e-Manifest user guide										
Read the regulations	0.00	0.25	1.00	0.00	1.25	\$72.26	\$0.00	53,654	67,068	\$3,877,038
Read the User Guide for e-Manifest	0.00	0.50	1.50	0.00	2.00	\$120.91	\$0.00	25,302	50,604	\$3,059,265
TOTAL	0.00	varies	varies	0.00	varies	varies	\$0.00	varies	117,672	\$6,936,303

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Manifest completion										
Paper Manifest										
Complete the manifest for domestic, export and import shipments	0.00	0.00	0.40	0.10	0.50	\$21.88	\$0.57	177,374	88,687	\$3,982,046
Complete the continuation sheet	0.00	0.00	0.19	0.04	0.23	\$10.17	\$0.57	12,416	2,856	\$133,350
Electronic Manifest										
Complete the manifest for domestic, export and import shipments	0.00	0.00	0.08	0.03	0.11	\$4.68	\$0.00	30,423	3,347	\$142,380
Complete the continuation sheet	0.00	0.00	0.04	0.01	0.05	\$2.19	\$0.00	2,130	106	\$4,664
Call Help Desk	0.00	0.00	5.00	0.00	5.00	\$236.05	\$2.00	25,302	126,510	\$6,023,141
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	221,506	\$10,285,581

^a Exhibit contains rounding error.

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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Manifest completion										
Complete the manifest for domestic, export and import shipments	0.00	0.00	0.02	0.01	0.03	\$1.24	\$0.00	1,174,112	35,223	\$1,455,899
TOTAL	0.00	0.00	0.02	0.01	0.03	\$1.24	\$0.00	1,174,112	35,223	\$1,455,899

^a Exhibit contains rounding error.

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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Manifest completion										
Complete the manifest for domestic, export and import shipments	0.00	0.00	0.02	0.01	0.03	\$1.24	\$0.00	1,174,112	35,223	\$1,455,899
TOTAL	0.00	0.00	0.02	0.01	0.03	\$1.24	\$0.00	1,174,112	35,223	\$1,455,899

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Compliance with State program requirements										
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	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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Manifest transmittal and recordkeeping										
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	\$0.47	\$0.00	1,147,883	11,479	\$539,505
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	\$3.00	\$0.00	1,147,883	114,788	\$3,443,649
Keep a copy of the manifest returned from the designated facility	0.00	0.00	0.00	0.10	0.10	\$3.00	\$0.00	1,147,883	114,788	\$3,443,649
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	\$4.79	\$0.58	34,436	5,510	\$184,921
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	\$4.79	\$0.58	68,873	11,020	\$369,848
Electronic Manifest - PIN/Password										
Conduct witnessed signature ceremony with transporter	0.00	0.00	0.03	0.00	0.03	\$1.42	\$0.00	153,661	4,610	\$218,199
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	19,976	200	\$9,389
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	\$4.07	\$0.00	4,681	608	\$19,050
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	\$0.90	\$0.58	4,610	138	\$6,823
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	\$0.90	\$0.58	9,220	277	\$13,646
Electronic Manifest - Digitized Electronic Signature										
Sign e-manifest	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	0	0	\$0
Provide paper manifest to transporter (only for generators that prepare manifest without TSDf assistance)	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	0	0	\$0
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	\$4.07	\$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	\$0.90	\$0.58	0	0	\$0
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	\$0.90	\$0.58	0	0	\$0
Assurances from Designated TSDf										
If applicable, contact the designated facility to assure it agrees to sign and return the manifest to the generator and that any out-of-state transporter signs and forwards the manifest to the designated facility, as required under 40 CFR 262.23(e).	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	1,382	111	\$5,224
Import Shipments										
Provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with 40 CFR 264.71(a)(3) and 265.71(a)(3), as required by 40 CFR 262.84(c)(4)	0.00	0.00	0.00	0.10	0.10	\$3.00	\$0.10	28,600	2,860	\$88,660
Reclamation Agreements										
Retain a copy of each reclamation agreement	0.00	0.00	0.00	0.10	0.10	\$3.00	\$0.00	4,729	473	\$14,187
Post-Receipt Manifest Data Corrections										
Submit email (off-line generators)	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	1,073	11	\$504
Submit a correction or respond with comments	0.00	0.00	0.33	0.00	0.33	\$15.58	\$0.00	1,382	456	\$21,530
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	267,329	\$8,378,784

^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										
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	\$0.00	\$0.00	13,319	1,066	\$0
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	138,191	11,055	\$464,321
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	\$1.01	\$0.00	8,942	268	\$9,032
Undeliverable Import Shipments										
Instruct the transporter in writing via fax, email or mail to (i) return the hazardous waste to the foreign exporter or designate another facility within the United States and (ii) revise the manifest in accordance with the importer's instructions	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	346	28	\$1,308
TOTAL	varies	0.00	varies	0.00	varies	varies	\$0.00	varies	12,417	\$474,661

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.47	\$0.00	28	0	\$13
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	\$0.47	\$0.00	28	0	\$13
Provide the transporter a copy of the manifest	0.00	0.00	0.17	0.00	0.17	\$8.03	\$0.00	56	10	\$450
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	\$4.49	\$0.58	56	8	\$283
Retain a copy	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.00	56	10	\$285
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	\$0.47	\$0.00	6	0	\$3
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	\$0.47	\$0.00	6	0	\$3
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	\$0.47	\$0.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	68	28	\$1,050

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$76.69	\$0.68	9,852	10,837	\$762,249
Keep a copy of each exception report	0.00	0.00	0.00	0.10	0.10	\$3.00	\$0.10	9,852	985	\$30,541
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	\$36.85	\$0.68	3,644	1,822	\$136,759
TOTAL	0.00	varies	varies	varies	varies	varies	varies	varies	13,644	\$929,549

^a Exhibit contains rounding error.

EXHIBIT 10

ESTIMATED ANNUAL HOUR AND COST BURDEN FOR TRANSPORTERS ^a
READING THE REGULATIONS AND E-MANIFEST USER GUIDE

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Transporters	Total Hours	Total Cost
	Legal @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Read the regulations and e-Manifest user guide										
Read the regulations	0.00	0.25	1.00	0.00	1.25	\$72.26	\$0.00	1,075	1,344	\$77,680
Read the User Guide for e-Manifest	0.00	0.50	1.50	0.00	2.00	\$120.91	\$0.00	504	1,008	\$60,939
TOTAL	0.00	varies	varies	0.00	varies	varies	\$0.00	varies	2,352	\$138,619

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.47	\$0.00	1,047,111	10,471	\$492,142
Return a signed copy of the manifest to the generator	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	1,047,111	10,471	\$492,142
Ensure that the manifest accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$6.14	\$0.00	1,047,111	136,124	\$6,429,262
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	\$0.47	\$0.00	1,047,111	10,471	\$492,142
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.00	1,047,111	178,009	\$5,329,795
Give remaining copies of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	1,047,111	10,471	\$492,142
Electronic Manifest - PIN/Password										
Call Help Desk	0.00	0.00	5.00	0.00	5.00	\$236.05	\$2.00	504	2,520	\$119,977
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	\$1.42	\$0.00	143,042	4,291	\$203,120
Sign on behalf of generator, if applicable	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	70,454	705	\$33,113
Place paper manifest copy on truck	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	213,496	2,135	\$100,343
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	\$0.47	\$0.00	213,496	2,135	\$100,343
Electronic Manifest - Digitized Electronic Signature										
Call Help Desk	0.00	0.00	5.00	0.00	5.00	\$236.05	\$2.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0
Sign on behalf of generator, if applicable	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	0	0	\$0
Place paper manifest copy on truck	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0
Give copy of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	0	0	\$0

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.30	\$0.00	34,520	345	\$10,356
Forward the manifest to the designated facility	0.00	0.00	0.00	0.16	0.16	\$4.79	\$0.58	34,520	5,523	\$185,373
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	\$0.30	\$0.00	7,038	70	\$2,111
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	\$0.30	\$0.00	0	0	\$0
Forward the manifest to the designated facility	0.00	0.00	0.00	0.16	0.16	\$4.79	\$0.58	0	0	\$0
Manifest requirements for water (bulk shipment) transporters										
Paper Manifest										
Ensure that the shipping paper accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$6.14	\$0.00	34,520	4,488	\$211,953
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	\$0.47	\$0.00	34,520	345	\$16,224
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	\$0.47	\$0.00	34,520	345	\$16,224
Retain a copy of the manifest or shipping paper	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.00	34,520	5,868	\$175,707
Electronic Manifest - PIN/Password										
Ensure that the shipping paper accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$6.14	\$0.00	7,038	915	\$43,213
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	\$0.47	\$0.00	7,038	70	\$3,308
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	\$0.47	\$0.00	7,038	70	\$3,308
Electronic Manifest - Digitized Electronic Signature										
Ensure that the shipping paper accompanies the waste to its destination	0.00	0.00	0.13	0.00	0.13	\$6.14	\$0.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.47	\$0.00	69,040	690	\$32,449
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	\$4.79	\$0.58	69,040	11,046	\$370,745
Ensure a shipping paper containing all the information required on the manifest excluding the U.S. EPA ID number, generator certification, and signatures accompanies the waste	0.00	0.00	0.13	0.00	0.13	\$6.14	\$0.00	69,040	8,975	\$423,906
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	\$0.47	\$0.00	69,040	690	\$32,449
Retain a copy of the manifest and/or rail shipping paper	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.00	69,040	11,737	\$351,414
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	\$0.47	\$0.00	69,040	690	\$32,449
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	\$0.47	\$0.00	14,077	141	\$6,616
Ensure a shipping paper containing all the information required on the manifest excluding the U.S. EPA ID number, generator certification, and signatures accompanies the waste	0.00	0.00	0.13	0.00	0.13	\$6.14	\$0.00	14,077	1,830	\$86,433
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	\$0.47	\$0.00	14,077	141	\$6,616
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	\$0.47	\$0.00	14,077	141	\$6,616
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	\$0.47	\$0.00	0	0	\$0
Ensure a shipping paper containing all the information required on the manifest excluding the U.S. EPA ID number, generator certification, and signatures accompanies the waste	0.00	0.00	0.13	0.00	0.13	\$6.14	\$0.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0
Before accepting hazardous waste from a rail transporter, sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	0	0	\$0

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Manifest completion, transmittal and recordkeeping: Transporters										
Manifest requirements for transporters who transport waste out of the U.S.										
Paper Manifest										
Sign and date the manifest in the International Shipments block	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	32,355	324	\$15,207
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.00	32,355	5,500	\$164,687
Return a signed copy of the manifest to the generator	0.00	0.00	0.00	0.01	0.01	\$0.30	\$0.00	32,355	324	\$9,707
Send a copy to e-Manifest	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.55	32,355	5,500	\$182,482
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	\$6.14	\$0.00	0	0	\$0
Electronic Manifest - PIN/Password										
Complete the manifest in the International Shipments block	0.00	0.00	0.01	0.00	0.01	\$0.47	\$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	\$0.47	\$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	\$60.45	\$0.00	4,729	4,729	\$285,868
Carry the record when transporting waste to the reclamation facility	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	4,729	47	\$2,223
Retain the records	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.00	4,729	804	\$24,071

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Undeliverable shipments										
Undeliverable shipments to TSDF or alternate TSDF or place outside the U.S (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	\$3.78	\$2.00	13,319	1,066	\$76,984
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	\$3.78	\$2.00	138,191	11,055	\$798,744
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	\$9.93	\$0.00	179	30	\$1,777
Revise the manifest	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	138,191	1,382	\$64,950
Undeliverable Import Shipments										
Receive generator instructions in writing via fax, email or mail to (i) return the hazardous waste to the foreign exporter or designate another facility within the United States and (ii) revise the manifest in accordance with the importer's instructions	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	346	28	\$1,308
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 manifest.	0.00	0.00	0.10	0.00	0.10	\$4.72	\$0.00	1,394	139	\$6,582
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	\$0.47	\$0.00	1,394	14	\$655
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	\$0.47	\$0.00	293	3	\$137
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	\$0.47	\$0.00	293	3	\$137
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	\$0.47	\$0.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0
TOTAL	varies	varies	varies	varies	varies	varies	varies	varies	452,871	\$17,937,510

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Replacement manifests										
Reproduce sufficient copies of the manifest and complete them, as specified	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.30	2,130	170	\$8,689
Obtain a new manifest and complete it, as specified	0.00	0.00	0.40	0.00	0.40	\$18.88	\$0.57	0	0	\$0
Retain a copy of the manifest	0.00	0.00	0.00	0.17	0.17	\$5.09	\$0.00	2,130	362	\$10,840
Give remaining copies of the manifest to the accepting transporter or facility	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	2,130	21	\$1,001
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	553	\$20,530

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Post-receipt manifest data corrections										
Submit email (off-line transporters)	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	11	0	\$5
Submit a correction or respond with comments	0.00	0.00	0.33	0.00	0.33	\$15.58	\$0.00	1,382	456	\$21,530
TOTAL	0.00	0.00	varies	0.00	varies	varies	\$0.00	varies	456	\$21,535

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Notification of discharge of hazardous waste: Transporters										
Notify local authorities	0.00	0.25	1.00	0.00	1.25	\$72.26	\$0.00	750	938	\$54,195
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	\$72.26	\$0.00	75	94	\$5,420
TOTAL	0.00	varies	1.00	0.00	1.25	\$72.26	\$0.00	varies	1,032	\$59,615

^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 AND E-MANIFEST USER GUIDE

	Hours per Generator				Hours/ Respondent	Labor Cost/ Respondent	O&M Costs/ Respondent	Number of Facilities	Total Hours	Total Cost
	Legal @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Read the regulations and e-Manifest user guide										
Read the regulations	0.00	0.25	1.00	0.00	1.25	\$72.26	\$0.00	412	515	\$29,771
Read the User Guide for e-Manifest	0.00	0.50	1.50	0.00	2.00	\$120.91	\$0.00	75	150	\$9,068
TOTAL	0.00	varies	varies	0.00	varies	varies	\$0.00	varies	665	\$38,839

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Manifest completion: Designated TSDFs/Receiving Facilities										
Paper Manifest										
Complete the manifest	0.00	0.00	0.43	0.10	0.53	\$23.30	\$0.57	970,509	514,370	\$23,166,050
Complete continuation sheets	0.00	0.00	0.18	0.04	0.22	\$9.70	\$0.57	67,936	14,946	\$697,699
Electronic Manifest										
Complete the manifest	0.00	0.00	0.08	0.03	0.11	\$4.68	\$0.00	203,603	22,396	\$952,862
Complete continuation sheets	0.00	0.00	0.04	0.01	0.05	\$2.19	\$0.00	14,252	713	\$31,212
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	552,425	\$24,847,823

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.47	\$0.00	2,789	28	\$1,311
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	2,789	56	\$2,621
For imports: list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b.	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	2,789	56	\$2,621
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	0.17	\$8.03	\$0.00	2,789	474	\$22,394
Within 30 days of delivery, send a copy of the manifest (or shipping paper) to the generator	0.00	0.00	0.00	0.13	0.13	\$3.89	\$0.58	2,789	363	\$12,467
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	\$3.78	\$2.00	2,789	223	\$16,120
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	\$23.30	\$0.00	2,789	1,478	\$64,980
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	\$0.47	\$0.00	2,789	28	\$1,311
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	\$0.94	\$0.00	2,789	56	\$2,621
Re-sign and date the manifest	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	2,789	28	\$1,311
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	\$5.09	\$0.00	2,789	474	\$14,195
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	\$4.79	\$0.58	2,789	446	\$14,976
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	178.00	178.00	\$5,332.88	\$6.65	0	0	\$0
Within 30 days of delivery, transmit image files of paper manifests to e-Manifest System	0.00	23.00	70.00	23.00	116.00	\$6,297.92	\$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	36.00	107.00	36.00	179.00	\$9,736.51	\$0.00	0	0	\$0
For imports, send a copy of the manifest within thirty (30) days of delivery to EPA using the addresses listed in 40 CFR 262.82(e) until the facility can submit such a copy to the e-Manifest system	0.00	0.00	0.00	0.13	0.13	\$3.89	\$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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.47	\$0.00	585	6	\$275
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	585	12	\$550
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	\$3.78	\$2.00	585	47	\$3,382
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	\$4.25	\$0.00	585	53	\$2,487
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	\$0.47	\$0.00	585	6	\$275
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	\$0.94	\$0.00	585	12	\$550
Enter PIN/Password and answer challenge question	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	585	6	\$275
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	\$0.47	\$0.00	0	0	\$0
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	0	0	\$0
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	\$3.78	\$2.00	0	0	\$0
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	\$4.25	\$0.00	0	0	\$0
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	\$0.47	\$0.00	0	0	\$0
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	\$0.94	\$0.00	0	0	\$0
Re-sign the manifest	0.00	0.00	0.01	0.00	0.01	\$0.47	\$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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.47	\$0.00	2,789	28	\$1,311
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	\$3.78	\$2.00	2,789	223	\$16,120
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	2,789	223	\$10,542
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	\$5.09	\$0.00	2,789	474	\$14,195
Give the remaining copies back to the transporter	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	2,789	28	\$1,311
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	\$0.47	\$0.00	585	6	\$275
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	\$3.78	\$2.00	585	47	\$3,382
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	585	47	\$2,212
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	\$0.47	\$0.00	0	0	\$0
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	\$3.78	\$2.00	0	0	\$0
Complete Item 18a and 18b of the original manifest, as applicable	0.00	0.00	0.08	0.00	0.08	\$3.78	\$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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$0.47	\$0.00	5,522	55	\$2,595
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	5,522	110	\$5,191
For imports: list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b.	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	5,522	110	\$5,191
Note any discrepancies on each copy of the manifest (or shipping paper, if applicable)	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	663	53	\$2,506
Immediately give the transporter at least one copy of the manifest (or shipping paper)	0.00	0.00	0.17	0.00	0.17	\$8.03	\$0.00	5,522	939	\$44,342
Within 30 days of delivery, send a copy of the manifest (or shipping paper) to the generator	0.00	0.00	0.00	0.13	0.13	\$3.89	\$0.58	5,522	718	\$24,684
Within 30 days of delivery, mail paper copies of manifests to e-Manifest System	0.00	0.00	0.00	178.00	178.00	\$5,332.88	\$6.65	0	0	\$0
Within 30 days of delivery, transmit image files of paper manifests to e-Manifest System	0.00	23.00	70.00	23.00	116.00	\$6,297.92	\$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	36.00	107.00	36.00	179.00	\$9,736.51	\$0.00	0	0	\$0
For imports, send a copy of the manifest within thirty (30) days of delivery to EPA using the addresses listed in 40 CFR 262.82(e) until the facility can submit such a copy to the e-Manifest system	0.00	0.00	0.00	0.13	0.13	\$3.89	\$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	\$5.09	\$0.00	5,522	939	\$28,107
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	\$0.47	\$0.00	1,158	12	\$544
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	1,158	23	\$1,089
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	139	11	\$525
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	\$0.47	\$0.00	0	0	\$0
Complete the management method code	0.00	0.00	0.02	0.00	0.02	\$0.94	\$0.00	0	0	\$0
Note any discrepancies on the manifest	0.00	0.00	0.08	0.00	0.08	\$3.78	\$0.00	0	0	\$0
TOTAL	0.00	0.00	varies	varies	varies	varies	varies	varies	7,898	\$328,844

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Post-receipt manifest data corrections										
Submit email (off-line facilities)	0.00	0.00	0.01	0.00	0.01	\$0.47	\$0.00	0	0	\$0
Submit a correction or respond with comments	0.00	0.00	0.33	0.00	0.33	\$15.58	\$0.00	29,994	9,898	\$467,313
TOTAL	0.00	0.00	varies	0.00	varies	varies	\$0.00	varies	9,898	\$467,313

^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 @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/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	\$112.28	\$0.68	135	270	\$15,245
TOTAL	0.00	0.50	1.00	0.50	2.00	\$112.28	\$0.68	135	270	\$15,245

^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 ^b	Number of Manifests/ Respondents	Total Hours	Total Cost ^b
	Legal @ \$115.16/hr	Managerial @ \$100.18/hr	Technical @ \$47.21/hr	Clerical @ \$29.96/hr						
Manifest transactions subject to fees										
User fees										
Pay user fee for each paper or electronic manifest	0.00	0.00	0.00	0.00	0.00	\$0.00	\$23,346,212.00	N/A	0	\$23,346,212
Informal fee dispute resolution										
Contact system's billing representatives and provide specified information	0.00	1.00	2.00	1.00	4.00	\$224.56	\$0.00	749	2,995	\$168,151
Provide specified information to appeal the billing representative's decision if applicable	0.00	1.00	2.00	1.00	4.00	\$224.56	\$0.00	7	30	\$1,682
TOTAL	0.00	varies	varies	varies	varies	varies	varies	varies	3,025	\$23,516,045

^a Exhibit contains rounding error. N/A = not applicable.

^b The O&M cost in this column is a preliminary estimate and subject to change. It should not be used to estimate actual user fees. EPA is still formulating its user fee amounts.

EXHIBIT 22

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	\$72	\$72
Applying to the registry	2	\$0	\$1,820	\$154	\$1,974
Updating general information in the approved application	1	\$0	\$2	\$81	\$83
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	\$1,810	\$42	\$1,852
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	\$12	\$14
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	\$3,634	\$361	\$3,995
Generators					
Reading the regulations and e-Manifest User Guide	117,672	\$0	\$0	\$6,936,303	\$6,936,303
Manifest completion (without assistance of designated TSDF)	221,506	\$0	\$158,784	\$10,126,797	\$10,285,581
Manifest completion (with assistance of designated TSDF)	35,223	\$0	\$0	\$1,455,899	\$1,455,899
Compliance with State program requirements	0	\$0	\$0	\$0	\$0
Manifest transmittal and recordkeeping	267,329	\$0	\$70,801	\$8,307,983	\$8,378,784
Undeliverable shipments	12,417	\$0	0	\$474,661	\$474,661
Rejected waste and container residues	28	\$0	\$32	\$1,018	\$1,050
Exception report completion, submission, and recordkeeping	13,644	\$0	\$10,162	\$919,387	\$929,549
Subtotal (Generators)	667,819	\$0	\$239,779	\$28,222,048	\$28,461,827
Transporters					
Reading the regulations and e-Manifest User Guide	2,352	\$0	\$0	\$138,619	\$138,619
Manifest completion, transmittal, and recordkeeping (domestic + imports +	452,871	\$0	\$381,888	\$17,555,622	\$17,937,510
Replacement manifests	553	\$0	\$639	\$19,891	\$20,530
Post-receipt manifest data corrections	456	\$0	\$0	\$21,535	\$21,535
Notification of discharge of hazardous waste	1,032	\$0	\$0	\$59,615	\$59,615
Subtotal (Transporters)	457,264	\$0	\$382,527	\$17,795,282	\$18,177,809
Designated TSDF/Receiving Facilities					
Reading the regulations and e-Manifest User Guide	665	\$0	\$0	\$38,839	\$38,839
Manifest completion (assisting the generators)	552,425	\$0	\$591,913	\$24,255,910	\$24,847,823
Manifest transmittal and recordkeeping (domestic + imports)	777,737	\$0	\$734,419	\$30,709,704	\$31,444,123
Compliance with State program requirements	0	\$0	\$0	\$0	\$0
Discrepancy report completion and submission	25,495	\$0	\$380,330	\$1,311,349	\$1,691,679
Rejected waste and container residues	7,898	\$0	\$19,935	\$308,909	\$328,844
Post-receipt manifest data corrections	9,898	\$0	\$0	\$467,313	\$467,313
Unmanifested waste report completion and submission	270	\$0	\$92	\$15,153	\$15,245
Fees for the electronic hazardous waste manifest program	3,025	\$0	\$23,346,212	\$169,833	\$23,516,045
Subtotal (Designated TSDF/Receiving Facilities)	1,377,413	\$0	\$25,072,901	\$57,277,010	\$82,349,911
Annualized Capital Costs					
Paper storage (file cabinets)	--	\$69,827	--	--	\$69,827
Subtotal (Capital Costs)	--	\$69,827	--	--	\$69,827
TOTAL: ALL RESPONDENTS	2,502,500	\$69,827	\$25,698,841	\$103,294,701	\$129,063,369

^a Exhibit contains rounding error.

	Hours per Agency Respondent					Hours/ Respondent	Labor Cost/ Respondent	Capital Costs/ Respondent	O&M Costs/ Respondent	Number of Activities	Total Hours	Total Cost
	Legal @ \$80.59/hr	Managerial @ \$75.36/hr	Technical @ \$55.26/hr	Clerical @ \$22.19/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	\$29.64	\$0.00	\$0.00	1	1	\$30
Notify registrant of EPA's decision regarding its application	0.00	0.00	0.00	0.10	0.00	0.10	\$2.22	\$0.00	\$0.58	1	0	\$3
Review revised application	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00	1	1	\$30
If application is approved, provide electronic file of the manifest, continuation sheet, and manifest instructions to approved registrant and request manifest form samples	0.00	0.00	0.00	0.10	0.00	0.10	\$2.22	\$0.00	\$5.31	1	0	\$7
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00	1	1	\$30
Notify registrant of EPA's decision regarding its manifest form samples	0.00	0.00	0.00	0.10	0.00	0.10	\$2.22	\$0.00	\$0.58	1	0	\$3
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00	1	1	\$30
Updating General Information in the Approved Application												
Review revised application	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00	3	2	\$89
Review documentation submitted by registrant	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00	1	1	\$30
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	\$23.57	\$0.00	\$0.58	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	\$29.64	\$0.00	\$0.00	1	1	\$30
Evaluate revised manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00	1	1	\$30
Typesetting the Manifest Form Subsequent to its Approval												
Evaluate manifest form samples	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$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	\$29.64	\$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	\$59.28	\$0.00	\$0.00	1	1	\$59
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	\$29.64	\$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	\$29.64	\$0.00	\$0.00	0	0	\$0

	Hours per Agency Respondent					Hours/ Respondent	Labor Cost/ Respondent	Capital Costs/ Respondent	O&M Costs/ Respondent
	Legal @ \$80.59/hr	Managerial @ \$75.36/hr	Technical @ \$55.26/hr	Clerical @ \$22.19/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	12,500.00	37,500.00	\$3,443,300.00	\$9,951,456.00	\$9,951,456.00
For Generators									
Exception report									
Review exception reports: LQGs	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00
Review exception reports: SQGs	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00
For Transporters									
Notification of discharge									
Receive notifications of discharge	0.00	0.20	0.80	0.00	0.00	1.00	\$59.28	\$0.00	\$0.00
For Designated Facilities									
Discrepancy report									
Review designated facility discrepancy reports	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00
Unmanifested waste report									
Review designated facility unmanifested waste reports	0.00	0.10	0.40	0.00	0.00	0.50	\$29.64	\$0.00	\$0.00
TOTAL: AGENCY	0.00	varies	varies	varies	varies	varies	varies	varies	varies

^a Exhibit contains rounding error.

6E. Bottom Line Burden Hours and Cost

Respondent Tally

Exhibit 22 shows the total annual hour and cost burden to respondents. As shown in the exhibit, EPA estimates the annual respondent burden to be 2,502,500 hours and \$129,063,369. The bottom line burden to respondents over 3 years is estimated to be 7,507,500 hours and \$387,190,107.

Agency Tally

Exhibit 23 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 59,397 hours and \$24,644,072. The bottom line burden to the Agency over 3 years is estimated to be 178,191 hours and \$73,932,216.

6F. Reasons for Change in Burden

The currently approved Manifest ICR (0801.22) estimates an annual respondent hourly burden of 2,639,210 hours. This ICR (0801.23) estimates an annual burden of 2,502,500 hours, which is a 136,710-hour decrease from the currently approved ICR. This decrease resulted from adjustments to ICR 0801.23.

Table 11 identifies the adjustments in ICR 0801.23, compares them to ICR 801.22 and indicates the reason for the adjustment. The burden decrease in ICR 0801.23 results primarily from the following adjustments:

- ICR 801.22 estimates that 2,004,558 manifests are prepared, transmitted and retained by waste handlers annually as part of the manifest cycle, whereas ICR 0801.23 estimates 1,381,909 manifests, which is a decrease of 622,649 manifests (see Adjustment 2). This 31% decrease in manifests affects a number of the ICR's burden estimates for generators, transporters and designated TSDFs. Whereas EPA used data modeling and assumptions to estimate the number of manifests in ICR 801.22, EPA incorporated e-Manifest data on the number of manifests into ICR 0801.23.⁵⁶

⁵⁶ The manifest totals in Adjustments 3 and 4 of the table have minimal impact on respondent hourly burden in ICR 0801.23 because the exhibits do not use them for burden estimation.

- ICR 801.22 estimates that 56% of manifests are prepared by designated TSDFs for their generator customers, whereas ICR 0801.23 estimates 87% (Adjustments 7 and 8). Under such an arrangement, the TSDF prepares the majority of the manifest form which is provided to the generator for signature when the waste is picked up. This shifts burden from the generator to the designated TSDF, which generally prepares them more efficiently. The percentages in ICRs 801.22 and 0801.23 are based on industry consultations.

In addition, Manifest ICR 801.22 estimates an annual respondent O&M cost of \$38,649,953. ICR 0801.23 estimates an annual O&M cost of \$25,698,841, which is a decrease of \$12,951,112 from the currently approved ICR. This decrease resulted from adjustments to ICR 0801.23.

Most of the decrease results from adjustments to the user fee amounts in ICR 0801.23. Specifically, ICR 801.22 estimates that designated TSDFs would pay a total of \$35,345,411 in user fees annually, whereas ICR 0801.23 estimates \$23,346,212 in user fees annually⁵⁷ (Adjustment 5). This is a decrease of \$11,999,199. The fee amount in ICR 801.22 is based on EPA modeling and assumptions. In ICR 0801.23, EPA used a different approach. The fee amount in ICR 0801.23 is based on EPA's preliminary estimate of the total annual cost for EPA to develop, operate and maintain the e-Manifest system during the next 3 years. This approach recognizes that the user fees are designed to recover the Agency's total annual cost of e-Manifest. Therefore, ICR 0801.23 uses EPA's preliminary estimate of the total costs to approximate the total amount of user fees that designated TSDFs must pay, collectively, each year.

⁵⁷ This cost is a preliminary estimate and subject to change. It should not be used to estimate actual user fees. EPA is still formulating its user fee amounts.

**Table 11
Comparison of Estimates in ICR 801.22 and ICR 0801.23**

Parameter	ICR 0801.22	ICR 0801.23	Reason for Adjustment in ICR 0801.23
1. Annual respondent universe	203,927	215,677	Review of e-Manifest and RIA data
2. Total annual number of manifests in manifest cycle*	2,004,558	1,381,909	Review of e-Manifest data
3. Total annual number of manifests submitted to National System	2,330,579	1,765,974	Review of e-Manifest data
4. Total annual number of manifests for which user fees are paid	3,25,1970	2,000,000	Review of e-Manifest data
5. Total Annual User Fees (O&M cost)	\$35,345,411	\$23,346,212**	EPA preliminary cost estimates. Subject to change
6. Annual average rate of waste handler use of electronic manifest for tracking of shipments cradle to grave	28%	12%	Review of e-Manifest data
7. % manifests prepared by designated TSDF on behalf of generators	56%	87%	Industry consultations
8. % manifests prepared by generators without TSDF assistance	44%	13%	Industry consultations
9. Time (minutes) for designated TSDF to send manifest copy back to generator	10	8	Industry consultations
10. Time (hours) for designated TSDF to submit paper-based manifests to e-Manifest annually			
Mailed paper-based manifests	6	178	Industry consultations
Image file uploads	6	116	Industry consultations
Data file & image uploads	6.5	178	Industry consultations
11. % manifests received by designated TSDF annually that require:			
Noting a discrepancy	25%	12%	Industry consultations
Discrepancy report	0.4%	2%	Industry consultations
Rejected load or container residue	3%	0.5%	Industry consultations
12. Time (minutes) for designated TSDF to make a post-receipt manifest data correction under 40 CFR 264.71(l)	5	20	Industry consultations

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

**This cost is a preliminary estimate and subject to change. It should not be used to estimate actual user fees. EPA is still formulating its user fee amounts.

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 12 presents these estimates.⁵⁸ 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 12
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 waste handler per year.

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-2018-0756, 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 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

⁵⁸ 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).

“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-2018-0756 and OMB Control Number 2050-0039 in any correspondence.

