# Integrating e-Manifest With Hazardous Waste Exports and Other Manifest-Related Reports, PCB Manifest Amendments and Technical Corrections

# **Response to Comments (RTC) Document**

June 2024

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# I. Introduction

# 1. Background

On April 1, 2022 (87 FR 19290), the U.S. Environmental Protection Agency (EPA or the Agency) published in the Federal Register a proposal to amend certain aspects of the hazardous waste manifest regulations under the Resource Conservation and Recovery Act (RCRA), specifically concerning the electronic manifest (e-Manifest) system to: (1) collect hazardous waste export manifests in the e-Manifest system and adopt the existing manifest provisions for electronic manifest use and the electronic signature requirements for export manifests; (2) expand the required international shipment data elements on the manifest form; (3) revise aspects of the manifest form to improve compliance with import and export consents and tracking requirements and to allow for greater precision in waste data reported on the manifest; (4) incorporate three manifest-related reports (i.e., discrepancy, exception, and unmanifested waste reports) into e-Manifest; (5) make conforming changes to the polychlorinated biphenyl (PCB) manifest regulations under the Toxic Substances Control Act (TSCA); and (6) make other technical corrections to remove obsolete requirements, correct typographical errors, establish definitions, and/or improve alignment with the e Manifest program.

EPA also discussed and requested comment on a conceptual approach for Biennial Report (BR) integration with the e-Manifest system. EPA requested comment on modifying the manifest forms to facilitate receiving facilities leveraging the e-Manifest system to populate the corresponding fields of the Waste Received from Off-site (WR) Form as part of the Biennial Report.

The comment period for the proposed rule was scheduled to end on May 31, 2022. However, after its publication, EPA received a request to extend that comment period to allow for additional time to develop comments on the proposed rule. After considering the request for additional time, EPA decided to extend the comment period for an additional 61 days, through August 1, 2022.

EPA received 17 sets of comments in response to the proposal, including the request to extend the comment period.

## 2. Document Purpose

This document summarizes the public comments received in response to the proposed rule and provides the Agency's responses. The Agency's responses clarify how the comments were considered in developing the final rule and e-Manifest system. This document does not address comments that are outside the scope of the final rule. This document does not address sections of the proposed rule that received no public comments.

Instead of responding to each commenter individually, this document groups public comments (e.g., suggestions, concerns, questions) by the issue discussed in the proposed rule and the perspectives of the commenters. In each comment summary, EPA provides the number of organizations that are included in the comment summary and identifies the organizations. Each organization is assigned a unique ID that is used to reference the organization throughout the document (see Table of Commenting Organizations). The type of commenter (e.g., state, waste handler, trade association) is acknowledged in some of the comment summaries when it is helpful to clarify the context of the commenter.

# **II. Public Comments and Agency Responses**

# 1. International Shipments of Hazardous Waste

a. Export Manifests

**Comment:** Four commenters generally supported the proposed amendments to the manifest regulations that would require export manifests to be collected in the e-Manifest system (Commenters No. 2, 6, 8, and 9).

**Response:** EPA thanks commenters for their comments regarding the regulatory amendments requiring exporters to submit export manifests into the e-Manifest system. EPA is finalizing the proposals as proposed.

**Comment:** One commenter stated support for the proposed manifest fee and the fee formula and methodology and fee revisions to calculate the fees based on the exporter's manifest activities in the system (Commenter No. 2).

**Response**: EPA appreciates the commenter's support for the proposed fee methodology for the submission of export manifest to the e-Manifest system. Pursuant to the new provisions, an exporter must pay the requisite use fee for manifest submissions. EPA will impose a per manifest fee for each manifest submitted to the system based on the type (paper or electronic) and mode of submission (data upload, image file upload, or electronic). EPA will use the fee formula and methodology and fee revisions described at §§ 265.1312 and 265.1313, respectively, to calculate the manifest fees based on exporters' manifest activities in the system.

**Comment:** Two commenters (Nos. 8 and 6) stated support for EPA's changes, as proposed, to add a requirement for transporters to send a manifest to the exporter instead of the generator, another commenter (No. 2) supported an alternative approach.

One commenter supported EPA's proposal that would require an exporter to submit the export manifest to the e-Manifest system and paying the requisite processing fee. The commenter concurred with EPA that transporters are not best suited for submitting the export manifest to the system and paying the requisite processing fee (Commenter No. 8).

Another commenter (No. 6) concurred with EPA that transporters are not best suited for submitting the export manifest to the system and paying the requisite processing fee. This same commenter noted that exporters and traders who export hazardous waste are fewer in number, are reasonably expected to be more sophisticated and able to consistently manage manifest submittals and are more knowledgeable about the hazardous waste being exported than the transporters who currently close out export manifests. This commenter reasoned that applying the primary regulatory responsibility to exporters and traders who are already required to be domiciled in the U.S. would reduce the difficulty in communications with and regulatory oversight over entities domiciled in a foreign country.

One commenter (No. 2) recommended instead that the foreign receiving facility be responsible for returning the manifest to the exporter and suggested EPA incorporate into the final rule a mandatory requirement that all export contracts or equivalent legal arrangements established among all parties (e.g., exporter, importer and receiving facility) require that the foreign receiving facility return the manifest to the exporter.

**Response:** EPA agrees with commenters who stated that the transporter is not well positioned to submit the export manifest to the system and pay the requisite processing fee. Therefore, EPA is finalizing provisions under section § 262.83(c) which requires exporters to submit the top copy of a manifest form and continuation sheet to EPA for processing (for paper manifests) and pay the requisite user fee.

EPA appreciates the recommendation from commenter No. 2 that the foreign receiving facility be the responsible party to submit the manifest, however, EPA agrees with other commenters who stated that the primary regulatory responsibility should be an entity domiciled in the U.S. This will eliminate the difficulty in regulatory oversight over entities domiciled in a foreign country.

**Comment:** Two commenters (No. 8 and 9) stated that an important obstacle to the increased use of electronic manifests is the U.S. Department of Transportation (DOT) requirement for a paper manifest to be carried by transporters. The commenters believed this is a strong disincentive to the use of electronic manifesting and encouraged further coordination with DOT on shifting to electronic recordkeeping during transportation. On July 11, 2022, the Pipeline and Hazardous Materials Safety Administration (PHMSA) published in the Federal Register a Request for information, which seeks input on the use of electronic hazard communications in lieu of hard-copy documentation. The commenter believes that the EPA should strongly support the use of electronic hazard communications in response to the DOT request for information.

Response: EPA believes that, while the DOT requirement for a paper record to be carried by transporters could be a disincentive to use electronic manifests, the Agency does not have authority to amend regulations promulgated by the DOT. Furthermore, EPA disagrees with industry's view about the magnitude of the obstacle that this requirement presents. The e-Manifest system currently offers solutions through electronic manifesting that make complying with DOT regulations easier than if a paper manifest is used. For example, the e-Manifest system supports the ability to print hard copies of electronic manifests (instead of going through an EPA approved printer), the hybrid manifesting workflow, and the ability to "build" DOT descriptions automatically.

Comment: One commenter (No. 2) stated that the number of foreign carriers exceeds 40, including the following: Altom, Amnor Industries Inc., Bison Transport, Inc., Clean Harbors, Contrans Tank Group Inc., Dallas Haul Inc., Drain All Ltd., Entretien Industrial ROVAN, Environmental Services Inc., Fortress Trucking Ltd., Gabbro Enterprises Ltd., GFL Environmental West Corp., Harmac Transportation Inc., Harold Marucs Limited, Inaan Truck Services, Jade Transport Ltd., Joseph Haulage Inc., JMV Environment Inc., Kingsway Bulk Division Vrac, Laidlaw Carriers Van GP Inc., MCQ Handling Inc., McRae's Environmental Services Ltd., Miller Environmental Corporation, One Environmental Inc., Pardy's Waste Management Ltd., PDI (Polymer Distribution Inc.), Primemax Energy Inc., Quality Carriers Inc., Raw Materials Co. Inc., Recubec Inc., and Rollex Transport.

**Response:** EPA thanks commenters for the relevant information.

#### b. Import Manifests

**Comment:** One commenter (No. 2) stated support for: (1) revisions to the international movement document to require a list of manifest tracking numbers from Item 4 if the shipment is required to be manifested while being transported in the U.S; and (2) revisions to add the unique international movement document tracking number as an acceptable alternative to listing the shipment number and total number of shipments or the foreign export permit number on the generic international movement document. This commenter, however, suggested EPA provide industry with a reasonable amount of time to make changes in their data management systems. The commenter also requested that industry be allowed to use their current paper forms until the supplies are exhausted.

**Response:** EPA thanks the commenter for the supporting comments. EPA is finalizing the requirements as proposed. The movement document does not require the use of a specific form so the current forms may continue to be used so long as all items required by U.S. movement document regulations are included. The additional items must be added to the movement document forms being used on the effective date of this rulemaking.

**Comment:** One commenter (No. 2) stated that the bulk of imports/exports of hazardous wastes occurs between Canada and the U.S. When exporting to Canada, given that the Canadian system closes out the export transaction and that EPA's system is linked to the Canadian system, the Canadian system should be responsible for submitting the confirmations of receipt and disposal/recycling to Waste Import Export Tracking System (WIETS). The commenter further stated that this will only be possible if EPA ensures that any newly established compliance dates do not go into effect until the data exchange is available.

Response: The electronic import-export reporting compliance date will not be established until RCRAInfo WIETS adds the capability for the U.S. exporter and U.S. receiving facility to submit the confirmations into RCRAInfo WIETS. Since December 31, 2016, U.S. exporters have been required to receive confirmations of receipt and confirmations of recovery or disposal from the foreign receiving facilities, and U.S. receiving facilities have been required to send out confirmations of receipt and confirmations of recovery or disposal to the foreign exporter and relevant countries of export and transit. Additionally, while many exports are shipped to Canada, exports of hazardous waste are shipped to other countries, so the requirements need to be implementable regardless of the destination country.

**Comment:** Commenter No. 2 supported the Agency's proposed revisions to allow an established data exchange to be used to comply with the transmittal of shipment confirmations for import shipments between the receiving facility and the foreign exporter and between the receiving facility and the competent authority for the country of export and transit for import shipments. However, the commenter stated that it would only be possible if EPA ensures that any newly established compliance dates do not go into effect until an Application Programming Interface (API) exists between industry users and WIETS, and the data exchange between WIETS and other countries is operational. The commenter also stated that, unless foreign transporters are allowed to obtain a RCRAInfo Industry account and register in e-manifest, exports and imports will never be fully electronic.

**Response:** The requirements related to confirmations of receipt and confirmations of recovery or disposal have been required since December 31, 2016. The electronic import-export reporting compliance date will not be established until RCRAInfo WIETS adds the capability for the U.S. exporter and U.S. receiving facility to submit the confirmations into RCRAInfo WIETS. If, and when, a country-to-country data exchange is established for shipment tracking, the regulations will allow use of the exchange to meet the transmittal requirements more efficiently between the two countries. Lastly, there is no required movement document form, so use of older forms is not prohibited so long as all the required data items are included.

c. Manifest Form Changes Related to Export and Import Hazardous Waste Shipments

**Comment**: Three commenters supported moving the International Shipment field (Item 16) from the manifest to the continuation sheet and adding new fields for the consent number, the exporter's EPA ID Number, and email address to the International Shipments field (Commenters No. 2, 8, and 9). Two of these commenters (Nos. 8 and 9) reasoned that moving Item 16 (International Shipments field) from the manifest to the continuation sheet would be clearer and easier for the regulated community since one field would no longer be used for two different pieces of information (information for the waste generator and waste exporter).

Response: EPA appreciates commenters' strong support for moving the International Shipment field (Item 16) from the manifest to the continuation sheet and adding new fields for the consent number, exporter's EPA ID Number, and email address to the International Shipments field. EPA is finalizing most of the proposed changes to the manifest forms and instructions related to international shipments of hazardous waste. EPA is not finalizing its proposal to add the exporter's email address to the international shipment block of the manifest. EPA is also not finalizing changes that would remove the requirement for the final transporter to sign the manifest on the date the waste departs the country.

EPA decided to retain the requirement that transporters sign on the day that the shipment departs the US. The date of the transporter's signature documents the start of the 30-day timeframe that, by the end of, the exporter must submit the manifest to the e-Manifest system. EPA decided against finalizing the addition of the exporter's email address to the International Shipment since the proposed addition to the form would have used the space needed for the transporter's signature. EPA has contact information for US exporters since they must include an email address when they establish their RCRAInfo account.

**Comment:** Commenter No. 2 opposed EPA's proposal to allow the exporter to use the left side of Item 5 for its name and address and supply the generator's information on the right side of Item 5 for cases where the exporter is not the generator. The commenter suggested receiving facilities be allowed to collect all the export information on the manifest continuation sheet, rather than having it on both the manifest and continuation sheet. The commenter reasoned that using Item 5 to collect two distinct types of information would create confusion for manifest users, preferring instead a clearly defined area for the collection of exporter information.

Response: EPA agrees with the commenter's suggestion that a clearly defined area on the manifest continuation sheet for the collection of exporter information is a better approach than entering it on the right side of Item 5. Therefore, in establishing a clearly defined area on the manifest sheet for exporter information, this final rule removes the International Shipments field (Item 16) from the manifest, re-designates it as Items 33a and 33b on the continuation sheet, and adds new fields for consent numbers and the exporter's EPA Identification Number to the International Shipments field. EPA notes, however, that if the exporter is the generator of the export shipment or the site initiating the export shipment, then the exporter must continue to record its information – name, address, and phone number – in Items 1 and 5 of the manifest form. Such exporters are not required to provide their EPA ID number on the manifest continuation sheet.

This final rule also revises the current manifest instructions for completing the International Shipments field to reflect these new changes.

For Item 33a, the exporter must check the box indicating an export shipment and enter the port of exit (city and state) from the U.S. If the exporter is located separate from the site initiating the shipment, then the exporter must enter its EPA ID Number. As mentioned in the preamble, exporters must submit export manifests to the e-Manifest system and receive invoices for payment. Therefore, exporters must register for the e-Manifest module in the RCRAInfo industry application with at least one Site Manager level access to receive and pay invoices for their site(s). These invoices cannot be forwarded to or paid by someone other than a Site Manager.

The final transporter of the export shipment must sign and date the manifest in Item 33a to indicate the day the shipment left the U.S. via a road or rail border crossing or the date the shipment was delivered to a seaport of exit for loading onto an international carrier. For import shipments, the importer must check the box indicating an import shipment and enter the port of entry (city and state) into the U.S. in new Item 33a of the continuation sheet. For Item 33b, destination facilities of import shipments and exporters must record the consent numbers on the manifest for each waste stream listed in Items 9b and 27b of the manifest and continuation sheet.

Comment: One commenter stated that, for hazardous waste shipments entering the U.S., the manifest regulations for importers are similar to the requirements for exporters. The importer must also comply with manifest requirements at 40 CFR 262.20 through 262.23. The importer is considered the RCRA generator whose EPA ID Number will be entered in Item 1. Additionally, the importer's information must be entered in Item 5, except that the importer must enter the name and site address of the foreign facility on the right side of Item 5 of the manifest in lieu of entering its physical site address, and the importer must also enter the name, site address, and EPA ID Number of the domestic designated facility in Item 8 of the manifest. If the domestic designated facility is also the importer, its information would be entered in both locations on the manifest. The commenter recommended that, when updating the instructions for Form 8700-22 and 22a, EPA includes the importer's requirements for sections 1 and 5 of EPA Form 8700-22 that are relevant to 40 CFR 262.84(c)(1)(i).

**Response:** EPA accepts the commenter's recommendation about revising the manifest instructions of Items 1 and 5 of the manifest form for hazardous waste import shipments. EPA agrees that the manifest instructions for these fields should align with the existing importer requirement at § 262.84(c)(1)(i) and has revised the manifest instructions accordingly.

## d. Additional Proposed Changes to International Shipment Requirements

**Comment**: Commenter No. 2 stated support for: (1) revisions to require the international movement document to list the RCRA manifest tracking number from Item 4 if the shipment is required to be manifested while being transported in the U.S; and (2) revisions to add the unique international movement document tracking number as an acceptable alternative to listing the shipment number and total number of shipments for the EPA acknowledgment of consent (AOC) or the foreign export permit number on the generic international movement document. This commenter, however, suggested EPA provide industry with a reasonable account of time to make changes in their data management systems. The commenter also requested that industry be allowed to use their current paper forms until the supplies are exhausted.

**Response**: EPA appreciates the commenter's support and is finalizing revisions as proposed. The movement document requirements do not require the use of a specific form so the current forms may continue to be used so long as all items required by US movement document regulations are listed. The additional items must be added to the movement document forms being used after the effective date of this rulemaking.

**Comment:** Commenter No. 2 stated that the bulk of imports and exports of hazardous wastes occurs between Canada and the U.S. When exporting to Canada, given that the Canadian system closes out the export transaction and that EPA's system is linked to the Canadian system, the Canadian system should be responsible for submitting the confirmations of receipt and disposal/recycling to WIETS. The commenter further stated that this will only be possible if EPA ensures that any newly established compliance dates do not go into effect until the data exchange is available.

Response: EPA appreciates the commenter's recommendation to link the Canadian system with e-Manifest. While many exports are shipped to Canada, exports of hazardous waste are shipped to other countries, so the requirements need to be implementable regardless of the destination country. The U.S. exporter and U.S. receiving facility will therefore need to submit the confirmations into RCRAInfo WIETS on the electronic import-export reporting compliance date once it has been established. If, and when, a country-to-country data exchange is established for shipment tracking, the regulations will allow use of the exchange to meet the transmittal requirements more efficiently between the two countries.

**Comment:** Commenter No. 2 supported EPA's proposed revisions to allow an established data exchange to be used to comply with the transmittal of shipment confirmations for import shipments between the receiving facility and the foreign exporter and between the receiving facility and the competent authority for the country of export and transit for import shipments. However, the commenter stated that it would only be possible if EPA ensures that any newly established compliance dates do not go into effect until an API exists between industry users and WIETS, and the data exchange between WIETS and other countries is operational. The commenter also stated that, unless foreign transporters are allowed to obtain a RCRAInfo Industry account and register in e-manifest, exports and imports will never be fully electronic.

**Response:** If, and when, a country-to-country data exchange is established for shipment tracking, the regulations will allow use of the exchange to meet the transmittal requirements more efficiently between the two countries.

# 2. Exception, Discrepancy, and Unmanifested Waste Reports

## a. Exception Reporting

Comment: Eight commenters supported EPA's proposal to integrate exception reporting into the e-Manifest system (Commenters No. 2, 3, 6, 8, 9, 10, 14, and 16). One commenter reasoned that it would create a unified format for submitting Exception Reports, greater efficiency in reporting, quick submissions to the applicable agency, and greater transparency between all impacted parties (Commenter No. 14). One commenter fully supported the use of electronic exception reporting to (1) eliminate unnecessary paper processing and (2) to keep all manifest-related communications within the e-Manifest system. The same commenter noted that this will enhance the e-Manifest system's utility for industry and allow easier access of these records for regulators (Commenter No. 16).

**Response**: EPA appreciates the numerous comments favoring integration of exception reporting into e-Manifest to allow generators to submit Exception Reports electronically. EPA agrees with commenters who favor integrating Exception Reports into the e-Manifest system and is finalizing requirements that will require the use of electronic Exception Reports on the established date.

**Comment**: Three commenters (Nos. 6, 8, and 9) agreed with EPA's proposal to restrict electronic exception reporting to shipments using electronic manifests (hybrid or fully electronic manifests). One of these commenters concurred that, for electronic and hybrid manifests, it not only would be more efficient to also route exception reports through the e Manifest system, but counter to the goal of the entire e Manifest effort to require "off-line" submittal of hardcopy exception reports for electronic manifests (Commenter No. 6).

Two commenters (No. 2 and 10) did not agree with EPA's proposal to restrict electronic exception reporting to shipments using electronic manifests (hybrid or fully electronic). Both of these commenters stated that the number of generators that use electronic manifests comprise an exceedingly small fraction of all generators and that EPA should find ways to facilitate electronic exception reporting for paper manifests. Both commenters provided recommendations for extending electronic exception reporting to all manifests.

Commenter No. 2 added that the great majority of electronic manifests are Data Plus Image uploads because the hazardous waste industry and its customers are fully invested in that system. Rather than attempting to persuade generators to switch to fully electronic or hybrid manifests, the commenter urged EPA to develop the functionality that will allow receiving facilities to electronically capture signatures on their industry systems so that the Data Plus Image would be replaced by a data upload that includes the electronic signatures, eliminating the need for an image of the paper manifest. This commenter asserted that EPA and industry would be better served by embracing the preferred industry process and allow industry systems to capture electronic signatures outside e-Manifest.

The same commenter respectfully submitted that it is not "impossible" to use the e-Manifest system to facilitate electronic exception reporting for all manifests. The commenter stated that the time has come for EPA to require generators to register with the e-Manifest system. The commenter further stated that EPA should amend the regulations to require registered generators to submit electronic exception reports whenever they do not receive a notification from the e-Manifest system of a completed manifest within the required timeframe. The responsibility should clearly be on the generator to monitor the manifests, either manually or in an e-Manifest account, and determine if and when an exception report should be electronically filed. In this way, EPA could extend electronic exception reporting to all generators, regardless of the manifest type used. If EPA does not do this, instead of restricting electronic exception reporting to a miniscule fraction of generators that use fully electronic or hybrid manifests, EPA would waste time and money on the system upgrade with little benefit, missing an important opportunity to streamline exception reporting for all generators.

Another commenter (No. 10) stated that the ability to complete an electronic exception report would serve as an incentive for the majority of generators to enter the RCRAInfo industry application. The commenter also stated that it should be possible to avoid any paper processing/data entry costs by only allowing a "data plus image" type of exception report where the generator would upload a scanned copy of the manifest and enter relevant details (e.g., manifest tracking number) in an online form. This would be similar to EPA's proposed method of collecting electronic submissions of unmanifested waste reports described on page 19306 but would also include uploading a PDF image of the paper manifest. By making this option available to all generators—or possibly even by making this the only allowed method for submitting an exception report—EPA would incentivize generators who are using a paper manifest and need to complete an exception report to enter the RCRAInfo industry application.

**Response:** EPA is persuaded by commenters that assert that electronic exception reporting should not be restricted to electronic manifests that originate in the system (fully electronic and hybrid manifests). The Agency agrees with commenters who assert that allowing electronic exception reporting for paper manifests would decrease the amount of paper processing required by states and provide a unified format for reporting regardless of the manifest submission type.

While EPA acknowledges that current electronic manifest usage comprises a small proportion of the total manifests captured in the system, EPA is not persuaded by Commenter No. 2 who urges EPA to allow electronic signatures to be solely captured in industry systems.

The Agency is persuaded by Commenter No. 2 who asserted that requiring Exception Reports to be filed electronically by generators, regardless of the manifest type, would benefit the hazardous waste community. Since the Agency is requiring small and large quantity generators (SQGs and LQGs) to register in the RCRAInfo industry application (see the final rule for more details), expanding electronic exception reporting to include paper manifests is now feasible and provides generators a streamlined method to file Exception Reports.

**Comment:** Four commenters provided recommendations on EPA's proposal to add functionality that alerts generators when exception reporting requirements may be triggered (Commenters No. 8, 9, 10, and 14).

Two commenter stated that they do not believe that the exception reporting notifications should only alert generators based on their federal generator category in RCRAInfo for several reasons: (1) many generators do not keep their generator category current in RCRAInfo; (2) generators who only generate state-only hazardous waste, or a combination of state-only and federal hazardous wastes, may be excluded from notification; and (3) some states may require manifesting and exception reporting for all generators, not just SQGs and LQGs. This commenter suggested notifying hazardous waste generators with a valid EPA ID number, regardless of generator category, as well as PCB waste generators, the receiving facility, and the state regulators for both the generator and receiving states (Commenters No. 8 and 9).

Response: EPA appreciates commenters input regarding implementation of electronic exception reporting and suggestion that e-Manifest system notifications should alert all generators with valid EPA ID numbers regardless of generator category. The e-Manifest team will continue to practice an agile workflow to collect feedback on potential functionality to alert generators (and other parties) in a method that best serves the user community. Such alerts would only be available to generators who have registered accounts in the RCRAInfo application and thus have access to the e-Manifest module in RCRAInfo. The final rule does not require very small quantity generators (VSQGs) that are required to use a manifest to comply with the electronic exception reporting requirements. EPA understands that select RCRA-authorized states administer their hazardous waste programs more stringently than the federal program; thus, these states require VSQGs use manifests and obtain EPA ID numbers. Such states may also require VSQGs to register with the EPA e-Manifest system. In these situations, the system will be able to accommodate Exception Report notifications to VSQGs.

**Comment**: One commenter suggested that an alert for an Exception Report be activated by a toggle button to allow for the report's submittal based on any applicable state requirement (Commenter No. 14).

**Response:** EPA appreciates the suggestion that an alert for an Exception Report be activated by a toggle button to so that the Exception Reports can be submitted to states based on applicable state requirements. EPA understands that the Exception Report will need to be implemented in the RCRAInfo industry application in a way that is flexible enough to accommodate state-specific requirements and will consider this suggestion as it integrates electronic exception reports in e-Manifest.

**Comment:** One commenter asked if it would be possible to set up exception reporting in e-Manifest/RCRAInfo industry application so that a generator can reach out to their receiving facility using the exception reporting system. The commenter suggested that this could become the starting point of an Exception Report by having the system record when the generator reached out to the receiving facility to resolve the issue. A report thus started could be "canceled" by the receiving facility responding with a copy of the manifest before the deadline but could otherwise be automatically sent to the appropriate regulator when the clock runs out without any further action by the generator needed (Commenter No. 10).

**Response:** EPA appreciates commenter's input regarding the implementation of electronic exception reporting in the e-Manifest system. EPA intends to implement electronic exception reporting so that explanation of the efforts taken to locate the hazardous waste and the results of those efforts will be prepared directly in EPA's e-Manifest system as part of the electronic Exception Report.

**Comment:** Five commenters supported EPA's proposal to create pre-populated drop-down lists, as well as another option for scenarios not covered by the drop downs, to accurately describe the generator's efforts to obtain the signed manifest from the receiving facility (Commenters No. 6, 8, 9, 14, and 16). One of these commenters indicated that the use of drop-down lists would help create a uniform process and workflow regarding the submittal of the report and allow facilities with unique state requirements to benefit from this proposed change (Commenter No. 14).

Four commenters disagreed with limiting the use of the drop-down lists to LQGs (Commenters No. 8, 9, 14, and 16). Commenter No. 16 stated that the e-Manifest system should be designed in a user-friendly manner to not exclude or discourage anyone from usage. Commenters No. 8 and 9, stated that many authorized RCRA programs do not make a generator category-based distinction in reported generator category for exception reporting. These commenters further stated that, if the exception reporting is built in the way that EPA currently proposes, non-LQGs in some states would not be able to meet their reporting obligations using the e-Manifest system while LQGs could. This would make participation in the e-Manifest system less attractive to the SQG universe and work against EPA's goal of transitioning to fully electronic manifesting.

**Response:** EPA thanks commenters for their input. EPA notes commenters that recommend that a pre-populated dropdown menu may limit the information that may be provided. EPA may still include a dropdown menu but offer an "other" option that allows users to fill in the necessary information when the Exception Report falls outside of one of the common pre-populated options.

**Comment**: One commenter (No. 6) requested clarification from the EPA on how the proposed exception report mechanism and requirement would apply to VSQGs in authorized states where VSQGs are required to manifest shipments of hazardous waste and thus use the e-Manifest system equally with SQGs.

**Response**: EPA appreciates the commenter's request for clarification about the applicability of the electronic exception reports in authorized states where VSQGs are required to manifest shipments of hazardous waste and thus use the e-Manifest system equally with SQGs. EPA notes that a few RCRA authorized states administer their hazardous waste programs more stringently than the federal program. In states that require VSQGs to manifest shipments and hazardous waste and thus use the e-Manifest system equally with SQGs (including Exception Reports), a VSQG will be required to have an EPA site ID in RCRAInfo in order to submit electronic exception reports. VSQGs then would submit electronic Exception Reports through e-Manifest in a similar manner to SQGs and LQG.

**Comment:** Two commenters (Nos. 3 and 6) requested clarification about how the e-Manifest system will disseminate Exception Reports to authorized state agencies. One of these commenters (No. 3) recommended that EPA disseminate Exception Reports via downloadable reports to ensure that all enforcement staff have access to the reports and to minimize issues with invalid email addresses due to staff turnover.

The other commenter (No. 6) believed that the primary benefit of the exception reporting requirement overall is to alert the primary regulatory agency responsible for oversight of a hazardous waste shipment that some element of the shipment has potentially gone awry, with the concomitant risk of improper hazardous waste management or release, such that the agency can timely investigate and ensure environmental protection. The commenter stated that, because the responsibility and requirement rests on the generator of the manifested hazardous waste, this usually means the authorized state agency of the generator receives the exception report. However, this proposal would effectively shift that 'ensuring receipt' responsibility to the relevant regulatory agency itself, through the channel of the e-Manifest system. An exception report lodged in the e-Manifest system but not affirmatively brought to the attention of and timely received by the relevant regulatory agency (again, typically the generator's authorized state agency) is useless. The commenter asked EPA to not implement this proposal until the EPA can ensure that electronic exception reports created in the e-Manifest system will be immediately and affirmatively notified to the relevant regulatory agencies.

**Response:** EPA intends to develop the system so that Exceptions Reports are immediately disseminated and readily available to authorized state agencies as soon as the Exception Report is submitted through the e-Manifest system. EPA will also work with states as the Agency develops the electronic exception reporting to ensure that the state's needs are met.

**Comment:** Five commenters provided comment on EPA's proposal to adjust the exception reporting timeframes for waste generators to better align with timeframes required for submission and processing of paper manifests in the e-Manifest system. Three commenters (Commenters No. 2, 6, and 14) agreed with EPA's proposal, however, these three commenters suggested that EPA consider aligning the exception reporting timeframe for all generators to be the same. In addition, two commenters stated they did not agree that it was necessary to modify the timeframes (Commenters No. 8 and 10).

One of the commenters that agreed with extending the exception reporting timeframes suggested that EPA also consider aligning the deadlines for LQGs so that they match those currently required for small quantity generators ("SQGs") (45/60 days). The commenter also asked that EPA clarify in the final rule and regulatory text that these are calendar days, not business days (Commenter No. 14).

One commenter that agreed with extending the exception reporting timeframes stated that the risk presented by each shipment cannot be assumed by the 'size' of the shipping generator, and the exception reporting timeframe differential serves only to add unnecessary complexity to generators attempting to understand if and when they must file an exception report. The commenter has administered an across-the-board exception report requirement of 35/45 days applicable to all generators, including LQGs, SQGs, and VSQGs, since 1992, and has observed that the benefit of simplicity, ease of comprehension, and consistency regardless of a generator varying its generator category between months or years has far outweighed the minimal increased reporting burden of SQGs having a slightly shortened exception reporting timeframe. The commenter urged the EPA to consider the benefits of this approach (Commenter No. 6).

One commenter that agreed with extending the exception reporting timeframes stated that adding just 5 additional days to the timeframes in the current regulations will not be sufficient. The commenter indicated that EPA does not address the time needed for transport from the generator to the receiving facility, but a critical aspect of providing hazardous waste services is efficiently managing the logistics of the transportation phase. Rather than straight line shipments from the generator directly to the receiving facility, many shipments are routed through one or more transfer facilities for offloading, consolidation, and scheduling before trans-shipment to the TSD facility. Thus, a substantial portion of the 35-day timeframe can expire during transportation. In addition, TSD facilities have 30 days after receipt of a generator's shipment to upload Data Plus Image manifests or image copies of paper manifests, and our experience is that most companies use all or most of this time to QA/QC the manifest data with the waste shipments. Then EPA may take additional time to process the manifest submittal so that generators have little time, if any, to access the final manifest in the e-Manifest system. EPA apparently has not evaluated data on the time periods from generator shipment to receipt confirmation based on an analysis of industry practice, but our informal survey of member companies indicates that 60/70 days is a more reasonable timeframe. The current SQG timeframe for verification of shipment delivery is 60 days, so it makes sense to align the timeframes for LQGs as well. Whether the waste shipment is from an SQG or an LQG does not materially affect the time necessary to transport the waste, confirm the manifest data, and upload the final manifest to the e-Manifest system for the generator to access. For these reasons, EPA should revise the timeframes to 60 days for all generators to verify that their waste was received by the designated facility, and 70 days to submit an exception report if the status of the shipment is not resolved (Commenter No. 2).

Of the two that opposed modifying the exception reporting timeframes to deal with the current lag impacting the input of manifest data into e-Manifest system, one commenter (Commenter No. 8) stated that, theoretically, as more handlers adopt fully electronic manifests the time to identify issues with shipments should decrease not increase. This commenter also indicated that increasing these reporting timeframes would disincentivize receiving facilities from completing their data entry responsibilities in a timely manner. The other commenter (Commenter No. 10) stated that changing the timeframe for exception reporting requirements for LQGs to "better conform to timeframes for submittal and processing of paper manifests in the e-Manifest system" seems like it is aimed at reducing the burden on receiving facilities of returning paper copies of manifests to generators rather than incentivizing use of the e-Manifest system. The commenter stated that this change would make sense: (1) if most shipments reach their destination in under ten days and LQGs are receiving the completed manifest from the e Manifest system or (2) if all generators can use electronic exception reporting.

**Response:** EPA is persuaded by comments asserting that EPA should take this opportunity to streamline the exception reporting timeframes and remove unnecessary complexity in the regulations. The Agency believes that a uniform exception reporting timeframe for all generators, regardless of their generator category (e.g., LQG or SQG), would benefit all parties. Therefore, EPA is amending the proposed revisions under § 262.42 and § 761.217 for hazardous waste and PCB waste generators, respectively.

Under the finalized revisions that would appear in § 262.42(a)(2) and § 761.217(a)(2), LQG and PCB generators are required to submit an Exception Report (whether paper or electronic) within 60 days if the generator has not received a final completed copy of the manifest from the date the waste was accepted by the initial transporter. The finalized Exception Report submission timeframe for LQGs and PCB generators aligns with the existing 60-day SQG generator requirements under § 262.42(b). As discussed in III.C. of this preamble, Exception Reports will be submitted to the states and EPA Regions through the RCRAInfo industry application.

In addition, EPA is amending the proposed timeframes for which an LQG or PCB generator must initiate contact with other parties on a manifest to determine the status of the waste shipment. The finalized revisions under § 262.42(a)(1) and § 761.217(a)(1) for LQG and PCB generators, respectively, state that the generator must contact the transporter and/or the owner or operator of the designated facility within 45 days to determine the status of the hazardous waste after not receiving a final copy of the manifest. This is an additional 10 days beyond the proposed 35-day requirement. SQG status generators are not subject to a similar requirement under § 262.42(b) and are therefore not required to contact the transporter and/or designated facility after 45 days.

The finalized 45/60-day timeframes provide additional time for the designated facility to submit final copies of the manifest to the e-Manifest system and for the EPA paper processing center to enter the paper manifest, if necessary, in order for the generator to receive its final copy. The 45/60-day timeframes also serve to simplify the exception reporting regulations for generators; all generators must submit an Exception Report after 60 days. Only SQGs are not required to initiate contact to determine the status of their waste 45 calendar days after the waste is accepted for offsite shipment.

EPA notes that one commenter (No. 2) is mistaken about the "current SQG timeframe for verification of shipment delivery is 60 days." SQGs are required to submit an Exception Report at 60 days, but SQGs do not have a timeframe where they are required to verify the status of the shipment with the receiving facility (similar to the, now, 45-day timeframe requirement for LQGs). The Agency is not persuaded by the single commenter that stated that the Exception Reporting timeframes should be extended to 60/70 days.

EPA clarified in the preamble of the final rule that the e-Manifest regulation refers to calender days, not business days, unless explicitly stated otherwise.

## b. Discrepancy Reporting

**Comment:** Commenters generally opposed limiting electronic discrepancy reporting to only electronic manifests (Commenters No. 6, 8, 9, and 10). Two of the four commenters (Nos. 8 and 9) asserted that electronic discrepancy reporting should be available for all manifest types as long as the manifest has been captured in the system. Commenter No. 8 also stated that for fully electronic or hybrid manifest, discrepancy reporting should remain fully electronic. Another commenter (No. 6) reasoned that designated facilities have all the necessary information available and should be able to file discrepancy reports electronically through the e-Manifest system, regardless of whether the original manifest was hardcopy, hybrid, or electronic. The last commenter (No. 10) suggested that electronic Discrepancy Reports should not be limited to electronic or hybrid manifests as the manifest tracking number can be used to connect the records in the e-Manifest system even if the report is entered before the manifest is submitted.

Response: EPA is persuaded by commenters who assert that electronic discrepancy reporting should not be restricted to electronic manifests that originate in the system (fully electronic and hybrid manifests). The Agency also agrees that designated facilities should have all the necessary information, regardless of the original manifest type, and should be able to file discrepancy reports electronically through the e-Manifest system. Therefore, EPA is finalizing the discrepancy reporting requirements to require that receiving facilities submit Discrepancy Reports for both paper and electronic manifests to the e-Manifest system in lieu of submitting written reports to federal or state regulatory agencies. Thus, receiving facilities no longer have the option to supply Discrepancy Reports directly to the EPA Regional Administrators and authorized states via postal mail.

**Comment:** Two commenters supported the alternate approach to eliminate formal discrepancy reporting (Commenter No. 2 and 14) while two stated opposition to the elimination of discrepancy reporting (Commenters No. 6 and 8).

Commenter No. 2 supported promulgating an alternate approach to eliminate Discrepancy Reports entirely, and instead, rely on the e-Manifest corrections process to address discrepancies. The commenter stated that this approach would reduce reporting burdens, and the corrections process is well suited to track and resolve discrepancies as receiving facilities already use the corrections process to address most discrepancies. The commenter also remarked that eliminating the Discrepancy Reports underscores the need for EPA to require generators to register with the e-Manifest system and delivers benefits to state agencies and the regulated community.

The same commenter (No. 2) added that facilities should write the discrepancy type and include information on the attempts to resolve the discrepancy in Item 18 of the manifest, or an attached continuation sheet, before uploading to e-Manifest. The PPC could then include the discrepancy information in the data file. The commenter went on to reason that receiving facilities do not need to complete a Discrepancy Report separate from the information recorded in Item 18 of the manifest, thus the "challenges" that EPA describe in 87 FR 19305/2 can be overcome using the manifest corrections process with some additional functionality. The corrections or discrepancy process can be used by the receiving facility to add omitted wastes to the manifest and provide the information required by 40 CFR 264.76. The commenter also encouraged EPA to limit this alternate approach to only fully electronic and hybrid manifests.

The other commenter that generally supported the alternate approach to eliminate formal discrepancy reporting also concluded that the approach does not address scenarios in which disagreements cannot be resolved by the relevant waste handlers. Therefore, the commenter suggested EPA allow free text boxes for facilities to explain why the manifest discrepancy remains (Commenter No. 14).

Amongst the commenters that opposed eliminating discrepancy reporting, one commenter (No. 8) reasoned that discrepancy corrections need to be easily identified, tracked, investigated, and evaluated by state and EPA enforcement personnel. The other commenter (Commenter No. 6) added that discrepancy reports serve a vital function of indicating critical compliance issue(s) with the generator or receiving facility and often serve as a clue of improper waste management or shipment to facilities that cannot safely handle the hazardous waste. The commenter stated that the alternate approach would cause regulatory agencies to spend considerable time and effort searching through e-Manifest corrections to determine if there is a larger compliance or systemic issues which may result in many hazardous waste management problems being "lost."

**Response:** EPA agrees with commenters who stated that EPA should not eliminate the Discrepancy Report at this time. EPA was persuaded by commenters that asserted that Discrepancy Reports serve a vital function when the generator and the designated receiving facility cannot resolve a disagreement on a significant discrepancy. EPA agrees with commenter No. 8 who stated that Discrepancy Reports should be easily tracked and identified by state and EPA enforcement personnel. In addition, The Agency also agrees with commenter No. 6 who argued that formal Discrepancy Reports serve a vital function and provide clues that may indicate critical compliance issues; the alternate approach would make it difficult for regulators to distinguish between significant discrepancies and corrections that need to be made for data quality purposes.

**Comment:** One commenter (No. 14) supported EPA's proposal to allow up to 20 days to reconcile discrepancies stating that the extra 5-days would allow for much needed extra time to resolve issues with unresponsive generators. The commenter requested that EPA clarify that the requirement is measured in calendar days, not business days.

Another commenter was concerned that some TSDF permits have a 15-day timeline incorporated into the permit conditions, potentially creating a reporting conflict with the proposed 20-day timelines. The commenter requested a transition period be created requiring permittees to adhere to their current permit requirements until such time as the permit is modified or renewed to incorporate the new manifest discrepancy reporting timeframe.

**Response:** The Agency is finalizing adjustments to the discrepancy reporting timeframe proposed in the Notice of Proposed Rulemaking (NPRM). The finalized adjustments, included in §§ 264.72(c), 265.72(c), and 761.215, allow receiving facilities up to 20 days to reconcile a shipment with the generator and/or transporter for significant discrepancies (i.e., waste shipments having significant differences between the quantity or type of waste shown as shipped by the generator and what the designated facility received).

In response to a comment requesting that EPA clarify whether the regulations or written using calendar or business days, the 20-day period in this regulation means 20 calendar days. EPA regulations that refer to days typically mean calendar days. In situations where EPA intends to mean business days, EPA would specify "business" days. Otherwise, the word "days" alone would mean calendar days. The 20-day timeframe meaning 20 would begin at the custody exchange from the delivering transporter to the receiving facility by way of the receiving facility's signature on a manifest. This timeframe also applies to users of fully electronic and hybrid manifests.

Regarding receiving facilities that have an existing 15-day discrepancy reporting requirement built into their permit, those facilities would be required to continue following the requirements described in their permit until their permit is renewed or modified.

**Comment:** One commenter (No. 14) had reservations about whether the Discrepancy Report should be triggered based solely on the receiving facility checking a box in Section 18a of the manifest, because an increased number of Discrepancy Reports may be generated that would not otherwise require reporting.

**Response:** EPA does not intend to implement functionality that would require a Discrepancy Report to be filed if the check box in section 18a is filled in. Receiving facilities will only be required to submit a Discrepancy Report upon discovering a significant different in quantity or type that cannot be resolved within the timeframe described in §§ 264.72(c), 265.72(c), and 761.215.

**Comment:** One commenter requested EPA to not implement this proposal until the EPA can ensure that electronic Discrepancy Reports created through the e-Manifest system will be immediately and affirmatively notified to the relevant regulatory agencies (Commenter No. 6).

**Response:** EPA appreciates commenter's concerns regarding the availability of Discrepancy Reports created through the e-Manifest system for relevant regulatory agencies. The Agency intends to architect the system in such a way that Discrepancy Reports are immediately available to authorized state regulators.

**Comment:** One commenter wrote that receiving facilities should not be responsible for providing the density or specific gravity for the waste if it is reporting volumetric measures, as this is a condition associated with biennial reporting requirements only (Commenter No. 14).

**Response:** EPA agrees with the commenter's statement that density or specific gravity should not be a required field when submitted a Discrepancy Report to the e-Manifest system. The Agency may allow receiving facilities to optionally provide this information.

#### c. Unmanifested Waste Reporting

**Comment:** Five commenters provided input on the Agency's proposed changes to integrate Unmanifested Waste Reports into the e-Manifest system (Commenters No. 2, 8, 6, 14, and 9). Commenters were split between supporting and opposing report integration. Commenters that opposed Unmanifested Waste Report integration cited edge cases and potential paper processing costs imposed on users.

Three commenters supported EPA's proposal to accept only electronic submissions of Unmanifested Waste Reports by the receiving facility for hazardous and regulated PCB wastes (Commenters No. 2, 8, and 9). Commenter No. 2 added that the e-Manifest system can be used to electronically report unmanifested wastes and eliminate the paper Unmanifested Waste Report. This commenter also reasoned that unmanifested waste shipments should be entered into the e-Manifest system for data accuracy and completeness by reporting the initial receipt in Item 18 or on a continuation page. The other two commenters (No. 8 and 9) supported electronic submittals of Unmanifested Waste Reports as long as state regulators would be notified by the e-Manifest system involving a receiving facility or generator located in the state. The commenters also remarked that EPA would need to ensure that the system will properly recognize state-only hazardous waste so unmanifested shipments of state-only hazardous waste would be reported electronically as well.

Two commenters did not support EPA's proposal to accept only electronic submissions of Unmanifested Waste Reports by the receiving facility for either hazardous or regulated PCB wastes (Commenter No. 6 and 14).

Commenter No. 6 stated that, until electronic recordkeeping and communications for hazardous waste management are nearly universal, they could not support the EPA's proposal to require unmanifested waste reporting solely through the e-Manifest system. This commenter also said that they have observed shipments of hazardous waste received by facilities that cannot safely handle the waste, or are not hazardous waste management facilities at all, and Unmanifested Waste Reports from these facilities document high risk situations, necessitating immediate and significant regulatory agency response to ensure environmental and public health and safety protection. The commenter recommended that EPA instead make every effort to encourage any and all facilities receiving unmanifested waste to report receipt of the waste immediately to EPA and/or relevant regulatory agency and not require Unmanifested Waste Reports to be made through the e Manifest system; these facilities are least likely to be registered with the e-Manifest system or take on additional work.

The other commenter (no. 14) stated that they oppose the requirement to convert all Unmanifested Waste Reports to digital format and that receiving facilities should continue to have the option to submit a paper version. The commenter added that, while generators are not directly involved in the unmanifested reporting process, receiving facilities often pass on the costs of submitting electronic reports to the generator, sometimes at a marked-up rate. Therefore, it is not accurate to assert that a mandatory switch to electronic unmanifested waste reporting would not have an impact on waste generators.

Response: EPA appreciates input it has received on whether the Agency should integrate the Unmanifested Waste Report into the e-Manifest system in lieu of hardcopy reports. EPA believes that eliminating paper Unmanifested Waste Reports will alleviate burden associated with processing and will aid e-Manifest users by providing a more accurate and complete picture of hazardous waste shipments. Therefore, the Agency is finalizing revisions in section §§ 264.76 and 265.76 for hazardous waste and 761.216 for PCB wastes that will require all Unmanifested Waste Reports to be submitted electronically through the e-Manifest system, as proposed in the NPRM.

EPA acknowledges comments that did not support eliminating paper versions of the Unmanifested Waste Reports, but EPA believes that the commenters' concerns are addressable. Regarding one commenter's concern for instances where hazardous waste is sent to non-permitted facilities and therefore lacks a registered party to submit an electronic report: the Agency expects the number of these instances will be manageable through manual processes. EPA expects that instances where an electronic report cannot be filed represents an edge case that will comprise an exceedingly small proportion of the estimated 491 Unmanifested Waste Reports that will need to be filed per fee cycle. EPA believes the burden reduction and holistic benefits of providing a central location for filing manifest related reports can be managed by EPA and state regulatory staff.

Regarding the comment about EPA requiring any and all facilities receiving unmanifested waste to report receipt of the waste immediately to EPA and/or relevant regulatory agency, EPA appreciates the suggestion. The Agency intends to architect the system in such a way that Unmanifested Waste Reports are immediately available to authorized state regulators.

EPA is not finalizing the proposed revisions that would implement a user fee for the submission of Unmanifested Waste Reports. EPA understands that e-Manifest fees are often passed onto the clients of receiving facilities (i.e., generators), however, EPA cannot dictate fees receiving facilities charge to their clients.

**Comment:** One commenter (No. 2) urged EPA to clarify in the final rule what is considered an unmanifested waste, perhaps including a specific definition, consistent with industry's understanding and commercial practice.

Response: EPA believes that the concept of unmanifested waste is sufficiently explained in the context of the unmanifested waste regulation. Receiving facilities must comply with unmanifested waste reporting requirements if they accept custody of hazardous waste or regulated PCB waste at their facility from off-site; the hazardous waste/regulated PCB waste was not accompanied by a manifest, or shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures); and the hazardous waste/regulated PCB waste is not excluded from the requirement for a manifest by federal or state regulations. The federal unmanifested waste reporting requirements are not intended for scenarios where waste is mischaracterized as non-hazardous on the manifest (e.g., the generator completed a manifest based on process knowledge) but determined to be regulated hazardous waste by the receiving facility upon receipt.

**Comment:** Three commenters provided input on the implementation of a fee on Unmanifested Waste Reports; one supported EPA's proposal to require a fee and two opposed the proposal. The commenter that supported the Agency's proposal (Commenter No. 8) stated that failure to charge a fee would encourage unmanifested waste, and non-compliance, to avoid paying fees.

Two commenters opposed a fee to facilitate submitting Unmanifested Waste Reports through the e-Manifest system (Commenters No. 6 and 2). The first commenter (No. 6) concluded that a fee for submitting Unmanifested Waste Reports would very likely result in these reports often going unmade and unmanifested waste would go "under the radar." Another commenter (No. 2) stated that the receiving facility should be allowed, but not required, to create a manifest with all information required by 40 CFR 264.76, if known, and pay the manifest user fee.

Response: The Agency is persuaded by comments that state a user fee for the electronic submission of Unmanifested Waste Reports would disincentivize receiving facilities from submitting these reports. Based on the FY2024/2025 manifest usage projections, EPA estimates the e-Manifest system will process 4,909,578 manifests during the two-year fee cycle. EPA also estimates that approximately 0.01% of waste shipments will require an Unmanifested Waste Report (approximately 491 reports for the FY2024/2025 fee cycle). In the NPRM, EPA proposed requiring user fees that are equivalent to the user fees for electronic manifests; the FY2024/2025 user fee for an electronic manifest is \$6 per manifest. As a result, the EPA projects that approximately \$2,946 would be collected in revenue if the Agency finalized the proposal to collect user fees for electronic Unmanifested Waste Reports.

The relatively small number of unmanifested shipments and the resulting negligible impact on revenue will not affect the Agency's ability to recover the full cost of operating the e-Manifest System. The Agency also believes that incentivizing the submission of Unmanifested Waste Reports, and the resulting benefits for the quality of e-Manifest data far outweigh the small potential uncovered costs. Therefore, EPA is not finalizing language proposed in sections §§ 264.76(b), 265.76(b), and 761.216(b) that would implement a user fee requirement for submission of electronic Unmanifested Waste Reports to the e-Manifest system.

EPA rejects one commenter's recommendation to allow receiving facilities to submit manifests in lieu of the Unmanifested Waste Report. Manifests submitted through this process would make use of existing e-Manifest functionality and would be difficult to implement without charging a user fee.

# 3. Other Regulatory Changes

a. Conforming Changes to TSCA/PCB Regulations

**Comment:** Five commenters (No. 2, 6, 9, 12, and 14) provided input on EPA's proposed, conforming changes to the TSCA/PCB regulations in 40 CFR part 761. Commenters generally supported the proposed conforming changes to the PCB regulations. No commenters opposed the conforming changes to the regulations for the use of electronic manifests and the e-Manifest system for PCB wastes. Three of the five commenters (No. 6, 9, and 14) that supported the conforming changes to the PCB regulations also recommended improvements for the use of the e-Manifest system for PCB manifests.

Response: EPA appreciates commenters' support for the proposed conforming changes to TSCA/PCB regulations. The Agency is finalizing the conforming changes largely as proposed in the NPRM, including changes that clarify the e-Manifest Act applies to manifests for PCB waste and the definition for "electronic manifest" in § 761.3. However, EPA is modifying the proposed definition to clarify that electronic manifests must be obtained from EPA's national e-Manifest system and signed electronically through EPA's national e-Manifest system. EPA is also finalizing conforming changes to the TSCA/PCB regulations for Discrepancy Reports under § 761.215, Unmanifested Waste Reports under § 761.216, and Exception Reports under § 761.217. This final rule modifies the proposed changes to these requirements so that they align with the requirements finalized for the RCRA manifest-related reports.

EPA is not finalizing the proposed changes to § 761.180(b)(3) (Annual Report; EPA Form 6200-025). This is because EPA already finalized revisions to this requirement in the August 2023 PCB Final Rule (88 FR 59662). Therefore, the proposed changes discussed in the NPRM are no longer needed. EPA is also not finalizing the proposed change to § 761.215(f)(6). This change would have required a commercial storage or disposal facility to mail or submit initial copies of manifests to the e-Manifest system, for rejected shipments returned to the generator.

**Comment**: One commenter suggested that EPA consider adding an alternative means of formatting the PCB continuation sheet. The commenter indicated that current formatting is not conducive to the needs of PCB waste handlers that use the hazardous waste manifest. The commenter believes that PCB waste handlers should have the ability to use alternative forms if they meet the requirements set forth in the general PCB manifest requirements, 40 CFR 761.207 (Commenter No. 14).

Response: EPA thanks the commenter for their suggestion to format PCB continuation sheet in an alternative manner. Currently EPA Form 8700-22A is not required as the PCB manifest continuation sheet because it does not have the adequate space to list the required PCB-specific information for several PCB articles. However, PCB waste generators may use EPA Form 8700-22A, or other PCB manifest continuation sheet in accordance with Note 1 to 40 CFR section 761.207(a). If a continuation sheet is used with the manifest, either Form 8700-22A or any other document, it must be submitted to EPA's e-Manifest system. At this time EPA is not considering the creation of a continuation sheet format specific for PCB manifesting, and it will not be addressed in this document as it is outside the scope of the e-Manifest Final Rule.

Comment: One commenter (No. 6) wrote that the PCB regulations require that certain additional information, beyond standard hazardous waste identification and hazardous material description, be included on the manifest for PCB wastes (e.g., the dates removed from service for disposal, unique serial numbers or container numbers). Most commonly this information is provided only on separate attachment sheets physically attached to the manifest (with an annotation to 'See Attachment Sheet' printed in Item 14 on the actual manifest). However, there is currently no provision for these attachment sheets to be accommodated or maintained in the e-Manifest system. Thus, unless the generator retains a hardcopy of them, attachment sheets are effectively being 'lost' when the final signed manifest is uploaded to the e-Manifest system by the receiving facility. The commenter stated that without attachment sheets, or at least the required PCB information they contain, in the e-Manifest system, both regulators and regulated entities alike will increasingly find the PCB compliance information simply unavailable. The commenter urged EPA to address this 'missing piece' through amendment to this rulemaking.

**Response:** EPA thanks the commenter for their input on attachments sheets containing PCB information beyond standard hazardous waste identification and hazardous material description in the e-Manifest system. This comment is outside the scope of e-Manifest Rule; however, all PCB manifest continuation sheets are required to be submitted to the e-Manifest. PCB generators should continue to retain these documents on site.

**Comment:** One commenter (No. 9) indicated that the TSCA ID Numbers do not appear in RCRAInfo unless a person provides their RCRA ID Number in their PCB Notification. The commenter suggested that, in order to validate a TSCA ID Number, PCB handler data could be made available through RCRAInfo. In addition, since some ID numbers are used for both RCRA and TSCA manifests, it would be advantageous to be able to filter searches to either include or exclude PCB manifests.

**Response:** EPA thanks the commenter for their input regarding validation of PCB handlers through e-Manifest and having the ability to filter searches to include or exclude PCB manifests. These comments are outside the scope of the e-Manifest final rulemaking. At this time EPA is not considering edits to RCRAInfo to filter RCRA manifest from PCBs manifest when submitted under the same EPA ID; however, separately, EPA will publish online content to guide PCB handlers on how to gain access to the e-Manifest system.

Comment: One commenter expressed support for the use of an approved electronic system for the submission of PCB documents (Commenter No. 2). The commenter noted that they could not find any text that was added to 40 CFR 761.180(b)(3) in the proposed regulation at 87 FR 19336/3 "to allow the future use of an approved electronic system, such as the RCRAInfo industry application." The commenter stated that, despite this apparent oversight, they believed the preamble adequately explains EPA's proposal. The commenter also stated that EPA should streamline the requirements for the various PCB waste reports by using the electronic e-Manifest system. Since all of the information on PCB waste transport and disposal will be collected in the e-Manifest system, EPA should eliminate the requirement for facilities to file annual reports and certificates of disposal. The commenter further stated that these reports impose a substantial burden on regulated entities and largely duplicate the data collected in the e-Manifest system.

**Response**: The Agency thanks this commenter for their attention to detail. 40 CFR 761.180(b)(3) concerns the submission of annual reports using EPA form 6200-025 which falls outside the scope of this rulemaking. EPA is not finalizing the proposed changes to § 761.180(b)(3) (Annual Report; EPA Form 6200-025). This is because EPA already finalized revisions in the August 2023 PCB Final Rule (88 FR 59662) that eliminated the requirement to provide a list of manifests handled in the annual report. Therefore, the proposed changes discussed in the NPRM are no longer needed.

**Comment:** One commenter (No. 2) wrote that the e-Manifest system should be used to electronically report exceptions, discrepancies, and unmanifested PCB wastes, rather than amending the regulations as proposed to require the submittal of separate Exception Reports, Discrepancy Reports, and Unmanifested Waste Reports for PCB waste shipments.

**Response:** The Agency agrees with the commenter that PCB manifest-related reports should be submitted electronically through the e-Manifest system. As discussed in the preamble of final rule, EPA is finalizing conforming changes to the TSCA/PCB regulations for Discrepancy Reports, Unmanifested Waste Reports, and Exception Reports that align with the requirements finalized for the RCRA manifest-related reports. The finalized changes under §§ 761.217, 761.215, and 761.216 establish the requirements and addressed the legal equivalency of electronic reports to paper reports for Discrepancy, Exception, and Unmanifested Waste Reports, respectively. Unlike RCRA hazardous waste LQGs and SQGs, PCB generators are not required to register with e-Manifest. Thus, this final rule does not affect a PCB generator's ability to submit Exception Reports for paper-based manifests to EPA via postal mail. Submission of Discrepancy Reports and Unmanifested Waste Report are restricted to electronic formats in e-Manifest.

#### b. Final Copies of Manifests

**Comment**: Seven commenters provided input on EPA's proposal to add an email address field to Item 5 of the generator block of the manifest (Commenters No. 5, 6, 8, 9, 10, 11, and 14).

One of these commenters stated that the collection of a generator email address on manifest forms is beneficial as it creates another avenue for ensuring generator receipt of final manifest copies via the e-Manifest system, assists generators with accessing these forms electronically, and reinforces the electronic copy as the primary source of information for all parties involved (Commenter No. 5).

Another commenter wrote that requiring an email address to be entered each time a generator initiates a shipment of hazardous waste would be a *de minimus* burden on generators and result in a significant benefit for both the regulated generators and relevant regulatory agencies alike (Commenter No. 6).

Two commenters (No. 10 and 11) that supported the addition of an email address field to Item 5 of the generator block of the manifest had concerns. Both commenters expressed concerns about the use of a shared email inbox associated with the company site as an option for completing the generator email address field. One of these commenters (No. 11) stated that, for security reasons, a shared inbox is not recommended for RCRAInfo Industry user account holders and probably should not be encouraged by allowing it for the manifest. The other commenter stated that requiring the generator to put an e-mail address on the manifest that is "associated with the company site and shared with site employees..." runs counter to the set-up of the RCRAInfo Industry Application in general because it runs counter to Cross-Media Electronic Reporting Rule (CROMERR) (Commenter No. 10).

Two commenters stated that there is a possibility that email addresses could be entered on the manifest or into the e-Manifest system incorrectly, leading to manifests being sent to the wrong entity or sent to email addresses that do not exist (Commenters No. 8 and 9).

Three commenters believe that providing copies of the final manifests directly to generators without requiring them to register for e-Manifest runs directly counter to EPA's goal of increasing the industry adoption of e-Manifest. If copies of the manifests are provided directly to generators, it will remove the main incentive for generators to register for e-Manifest (Commenters No. 8, 9, and 10).

Lastly, one commenter did not support EPA's proposal to add an email address field in the generator block of the manifest so that the e-Manifest system can email copies of completed paper manifests to the generator's email address (Commenter No. 2). The commenter provided the following reasons:

- Hand-written e-mail addresses on paper manifests can be poor quality and may result in frequent errors when uploaded to the e-Manifest system and that generator personnel may not know the correct e-mail address to write on the manifest.
- 2. For Data Plus Image and hybrid manifests, EPA's proposed verification process to alert unregistered generators that manifests have been completed, and then require generators to verify the e-mail address recorded on the paper manifest before providing them access to their manifests, could discourage access.

The commenter recommended that EPA require generators to register with the e-Manifest system and maintain an accurate email address in their registered accounts. **Response:** EPA appreciates the numerous commenters that provided input on whether the agency should modify the uniform hazardous waste manifest to include an email address in box 5 as a method to return final copies to generators. EPA is dissuaded from collecting the generator's email address based on commenters' input and data quality concerns that have become evident since the proposed rule. EPA agrees with commenters' concerns on potential problems with using an email address, such as interpreting and transcribing hand-written email addresses, abandoned and inaccessible inboxes, and the limited benefit of alerts to unregistered generators.

EPA also agrees with commenters who stated that adding the generator's email address, as a method for generators to receive final copies without registering, runs counter to the goal of the e-Manifest program. EPA believes that reaching the program's goal of 100% electronic adoption will not be reached if EPA continues to incentivize generators to use paper manifest by providing methods to receive final copies without registering. EPA is thus not finalizing its proposal to require generator's email addresses on the manifest form as a means of returning the manifest to the generator. Instead, EPA is finalizing requirements for LQGs and SQGs to register for e-Manifest and access final copies of signed manifests from the e-Manifest system.

**Comment:** As an alternative, EPA requested comment on mandating generator registration with e-Manifest to receive the final copies of the manifest. Among the six commenters that provided input, five commenters supported EPA's alternative option that would mandate that generators register with the e-Manifest system (Commenters No. 1, 2, 6, 10, and 13), and 1 (Commenter No. 14) opposed the option.

As pointed out by Commenter No. 2, this alternative option would not require EPA to add email addresses on the manifest form. In addition, EPA would not email digital copies of manifests to generators as they would be expected to access their accounts to view their manifests.

One commenter (No. 13) added that requiring all generators (including VSQGs) to register in the e-Manifest system would aid in finding and evaluating manifests for a particular generator. The commenter also stated that doing so would also make it easier to use the data in the e-Manifest system to replace state systems used for generator reporting. Another commenter (No. 10) supported the idea of requiring all generators to register with the e-Manifest system. However, the commenter indicated that they have some concerns with the option because (1) it would require VSQGs to have EPA ID numbers, which is a major departure from the current federal program that extends beyond the scope of e-Manifest, and (2) the description of how it would work seems to be inconsistent with the RCRAInfo Industry Application/counter to CROMERR.

One commenter (No. 1) added that EPA should make the information on e-Manifest open to the public for increased accountability, like blockchain security. The commenter believed that a blockchain reporting style would essentially make each manifest a distributed database of all previous records of trades and transactions among the waste handlers. The commenter added that "this would assist in the preventing or reducing discrepancy and unmanifested waste reports by reducing the cost of maintaining a record by providing a public ledger of ownership certainty and a history of the assets' transactions."

**Response:** EPA thanks the commenters for the provided input on the alternate approach of requiring generator registration instead of including the generator's email in block 5 of the manifest form. EPA is persuaded by commenter's arguments that supported the alternate approach and is finalizing a requirement for generator (SQGs and LQGs) to register with e-Manifest. Since many generators will now be required to register for e-Manifest, they can receive final copies of manifests directly from e-Manifest through the RCRAInfo industry application.

The Agency believes that requiring generator registration will provide a holistic solution that will do more than just serve as a method to return final copies of manifests to generators. Requiring generator registration will incentivize voluntary participation in the manifest post-receipt corrections process and increase the quality of manifest data in e-Manifest. It will also provide the Agency an opportunity to uniformly implement electronic manifest-related reports (Exception, Discrepancy, and Unmanifested Waste Reports), and act as a first step towards 100% electronic adoption.

The finalized changes do not require VSQGs to obtain an EPA ID number and register for an account in e-Manifest since the Agency did not request comment on an alternative approach that included VSQGs. Receiving facilities are required to mail final copies of paper manifests to generators who are not registered, such as PCB generators and VSQGs that do not have EPA ID number.

**Comment:** One commenter (No. 14) stated that they oppose any element of the Proposed Rule that would require generators (whether under the RCRA or TSCA PCB program) to register and obtain an account in the e-Manifest system. The commenter indicated that, although this allows receiving facilities the ability to return the manifest electronically to the generator, this does not address the fundamental concern that waste handlers – particularly generators – are not able to universally adopt the e-Manifest program and thus should not be compelled to do so under any final rule.

**Response:** EPA appreciates the commenter's concerns. EPA is not finalizing changes that mandate electronic manifests, which the Agency did not propose nor is finalizing in this rulemaking. Generators that register will undergo a process similar to the current notification process that generators use to obtain an EPA ID number. The registration process ensures generators can access final, completed copies of their manifests and submit manifest data corrections electronically in the EPA e-Manifest system. Generator registration will allow EPA to remove the requirement for receiving facilities to mail back final manifests to unregistered large and small quantity generators.

**Comment:** One commenter stated that the e-Manifest system should send notification emails to generators on a "daily" basis (Commenter No. 7). The commenter further stated that allowing anything less frequently could result in false alarms regarding exception reporting from generators and could potentially cause an undesirable effect of expending limited state resources by investigating incorrect reports.

**Response:** EPA explained in the final rule that LQG and SQG status generator are required to register for the e-Manifest system; they will now be able to see that status of their manifest directly in the RCRAInfo industry application in real time.

**Comment:** Three commenters supported the removal of the requirement that receiving facilities mail paper manifests to generators (Commenters No. 2, 6, and 10).

Commenter No. 2 stated that removing the existing requirement that receiving facilities mail paper manifests to the generators would improve e-Manifest functionality by allowing generators to receive final manifest copies from the system, rather than continuing to impose costs on receiving facilities to mail or email paper manifest copies back to their customers.

Commenter No. 6 stated that this proposal would facilitate lowering receiving facilities' burden by allowing the elimination of any need to mail or otherwise return final signed manifest copies to generators.

Commenter No. 10 added that if EPA wants to make the default situation that PDF manifest are emailed to generators and/or that generators sites are required to have at least one individual user account associated with their site in the RCRAInfo industry application, but is truly concerned about the case of generators who do not have email addresses or reliable internet connections, it would be necessary to mandate that receiving facilities continue to mail paper manifests to generators by generator request. The commenter suggested that the mechanism for a generator to request to continue receiving paper manifests could be in RCRAInfo itself and EPA would be able to track which generators have made this request. In addition, this commenter asked how EPA would ensure that the generator was complying by providing an email address and that the receiving facility was complying by sending paper copies.

**Response:** EPA is finalizing requirements that LQGs and SQGs register for e-Manifest, which can be done through the RCRAInfo industry application. Receiving facilities are not required to mail final paper copies of manifest back to generators that are registered and maintain access to e-Manifest.

EPA did not take comment or propose a requirement that VSQGs obtain an EPA ID number (if they do not have one) and register for e-Manifest. Receiving facilities are still required to mail copies of final manifests to generators who are not registered for e-Manifest.

**Comment:** One commenter offered support for the elimination of Page 3 of the manifest form (Commenter No. 10), while four commenters stated that they support elimination of Pages 2 and 3 of the manifest form (Commenters No. 2, 4, 5 and 6).

The first commenter (no. 10, which supported eliminating one page) stated that it makes sense to eliminate the designated facility copy (Page 3) of the manifest form. If the designated facility wants to keep a paper copy, they can (and should) keep page 1, which is the copy scanned and uploaded to the e-Manifest system. The commenter also stated that it is good business practice to keep this paper copy in case of problems with the data upload and/or scanned image.

Among the other four commenters who supported EPA's proposal to eliminate Pages 2 and 3, Commenter No. 2 stated that Page 2 copy is not needed because EPA intends to revise the regulations to remove the requirement that receiving facilities mail a paper copy back to the generator, and instead would provide generators with electronic access to all completed manifests. Receiving facilities do not need the Page 3 copy which is routinely discarded when the image copy of the final manifest is uploaded to the e-Manifest system. Another commenter (No. 4) wrote that removing current Pages 2 and 3 of the paper manifests is sound and will further encourage generators to use the e-Manifest system. Removing these obsolete pages reduces the administrative costs of managing the paper manifests. Both Commenters No. 5 and 6 added that the removal of manifest copy Pages 2 and 3 is logical and justified by EPA's proposal and that this change would also increase the readability of remaining manifest copies, as it is often difficult to accurately read handwritten notes on all pages of a five-copy manifest.

**Response:** EPA appreciates commenter's input on removing Pages 2 and 3 from the uniform hazardous waste manifest. The Agency is not finalizing its proposal to remove Page 2 of the manifest forms in this final rule since VSQGs, and certain PCB generators, are not required to register with e-Manifest to access completed manifests for their site. Therefore, VSQGs and PCB generators who elect to not register with e-Manifest must continue to receive Page 2 of the manifest form or manifest continuation sheet to verify shipment receipt by the designated receiving facility.

EPA is persuaded by commenters that supported eliminating Page 3 ("Designated Facility" copy). EPA agrees with commenters that this copy is no longer needed since a completed, top paper copy of the manifest which is uploaded to the e-Manifest system by the receiving facility can just be retained, if needed, by the receiving facility.

**Comment:** Commenter No. 10 stated that, in light of the massive data quality problems that state regulators have documented, EPA should consider adding a regulatory requirement for receiving facilities to retain the original paper manifest for three years. If generators receive completed manifests only by e-mail or through the e-Manifest system, it will be even more important for receiving facilities to retain the original paper manifest to deal with any data errors or other manifest corrections because they will be the only party with access to the original.

**Response:** Paper manifests are uploaded as a scanned image to the e-Manifest system and are retained by EPA in an auditable format. Imposing additional retention requirements for hazardous waste handlers would run counter to the overall goals of the e-Manifest program.

**Comment:** With regard to generators without on-site internet access, Commenter No. 2 stated that generators without on-site internet access can plan to visit a nearby location that has internet, such as a local business, municipal building, or community library. The commenter further stated that it should be the generator's responsibility to arrange email access, not the receiving facility's obligation to mail the completed manifest.

**Response:** EPA agrees with Commenter No. 2 and believes that it is nearly impossible to operate modern business in the U.S. - taking payments, interacting with customers and vendors, and otherwise facilitating commerce – without internet service. EPA accepts the commenter's recommendation that generators who do not have reliable internet connections or email accounts should plan to visit a nearby facility that has internet capabilities (e.g., a local business, municipal building, or community library) to access e-Manifest.

However, to the extent that there are select generators who do not have adequate internet access, EPA points to the Biden-Harris administration's announcement of the Broadband Equity Access and Deployment (BEAD) program in June 2023 – a \$42.45 billion grant program created in the Bipartisan Infrastructure Law (BIL) and administered by the Department of Commerce – which was established to connect small businesses and families in the U.S. with reliable, affordable high-speed internet by the end of 2029.

**Comment:** Three commenters provided input on EPA's proposed burden impact (Commenters No. 6, 7, and 10) on removing the requirement for facilities to mail completed paper copies to generators.

Two commenters (No. 6 and 7) supported EPA's proposed burden impact assessments, adding that the proposed changes would provide an efficient process and cost savings for the receiving facilities. In addition, it would facilitate lowering receiving facilities' burden by allowing the elimination of any need to mail or otherwise return final signed manifest copies to generators.

Another commenter (No. 10) stated that the receiving facility's burden of providing a manifest copy to generators would be exchanged for a large burden on generators (to figure out how to properly set up individual user accounts from a very confusing starting point of being required to provide a shared email address that cannot be used to set up those accounts) and state regulators (to help generators navigate this, to handle assigning EPA ID numbers to all VSQGs) at the expense of EPA's ability to incentivize generators to register for the e-Manifest system.

**Response:** EPA thanks commenters for their input on the Agency's estimate on burden reduction. The Agency believes that added burden resulting from the new registration requirements for generators is offset by the burden reduction from removal of the requirement to mail paper copies back to registered generators. In addition, registered generators will now be able to submit Exception Reports electronically and will likely be more involved in the e-Manifest data corrections process resulting in better e-Manifest data quality. EPA believes the net burden reduction and long-term benefits outweigh the initial burden of getting generators registered in RCRAInfo.

### c. Conceptual Approach for Biennial Report Integration

**Comment:** Four commenters generally supported EPA's conceptual approach of utilizing manifest data to populate Biennial Report (BR) (Commenters No. 6, 8, 10, and 11) but may have had concerns. One commenter did not approve EPA's conceptual approach and recommended an alternative (Commenter No. 2).

Commenter No. 8 cautioned EPA about adding too many features as part of the Biennial Reporting integration. The commenter stated that keeping the data migration process from e-Manifest to a Biennial Report as simple as possible will be beneficial to both state regulators and the regulated community.

Commenter No. 11 stated that, while they are supportive of utilizing manifest data to populate Biennial Reports, there are still challenges and data gaps that exist between the current and proposed data collected on manifests and what is collected in a Biennial Report. The commenter also warned that EPA must come up with an approach that allows for reporting of wastes from state to state and addressed issues related to rejected shipments and residuals, which are currently ignored for BR reporting. The commenter added that if manifest data is used to pre-populate forms, EPA would need to employ logic that uses existing e-Manifest fields related to rejected loads and residuals to decide how to handle them. If the receiving facilities are not completing these fields correctly, it would be a data quality issue. The commenter noted that there are no existing federal BR instructions that handle this topic.

Another commenter (No. 6) stated that they generally support the ultimate integration of the Biennial Report with the e-Manifest system. However, the commenter cautioned that the e-Manifest system is used by many, many more sites than sites that are subject to BR requirements. Thus, the commenter urged EPA to focus first on the Biennial Report itself. The commenter indicated that, rather than adding complexity to the manifest, it may be more beneficial and result in greater environmental protection to instead determine whether this level of detail is critical for the Biennial Report purposes themselves and whether burdening all manifest users with it is the most effective collection method. If EPA determines after this review that including new information, or increased level of detail in existing form elements, is the best approach, then the commenter strongly recommended that EPA clearly specify that such elements are voluntary only, and not required for generators not subject to the BR. In addition, the commenter requested that EPA clarify whether industry users would still have the option to carry forward data from previous cycles or upload a flat file. The commenter indicated that many larger generators and permitted TSDFs already have existing processes to upload flat files. Thus, compelling preparation of the Biennial Report from the e-Manifest system, or severely 'tweaking' the e Manifest system to accommodate such, may actually hinder efficient information submittal. The commenter encouraged EPA to continue to leave industry users with options as to how they enter data for the BR such as adding a third option to "Import e-Manifest data for (BR RY)."

One commenter (No. 10) stated it would be beneficial if the system could automatically consolidate data from waste lines that have the same DOT shipping names, waste codes, form code, management method codes to transfer this information into a single WR form.

The last commenter (No. 2) did not support EPA's conceptual approach for integrating Biennial Report to the e-Manifest system. The commenter stated that a better conceptual approach would be for EPA to replace the Biennial Report in its current format with a report produced directly from the e-Manifest system using the information currently available in e-Manifest. The commenter further stated that this approach would avoid imposing the duplicative burden on TSD facilities of supporting two separate databases, the e-Manifest system and the BR database, that cover the same hazardous waste. This approach would also eliminate the potential for inconsistencies and conflict due to reporting differences.

**Response:** EPA appreciates comments about the proposed conceptual design for BR integration with the e-Manifest system. EPA believes that commenters raised significant substantive issues that merit further analysis and external outreach prior to adopting a final approach. EPA also agrees that the existing data gaps between the manifest and the Biennial Report merits further investigation and that the Agency needs to collect information on how the missing data is used by industry and states. Any further action on BR integration will be addressed in a separate rulemaking, as needed; the Agency is not considering BR integration in this final rulemaking.

**Comment:** Four commenters provided input on EPA's proposed approach of giving receiving facilities the option of using the e-Manifest Data Transfer Table for completing their WR Forms. Three supported EPA's proposal (Commenters No. 5, 10, and 11) and one did not (Commenter No. 2).

Commenter No. 11 stated that receiving facilities should be able to directly upload their data into the proposed e-Manifest Data Transfer Table as many receiving facilities already collect this data in their company systems.

Commenter No. 5 added that allowing receiving facilities to add, delete, and modify data in the transfer table prior to pre-populating a WR form would eliminate a hurdle to the reporting of complete and correct data.

One commenter (No. 2) did not support EPA's proposed approach of giving receiving facilities the option of using the e-Manifest Data Transfer Table for completing their WR Forms. The commenter stated that reviewing, supplementing, and possibly correcting thousands of lines of waste receipts in the e Manifest Data Transfer Table would not be feasible for a TSDF.

**Response:** EPA understands that requiring receiving facilities to transfer thousands of rows of waste line information from manifests to the WR form is not the most streamlined approach to compiling this information into a reportable format. However, the Agency also believes that due to existing data quality concerns with e-Manifest data, future proposed approaches will require human interaction, to some degree, during the reporting process. Any further action on BR integration will be addressed in a separate action, as needed; the Agency is not further considering BR integration in this final rulemaking.

**Comment:** One commenter (No. 11) stated that correct reporting of Management Method Codes (MMC) in BR data is important because of how EPA and states use the information, in particular, for national capacity planning. The initial MMC written on the manifest may need to be updated, or the waste line split amongst two MMCs with appropriate amounts. This scenario needs to be considered when planning an e-Manifest Data Transfer Table.

**Response:** EPA thanks the commenter for their input and will take this into consideration to make sure that any future proposed approaches to e-Manifest and BR integration remains flexible enough to account for situations where multiple MMCs need be used for a single waste line.

**Comment:** One commenter stated that one step EPA can take toward BR integration is implementing a requirement that all applicable waste codes, for a given waste line, be included in the manifest data submitted by a receiving facility, even if a paper manifest was used and not all codes appear on that manifest (Commenter No. 10). On the other hand, another commenter stated that adding state waste codes to meet the requirements of the BR would be very burdensome. The commenter also questioned whether there will be room on the paper manifest to add all applicable state waste codes (Commenter No. 2).

**Response:** While EPA agrees with Commenter No. 10, that requiring all applicable waste codes (state and federal) on each manifest would aid the Biennial Reporting process if the two systems were integrated, EPA does not believe the net change in burden would result in a reduction if this information was required for every paper manifests. EPA will take this comment into consideration with any future action, as needed, as the Agency is not further considering BR integration in this final rulemaking.

**Comment:** Five commenters provided input on the use of waste density or specific gravity for waste whose quantity is reported by volume. Two commenters supported the use of density or specific gravity (Commenters No. 8 and 9) while three commenters had concerns or opposed the option (Commenters No. 11, 2, and 15).

Commenter No. 11 stated that density and some other BR elements should be optional and not required on the manifest. Commenter No. 15 added that reporting waste densities would be challenging for retailers because of very diverse waste streams of non-homogeneous mixtures of products. The same commenter also stated that EPA should account for handling mixtures as it considers the integration of these reporting schema. Another commenter (No. 2) stated that EPA should pull the manifest units of measure to the BR instead of converting everything to weight by requiring the specific gravity.

Response: The Agency appreciates input on the complexity of requiring density or specific gravity for wastes reported in volume. The Agency believes, if e-Manifest and BR are eventually integrated, that there will need to be a consistent unit of measurement used for waste reported to ensure that regulators can make informed decisions. EPA is not finalizing any changes in this rulemaking that would require specific gravity or density to be reported on the manifest. Any further action on BR integration will be addressed in a separate action, as needed. The Agency notes that the option to report density or specific gravity information is presently available to industry and can be used to assist filling out the BR.

**Comment:** Three commenters provided input on pre-populated waste descriptions based on DOT shipping name and codes during the completion of the BR; two supported (No. 2 and 10) the option, one of which had concerns, and one did not support (No. 11).

One supporting comment stated that the form code along with the waste code description will be sufficient and that adding the management method code detail into the description does not really describe the waste (Commenter No. 2). However, this commenter stated that pre-populated forms would not be practical for large TSDFs.

Another commenter (No. 11) did not support the use of pre-populated waste descriptions based on DOT shipping name and codes because DOT descriptions are not good waste descriptions compared to what is requested in the BR instructions. This commenter supported the use of data reported in a previous BR cycle to match up with the current BR cycle and pre-populate the waste description if reconciliation efforts are successful and the data is ultimately accurate.

**Response:** EPA is not finalizing changes that would implement pre-populated waste descriptions. However, due to the wide variations in descriptions used for box 9b, EPA believes that it is not practical to automate the process of consolidating individual waste lines from manifests into waste streams that would be used for Biennial Reporting without a standard for waste descriptions (or another form of identifier that would allow the e-Manifest system to consolidate waste lines).

**Comment:** One commenter (No. 8) expressed support for EPA-led outreach to the data entry staff of receiving facilities to improve e-Manifest data quality (e.g., training data entry staff to look in Items 1, 14 and 18 on the paper manifest for manifest correction information).

**Response:** EPA will continue to work with receiving facilities to improve the quality of Data Plus Image Submissions. However, it is the Agency's position that the use of paper manifest will continue to generate data quality issues in the e-Manifest system, and the benefits of the e-Manifest system will only be realized with near 100% electronic manifest adoption.

**Comment:** Three commenters (Nos. 5, 10, and 11) support the future integration of the e-Manifest system with the Generation and Management (GM) Form.

Commenter No. 5 stated that the future integration of e-Manifest with the GM Form should continue to be prioritized as it will drive additional adoption of the e-Manifest system. When paired with the incorporation of Exception, Discrepancy, and Unmanifested Waste Reports, system integration will provide significant value to generator for burden reduction and data consistency.

Commenter No. 11 stated that EPA needs to ensure integrating the e-Manifest system with the GM Forms provides the necessary information.

Commenter No. 10 indicated that a conceptual approach similar to the WR Form approach should work for the GM Form.

**Response**: After further analysis, EPA believes that further external outreach prior to adopting a final approach for biennial report integration is necessary. Any further action on BR integration will be addressed in separate action, as needed; the Agency is not further considering BR integration in this final rulemaking.

**Comment:** One commenter stated that, if EPA finalizes the proposal to require receiving facilities to use RCRAInfo to complete their BR, receiving facilities should not be allowed to edit the Site ID Form information included in the BR if the state has not opted into myRCRAid. The commenter added that EPA should provide authorized state agencies the ability to designate which information fields on the Site ID Form may be edited by receiving facilities, and that authorized states are notified if changes are made to those fields (Commenter No. 3).

**Response:** EPA appreciates the suggested edit to the Site ID Form and will take this into consideration if further action is taken by the Agency. However, this comment is outside the scope of the final rule and will not be addressed in this document.

**Comment:** One commenter (No. 2) suggested that a later BR due date (e.g., May 1 rather than March 1) would allow for notification of outstanding manifests at the end of the year, resolution of issues, manifest entry, and generation of a manifest summary report (rather than a BR submittal).

**Response:** This comment is outside the scope of the final rule. This document does not address comments that are outside the scope of the e-Manifest Final rule.

## d. Manifest Form Changes for Biennial Report Integration

Comment: Four commenters recommended against capturing form code data in federal reporting years only (Commenter No. 2, 6, 8, and 10). Commenter No. 2 stated that if the form codes are added to the manifest, receiving facilities should have the option of recording them in both reporting and submission years to maintain a consistent procedure. Alternatively, EPA could make form codes completely optional and then only facilities that opt to use this approach would record them during the reporting year. Commenter No. 10 concluded that if form codes are required, it would probably make sense to require them all the time so that they can also be used for annual reporting. Commenters No. 8 and 10 indicated that if EPA collected data required for BR every year, states could use this information for annual reporting as well. All commenters supported options where form codes are collected every year, regardless of whether EPA made the form codes optional.

Commenter No. 6 strongly discouraged the EPA from alternating manifest information requirements from year-to-year dependent on whether the year happens to be a reporting or submission year. The commenter reasoned that adding a new layer of complexity that would change the mandatory information depending on whether the calendar was an even or odd year would likely result in significant confusion, a large education burden on regulatory agencies, as well as frequent misunderstanding and noncompliance.

**Response:** EPA appreciates input from the commenters about capturing form code data on the manifest and will take commenter's input into consideration if future action is taken by the Agency. EPA is not adopting a final approach for Biennial Report integration as further analysis is necessary. Any further action on BR integration will be addressed in a separate action, as needed; the Agency is not further considering BR integration in this final rulemaking.

#### e. Manifest Data Corrections

**Comment:** EPA requested comment on whether the post-receipt data corrections procedures should be mandatory for discrepancies in quantities and units of measure (discrepancies that would trigger requirements to file a Discrepancy Report). Two commenters support mandatory data corrections of discrepancies in quantities and units of measure, to the extent possible (Commenters No. 8 and 9).

**Response:** EPA is finalizing revisions to the existing post-receipt corrections requirements to make manifest data corrections mandatory when requested by EPA or RCRA authorized state regulators. The Agency believes that this process will help alleviate situations where data quality errors are found by state regulators that needs attention from the waste handlers.

**Comment**: Two commenters provided input with opposing views on EPA's request for comment on mandatory post-receipt corrections to manifests (Commenters No. 2 and 10).

One commenter (No. 10) stated that EPA should make post-receipt corrections mandatory for all errors and inconsistencies between the scanned image of the paper manifest and the uploaded data, particularly generator and waste information. The commenter stated that EPA should promulgate data quality requirements for receiving facilities that include making updates and corrections.

The other commenter (No. 2) stated that mandatory post-receipt data corrections should not be required because quality data should be submitted the first time and should not have to be QC (read: quality checked), line-by-line. This commenter recommended that post receipt corrections should only be required for significant manifest discrepancies of weight or waste type as specified in the regulations.

The commenter opposing mandatory corrections added that, if there were questions about the manifest, the PPC should contact the facility. To elaborate, the commenter added that most TSD facilities, that have data management systems, are more likely to upload data to the BR via flat files. The designated receiving facility would already have data in their system for the manifests, that are manually uploaded as image only, and would not rely on EPA's Paper Processing Center (PPC).

Response: EPA agrees with Commenter No. 10's concern regarding the quality of data currently in the e-Manifest system and agrees that inaccuracy of manifest data reduces overall system effectiveness and prevents efficient identification of mismanaged waste. e-Manifest data allows handlers to easily store and retrieve records, receive updated manifest information, and reduces the time spent producing reports. Therefore, it is important to have accurate e-Manifest data. Accurate data assists EPA and states to make important decisions about hazardous waste management (e.g., allocating resources). EPA disagrees with Commenter No. 2's statement that the e-Manifest community should expect the quality of data to be near perfect when initially submitted; tracking wastes using paper manifests will invariably have data quality problems due to varying QA/QC practices and simple human error.

EPA accepts the commenter's recommendation to establish mandatory post-receipt correction requirements for manifest errors when requested by state regulatory agencies, EPA, or the EPA PPC. However, EPA is not persuaded by one commenter's suggestion to solely require receiving facilities to make corrections to all errors/omissions recorded on the manifest (i.e., items on the manifest outside the receiving facilities responsibility such as the generator ID number, box 1). Therefore, in this final rule, generator, transporters, and receiving facilities must electronically submit manifest data corrections to portions of the manifest and manifest continuation sheet for which they are required by regulation and/or the manifest instructions to complete.

Specifically, the manifest instructions for receiving facilities require them to complete Items 18-20 and, if necessary, the corresponding fields of the continuation sheet. These instructions are now printed on the reverse side of Page 1 of the 4-copy manifest form ("Designated Facility copy," previously Page 3 of the old 5-copy form). The manifest instructions for generators require them to complete Items 1-15 and, if necessary, the corresponding fields of the continuation sheet. The instructions for generators are now printed on Page 4 ("Generator's Initial copy," previously printed on Page 5 of the old 5-copy form). The manifest form instructions for transporters are now printed on reverse side of Page 3 of the manifest form ("Transporter copy," previously Page 4 of the old 5-copy form). Further, the manifest provisions of paragraphs (a)(2)(I) and (a)(2)(II) under sections § 264/265.71 require receiving facilities to sign and date the manifest and note any discrepancies (as defined in § 264/265.72(a)) on each copy of the manifest.

EPA understands that transporters or receiving facilities often complete the manifest on behalf of the generators. EPA strongly recommends generators arrange through contracts or other legal arrangements to have the transporter or receiving facility make and submit post-receipt manifest data correction submissions to EPA or a state on their behalf. Generators are ultimately responsible to make sure either they, or a company they hire to fulfill the generator requirements on their behalf, meet the generator requirements.

Comment: Three commenters supported mandatory data corrections of generator ID numbers by the reporting entity, to the extent possible (Commenters No. 8, 9, and 11). Two of these commenters supported the implementation of an on-screen warning when an invalid EPA ID number (in handler) is entered in the generator ID field and there is 1,000 kg total hazardous waste on a manifest (Commenters No. 8 and 9). One of these commenters suggested that this could be accomplished at the proposed e-Manifest Data Transfer Table (Commenter No. 11).

**Response:** EPA accepts one industry commenter's recommendation that receiving facilities should only be responsible for correcting errors on the manifest in sections that the receiving facility is responsible for filling out as specified in the manifest instructions. This does not include the generator's EPA ID number in box 1 of the manifest for receiving facilities, which are the entity responsible for submitting the paper manifest, post shipment.

EPA is aware that it is a common practice for receiving facilities to perform the steps necessary to prepare a waste shipment for transportation on behalf of the generator, including the steps associated with preparing the manifest paperwork. Often, the receiving facility prepares the manifest paperwork as a part of the service it provides to its generator customers. In such instances, EPA strongly recommends that generators arrange through contracts or other legal arrangements to have the receiving facility make and submit post-receipt manifest data correction submissions to EPA or a state on their behalf. Generators are ultimately responsible to make sure either they, or a company they hire to fulfill the generator requirements on their behalf, meet the generator requirements.

**Comment:** Six commenters provided input on existing data quality issues associated with the e-Manifest system (Commenters No. 2, 8, 9, 11, 14, and 16).

Three commenters (Nos. 8, 9, and 16) stated that EPA should continue to work on fixing the known data quality issues with the current e-Manifest system, issues with reporting and participation from some receiving facilities, and issues with complex cross-state/Region enforcement before implementing many of the changes outlined in EPA's proposal (e.g., electronic reporting functions, notifications, BR integration).

Commenter No. 11 stated that the quality of the manifest quantity information is often poor when estimated and not corrected by the receiving facilities.

Commenter No. 14 expressed concern about the quality of hazardous waste data being calculated by the e-Manifest system. This commenter stated that the e-Manifest system appears to have a glitch related to the check box for DOT Hazardous Materials in Waste Line 9a on the manifest and counts non-hazardous waste materials designated as a DOT hazardous material into the "Manifest Total of Hazardous Waste" when that box is checked.

Commenter No. 2 stated that all data quality concerns would go away if the e Manifest database is used to produce the BR but did not elaborate on what that meant.

**Response:** EPA appreciates states' concerns regarding the quality of data currently in the e-Manifest system and agrees that inaccuracy of manifest data reduces the overall system effectiveness and prevents proper identification of mismanaged waste.

EPA believes the continued use of paper manifests to track hazardous waste will invariably propagate these data quality problems further and that many of these issues will only be fixed by transitioning to electronic manifests, which are faster, easier, space-saving, and more convenient than paper submissions. Unlike paper manifests, electronic manifests already exist in digital format, include built-in data quality checks, and assist users with up-to-date information while completing.

With regard to bugs in the e-Manifest system, users are encouraged to submit a ticket through the currently labeled "Feedback/Report and Issue" link in RCRAInfo. Creating a ticket allows the e-Manifest team to contact the user for clarification, prioritize, and track the status of the issue until it is resolved. EPA will investigate this potential bug further.

# 4. Technical Corrections, Typographical Errors, and Other Issues

**Comment:** One commenter stated that, for clarity and ease of reading, EPA should replace the language "generator of 1,000 kilograms or greater of hazardous waste in a calendar month, or greater than 1 kg of acute hazardous waste listed in §§261.31 or 261.33(e) in a calendar month," with "large quantity generator" in (a)(1) and (a)(2) and replace "generator of greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month" with "small quantity generator" in (b). These terms are now defined and are used in the new subsection (d).

The commenter (No. 10) also noted that it looks like something might be mistakenly missing or added at 40 CFR 271.10, the regulatory text goes (1)(a) (ii) (A) (iii), the punctuation doesn't seem right, and (A) doesn't read like a complete thought.

**Response:** EPA appreciates the thorough nature of the commenter's suggestions. EPA has revised 40 CFR 262.42(a) and (b) based on the commenter's suggestion. EPA also revised the requirement under 40 CFR 271.10(j)(1) in the final rule so that the requirement is easier to read and understand.

**Comment:** One commenter noted the following typographical errors in the proposed rule (Commenter No. 8).

- On proposed 8700-22 form: Box 19 has an extra period between 1 and 9 ("1.9.", which should be "19.")
- On FR page 19326: The commenter suggested that the term "(whether paper or electronic)" should be used in the regulatory language in 262.83 (c)(4) rather than ..." (both and electronic and paper)" and ... "(both electronic and paper)". Use of "(whether paper or electronic)" is the language used in preamble FR pages 19296 and 19319.
- On FR page 19326 19328: 262.83(b)(1)(iv), 262.83(d)(2)(ix), 262.84(b)(1)(iv), and 262.84(d)(2)(ix) references to "fax" should be "fax number".
- Paragraph 262.84(d)(2)(ix) is listed twice in the draft regulations, once with "site address", the other with a clause in parenthesis () and "address".
- On FR page 19330: 264.71(a)(2)(v) the 2 last lines have an extra semicolon "within 30 days of the date; of delivery."
- On FR page 19333: 265.72(c)(4) line 7 says "discrepancy re" which should be "discrepancy report."

**Response:** EPA thanks the commenter for their suggestions, the Agency has made clarifying corrections in the final rule.

**Comment:** One commenter stated that they appreciate EPA's Section IV.D of the Proposed Rule, Summary of Requests for Public Comments, and urged EPA to prepare a summary like that in future Federal Register rulemaking notices. Having the summary available made it easier for us to prepare these comments (Commenter No. 9).

**Response:** EPA appreciates that Commenter No. 9 took the time to make comments and will consider using a similar Summary of Requests for Public Comments on future FR rulemaking notices for e-Manifest policy in the future.

# 5. State Implementation

Comment: Three commenters (Nos. 8, 9, and 16) indicated that they support the e-Manifest program but have found that its implementation is much more work than initially anticipated. These commenters stated that state programs have had to invest considerable staff resources in areas including account administration, end user training, quality assurance/quality control (QA/QC) and corrections of the e-Manifest data. This work is not covered by any former task or funding source. Many state RCRA programs have experienced significant cuts in federal funding in recent years and have fewer staff resources than ever to conduct the activities that are needed to support an effective hazardous waste management program. The added work on e-Manifest information has stretched limited program resources and may not be sustainable without revisiting funding levels.

Response: EPA understands that state regulators have had to invest considerable time and resources to utilize e-Manifest. EPA believes that the changes made in this rule are a preliminary step towards the greater distribution of responsibility amongst industry users (generators, transporters, receiving facilities) to ensure that waste activity is accurately reported. This is, in part, why EPA has finalized revisions in this rulemaking that will require (1) generator registration, (2) electronic manifest related reports (Exception, Discrepancy, and Unmanifested Waste Reports), and (3) mandatory data corrections. EPA will continue to seek opportunities to expand the e-Manifest program in ways that will assist authorized state programs implement RCRA.

**Comment:** Commenter No. 9 expressed that much of the development of e-Manifest over the past five years has been in response to requests, and concerns, expressed by the regulated community, particularly TSDFs. The commenter further expressed that the kinds of changes made to address the requests of the regulated community have not always been beneficial for state programs. The commenter urged EPA to take a balanced approach in the future in making changes to e-Manifest to address state concerns as well as those of the regulated community.

**Response**: EPA thanks the commenter for their input. EPA has made great effort to ensure that the e-Manifest program is transparent in every aspect of the program (e.g., funding, ongoing system implementation, program goals, policy decisions). Currently, the highest priority of the e-Manifest program is to achieve near 100% adoption of electronic manifesting, which will require ongoing collaboration with industry. In addition, EPA will continue to seek opportunities that will assist authorized state programs implement RCRA more efficiently.

# **III. Table of Commenting Organizations**

No.	Name	Type of Organization
1	Madison Mede	Individual
2	Environmental Technology Council (ETC)	Trade Association
3	Texas Commission on Environmental Quality (TCEQ)	State Agency
4	Anonymous Commenter	Unknown
5	Anonymous Commenter	Unknown
6	Minnesota Pollution Control Agency (MPCA)	State Agency
7	Alabama Department of Environmental Management (ADEM)	State Agency
8	New York State Department of Environmental Conservation (NYSDEC)	State Agency
9	Northeast Waste Management Officials' Association (NEWMOA)	State Association
10	Hawaii Department of Health (HDOH)	State Agency
11	Ohio Environmental Protection Agency (Ohio EPA)	State Agency
12	Anonymous Commenter	Unknown
13	Missouri Department of Natural Resources	State Agency

14	Utility Solid Waste Activities Group (USWAG)	Trade Association
15	Retail Industry Leaders Association (RILA)	Trade Association
16	Association of State and Territorial Solid Waste Management Officials (ASTSWMO)	State Association

Table 1