e-Manifest Advisory Board Meeting

Background/IT System/User Fee January 2017

Agenda

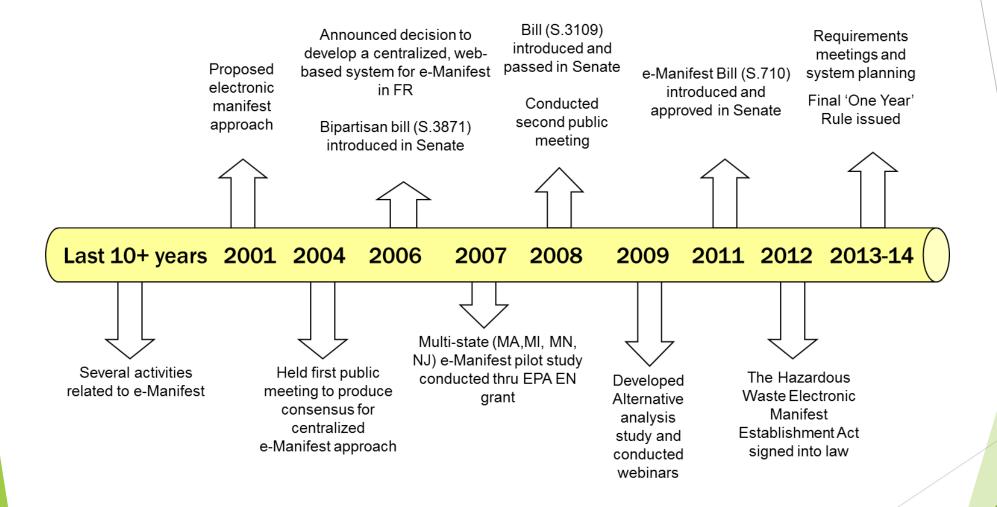
- Background
- e-Manifest IT System Summary
- e-Manifest Agile System Development
- e-Manifest System Operations & Maintenance
- User Fee Proposed Rule
- e-Manifest Outreach

e-Manifest Background

Purpose of the Manifest System

- ► The manifest system documents off-site shipments of hazardous wastes that are designated for and arrive at facilities authorized to manage them.
 - ▶ The manifest provides the proof of RCRA "cradle-to-grave" management.
 - Manifest shows the chain of custody of all those in the chain of waste handlers named on the manifest to take custody and deliver the waste for management.
 - The manifest was Congress's answer to several notorious episodes of midnight dumping of hazardous wastes that led to significant harm and cleanup costs.
- ► The manifest serves as the "shipping document" under both Hazardous materials law and the RCRA Subtitle C transportation requirements.
 - Hazardous wastes are a subset of Hazardous Materials regulated by DOT (49 CFR)
 - Much of the manifest consists of the shipping description information required under Hazmat law (e.g., proper shipping name, packing group, hazard class)
 - ▶ The manifest generator certification is the Hazmat shipper's certification

Historical Actions



Early e-Manifest History

- ► EPA began discussions with stakeholders on electronic manifesting in the late 1990's.
 - Push for Electronic Government initiatives and OMB interest in burden reduction
- ▶ In May 2001, EPA published its first electronic manifest proposed rule:
 - A "decentralized" approach with EPA adopting standards only for private entities to use to develop their own systems
 - Comments were critical of this approach and urged the development of a national, consistent system accessible to all
- The May 2004 national meeting with stakeholders affirmed interest in a national system, and suggested user interest in funding it thru user fees
 - Congressional staff took note of this and began drafting a statute to provide for the establishment of a fee funded electronic manifest system
 - From 2006 2012, EPA and stakeholders provided much input to Hill on draft legislation dealing with e-Manifest
 - Draft bills were focused on a public/private partnership approach to system funding
 - ▶ "Share in revenue:" the IT vendor would front development costs and be repaid from fees
 - ▶ The development of the e-Manifest Act enjoyed industry, state, and bipartisan support

Questions?

Hazardous Waste Electronic Manifest Establishment Act

- October 5, 2012 President Obama signs the Act into law authorizing EPA to implement a national electronic manifest system
- Key Features of the Act:
 - e-Manifest extends to all federally and state-regulated wastes requiring manifests
 - ► Electronic use is optional for users
 - ► EPA is authorized to collect reasonable user fees
 - ► EPA must establish a uniform effective date in all states
 - ► EPA must establish a 9-member Advisory Board, also known as a Federal Advisory Committees Act (FACA) committee
 - ► The Act provides measures of effective system performance
- ► The Act as enacted did not include "share in revenue" funding of system, but relied instead on traditional appropriations with fee offsets.

Constraints Under the Act

- Funding provisions in final Act are a hodgepodge of a "share in revenue" Act and a traditional appropriations Act.
 - ► Residues remain of language requiring EPA to reimburse the contractor for its contributions to the investment, though Act does not authorize vendor funding.
 - Act requires that EPA "own" the IT system, a vestige of draft bills that would have IT vendor fund the initial system and have EPA purchase it back with fees.
- ► EPA constrained to collect fees sufficient to offset its development and operating costs, with only room for a minimal "surplus" of revenues.
- ► EPA constrained to develop an IT system promoting electronic manifest use, while Act allows users the option to continue to use paper forms.
- ► EPA constrained by appropriations approach of Act to build e-Manifest system with incremental funding supplied annually by appropriators.
 - Approach further complicated by Continuing Resolutions as the recent norm
- ▶ EPA was required to produce system in just 3 years, though funding was late.

The One Year Rule of February 2014

- The Rule establishes the legal and policy framework for the use of electronic manifests
- Purpose:
 - ► To codify key provision of the Act touching upon the scope of the users and manifests eligible to participate in e-Manifest
 - To codify the provisions of the Act requiring consistent implementation of electronic manifests in all the states
 - To finalize EPA's decisions to establish a national electronic hazardous waste manifest system
 - ▶ To announce policy decisions related to using and implementing electronic manifests

Questions?

e-Manifest System Summary

E-Enterprise

- ► The e-Manifest program is a fundamental component of the EPA Administrator's e-Enterprise initiative
- e-Manifest is the flagship component of the EPA's E-Enterprise initiative, a new model for collaborative leadership among environmental co-regulators. Working together, environmental leaders at EPA, the states and tribes, are utilizing the E-Enterprise model to simplify, streamline and modernize the implementation of our environmental programs.
- ▶ E-Enterprise is enabling the nation's environmental protection enterprise to be more informed, timely and productive resulting in better health and environmental outcomes while supporting local jobs and communities
- ► E-Enterprise helps foster greater trust among the regulated community, the public, and co-regulators by improving data integrity and communication

e-Manifest System - Current State

- Paper based manifest system has a large paperwork burden
- 6-copy form that must be:
 - Obtained from a registered printer approved by EPA's Registry,
 - Completed by generator to describe wastes and designate handlers,
 - Physically carried with shipment on truck,
 - Signed with ink signature by each handler at custody changes,
 - Filed among each handler's records,
 - Once the manifest is completed, it must be mailed back to generators and to authorized states at end of process, and
 - Subjected to manual data key entry by the handlers and state tracking systems.
- Satisfies EPA's and DOT's requirements for a shipping document
 - Record of information on types, quantities, hazmat description, and routing

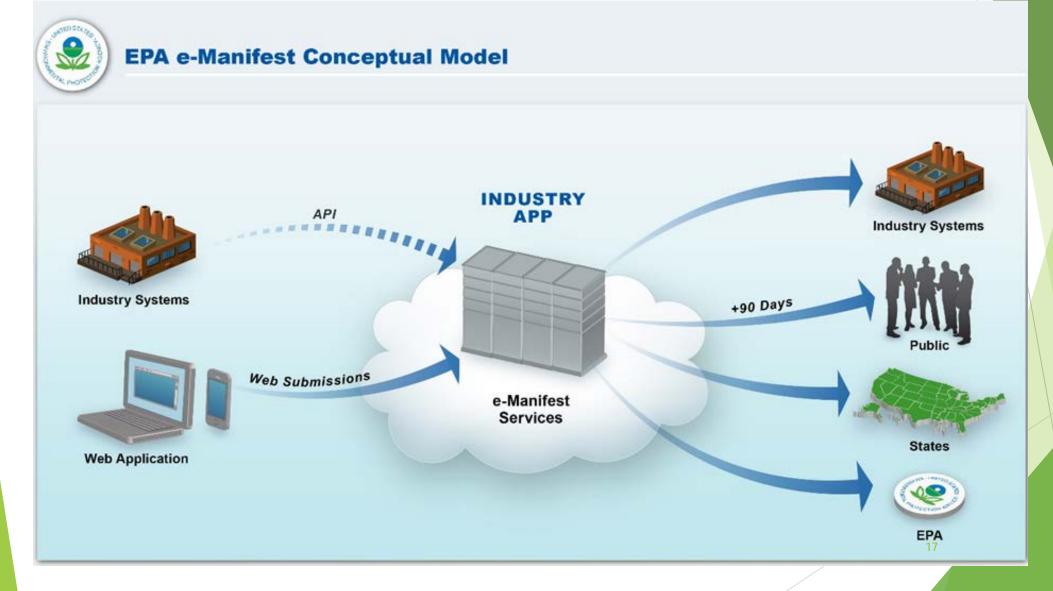
e-Manifest System - When Complete

- e-Manifest will be a centralized repository for both paper and electronic manifests
- e-Manifest will:
 - ► Allow hazardous waste handlers, states, and EPA to track off-site shipments of hazardous waste from the point of generation to disposition
 - Make the e-Manifest form and data available to users as an alternative to the paper manifest forms
 - ► Facilitate the electronic transmission of the uniform manifest data and enable the use of the e-form more cost effective and convenient for users
 - ▶ EPA is going to be the home for the hazardous waste manifest

e-Manifest System - Submission

- ► There will be three ways for users to submit manifest data to EPA:
- Paper/Image:
 - ▶ Paper processing center, via upload of an image or mail.
- ► Web-Based System:
 - Industry users access the web-based system via EPA's Central Data Exchange (CDX) and the RCRA Industry application from a common web browser.
 - The web based system will allow users to view, create, edit and sign manifests.
- System-to-System:
 - Industry system accesses e-Manifest via APIs. Companies that have their own electronic systems to handle manifests may continue to do so and submit the data to EPA and electronically sign manifests as well.
 - The APIs will allow users to view, create, edit and navigate to EPA's web based system to sign manifests.

e-Manifest System - Conceptual Model



Questions?

e-Manifest Agile System Development

History of System Development - COTS

- ► Following passage of the Act Agency conducted extensive market researchthere is no single existing system nor COTS that can be modified easily to conform to the statutory requirements of the e-Manifest Act.
 - ► EPA will be building system for 160,000 hazardous waste handlers, e.g. small & large generators, independent transporters, sites with and without internet connectivity.
 - ► FedEx and USPS have limited and controlled user base. It is not feasible for every company to have the same device to interface with one type of material they ship.
 - ► CROMERR signature requirements more stringent than typical electronic signatures used on USPS/FedEx packages as well as other COTs products



System Development - Initial Architecture Efforts

- Spring 2013 EPA conducted analysis meetings and two webinars
- May 2013 EPA completed an Analysis of Alternatives and cost benefit analysis
- September 2013 EPA completed a Concept of Operations (CONOPS) document
- Beginning in 2013 to the present EPA conducted more detailed requirements gathering and documentation
- ► Throughout 2014 EPA led a series of 15 webinars, working extensively with commercial users on identifying and addressing their issues and met regularly with state partner organizations.

Questions?



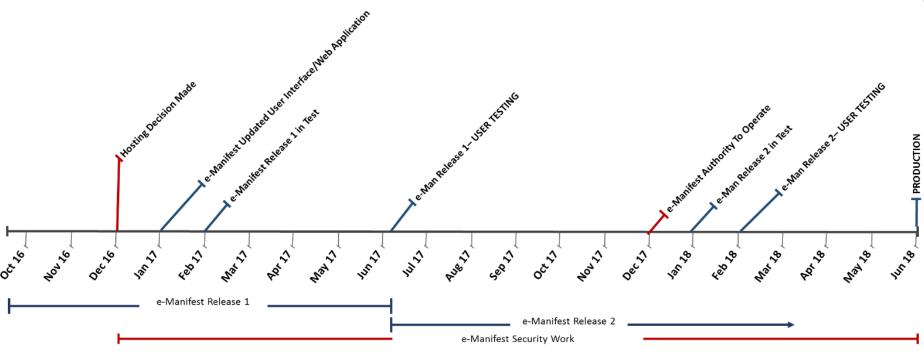
System Development - Use of Agile

- Agile embodies continuous improvement through iterative development
- EPA has implemented:
 - Two-week sprint intervals
 - Using modular development practices, building individual working pieces of the system and integrating them into the whole addressing uncertainties that arose during the initial architecture planning work, and engaging early with users and stakeholders
 - Bringing down the cost of current and future development by addressing risk upfront and ensuring that the work being completed brings actual value to stakeholders and users
 - Continuously improving, using iterative processes, and engaging regularly with users and stakeholders throughout the life of the program

e-Manifest Technologies

Hosting	NCC Moving Toward Public Cloud
Database	Oracle looking into PostgreSQL
Application Technologies	Apache Tomcat; Spring; Java; Bootstrap; Hibernate
Development Language	Java

System Development - Timeline



Release 1

- •Generator input, no signature
- •TSDF input, with CROMERR signature
- •Upload of Manifest, including images
- Ability to sign data, using CDX services
- •Ability to retrieve data by manifest ID (get service)
- Data Validations
- User Administration
- •Adding Brokers to Handler
- Bulk Signatures
- •Non-Handler IDs

Release 2

- Additional CROMMER signature options
- •User fee and payments Pay.gov integration
- •Data access and reporting state, tribal, EPA, Public, Industry
- Corrections process
- Associated handlers
- Atypical workflow
- Imports / exports (international)
- O Discrepancies section on form
- PCB manifests

System Development - Use of Agile

- The team uses Agile to plan our releases and sprint work
 - ► We create issues and user stories and groom them into a backlog of work that can be handled in the current or future sprints
 - ▶ During a sprint the team works on the issues/user stories
 - ▶ The product owner and EPA develop the stories with the developers
 - ▶ Fully groomed issues/user stories are developed and then tested by EPA
 - Daily stand up/check-in meetings and our user stories/issues are published publicly via GitHub. With each release the team will also publish code.
- Key Terms
 - ▶ Test Application elements are made available to users to test system based on feedback, changes will be made leading up to pre-prod
 - Pre-Production Application elements are made available to users to test system - changes will be made in next release/iteration
 - Production Application is fee-worthy and operational

System Development - Milestones

- Fall 2016 to early 2017
 - ▶ Development and release of Phase 1 of e-Manifest
 - User Interface
- Early 2017 to June 2017
 - Testing and refinement of Phase 1, with deployment to the pre-production environment for further user testing planned for June 2017
 - ► EPA will be requesting testers on a rolling basis will coordinate with volunteers
- June 2017 to early 2018
 - ► Continue full scale development
- Early 2018 to June 2018
 - Testing and refinement of Phase 2

e-Manifest Release 1

► Test: 2/2017 Pre-production: 6/2017

Generator Input (no signature)	Screens and services that allows generators/brokers to create/notify/view manifest in workflow
TSDF Input (with signature)	Screens and services that allow TSDF to act as generators as well as edit and sign completed manifest and manage post-generator workflow
Upload of Manifest (with images)	Screens and services allowing TSDFs to upload manifest data and images
Ability to Sign Data (CDX services)	Using standard CDX/CROMERR services allows TSDFs to sign completed manifest
Ability to Retrieve Data manifest ID	Ability for authenticated users to search for manifest by ID and retrieve associated data
Data Validations	Ensures manifest data entered meets the confines of the regulations and guidance government manifests
User Administration	Ability to authenticate users and manage what sites they may access
Adding Brokers to Handler	Allowing 3rd party brokers to register for EPA ID and manage the manifests they create in the system
Bulk Signatures	Allowing users to review and sign for multiple manifests at one time in compliance with CROMERR
Non-Handlers IDs	Allows IDs that use manifests but not in the RCRAInfo system (emergency response manifests, State CESQG)

e-Manifest Release 2

► Test: 9/2017-2/2018 Pre-production: 2/2018

Additional CROMMER Signature Options	Exploring and developing CROMERR options and workflows offered by 3rd parties to ease signature burden when signing manifests
User Fee and Payments (Pay.gov)	Following determination of payment method, working w/Pay.gov and EPA OCFO to develop payment processing workflows and modules
Data Access and Reporting	Allowing Gov./Industry/Public users to access manifest data
Corrections Process	Following determination of corrections process, implementing manifest corrections workflows
Atypical Workflow (AW)	Unique manifest instances workflows
Atypical Workflow - Imports/ Exports	Unique manifest instances workflows - imports and export manifests
Atypical Workflow - Discrepancies	Unique manifest instances workflows - discrepancies
Atypical Workflow - PCB Manifests	Data options that will facilitate the flagging of PCB manifests and ease future annual reports
Associated Handlers	Frequently used handler list for simplifying manifest creation
Adding in additional handler types	Adding in Transporters
Manifest Routing/Workflow management to/from PPC	Establishing data connection from paper/image capture facility to e-Manifest

Questions?

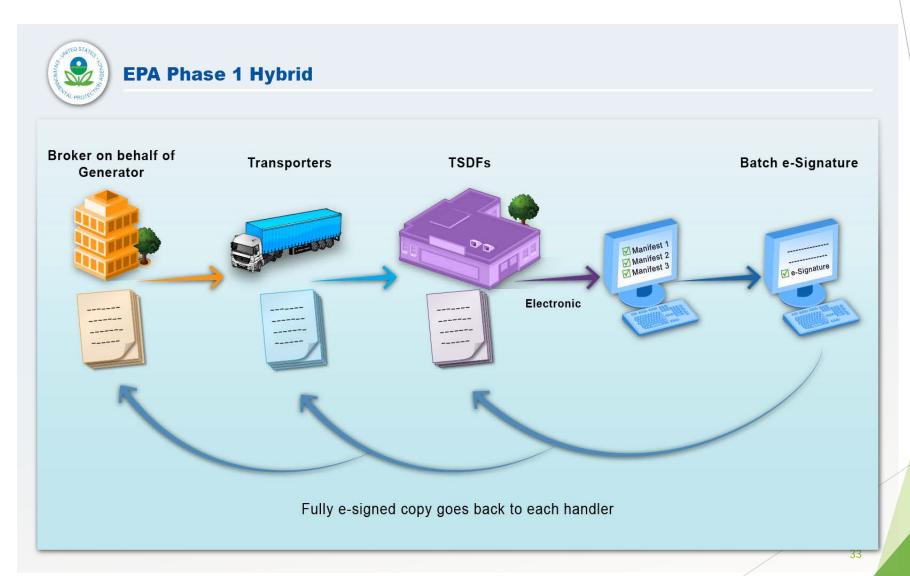
System Development - Hybrid Approach

- e-Manifest is motivated by a desire to eliminate inefficiencies with paper manifests and to improve the management of manifest data at the national level
 - The achievement of a "paperless" manifest has been a stated goal of the program, despite the existence of impediments to a fully electronic system
 - ► For example, the Department of Transportation (DOT) still requires that one hard copy of the hazmat shipping document be carried in the particular location on transport vehicles to facilitate emergency response
 - Further, it is understood that it might be challenging to access internet and electronic documents in geographically remote handler locations.
 - ▶ It is also understood that paper manifests may still be a necessary "backup" to enable commerce of hazardous waste shipments to continue when the e-Manifest system is down or otherwise inaccessible
- ► EPA has struggled with the question of whether an electronic manifest can supplement or co-exist with a paper manifest

System Development - Hybrid Approach

- ► EPA concluded in the final One Year Rule that the burden of processing mixed or hybrid manifests in this manner would offset any realized savings
- ► However, for the proposed Fee Rule, EPA was most concerned with the significant implementation challenges that e-Manifest would pose for certain generators
- Therefore, in the proposed Fee Rule, EPA proposed for public comment an approach relaxing the hybrid manifest ban for hazardous waste generators
 - Generators could choose to complete and sign a conventional paper manifest, obtain the ink signature of the initial transporter at the time the transporter acknowledges its receipt, and retain this ink-signed paper copy as the initial generator copy
 - Transporters and TSDFs would execute the manifest with electronic signatures
 - ► The final copy signed electronically by the receiving facility would be submitted to the system and retained as the shipment copy of record

System Development - Hybrid Approach



Questions?

System Development - Relation to RCRAInfo

- Concept during technical architecture planning
 - e-Manifest system initially conceived of as a standalone system
 - Promoted out-of-the-box thinking, allowing system architects to consider a broad range of approaches without inheriting constraints from an existing system design
 - Permitted EPA to examine alternatives that would not have been possible if they were limited to technologies immediately supported by the existing RCRAInfo system
- Reimagined concept moving from design to development
 - Recognition that the e-Manifest technical solution aligned closely with RCRAInfo in terms of end user functionality, data integration, and required technical infrastructure
 - Many of the new capabilities of e-Manifest can be implemented in RCRAInfo using the existing modular architecture present in RCRAInfo
 - Some of the more innovative design aspects of e-Manifest could also be incorporated into RCRAInfo, improving both systems
 - ► Furthermore, by leveraging e-Manifest and RCRAInfo modules, opportunities for reuse of existing technology investments were present, reducing the burden of e-Manifest implementation
- ► These factors led to the decision to develop e-Manifest and RCRAInfo modules as distinct, but interrelated entities which will meet the current and future needs of Industry, Government and Public

System Development - Cloud First Approach

- Why the Cloud?
 - ► Cloud computing allows for paying for only the services we will use rather than the full cost of all potential use
- ► EPA is finalizing the decision to host e-Manifest at a FedRAMP certified third-party commercial cloud hosting provider data center.
- Expected to provide greater capabilities to both the end users and the EPA at reduced cost levels.

System Development - Electronic Signature

- What is CROMERR?
 - ▶ Sets performance-based, technology-neutral standards for the systems that states, tribes, and local governments use to receive electronic reports
- Compliance with CROMERR and all E-Reporting requirements
- ► The performance-based criteria address a number of topics:
 - Criteria for establishing a copy of record
 - Integrity of electronic document
 - Opportunity to review and repudiate copy of record
 - Validity of electronic signatures
 - Determination of the identity of the individual uniquely entitled to use a signature device
 - ▶ The system may potentially have and utilize several options to meet CROMERR, such as:
 - ► CROMERR through CDX
 - APIs utilizing EPA's CROMERR Services
 - Third party signature providers

System Demonstration

Demonstration of e-Manifest Release 1

Questions?

e-Manifest System – Operations & Maintenance

Corrections Process for Manifest Data

- ► EPA recognizes the need for a corrections process
- ► EPA proposes that all manifest data corrections be made by electronic means and not by paper submissions
- ► Correction submissions must include the following information:
 - ► The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected
 - ► The Item Number(s) of the original manifest that is the subject of the submitted correction(s)
 - ▶ The required certification statement, as discussed above

e-Manifest Paper Processing Center

- Electronic manifesting is optional
- ► The following allowable submission mechanisms are considered part of the paper process
 - Postal mail
 - Image file of a scanned manifest transmitted to EPA (e.g., a PDF of a scanned manifest sent via the API or uploaded via web interface)
 - ▶ Data file containing manifest data with an accompanying image file of the scanned manifest transmitted to EPA (e.g., Complete JSON containing manifest data with an accompanying PDF sent through API or uploaded via web interface)

e-Manifest Paper Processing Center

- Data entry quality
- Sorting manifests
- Supplemental and miscellaneous documents
- Retention of 'paper' manifests
- Performance standards
- System components to support paper processing
- Billing
- Final Considerations

e-Manifest Help Desk

- In order to accommodate the unique aspects of the e-Manifest system, the helpdesk will need to tailor its operations to provide the best possible support for users
 - ▶ Depending on user needs and resource availability, EPA may require 24/7/365 helpdesk operations, or at a minimum, operations that run Monday through Friday during regular business hours
 - Along with standard means of receiving user inquiries such as telephone and e-mail, the helpdesk may offer support through chat, via the web application or native mobile application, and/or social media
 - ► The helpdesk will need to be able to communicate effectively and courteously with the wide range of e-Manifest stakeholders
 - The e-Manifest helpdesk will also be responsible for developing user guides and web tutorials to assist users in using the system in advance of any system release
 - Once the system is operational, the helpdesk shall use its knowledge base to make suggestions on improving or adding to any training, the user guides, web tutorials, as well as areas of the system that may need extra attention

e-Manifest Help Desk

- Tier 1
 - Password resets
 - User account maintenance
 - Basic electronic manifest creation, transmission, and submission
 - General questions about where to send paper manifests, data files, and images
 - General questions about how to submit paper manifests, e.g., which documents to send
 - Confirmation of known system tickets and any possible workarounds
 - Data access and reporting
 - Other paper documents received with the paper manifest
 - Electronic signatures

- Tier 2
 - ► Fee questions
 - Lost manifests
- Tier 3
 - Technical issues or glitches that require system or development changes
 - Questions or comments regarding a new system release
 - Issues identified by the paper processing center such as incorrect validation rules and issues with XML.

Questions?

User Fee Proposed Rule and Related Issues

User Fee Proposed Rule

- ▶ July 26, 2016 EPA published the proposed User Fee Rule in the Federal Register (81 FR 49072)
- Purpose:
 - To propose methodology for determining and revising e-Manifest related user fees
 - To create a process for publishing the fee schedules to the user community
- Fee-Related Issues
 - ▶ Which Users and Transactions Are Subject to Fees?
 - ▶ How and When Will Fee Payments Be Made?
 - What Program Costs Are Fee Recoverable?
 - What Formula Will Be Used to Calculate Per Manifest User Fees?
 - ► How Does the Proposed Rule Address Fee Revisions?
 - ▶ What Sanctions Are Proposed for Non-Payment of Fees?

Users and Transactions Subject to Fees

- The proposed rule will:
 - ► Track closely the definition of "users" prescribed by the e-Manifest legislation and by the implementing regulation of February 2014
 - ► Focus fee coverage on those members of the regulated community that are required to use the hazardous waste manifest under either federal or state law
 - Refine the scope of e-Manifest user fees by limiting fee collection by EPA to only the 400+ TSDFs that receive waste from off-site facilities for management
 - ► Clarify the "major billable" event as the submission of the final copy of the manifest signed by the TSDF

Questions?

Fee Payments Options

- The e-Manifest Act grants EPA broad discretion to collect fees in advance or as reimbursement services for both electronic manifests and paper manifests that continue in use
- Advanced, Fixed Payment
 - ► TSDF users would make a fixed payment each month
 - Amount determination will be estimated based off of previous year manifests
 - At the end of each year EPA would invoice TSDFs for differences in estimation vs. use
- Reimbursement through Monthly Invoices
 - ► Agency will bill each TSDF monthly for the actual manifest amount
 - ► TSDF will be directed to Treasury's Pay.gov website to submit payment

Fee Payments Options - Advanced, Fixed-Payment Method

- ▶ EPA believes the pre-payment options are advantageous, from an administrative perspective, because they would allow for the collection of fees in advance of manifest services, and provide a more stable revenue stream to cover system costs throughout the year, because of the nearly automatic, scheduled nature of the payments
 - Assuming that EPA receives adequate funding in fiscal years 2017 and 2018, the agency anticipates that the e-Manifest system will be operational in June 2018, and at that time, EPA will transition to a fee collection system
 - ► The inherent revenue vulnerability of the monthly invoice option proposed in the User Fee Proposed Rule could delay receipt of funds needed to manage the system during the first year of operation
 - The advanced payment option could generate revenue more promptly for the initial year of system operations

Fee Payments Options - Invoicing Approach

- In consultation with the Environmental Technology Council (ETC), the Agency learned that ETC members generally favor the invoicing approach to the advance payment options
 - ▶ ETC members advised that there are variations in manifest usage from year to year, and billing for actual usage avoids the imprecision of estimate fees based on a previous year usage
 - ▶ ETC members did indicate that with respect to advance payments, that option could be more attractive if the advance payments were paid monthly rather than as a lump sum, and if there were incentives (e.g., cost savings) tied to using this method

Fee Payments Options - Alternative Approach

- ► EPA requested comments on an approach to fee collections where, after conducting monthly invoicing for the initial year (or other period) of system operations, the Agency would transition users to the use of payment plans enabling facilities to authorize a debit from a commercial account of a fixed, monthly advance ACH payments
 - ► EPA acknowledges that there are uncertainties with regard to manifest usage rates and the numbers of electronic and paper manifests in use to assure with confidence that the advance payment approach is the method of choice during initial system operations
 - However, after more inquiry into facilities' actual manifest usage, EPA believes these concerns would diminish over time
 - Assumes that a baseline of manifest usage data from invoice activity would be helpful in projecting future manifest usage, and such information would be sufficient to develop estimated monthly payments under an advance fixed payment method
 - Any deviation between projected and actual usage and fees would be addressed by the end-of-year reconciliation process

Questions?

Program Costs That Are Fee Recoverable

- System Setup
 - ▶ All system procurement costs, IT and non-IT program development, and costs incurred prior to the operational date of the system
- Operations and Maintenance
 - ▶ All costs dedicated to running and managing the e-Manifest program
- Indirect Costs
 - The enabling and supporting costs not captured by either of the above categories

Formula for Calculating Per Manifest User Fees

- Purpose to allocate all the program related costs of e-Manifest across the various electronic and paper manifests that will be submitted to the system
- Electronic manifests have minimal marginal labor costs
- Paper manifests have three distinct modes
 - Submission by postal mail
 - Uploading an image file from paper form
 - Uploading a paper form's associated data file
- Proposed formula focuses on the marginal labor costs as the key differentiating feature
- After four years, the formula becomes more aggressive

User Fee Revisions

- Updated user fee every two years
 - ► EPA recognizes the need to respond nimbly to program cost changes
 - Fee revisions would be accomplished by recalculating the fee formula every two years
 - Revisions will be announced through the program's website
- Inflation Adjuster
 - ▶ Will reference the Consumer Price Index (CPI) and adjust fees between first and second year of each cycle
- Recapture revenue lost to imprecise estimates of manifest numbers
 - ▶ Will operate between the two-year fee cycles

Sanctions for Non-Payment of Fees

- ► Three tier sanctions system to ensure prompt payment of fees
 - First tier 30 days past due, an interest sanction results
 - Second tier 120 days past due, name of delinquent payor would be published in a Delinquent Payors List maintained on the program's website
 - ► Final tier Rise to a civil enforcement order
- Additional, more serious, sanctions under review
 - Impose a denial of services sanctions
 - Sanction that suspends a facility's authorization to continue managing hazardous waste

Questions?

User Fee Rule - Other Proposals

- Transporter regulation
 - ► EPA proposed a regulatory amendment that would allow the addition or substitution of a hazardous waste transporter in cases of emergency or for transporter efficiency and thus alter the routing of a waste after the shipment is en route
- Facilities and Manifest Corrections
 - ► EPA proposed that TSDFs are responsible for completing corrections to previously submitted manifest data within 90 days of hazardous waste receipt
 - All changes must be made electronically by the TSDFs, and the submission must contain a signature certifying that the changes will render the data accurate and complete
 - Data changes may also be initiated by a notice of an error provided to the facility by either a state or by an interested party

- ▶ EPA received 25 sets of comments by close of comment period:
 - ▶ 8 comments from HW management firms (TSDFs) and transportation interests,
 - ▶ 6 comments from HW generators,
 - 7 comments from RCRA authorized State agencies,
 - 4 from other interests, including 3 anonymous
- The significant comments addressed several key issues from the NPR:
 - Public Access: How to pay for it, and security concerns with providing it,
 - Which users and transactions will be charged user fees,
 - The differential fee methodology and formula for determining per manifest fees,
 - The fee revision process and factors used to adjust fees,
 - Payment methods supported by the Rule,
 - Sanctions for non-payment of fees,
 - Manifest data corrections process, and
 - ▶ The "Hybrid" paper/electronic manifest proposal.

Public Access:

- Industry comments that user fees should not subsidize public access
- State support for proposal to exempt states and pubic from user fee charges
- Industry and DoD expressed concerns that access could allow data mining for illicit purposes
 - ► Hostile actors could obtain information on particular sites or shipments w/chemicals of concern

Users and Transactions Subject to Fees:

- Agreement that HW receiving facilities or "designated facilities" on manifests are the proper party to be assessed fees, <u>not</u> generators or the public
 - ► Caution that not all facilities receiving waste are RCRA regulated nor have EPA ID Numbers
- Agreement that the final, signed manifest is the appropriate billable event when submitted to the system, with few, if any, other events being charged
 - ▶ Objections from waste industry to fees for continuation sheets and milk runs

Differential Fee Methodology and Formula:

- Agreement on a "differential fee" approach that assigns a different fee to the various electronic and paper submissions, based on marginal labor cost of each.
 - Dissenting comments expressing concern with projected fee amounts presented in preamble
- Agreement with proposed fee formula, and the concept that it become more aggressive for paper fees if electronic usage does not meet goals
 - ▶ Some TSDFs object to arbitrary goal (75% electronic use in 4 yrs) being locked into rule

▶ Fee Revision Process and Factors:

- General agreement with fee revision approach that would refresh fees every two years by running the latest numbers, and publish new schedule informally to users.
 - ▶ Support for CPI-U as inflation factor and for adjuster for imprecise manifest use estimates
 - Objections to adjusting fees for uncollectable manifest fees
 - Dissent for fee changes to be issued through rulemaking

Payment Methods:

- Industry and state generally support the monthly invoicing of payments option
 - ▶ TSDFs commented they would need more than 30 days to pay their invoices
- ▶ Few comments of support for advance fixed payment option

Sanctions:

- General support for the financial (interest and penalty) sanctions,
- Support for proposed civil enforcement remedy for egregious cases
- Little support for the publicity sanction (Delinquent Payors List) or denial of services

Corrections Process:

- Industry agreement that receiving facilities should be responsible for submissions
 - ▶ Minority view: States, generators, transporters should be able to enter system for corrections
- Agreement that most corrections should be made electronically, w/ exceptions
- Industry and state objections to proposed 90-day window for corrections
- Industry objections to correction fees disincentive for data quality
- Process should be clarified on how notices provided, how offline generators participate, what data validation rules will be used, and QA and resource expectations for States

Hybrid Manifest:

- Industry and generator support for hybrid manifest as basis for phased approach to e-Manifest implementation. ETC suggests three phase approach:
 - ▶ Phase I: Current paper process with TSDF upload of certified data files from back office
 - ▶ Phase II: Generators authorized to access system and obtain electronic copies from TSDFs
 - ▶ Phase III: Fully electronic implementation with full fee collections
- TSDF comments support only a "nominal" fee through phase II
- State and several industry objections to hybrid as not feasible and at odds with fundamental tracking objectives of manifest system.
 - Severs paper manifest from electronic version submitted by TSDFs to system
 - Uncertainty on what version is the copy of record
 - Creates disincentive for generators to ever adopt electronic manifest
 - Impedes ability of generator to track chain of custody, to verify waste receipts reported by TSDFs, or to conduct exception and discrepancy reporting

Other:

- Industry support for transporter changes proposal, although some comments raised questions on details of implementation:
 - ▶ One generator objected, unless generators held harmless for mismanagement that results
 - ▶ A few comments on how the agency authorization should be described on manifest
 - One TSDF objects that a rule change not required to support common industry practice
- Support of ETC members (large TSDFs) for policy that would ban submission of paper forms to system for processing.
 - Other commenters said ban of paper submissions would be hardship for some TSDFs
 - ▶ Several comments said ban would be OK if phased in over several years

Questions?

e-Manifest Outreach

e-Manifest Outreach

- ► EPA is conducting outreach through a number of mechanisms to disseminate information about e-Manifest and coordinate with other stakeholders
 - Webinars
 - e-Manifest Website
 - ► Advisory Board meeting
 - Coordination with other EPA offices
 - Coordination with other Federal partners such as Congress, OMB, and DOT
 - ▶ Development of Frequently Asked Questions

e-Manifest Outreach

- Submit input/questions to eManifest@epa.gov
- To subscribe to the ListServ send a blank message to: eManifest-subscribe@lists.epa.gov
- For more information on EPA's Manifest Program: http://www.epa.gov/osw/hazard/transportation/manifest/e-man.htm
- Or if you prefer to discuss please contact:
 - ► Stephen Donnelly (w)703-308-7294 donnelly.stephen@epa.gov

Questions?