e-MANIFEST

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ABSTRACT

This session will discuss e-Manifest system development, rule, communications efforts as well as update industry, states and regions on frequently asked questions surrounding the launch e-Manifest.

Overview

- The Electronic Hazardous Waste Manifest System (e-Manifest) is a new system that allows
  - Industry Hazardous Waste Handlers to submit Uniform Hazardous Waste Manifest Forms, either electronically or on paper, to EPA
  - States/Regions to retrieve the collected manifest data electronically
- E-Enterprise and e-Manifest
  - To optimize limited resources, e-Manifest will leverage shared services from other systems under e-Enterprise including: Resource Conservation and Recovery Act Information System (RCRAInfo), Central Data Exchange (CDX) and efficient solutions for electronic signatures
  - Both E-Enterprise and e-Manifest align with Administrator's "Cooperative Federalism" Vision for effective partnerships with states and tribes

Anticipated Result

EPA estimates the national e-Manifest system will ultimately reduce the burden associated with preparing shipping manifests by 300,000 to 700,000 hours and result in cost savings of more than $90 million per year for states and industry.

e-Manifest is a Multi-Faceted Project

▶ ## System development

- ▶ **Fall 2016 to Early 2017** – Development and release of Phase 1 of e-Manifest. Web application, user administration and services.
- ▶ **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 as part of the user-centered design strategy.
- ▶ **July 2017 to Spring 2018** – Testing and refinement of pre-launch system.

▶ ## Regulatory development

- ▶ One Year rule – authorized use of electronic manifests, 2/14
- ▶ User Fee rule – sets methodology for user fees
- ▶ Expect to issue final rule in December 2017

▶ ## e-Manifest Advisory Board

- ▶ First meeting in 1/2017
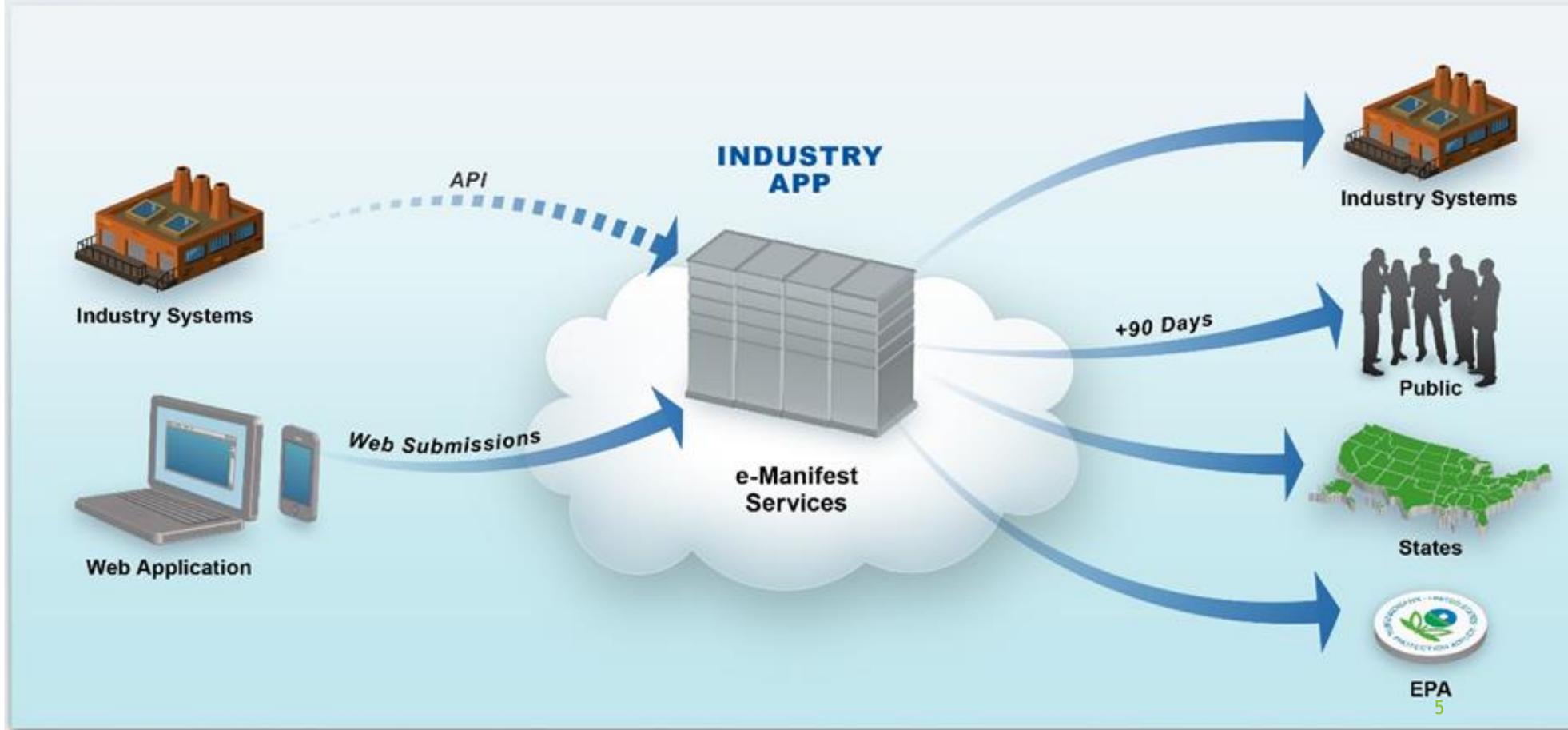- ▶ Next meeting 9/2017

▶ ## Stakeholder Engagement Plan

- ▶ Ensures stakeholders are prepared for transition

e-Manifest System – Conceptual Model

EPA e-Manifest Conceptual Model

Outreach and Next Steps

- Outreach
  - Submit input/questions to eManifest@epa.gov
  - To subscribe to the ListServ send a blank message to: eManifest-subscribe@lists.epa.gov
  - Monthly demonstration webinars starting 4/26
  - User Testing
    - To test visit: https://test.epacdx.net
    - In order to access the test environment, all users will be required to set up a test account on EPA's Central Data Exchange (CDX).
    - A detailed guide is available at https://github.com/USEPA/e-manifest/tree/master/Reference
  - Advisory Board
- Next Steps
  - Tell us what is missing
  - Tell us what you need

e-Manifest

Impacts on Industry and States/Regions

Key Impacts on Industry and States/Regions

- User Registration
- Manifest Access
  - Electronic Manifests
  - Paper Manifests
  - Corrected Manifests
- State-specific Waste Codes
- Non-Hazardous Wastes
- State Fee Collections
- Unknown Handler IDs (Emergency, Temporary, and New)
- State/Region Data Sharing MOUs

Role of Regions & States

- e-Manifest will offer new opportunities:
  - 1st time collection of complete manifest data for all of nation,
  - 1st time opportunity for remote inspection of manifests for compliance,
  - System will soon become tool for biennial reporting of waste receipts.
- Regions and states will have to take action to prepare for e-Manifest:
  - All manifests will go to EPA; states will no longer receive manifests, unless they wish to continue to collect generator copies of paper manifests
  - States need to adopt One Year Rule if they wish to enforce e-Manifest and user fee rule provisions for consistency with EPA
  - States with existing manifest tracking programs need to prepare their systems to receive data directly from e-Manifest
- Regions and States can assist in transition by training agency and state personnel in use of system.
  - Discuss and monitor progress
  - Prioritize state adoption and authorization for e-Manifest

Role of Industry Partners

- e-Manifest will offer new opportunities:
  - 1st time unified manifest creation and submission process nation-wide,
  - 1st time single system for compliance with manifesting regulations,
  - The ability to access manifests from a central warehouse.
- Industry Partners will have to take action to prepare for e-Manifest:
  - All manifests will go to EPA; states will no longer receive manifests, unless they wish to continue to collect generator copies of paper manifests
  - States with existing manifest tracking programs need to prepare their systems to receive data directly from e-Manifest
- Industry Partners can assist in transition by participating in training from states and agencies.
  - Provide constructive feedback
  - Working to update their system to integrate electronically with e-Manifest

Impacts: User Registration

- **Current Solution**
  - State/Regions will use the RCRAInfo system to view and manage user accounts associated with their State/Region
  - Only users registered in the CDX-based Network Authentication and Authorization System (NAAS) with access to e-Manifest will be allowed access to the e-Manifest application and data submission/retrieval Advanced Programmer Interfaces (APIs)
  - Industry Partners will use the RCRAInfo system to view and manage user accounts associated with their organization
    - Who can create and sign manifests?
    - Who can update manifests that have been created?
    - With whom can manifests be shared?
  - Only users registered in the CDX-based Network Authentication and Authorization System (NAAS) with access to e-Manifest will be allowed access to the e-Manifest application and data submission/retrieval Advanced Programmer Interfaces (APIs)
- **Requirements imposed on Industry**
  - Industry Partners will need to register users to use e-Manifest with the CDX NAAS
  - Industry Partners will need to maintain user accounts over time, including ensuring that lists of users associated with their organization, old accounts are deactivated, and the list of users with whom manifests can be shared is up-to-date
- **Requirements imposed on States/Regions**
  - States/Regions will need to register users to use e-Manifest with the CDX NAAS
  - States/Regions will need to maintain user accounts over time, including ensuring that lists of users associated with their State/Region are correct and old accounts are deactivated

Impacts: Manifest Access – Electronic Manifests

- **Current Solution**
  - State/Regional systems can access (and make corrections to) electronic manifest via the web application or API
  - Data retrieved by these services can be filtered by various criteria
    - Specific manifest number – to retrieve specific manifests
    - Date ranges – to retrieve manifests submitted within a specific timeframe
    - Handler IDs – to retrieve manifests specific to a given generator, transporter, or handler
    - Other filters may be added in the future based on feedback from states
  - Industry Partners can create, access, correct, and submit electronic manifest via the web application or API, depending on the user's specific role
    - Generators can create, update, sign, and submit generator copies
    - Transporters can retrieve generator and transporter copies, update, sign, and submit transporter copies
    - TSDFs can create, update, sign, and submit TSDF copies
    - All users belonging to organizations associated with a manifest can retrieve manifests based on Manifest Numbers, Date Ranges, and Handler IDs
    - Other filters may be added in the future based on feedback from states
- **Requirements imposed on Industry**
  - If Industry Partners want to submit, copy, update, or manipulate data within their own systems, they will be required to develop new or update existing systems to pull manifest data from the e-Manifest system based on their local requirements
  - Industry Partners are responsible for any internal management of manifest data; EPA is simply a collector and distributor of manifest data as it was reported by handlers
- **Requirements imposed on States/Regions**
  - If states want to copy, update, or manipulate data within their own systems, they will be required to develop new or update existing systems to pull manifest data from the e-Manifest system based on their local requirements
  - States are responsible for any state processing of manifest data. The EPA is simply a collector and distributor of raw manifest data as it was reported by the handlers

Impacts: Manifest Access – Paper Manifests

▶ **Current Solution**

- ▶ All paper manifests received by EPA will be scanned to create an electronic image of the paper received
- ▶ EPA will extract the data from paper manifests and enter it into the e-Manifest system
- ▶ Industry Partners and States/Regions can obtain (and correct) paper manifest data via the web application or API
- ▶ Industry Partners and States/Regions can download the scanned image files of the paper received by EPA
- ▶ Image retrieval will be handled on a manifest-by-manifest basis

▶ **Requirements imposed on Industry**

- ▶ If Industry Partners want to simply view images on the web, they can use the e-Manifest Web System to do so
- ▶ Industry Partners would need to include specific functions within their systems to pull manifest paper images

▶ **Requirements imposed on States/Regions**

- ▶ If states want to simply view images on the web, they can use the e-Manifest Web System to do so
- ▶ States would need to include specific functions within their systems to pull manifest paper images

Impacts: Manifest Access – Corrections

- **Current Solution**
  - As corrections to existing manifests are received, they will be processed as new versions of an existing manifest. Corrections made post-receipt will not amend completed manifests, but merely update the data records.
  - Industry Partners and States/Regions can obtain corrected manifest data using web application or APIs
  - When requesting manifests, they can filter on only manifests with a new version(s) available
  - Corrected paper submissions will follow the same processes previously described
  - There is no time limit for correcting manifest data. Any interested person may enter a correction, with notice provided to other interested persons.
- **Requirements imposed on Industry**
  - Industry partners using APIs will need to include specific functions within their systems to collate corrected manifest data
- **Requirements imposed on States/Regions**
  - States/Regions using APIs will need to include specific functions within their systems to collate corrected manifest data

Impacts: State Specific Hazardous Waste Codes

- **Current Solution**
  - e-Manifest will include state specific waste codes that are defined and maintained by the States and Regions
  - When completing a manifest, an industry user will be able to select state waste codes specific to the state locations of the generator and/or TSDF address on file with EPA
  - RCRAInfo is being updated to include a Web-based User Interface that allows authorized state users to create a list of state specific waste codes for their state
  - State specific waste codes will include valid date ranges during which the waste code is allowed to be used on manifests
  - As manifests are submitted, waste codes that do not match a Federal Hazardous Waste Code will be checked against appropriate state specific waste codes for that date
- **Requirements imposed on Industry**
  - If required State-specific waste codes are missing, Industry Partners will need to contact the state to obtain information on how to characterize the waste
- **Requirements imposed on States/Regions**
  - States will be required to regularly manage and maintain their state specific waste code lists in RCRAInfo

Impacts: Non-Hazardous Wastes

- **Current Solution**
  - e-Manifest will allow for the listing of non-hazardous wastes on paper and electronic manifests
  - e-Manifest will store the information, but will not validate the data beyond basic validation to ensure the data is submitted in a proper format
  - States/Regions will receive non-hazardous waste data along with other manifest data
- **Requirements imposed on Industry**
  - Industry Partner systems will need to be able to receive the non-hazardous waste data as part of the manifest data
  - Industry Partner systems will be responsible for all validation and processing of non-hazardous waste data
  - Industry Partners will need to work directly with the appropriate State(s) to obtain corrections to non-hazardous waste data on manifests
- **Requirements imposed on States/Regions**
  - State/Regional systems will need to be able to receive the non-hazardous waste data as part of the manifest data
  - State/Regional systems will be responsible for all validation and processing of non-hazardous waste data
  - States/Regions will need to work directly with handlers to obtain corrections to non-hazardous waste data on manifests

Impact: State Fee Collections

- **Current Solution**
  - EPA will not be responsible for collecting or tracking of any state fees
  - States can impose their own fees once they retrieve manifest data/images to support state data processing and tracking activities conducted in their systems.
  - States should consider if fee changes are appropriate, such as for data entry activities to be conducted by federal system rather than state's system in the e-Manifest system
- **Requirements imposed on Industry**
  - Industry systems will need to be updated based on specific feedback from the states with respect to the administration of state-specific fees
- **Requirements imposed on States/Regions**
  - State systems may need to be updated to use data retrieved from e-Manifest in levying state-specific fees

Impacts: Unknown Handler IDs

- **Current Solution**
  - e-Manifest will include features to support searching for Handler ID information based on other Handler data (name, address, other business information)
  - The system will not prevent the entry of an unknown Handler ID, but will:
    - Prompt the user for more information about the Handler
    - Make recommendations based on that information for partially matching known handlers
    - Request they verify the unknown Handler ID before submission
  - If a user confirms that the unknown Handler ID and information are correct, the system will record the user entered information in the manifest and flag the entry for later follow-up by States and Regions
- **Requirements imposed on Industry**
  - Industry Partners will need to validate unknown Handler IDs against the information they can obtain in the field to ensure correctness to the best of their knowledge
  - Industry Partners may be requested to provide further information as manifests are processed by EPA and the States when a manifest with an unknown Handler ID is submitted
- **Requirements imposed on States/Regions**
  - States/Regions will need to validate unknown Handler IDs against their data of Temporary, Emergency, and newly issued Handler IDs to ensure correctness
  - As appropriate, States/Regions should enter these Handler IDs into RCRAInfo for future use

Impacts: States/Regions RCRA Memoranda of Agreement (MOAs)

- ▶ Current Solution
  - ▶ States, Regions, and the EPA (as appropriate) will need to examine existing MOAs and determine what changes (if any) are required to accommodate the sharing of electronic manifest data
  - ▶ Updated MOAs will need to be vetted and approved by the appropriate Region
- ▶ Requirements imposed on States/Regions
  - ▶ States/Regions will need to examine existing MOAs and update as necessary
  - ▶ States will need to work with Regions to have them approve any updated MOAs

Update on e-Manifest User Fee Rule

- EPA issued proposed User Fee Rule on July 26, 2016
  - Proposed methodology for determining and revising user fees, and
  - Created process for publishing fee schedules to user community
- In response to proposal, we received 25 sets of public comments.
- First draft of final rule now under review with the workgroup
- Expect to issue final rule in December 2017

Key Regulatory Issues for Final User Fee Rule

1. Which manifest or data users will be charged fees?
2. Which transactions will be charged fees?
3. Should there be a Homeland Security based restriction on data disclosure?
4. Should the final rule determine if/when the fee formula pivots to more aggressive fees for paper manifest use?
5. What payment methods will be allowed?
6. What sanctions will be imposed for non-payment?
7. What process for resolution of fee disputes?
8. What should be the process for manifest data corrections?
9. What role is there for a "hybrid" or mixed paper and electronic manifest?
10. Should we prohibit facilities from submitting paper forms?

User Fee Rule Highlights

- Durable Fee Methodology with Differential Fee Formula:
    - "Durable" meaning we reuse the formula to periodically refresh the fees and we don't issue new regulation with every refresh
    - "Differential fee" meaning the formula keys on the marginal labor cost of processing each manifest type (electronic vs. paper) and assigns higher fees to paper manifest types
- Two-year refresh cycle for user fee schedules
    - Formula allocates program costs across all manifests in use
    - Formula to be re-run at two-year intervals with latest program cost and manifest usage numbers to determine new fee schedules
    - Adjusters built in to correct for inflation and imprecise manifest estimates
    - Fee Formula may pivot to become more aggressive for paper manifests if we do not see 75% electronic usage after four years

Highlights (continued)

- Simplicity of fee collections is paramount:
  - Submission of final, signed manifest by receiving facility is the primary billable event in the system
  - No additional fees for continuation sheets, corrections to data, or for use of help desk
  - No collection of fees from generators or transporters
  - Export manifests not currently included in scope
- User fee rule provisions closely tied to phased implementation
  - Initial focus on TSDF participation and support for data uploads (XML) from paper manifests
  - Second phase aimed at outreach to generators
  - Initial support for "hybrid" or mixed paper/electronic manifests to aid generator's participation in e-Manifest
  - Considering phase-out of mailed manifest submissions to EPA
  - Considering eventual phase-out of most paper manifest usage

e-Manifest Advisory Board

- The Hazardous Waste Electronic Manifest Establishment Act, mandated the establishment of e-Manifest System Advisory Board.

- e-Manifest System Advisory Board is a federal advisory committee whose role is to provide independent, peer review, and advice to the Agency on operational activities, and functional matters related to e-Manifest.

- The Agency plans to publicly convene the Board approximately biannually.

- Official meeting minutes from the January Board meeting are available public docket at www.regulations.gov under DOCKET NUMBER: EPA–HQ–OLEM-2016-0695.

Update on e-Manifest Advisory Board

- In January 2017, EPA held its first public meeting of the Hazardous Waste Electronic Manifest System (e-Manifest) Advisory Board.
- The Advisory Board met to address critical policy and system development issues needing resolution prior to system launch.
- One key Advisory Board recommendation was that the Agency should work closely with the states and regions in advance of deployment to prepare the user community (especially generators).
- In response to the Board's recommendations, we have developed an e-Manifest Engagement Plan.
- Next Advisory Board meeting is scheduled for September 26-28, 2017 in Arlington, VA.

Board Member	Organization	Sector
Joshua Burman	Minnesota Pollution Control Agency	State Government
Michael M. Hurley	Massachusetts Department of Environmental Protection	State Government
John Ridgway	Washington State Department of Ecology	State Government
Thomas Baker	Veolia North America, Industrial Business	Business and Industry
Cynthia Walczak	MPS Group	Business and Industry
Justin Wilson	Wal-Mart Stores Inc.	Business and Industry
Raj Paul	Lochbridge	Expert in Business and Information Technology
Robert Klopp	Social Security Administration	Expert in Business and Information Technology

e-Manifest Engagement Plan

- Regularly engage and gather feedback from states, industry, and other related stakeholders regarding the development, implementation, and functioning of the e-Manifest system in order to ensure the system's viability, effectiveness, and user satisfaction.

- Ensure that the user community is aware of the economic benefits of adopting e-Manifest.

- Ensure that users of the system, including industry and states, are prepared to transition to and adopt the e-Manifest system.

- Foster partnerships to enable the states and regions to assist with stakeholder outreach.

Engagement/ Communication Activity	Target Audience						
	General Public	EPA Regions and States	Hazardous waste generators	TSDFs	Hazardous waste transporters	Hazardous waste brokers and third party service providers	OMB, Congress, and DOT
FR notices		•	•	•	•	•	•
e-Manifest Marketing Initiative via videos and focus groups			•	•	•	•	
EPA e-Manifest Website	•	•	•	•	•	•	•
Regional and state meetings		•					
GitHub		•		•		•	
2 Week e-Manifest Sprint Deliveries				•			
Press Releases	•						
The e-Manifest Listservs and e-Manifest email account		•	•	•	•	•	•
Desk Statements	•						
Industry meetings/conferences			•	•	•	•	
e-Manifest email account eManifest@epa.gov		•	•	•	•	•	•
Public e-Manifest Advisory Board Meetings	•	•	•	•	•	•	•
Webinars	•	•	•	•	•	•	•
e-Manifest Fact Sheets/Checklists		•	•	•	•	•	•

Table 1. e-Manifest Engagement Activities by Target Audience