

THINK WISELY... EPA Hazardous Waste e-Manifest System

Requirements For The 21st
Century

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Agenda

- What's all the fuss about?
- User permissions
- Paper vs Hybrid
- University vs Industrial

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General Background

- Shipment of hazardous waste requires paper manifest
- Depending on what states, generator would send to EPA or state agency
- Starting June 30th, manifest information is stored onto one database

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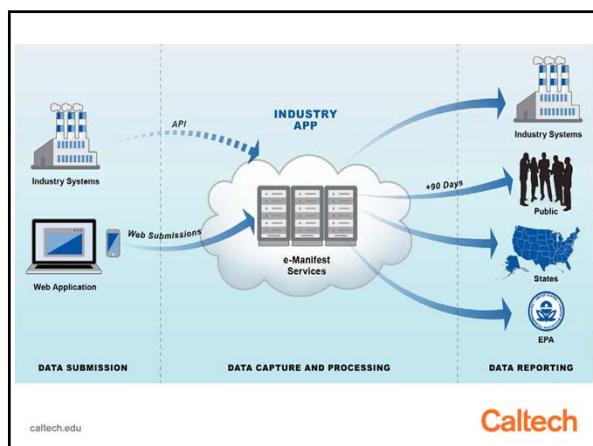
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How Does It Work?

- Module of *RCRAInfo* system
- Three industry applications
 - *MYRCRAid*
 - biennial report
 - e-manifest
- Identity proofing for electronic signatures

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Why Is This Important?

- Paper format to electronic database
- Increases efficiency
- Maintains chain of custody



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Positives of e-Manifest

- Rapid notification of any errors
- Easier to find compliance issues
- \$75-90 million to state and industry
- Biennial reporting and other forms



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Current Limitations

- Does not apply to exports
- Is not fully developed
- Potential for Cyber-security compromise
- Potential issues with data mining for compliance purposes.



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User Requests & Permissions

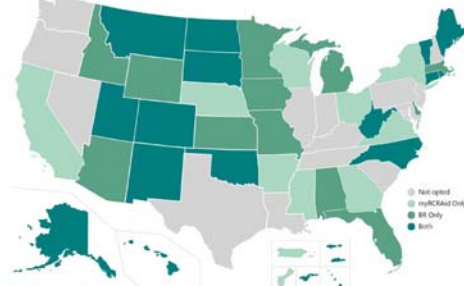
APPROVING USER REQUESTS AND PERMISSION LEVELS *e-Manifest*

Permission Level	States Opted into myRCRAid or BR	States Not Opted into myRCRAid or BR (i.e., e-Manifest only)
Site Managers <i>(Any of the three industry applications)</i>	Another Site Manager/ States	Another Site Manager/ EPA HQ
Certifier <i>(e-Manifest application)</i>	Site Manager	Site Manager
Preparer <i>(e-Manifest application)</i>	Site Manager	Site Manager
Viewers <i>(e-Manifest application)</i>	Site Manager	Site Manager

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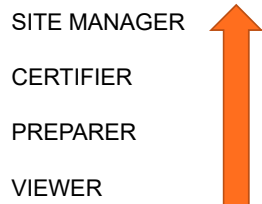
STATES THAT HAVE OPTED IN myRCRAid, BR, OR BOTH



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Hierarchy of System



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User Fees

- Covers the cost of maintenance and development
- Paper submissions more costly – triple electronic submission costs
- Some transportation companies may add a management fee



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User Fees

- Paper manifest submitted to the EPA: \$15
- Scanned image: \$10
- Pdf image and data file submitted together: \$6.50
- e-Manifest system or hybrid method: \$5

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Notable Exceptions

- 100% non-regulated material – no fee
- Rejection to alternate facility fee
- Return to generator manifest fee

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Full Electronic Filing

Code	View	Edit	Type	Sub-type	Normal workflow	Image upload	Inputs	Discrepancy Review	Rejection New Manifest	Rejection Original Manifest	CRMSER Call	Other notification	Correction
Generator	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
Transporter	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
TDF	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
Broker	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
On-Site	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

Hybrid Filing

Code	View	Edit	Type	Sub-type	Normal workflow	Image upload	Inputs	Discrepancy Review	Rejection New Manifest	Rejection Original Manifest	CRMSER Call	Other notification	Correction
Generator	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
Transporter	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
TDF	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
Broker	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
On-Site	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

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Available to Test Available to Test Not Available

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Hybrid Submission

- 5-copy paper manifest
- Half paper / Half electronic
- Manifest is scanned into database



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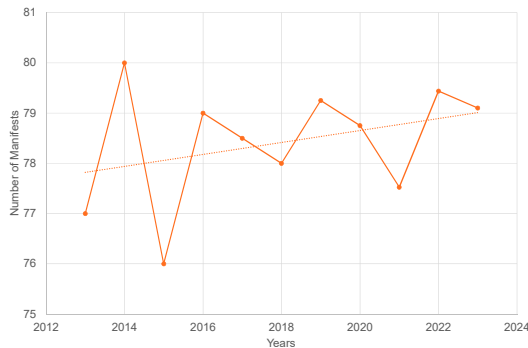
Financial Analysis

- Diversity of waste is a significant factor driving higher costs
- Research Facilities have more diversity
 - Universities, Research Centers, etc.
- Industrial facilities have greater quantity and fewer types of chemicals

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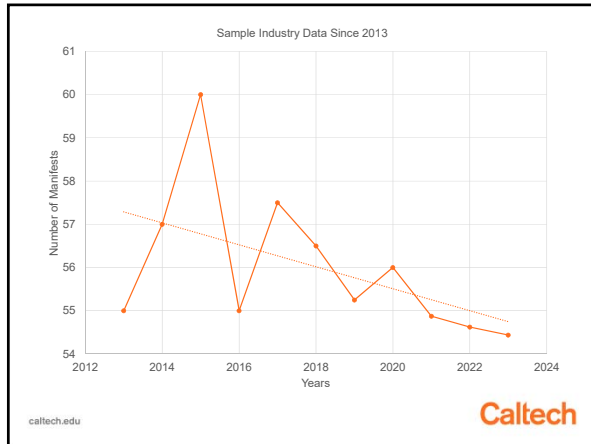
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Actual Caltech Data Since 2013



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Strategies for Success

- Location, Location, Location
- Associated packing costs
- Bulk whenever possible
- Minimize manifest submittals

Facility Stakeholders

- Vendors deal with most of the implementation
- Find a happy medium with customer
- Reduce number of manifests

Conclusion

- Cost Savings
- Don't have full electronic access? Use the hybrid method
- Keep an eye out for system updates
- Vendor → ← Customer friction

Additional Information

- For FAQ or updates go to www.epa.gov/e-Manifest
- e-Manifest help desk for industry users helpdesk@epacdx.net

Sources

- **Learn about the Hazardous Waste Electronic Manifest System (e-Manifest)** <https://www.epa.gov/e-manifest/learn-about-hazardous-waste-electronic-manifest-system-e-manifest>
- **Frequent Questions about e-Manifest** <https://www.epa.gov/e-manifest/frequent-questions-about-e-manifest>
- **e-Manifest : Updated Manifest Scenarios** <https://github.com/USEPA/e-manifest/blob/553292907bda55b1304853eb9a45222083519452/Reference/Updated%20Manifest%20Scenarios%20-%2007262018.pdf>