

e-Manifest Requirements Meeting – Chicago, IL March 14-15, 2013

*Please Note: throughout this meeting summary, various documents are referred to such as the 'AS-IS' process diagram or the requirements slide deck. Please see the Chicago meeting materials section of the website (<http://www.epa.gov/osw/hazard/transportation/manifest/e-man-meetings.htm>) for access to these documents. These documents are not attached as appendices.

1. Background

On March 14-15, 2013, the U.S. Environmental Protection Agency (EPA) held an e-Manifest Requirements meeting at the EPA Region 5 Office in Chicago, Illinois to discuss the existing paper manifest business process, the proposed electronic manifest business process, and review the requirements captured to date. This was the second of three e-Manifest Requirements meetings that EPA will be conducting to solicit industry and regulatory input into the proposed business processes and requirements of the national system. The stated purpose of the meeting was to establish a common high-level understanding of e-Manifest, better understand user needs and expectations, and capture and document input to inform the system requirements process.

2. Introduction

Margaret Guerriero, Director of the Region 5 Land and Chemicals Division, welcomed participants and provided a brief history of the e-Manifest project. She stated that the current effort is built off previous work, and that stakeholder partnership is important. She noted that EPA recognizes the need to make the e-Manifest system efficient and cost-effective.

Kristen Gunthardt, EPA, provided an introduction presentation providing information about what e-Manifest is as a concept, the history of e-Manifest, and the overall purposes and goals of the requirements gathering meeting. During the introduction presentation, various questions and discussion points were raised:

- **User Fees:** What is the envisioned approach and structure for user fees?
 - **Answer:** EPA is planning to structure and define the approach for user fees during rule making next year. Right now, the area of user fees is not defined.
- **State Authorization:** Since this will be a federal, centralized system, what will states actually be authorized for with e-Manifest?
 - **Answer:** States will be authorized for continued enforcement of the manifest program.
- **Paper Manifests:** It was clarified that all users of manifests (paper or electronic) will need to interact with e-Manifest. Paper manifests will be supplied to the central e-Manifest system, which represents a major change in the current process where paper manifests are mailed to individual states.

3. Existing Paper Manifest Business Process

Booz Allen provided a walk-through of the current paper process. This section of the meeting focused on the existing paper manifest business process as expressed in the As-Is Manifest process diagram. Various questions and discussion points were raised.

- **Non-hazardous Waste:** The issue of tracking non-hazardous waste was raised. Handlers often track non-hazardous waste on manifests. Stakeholders stated, however, that with having to pay for manifest processing with e-Manifest, people might end up doing separate waybills for the non-hazardous waste and this waste would never be a part of the e-Manifest system. This issue should be clarified.
- **Changes to manifest post closure:** Another issue that was raised was when additional changes occur on the manifest after the facility has signed the manifest and mailed the generator copy, based on further waste analysis or other items. These changes might result in a rejection as well. The AS-IS process should reflect this.
- **Un-manifested Waste:** Attendees brought up the issue of un-manifested waste – this is waste that is not manifested at first, but is later determined as needing to be tracked by a manifest. When this occurs, there is an un-manifested waste report that must be filed notifying the state or other handlers that the waste is now associated to a manifest.

Other issues were raised during the Existing Paper Manifest Business Process session:

- **Hybrid System Question:** Stakeholders raised the idea that e-Manifest might allow the ability to do paper as well as electronic manifesting within the same shipment. It was clarified that if users are going to do paper manifesting, the process must start and end with a paper manifest. If users are going to do electronic manifesting, the process must start and end with an electronic manifest. The system will not accommodate switching between paper and electronic.
- **DOT/Paper shipping paper requirements:** The question of what the printed document must be to be carried on the truck once e-Manifest is a reality. Folks asked if this would be full manifest (a print out of one copy of the manifest form), or a shipping paper? This is an important question for future users.

4. To-Be Electronic Manifest Business Process/Proposed Requirements

Booz Allen provided a walk-through of the proposed (To-Be) electronic manifest process. After the To-Be process was walked through, each phase of the To-Be manifest process was explored in depth using the proposed requirements slide deck. The discussion of the proposed requirements spanned the March 14th afternoon session and the March 15th morning session. The functional areas from the proposed requirements slide deck were reviewed in the following order:

Miscellaneous Functional Area (Slides 15-16)

The discussion clarified what an e-Manifest handler record is envisioned to be. Large, multi-state generators made the comment that they want to have a company specified ‘super-user’ that can manage records for all of their individual sites so that information can be pulled more efficiently. It was requested that the generator site location address and mailing address remain separate (and are included) in the electronic system. Handler e-mail addresses should be included in e-Manifest handler record information for system notifications. It was suggested that when users are creating e-Manifest handler records, it would be nice to have a check for existing IDs (e.g. have a flag that states the ID already exists) so there isn’t a mix-up over different states having duplicate IDs assigned. State stakeholders noted that the RCRA Subtitle C Site Identification Form (‘Site ID form’) should be used as

the official way of providing handler ID information to e-Manifest. MyRCRAID, which is a new capability within RCRAInfo for facilities to update their handler information directly, should be somehow paralleled with updating handler information in e-Manifest. It was also noted that there are a lot of state issued IDs that are not in RCRAInfo and suggested that it be determined why this is. States noted that there should be a single form or way of submitting handler information so regulated entities don't have to deal with multiple ways of updating information. It was noted that the information that states keep for state IDs a lot of times doesn't have the same number of fields as the full Site ID form, but even still, this information could be used quickly to create implementor IDs (in RCRAInfo).

The idea was raised that information from facility systems that contain generator customer information could be used to feed the handler information for e-Manifest. Attendees generally agreed to this, but also highlighted that regardless where the generator information comes from, the generator is liable for the shipment. It was stated that users need a way to enter non-Federal EPA ID into the Generator ID field to allow for the transport of PCBs, State-regulated waste, etc. It was noted that TSDFs should only be able to see manifests for generators they are serving, i.e. facilities shouldn't be able to see manifests that were created by other TSDFs serving that same generator.

User Admin Functional Area (Slides 11-12)

This functional area covers the requirements for setting up new users, managing users, and deleting users. Users requested a corporate user role for user admin. This user role would have the ability to create individual level user IDs for the system. It was asked whether user account set up would be at a systems level or if there will be a human component to user account set up. If the system will require humans to approve or facilitate account set up, this could be a potential bottleneck. Companies would want company administrators to be able to create users. The Ohio EPA described their e-Business Center CROMERR portal (<https://ebiz.epa.ohio.gov/>) which allows an approved responsible official within a regulated entity to then assign roles to anyone (signatory, payment, etc.) within the organization. A stakeholder commented that the system can't require that every single person interacting with e-Manifest be CROMERR certified as this would be a huge burden. It was raised by a state compliance person that there is a lot of turnover at regulated entities and people can't all be required to register. A TSDF representative commented that anyone authorized by the company should be able to sign the manifest.

Emergency responders and their user administration in the system was discussed. It was noted that emergency responders may not be local or state officials, but may be a waste remediation person. Policing emergency responder IDs in the system will be extremely difficult; responders need to go to the entities that are managing the manifest for information. A railroad representative commented that he runs a railroad emergency helpdesk. They have a database that helps them identify authorized personnel, but he also agreed that managing authorized emergency responders will be highly difficult. Attendees noted that until the DOT shipping paper requirement goes away, emergency responders' needs should be considered at a later phase in e-Manifest. Stakeholders also noted that emergency response is a DOT responsibility that they EPA needs to coordinate and involve them.

The topic of brokers and their user administration within e-Manifest was discussed. It was a general consensus that generators should give permission for brokers to be registered within e-Manifest.

Generators should give this permission to the broker as a company, and then the company can assign individual users to various roles within e-Manifest. It was noted that brokers will be a big force in helping people (especially smaller entities) use the e-Manifest system. For example, small generators can use the brokers to help register in the system.

Electronic Manifest Creation Functional Area (Slides 1-2)

This functional area covers the processes from initial manifest creation, including needed data elements and user templates or waste profiles, until the generator (or authorized representative) is ready to sign the manifest. Manifest Tracking Numbers (MTNs) and how e-Manifest should create and distribute MTNs were discussed. It was confirmed that a manifest created in an off-line mode should have an MTN on it. It was confirmed that blocks of MTNs as well as MTNs for individual manifests must be able to be created and accessed from the system. Stakeholders stated that blocks of numbers need to be kept track of by the company who has accessed them. Attendees discussed that each manifest record needs to have a unique tracking number or Unique Identifier that would be used for individual records in the system. This could be the MTN along with a time stamp. It was agreed that the format of the MTN must be standardized, but it was also noted that other than an indicator that the manifest is an electronic manifest (generated from e-Manifest), there shouldn't be any other logic to the MTN.

There were no issues raised with the idea of manifest templates, however, people noted that data within the templates must be editable.

A requirement for the system is that an open field for a company specific unique identifier for a manifest must be allowed. For example, this open field would provide room for companies to associate manifests with unique IDs that are tracked in their external systems for things like invoicing, etc. Extra fields/data elements that might be added to the electronic manifest record that aren't on the paper manifest include:

- Form and source code
- Shipment quantity in pounds – often reporting by the facility must occur in pounds
- Waste Description
- Waste minimization codes

State Waste codes were discussed. Stakeholders requested the ability to put in state waste codes that are longer in character size than the federal codes, as well as the ability to mark whether a waste code is a state or a federal code. It was noted that sometimes the state waste codes are duplicative of federal codes, so there should be an optional field or flag to say that the code is a state code.

It was noted that waste management codes need to reflect reality and that the management method codes may not be applicable at the manifest level, so these fields need to be flexible, and must be allowed to be edited at any point. It was requested that the system have some sort of wizard or step through functionality to record the DOT description information.

Electronic Manifest Workflow General Requirements Functional Area (Slides 3-4)

This functional area covers requirements for the 'chain-of-custody' workflow for generators, transporters and TSDFs, data error checking for completed manifests, offline and online mode

requirements, and electronic signature requirements. Generators commented that they would want to be notified of any changes to the manifest data at any time, not just when the shipment is 'IN-TRANSIT'. Even after the manifest is closed, if there are changes, the generators would want to know about it.

The CROMERR requirement for e-Manifest was discussed; a comment was raised that CROMERR seems excessively burdensome, and a question was asked regarding other options. ETC provided explanation that in past dealings with DOJ and EPA Office of Enforcement and Compliance (OECA), it was clear that individual signatures and their validity are extremely important. EPA described the two CROMERR signature options that have been considered for e-Manifest: a PIN/Password with second validation from drivers' license numbers and electronic signature on high-quality digitized pads.

A stakeholder comment was made that accomplishing CROMERR in an offline mode is hugely problematic, and this overall issue is probably the biggest barrier to e-Manifest coming to life. Other options for ensuring individual signing authority and providing for a second validation were raised such as snapping a photo of the person, using GPS as a geographic/location confirmation, or using something like voice print technology. The point was made that if e-Manifest log-ins are secure, why does a signature even need to occur? It was stated that IP addresses can be captured as well. The point was made that ultimately, the electronic signature must be provable in court. It was asked whether it is required to have a wet ink signature on the manifest at all and that even for paper, the wet ink signature requirement could go away. The point was raised that DOT certification of the shipping paper actually includes stronger language, and yet can be signed mechanically or with a rubber stamp. The overall take away from the discussion is that a follow up webinar should be conducted with DOT, OECA, DOJ and other relevant agencies to discuss CROMERR implementation. Officials from the criminal enforcement side need to hear directly the concerns of future users.

Electronic Manifest Workflow Phase – In Transit Functional Area (Slides 5-6)

This functional area covers the requirements for the 'chain-of-custody' workflow specific to the In Transit phase, requirements for corrections to manifest data while in the In Transit phase, and requirements related to the international importing/exporting of hazardous waste

Stakeholders sought clarification on what happens to the printed shipping paper after it is used, what is the lifecycle, and if there are retention requirements. The legal requirements for e-Manifest record retention were discussed. Generators stated that they would want the option to retain their own records for later inspection and not rely on EPA to retain records. It was clarified that it is envisioned that EPA would be the retaining entity for all records. There was wide agreement that users should be able to view the history of changes to the electronic manifest.

Electronic Manifest Workflow Phase – Received/In-Process/Accepted Function Area (Slides 7-8)

This functional area deals with the requirements for the 'chain-of-custody' workflow specific to the Received/In-Process/Accepted phase and the requirements for discrepancy reporting. It was suggested that when the TSDF puts in the actual accepted weight, quantity and/or type for a shipment, the system shall display a warning if the actual values vary enough to reach the significant discrepancy threshold. It was requested that generators would like to be notified if this situation occurs. It was stated that the after the passage of a specified time without a status change being made by the TSDF, the status of the

shipment be changed to 'unknown' and not automatically changed to 'accepted' as stated in the proposed requirements slide deck. It was noted that states shouldn't be able to see the closed manifest for 45 days. Clarification on when the public will have access to the information was requested.

It was discussed that sometimes there are changes to the manifest after it is signed by the facility and closed. The capability must be present in the future electronic system, for example, users must be able to make changes after the manifest has been closed, and these changes need to be made known to the generator and states. The issue of unmanifested waste was also raised where sometimes waste that was not manifested, but should have been needs to be later related to a manifest. It was stated that TSDFs track this information because it must be reflected in the BR. It was stated that the system must have the ability to relate waste streams that previously were not manifested to a manifest tracking number. States requested a notification from the system when this occurs.

Data QA Functional Area (Slides 9-10)

This functional area covers data Quality Assurance (QA) between Handlers and QA between states and Handlers. It was stated that Handler data should be able to be updated and records flagged when information is changed for the Handler record, and that there should be a capability to do batch updating and single record updating. TSDFs stated they want to have the capability to see what shipments are coming to them. Generators and states want to see data variance reports; states will need quality assurance reports built on the fly. There needs to be QA/QC on manifests that are scanned using OCR Technology because of poor legibility; stakeholders would like to see independent reviews of the manifest that are scanned in because of poor legibility. Stakeholders recommended that EPA handles data quality themselves because using multiple contractors to do so can produce bad results.

Electronic Manifest Format and Communications Standards Functional Area (Slides 13-14)

This functional area covered requirements for what standard formats or communications (encoding protocols, etc) are needed to support electronic manifest creation or data access and QA. It was stated that industry uses SOAP/XML and EDI, while states use flat files or CSV files. It was noted that use of the Exchange Network has been cumbersome. States want "all the data, all the time". TSDFs expressed concern about customer data mining if all data is given to the states for inspection.

Data Access and Reporting Functional Area (Slides 17-18)

This functional area covers what the system will need to do to provide access to the data and provide reports out to various users once manifest data is approved or "final" in the system. It was suggested that standard queries for Handler IDs be developed. State stakeholders want to be able to access data that EPA gathers, except the draft manifest information, and want to have a capability to download finalized data in bulk. The potential performance impact of an ad-hoc reporting capability was mentioned. It was also suggested that the system provide web services for data access so users can bring data into their systems in an automated fashion for further querying. Finally, it was discussed that various states make manifest data available to any who request it, and also that often state data access laws apply to data used by states.

Paper Manifest Processing Functional Area (Slides 19-20)

The existence of a 1996 memo stating that management facilities can retain images of their copy of the manifest (instead of the paper copy) and use them in a court of law was noted. It was stated that, according to the memo, industry can keep images of the manifest and signatures for proof. It was further clarified that many states also allow generators to retain electronic scanned images of their copy of the manifest for retention purposes. This posed a confusing situation to some as it seems to contradict the requirements of CROMERR. Clarification was requested.

5. Stakeholder Feedback

In addition to the requirements discussion, the March 15th morning session included a stakeholder feedback session. Attendees went around the room to bring up any observations from the first day as well as raise any questions or expectations. The organization is recorded along with a summary of the comment.

- **WTS** – what is EPA planning to do regarding customer/user support for e-Manifest? This will be a huge area that will need to be addressed.
- **Environmental Technology Council** – these requirements are key to see when finished. There are a lot of issues that have been discussed that remain open. When are folks going to get answers? When/will folks have the opportunity to see and comment on the final requirements?
- **Washington State Department of Ecology** – people’s comments to the individual requirements should be captured and traceable so that we can verify what has been discussed and eventually implemented. Also commented on the difficulty with utilizing the Exchange Network in terms of the cost burdens and lack of reusable or easy to use tools for implementation.
- **Ohio EPA** – noted that ORCR/OECA and the states need to work together to ensure compliance around handler data - ensuring this data is up to date. Also commented that there is a lot more consensus at this meeting than disagreement, which is encouraging.
- **Unidentified TSDf** – noted that it was unclear from the meeting materials that all paper manifests will come to the central e-Manifest system. This needs to be made very clear. Also noted that retention of electronic manifests needs to be very clear – some folks may not want the e-Manifest system to retain records past the current required 3 years.
- **Tradebe Environmental Services** – want to make sure that while there are a lot of issues with the current paper process, we focus on what the core e-Manifest system needs to do. Would be great if EPA could have an additional stakeholder meeting and make clear additional opportunities for comment. The question of when manifests are public documents remains.
- **Florida Department of Environmental Protection** – commented that everything within the requirements seems to be reflective of the rulemaking, which is great.
- **Unidentified Industry stakeholder** – from an industry perspective, commented that folks will want to make sure e-Manifest is fully functional before doing anything. This can’t be like other data reporting systems that EPA runs that aren’t functional before industry has to interact and use.
- **Unidentified Railroad stakeholder** – want to make sure e-Manifest considers the ANSI / EDI standards and interfacing with the current rail process. A demo or further conversation in Denver would be great.

- **Wisconsin Department of Natural Resources** – commented that getting information out of the system will be extremely important, and how will this work?
- **South Carolina Department of Health and Environmental Control** – state inspectors and their needs should be considered and addressed in e-Manifest’s design and implementation.
- **Massachusetts Dept of Environmental Protection** – raised the question of who people will call when there are system or policy issues? ASTSWMO should be involved as well for state policy changes as well as system changes as necessary.
- **Minnesota Pollution Control Agency** – re-raised the question of customer service with e-Manifest and that the point that states now do that work, and how will this be transferred to the central system? Also commented that DOT needs to be involved in these requirements discussions at a staff level.
- **General Motors Company** – made the point that the more information collection and planning that can be done up front, the better. Users will not want to incur additional costs if things like the data schema are changing at a later time.

6. Paper Shipping Document

The open issue of the printed paper shipping document requirement was discussed further. EPA asked what are the major barriers or issues if the manifest form must be printed for carrying on the trucks. It was noted that the overall idea that the printed manifest is supposed to be used to meet DOT standards/requirements is problematic, and that EPA needs to clarify the overall point of having to print the manifest form. A Railroad representative commented that a printed manifest form would not go along with their current process, and would be useless. A state stakeholder commented that if the shipping paper is allowed to be printed, it needs to be in a standard format so people know what they’re looking at. It was stated that the current paper process now allows you to have a separate shipping document; e-Manifest shouldn’t require anything else. The concern that notes made on the paper copy may not get into the official e-Manifest record electronically was raised. It was stated that people will get confused as to which document is the ‘true’ manifest and that users might mail in the paper copy instead of having the e-Manifest record be the true copy of record. A TSDF commented that from an IT implementation standpoint, the difference between printing the manifest form vs. a smaller shipping paper is significant, and if the manifest is required, people will just revert to paper. It was agreed that DOT needs to be consulted on this point.

Appendix A: Meeting Attendees

No.	Name	Organization	Mailing Address	Phone	Email	Thursday Sign-in	Friday Sign-in
1	Aggie Cook	Wisconsin Dept. of Natural Resources	101 S. Webster St., PO Box 7921, Madison WI 53707-7921	608-266-2414	Agnes.Cook@Wisconsin.gov	Y	Y
2	Alan Rosenauer	Compliance Publishing Corporation	PO Box 390607. Edina. MN 55439	877-500-6737	alan@compliancepublishing.com	Y	
3	Barry Smith	Steel Dynamics, Inc. - Flat Roll Division	4500 County Road 59 Butler, Indiana 46721	(260) 868-8185	barry.smith@stld.com	Y	Y
4	Bill Bougher	Steel Dynamics, Inc	2601 South 700 East	2606258484	bill.bougher@steeldynamics.com	Y	Y
5	Brian Kucharski	EQ - The Environmental Quality Company	26705 Northline Road, Taylor, MI 48180	734-413-5683	brian.kucharski@eqonline.com	Y	Y
6	Bruce C Forness	Hennepin County Department of Environmental Services	701 4th Ave S, Minneapolis, MN 55415	612-348-8690	bruce.forness@co.hennepin.mn.us	Y	Y
7	Catherine A. McCord	Heritage-Crystal Clean, LLC	2175 Point Blvd, Suite 375, Elgin, IL 60123	8472260756	catherine.mccord@crystal-clean.com	Y	Y
8	Chris Ray	Heritage Environmental Services	7901 West Morris Street	317-486-2727	chris.ray@heritage-enviro.com	Y	Y
9	Chrissie Gray	Nucor-Yamato Steel		870-762-9242	cgray@nucor-yamato.com	Y	Y
10	Chuck White	Heritage Environmental Services	7901 West Morris Street	317-390-3117	chuck.white@theheritagegrp.com	Y	Y
11	Clyde A. Buchanan	South Carolina Dept. of Health & Env. Control (SCDHEC)	2600 Bull Street Columbia, SC 29201	(803) 896-4136	buchanca@dhec.sc.gov	Y	Y
12	Colleen Morton	J. J. Keller & Associates		(920)727-7503	cmorton@jjkeller.com	Y	Y
13	Craig Rose	Heritage-Crystal Clean, LLC	2175 Point Blvd, Suite 375, Elgin, IL 60123		craig.rose@crystal-clean.com	Y	
14	Dan Heidenreich	Waste Management	W132 N10487 Grant Drive, Germantown, WI 53022	262-532-8042	dheidenr@wm.com	Y	Y
15	Dana Sulcer	Tradebe Environmental Services, LLC	1304 West 22nd Street, Suite 500 Oak Brook, IL				
16	Dave Walters	IL EPA			david.walters@illinois.gov	Y	
17	David Case	Environmental Technology Council	1112 16th ST NW STE 420, Washington DC 20036	202-783-0870 x201	dcase@etc.org	Y	Y

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18	Douglas Van Pelt	ExxonMobil	13501 Katy Freeway, Houston Texas 77079-1398	281-870-6836	doug.j.vanpelt@exxonmobil.com	Y	Y
19	Ed Bentley	WA St Dept of Ecology	PO Box 47600, Olympia, WA 98504-7600	(360) 407-6466	eben461@ecy.wa.gov	Y	Y
20	Ed Chapman	BNSF Railway	4200 Deen Road, Ft. Worth TX 76106	817-740-7254	ed.chapman@bnsf.com	Y	Y
21	F.O. (Brian) Burns	WTS	435 North 2nd Street Lewiston NY 14092	716-754-5400	BBurns@wtsonline.com	Y	Y
22	Glynis (GG) M. Zywicki	USEPA Region 5, RMD/IMB/ISS	77 W. Jackson Blvd., MI-10J, Chicago, IL 60604	312-886-4571	zywicki.glynis@epa.gov	Y	Y
23	Jack Griffith	Florida Department of Environmental Protection	MS 4550, 2600 Blair Stone Road, Tallahassee FL, 32399-2400	(850)245-8748	John.Griffith@dep.state.fl.us	Y	Y
24	Jack Schinderle	Michigan Department of Environmental Quality	PO Box 30241, Lansing, MI 48909	517-373-8410	schinderlej@michigan.gov	Y	Y
25	Jakob D. Reinbolt	North Star BlueScope Steel LLC	6767 County Rd. 9, Delta Ohio 43515	419-822-2120	jake.reinbolt@nsbsl.com	Y	Y
26	Jessica Ogle	TCEQ	PO BOX 13087 Austin, TX 78711-3087	512-239-6849	jessica.ogle@tceq.texas.gov	Y	Y
27	Jim Burns	PSC	5151 San Felipe	832-506-4080	jim.burns@pscnow.com	Y	Y
28	Joel Wolf	General Motors Company	Warren, Michigan	586-899-5811	joel.1.wolf@gm.com	Y	Y
29	Joshua Burman	Minnesota Pollution Control Agency	12 Civic Center Plaza, Ste 2165, Mankato, MN 56001-8704	507-344-5243	Joshua.Burman@state.mn.us	Y	Y
30	Kevin Jenssen	Maine Department of Environmental Protection	106 Hogan Road Bangor, ME 04401	207-299-4877	kevin.p.jenssen@maine.gov		
31	Lawrence Fura	WTS	435 North 2nd Street Lewiston NY 14092	716-754-5400	LFura@wtsonline.com	Y	Y
32	Linda Joyal	Vermont Department of Environmental Conservation	1 National Life Drive Davis 1 Montpelier, VT 05620-3704	802-522-1038	Linda.joyal@state.vt.us	Y	Y
33	Luciane Altieri	Waste Management	720 E. Butterfield Rd	3126360150	laltieri@wm.com	Y	Y
34	Lynn Metcalf	Vermont Department of Environmental Conservation	1 National Life Drive Davis 1 Montpelier, VT 05620-3704	802-522-0469	Lynn.Metcalf@state.vt.us	Y	Y
35	Matt Peterschmidt	Tradebe Environmental Services, LLC	1303 West 22nd Street, Suite 500 Oak Brook, IL 60523		matt.peterschmidt@tradebe.com	Y	Y

No.	Name	Organization	Mailing Address	Phone	Email	Thursday Sign-in	Friday Sign-in
36	Michael Beaulac	MI Department of Environmental Quality	525 West Allegan St., Lansing, MI 48909	517-388-5422	beaulacm@michigan.gov		
37	Michael Hurley	Massachusetts Dept of Env Protection	1 Winter St, Boston Ma 02108	617-292-5633	michael.m.hurley@state.ma.us	Y	Y
38	Mike Van Matre	Ohio EPA Information Technology Services	50 West Town Street, Suite 700, Columbus, OH 43215	614-728-1349	mike.vanmatre@epa.ohio.gov	Y	Y
39	Nicole Wiley	Steel Dynamics, Inc	2601 South 700 East	2606258408	nicole.wiley@steeldynamics.com	Y	Y
40	Paul Naundorf	J.J. Keller & Associates, Inc.	3003 W. Breezewood Lane, Neenah WI 54957	9207277233	pnaundorf@jjkeller.com	Y	Y
41	Paula Canter	Ohio EPA	50 W Town St, Suite 700, Columbus OH 43215	614-644-2923	paula.canter@epa.state.oh.us	Y	Y
42	Ravi Bhattiprolu	General Motors	30400 Mound Rd, Warren, MI 48090-9015	248-408-8686	ravi.bhattiprolu@gm.com	Y	Y
43	Richard Conforti	Michigan DEQ	525 West Allegan, Lansing MI 48909	517-241-2108	confortir@michigan.gov	Y	Y
44	Scott C. Dunsmore	Lion Technology Inc.	21 Sunset Inn Road	973.383.0800	scd@lion.com	Y	Y
45	Scott McLeod	CN	915 Belle Ave, Joliet, IL 60432	815-774-6410	scott.mcleod@cn.ca	Y	Y
46	Steve Laughlin	CJ&K Training Services	519 Hillcrest Lane, Lindenhurst, IL 60046	224-381-3943	sjlaughlin@comcast.net		Y
47	Tammy McConnell	Ohio EPA	50 West Town Street, Columbus, Ohio 43215	(614) 644-2922	tammy.mcconnell@epa.state.oh.us	Y	Y
48	Terrie McComb	Tradebe Environmental Services, LLC	1302 West 22nd Street, Suite 500 Oak Brook, IL 60523		Terri.McComb@tradebe.com		
49	Terry Ferrill	Heritage Environmental Services	7901 West Morris Street	317-486-2726	terry.ferrill@heritage-enviro.com	Y	Y
50	Thomas Nisler	Univar USA	39W085 Dean Lane, St. Charles, IL 60175	(630) 762-8560	thomas.nisler@univarusa.com	Y	
51	Thomas Sanicola	SSAB Iowa Inc.	1770 Bill Sharp Blvd.	563-381-5584	thomas.sanicola@ssab.com	Y	Y
52	Tita Lagrimas	Tradebe Environmental Services, LLC	1301 West 22nd Street, Suite 500 Oak Brook, IL 60523	(219) 354-2352	Tita.LaGrimas@tradebe.com	Y	Y

<u>No.</u>	<u>Name</u>	<u>Organization</u>	<u>Mailing Address</u>	<u>Phone</u>	<u>Email</u>	<u>Thursday Sign-in</u>	<u>Friday Sign-in</u>
53	Zenny Sadlou	USEPA Region 5	77 W. Jackson Blvd., MI-9J, Chicago, IL 60604	312-886-6682	sadlou.zenny@epa.gov	Y	Y