



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
LAND AND EMERGENCY
MANAGEMENT

May 5, 2023

MEMORANDUM

SUBJECT: Allowing Remote Signers for Electronic Manifests

FROM: Carolyn Hoskinson, Director
Office of Resource Conservation and Recovery

TO: Land, Chemicals, and Redevelopment Division Directors, Regions 1-10

PURPOSE

The purpose of this memorandum is to communicate EPA's new policy to allow generators, transporters, and receiving facilities to execute electronic signatures through their employees or contractors who are located remotely from the hazardous waste shipment. This policy has been in effect as of February 10, 2023.

This memorandum applies only to electronic signatures on electronic manifests conducted by generators, transporters, and the initial receipt by receiving facilities. The final designated receiving facility is still required to submit the final electronic manifest for invoicing to the e-Manifest system via a signature method that complies with EPA's Cross-Media Electronic Reporting Rule (CROMERR). This memorandum does not apply to wet ink signatures on paper manifests.

BACKGROUND

Over the forty years of implementing the uniform hazardous waste manifest, and more recently the electronic manifest, field personnel with direct responsibility for the shipment, such as personnel on loading docks and truck drivers, have been responsible for signing the manifest. These manifests are used for shipments of federally regulated hazardous waste, state-only hazardous waste and polychlorinated biphenyl (PCB) wastes.

Unlike paper manifests, electronic manifests require that signers have direct access to the e-Manifest system at the time of shipment. This includes network access and possession of an electronic device such as a smartphone, tablet, or computer. In addition, the signee must also have previously registered in RCRAInfo and obtained the appropriate level of access for their site before the shipment occurs. This is made more complicated by factors such as high employee turnover for positions that have historically been responsible for signing the paper manifests and U.S. Department of Transportation (DOT) shipper

certification requirements. EPA has heard from e-Manifest users that these obstacles, among others, have impeded adoption of electronic manifests since system launch.

On October 4-5, 2022, the EPA held a public meeting of the Hazardous Waste Electronic Manifest System (e-Manifest) Advisory Board. The purpose of the meeting, entitled “The Road to 100% Electronic Manifests,” was for the Board to advise EPA on its proposed changes to the e-Manifest System to increase use of electronic manifests.¹ As part of this Advisory Board meeting, EPA proposed a potential new policy to allow Site Managers and Dispatchers to execute electronic signatures for field personnel responsible for the hazardous waste shipment. In their final recommendations to the Agency, the Advisory Board supported the policy (now referred to as the “Remote Signer” policy) as a means to facilitate wider electronic manifest adoption. Specifically, the Advisory Board stated that the policy change would provide much needed flexibility for generators, receiving facilities, and especially transporters.

Based on the Advisory Board’s recommendation, EPA is communicating with this memorandum its policy to allow electronic signatures to be executed through remote signers, according to the section below.

REMOTE SIGNER POLICY FOR ELECTRONIC MANIFESTS

A Remote Signer is a registered RCRAInfo user with sufficient permissions to sign electronic manifests who is remotely located from the waste shipment. Under this policy, EPA is allowing Remote Signers to execute electronic signatures for field personnel, employees and contractors, associated with the same facility/transporter and which have first-hand knowledge of the hazardous waste shipment’s status. Remote Signers can execute electronic signatures in the e-Manifest system through one of the following two methods: (1) electronically signing manifests with remote personnel through the e-Manifest user interface; and (2) electronically signing using system-to-system communication.

Under the first method, field personnel with direct physical responsibility for a waste shipment must communicate and authorize a Remote Signer to carry out the electronic signature process in lieu of the field personnel. The benefit of this method is that it alleviates the need for the field personnel to have access to the e-Manifest system in a location that may have limited network availability or prohibit electronic device usage (i.e., smartphones, tablets, or computers).

Under the second method, field personnel may utilize industry waste management systems to execute electronic signatures through the e-Manifest application programming interface (API) using a Remote Signer’s API credentials. An API is a mechanism that defines a set of rules to enable two, or more, applications (e.g., industry waste management system and the e-Manifest system) to communicate with each other. Field personnel, with access to their site’s waste management system, can carry out the electronic signature process via system-to-system communication between industry waste management systems and the e-Manifest system. The benefit of this method is that it affords sites the ability to manage field personnel within company-internal systems, and the ability for field personnel to directly

¹ The public docket can be found at <https://www.regulations.gov/document/EPA-HQ-OLEM-2022-0611-0001>.

execute electronic signatures without the support from remotely located personnel acting as the Remote Signer, as described below in Method 1, when network access is available.

Regardless of the chosen method, field personnel are not required to register in RCRAInfo. However, Remote Signers must register in RCRAInfo and obtain the necessary site access to execute electronic signatures in the e-Manifest system. Furthermore, an electronic manifest is not signed unless the electronic signature is successfully executed through the e-Manifest system using “Quicker Sign” or other electronic signature methods as they become available. “Quicker Sign” is an electronic signature method that is further described below. In situations involving a Remote Signer, both the field personnel and the Remote Signer’s names will be reflected on the electronic manifest.²

Generators, transporters, and receiving facilities must follow one of the two methods described below to perform a legally valid and enforceable electronic signature in Box 15, 17, or 20, respectively, on an electronic manifest:

Remote Signer Method 1: Electronically Signing Manifests with Remote Personnel through the e-Manifest User Interface

1. A Remote Signer must register and obtain the necessary permissions (e.g., Preparer, Certifier, or Site Manager) to electronically sign manifests for their site (i.e., by EPA ID) in the e-Manifest system.
2. At the time of shipment, the Remote Signer must log into e-Manifest user interface (RCRAInfo) using their username and password and navigate to the e-Manifest dashboard for the site for which they will be signing the electronic manifest.
3. The Remote Signer must receive communication from the field personnel, authorizing the Remote Signer to execute the electronic signature. The field personnel must have direct physical responsibility and first-hand knowledge of the hazardous waste shipment.
4. The Remote Signer must execute the electronic signature utilizing existing electronic signature methods such as Quicker Sign, or other electronic signature methods the Agency develops in the future. Quicker Sign electronic signatures are completed as follows:
 - a. In RCRAInfo, navigate to the electronic manifest to be signed in RCRAInfo and click the “Add Printed Signer” button.
 - b. Enter the name of the field personnel in the “Typed Name” field.^{3, 4}
 - c. Enter the signature date.

² Currently, DOT’s hazardous materials regulations (HMR) require that a hard copy shipping paper be placed in the cab of the transport vehicle during transportation. Therefore, handlers using electronic manifests will still need to comply with DOT’s HMR requirement (e.g., print the electronic manifest from the e-Manifest system). The printed copy of the electronic manifest will reflect the names of the field personnel and remote signer. The field personnel’s name will be shown in the “Typed Name” field for Boxes 15, 17, and 20, for the generator, transporter, and receiving facility, respectively. The remote signer’s name will be shown in the “Signature” fields for Boxes 15, 17, and 20, for the generator, transporter, and receiving facility, respectively.

³ For Box 15 of the manifest, the Remote Signer must enter the name of the individual who is in physical proximity of the waste shipment and certifies that the wastes are properly classified, described, packaged, marked, labeled, and in proper condition for transportation according to the applicable regulations of the Department of Transportation.

⁴ For Hybrid manifests, the initial transporter must provide generator/offeror’s name recorded in Box 15 of the generator’s paper copy.

- d. Click the “Review and Quick Sign” button and verify the electronic manifest and information provided is accurate, complete, and reflects the waste shipment.
- e. Click the “Quick Sign” button and confirm you are signing Box 15, 17, or 20 for the appropriate generator, transporter, or receiving facility, respectively.

Remote Signer Method 2: Electronically Signing using System-to-System Communication

1. A Remote Signer must register and obtain the necessary permissions to electronically sign manifests for their site (i.e., by EPA ID) and generate an API ID and key. Currently only Site Managers can obtain and use API credentials.⁵
2. At the time of shipment, the field/remote personnel must log into their site’s waste management system, provide the field/driver employee’s printed name, and initiate the signature process (e.g., clicking a button that says “Sign Manifest”) within the site’s waste management system to request that the manifest(s) be signed through the e-Manifest API.^{2, 6}
3. The Remote Signer’s API credentials, which are available to the site’s waste management system, are used to authenticate against the e-Manifest API and retrieve a session token to be used in subsequent API calls.
 - a. If authentication is unsuccessful, the field/driver employee or remote signer will be unable to execute the electronic signature. The site’s waste management system should notify the field/driver employee responsible for the waste shipment.
4. The session token is used by the site’s waste management system to submit a request, which includes the field/driver employee’s printed name, signature date, and any other additional data required, to the e-Manifest API to sign the electronic manifest(s).
 - a. If the request is successful, the electronic signature is executed within the e-Manifest system and the system will return a response indicating the manifest(s) was successfully signed.
 - b. If unsuccessful, the e-Manifest system will return a response that explains why signature execution failed. The site’s waste management system should notify the field/remote personnel that the electronic signature was unsuccessful.

This policy change provides a flexible method for generators, transporters, and receiving facilities to participate in the electronic manifesting workflow while utilizing existing industry waste management systems. It reduces the number of users that are required to register in RCRAInfo, obtain access to their site, which requires manual approval from state and federal regulators, and have a network attached device during shipment.

⁵ The API credentials are stored in a secure location that can be utilized by the site’s waste management system that has been built to interface with the e-Manifest system and track the hazardous waste shipments. Sites are encouraged to adopt industry best practices to secure their API credentials.

⁶ A field/driver employee may also request a Remote Signer to carry out the electronic signature process as described in the first method if they don’t have direct access to the e-Manifest system.