



PAPERWORK REDUCTION ACT PUBLIC BURDEN STATEMENT

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Branching Information

- If not 11. Does your agency/company/organization current... = Yes then Hide 11a. Can this data be accessed in real-time (i.e....
- If 11. Does your agency/company/organization current... is one of [u'1', u'2', u'3'] then Hide 11a. Can this data be accessed in real-time (i.e....

 1. Name of the agency/company/organization you are representing:

 2. Location of the agency/company/organization:

Town or City: _____

County: _____

State: _____

Zip Code: _____

 3. Point of Contact (POC) information for the person completing this questionnaire:

Name: _____

Title: _____

Address: _____

Phone: _____

Email: _____

4. Which category(ies) describe your agency/company/organization? Select all that apply:

- Hazardous materials (HM) shipper
- HM carrier
- Emergency responder
- HM inspector
- Federal government
- State government
- Local government
- HM equipment vendor
- HM/emergency response training vendor/consultant
- Other, please identify: _____

5. With what transportation mode(s) does your agency/company/organization interact? Select all that apply:

- Roadway (truck)
- Rail
- Air
- Maritime (vessel)
- Not applicable

6. Describe the size of your agency/company/organization using any of the following parameters:

- Small
- Medium
- Large
- Number of HM shipments annually: _____
- Annual revenue (in U.S. dollars): _____
- Number of employees: _____

Other, please identify: _____

7. Does your agency/company/organization perform domestic (i.e., within the U.S.) commerce?

- Yes
- No
- Unknown
- Not applicable

8. Does your agency/company/organization perform international commerce?

- Yes
- No
- Unknown
- Not applicable

9. Does your agency/company/organization belong to any chemical and/or transportation industry associations?

- Yes, please provide association name(s): _____
- No
- Unknown

10. Are personnel at your agency/company/organization familiar with the look and content of an HM shipping paper?

- Yes
- No
- Unknown

11. Does your agency/company/organization currently have electronic access to conveyance (i.e., truck, railcar, plane, or vessel) HM data satisfying the U.S. Department of Transportation (DOT) shipping paper requirements?

- Yes
- No
- Unknown
- Not applicable

11a. Can this data be accessed in real-time (i.e., within five minutes of recall)?

- Yes
- No
- Unknown

 12. Do you understand that PHMSA will use the information you provide in this questionnaire as part of PHMSA's public report to Congress, Federal agencies, and other stakeholders, in support of the Moving Ahead for Progress in the 21st Century Act (MAP-21)?

- Yes
- No

Branching Information

• If 13. What class(es) of HM does your agency/company... contains one of [u'0', u'1', u'2', u'3', u'4', u'5', u'6', u'7', u'8', u'9'] then Skip to Page 5

• If 13. What class(es) of HM does your agency/company... = [u'10'] then Skip to Page 7

13. What class(es) of HM does your agency/company/organization transport? Please select all that apply:

- Class 1 Explosives
- Class 2 Gases
- Class 3 Flammable Liquids (100°F or less, closed cup)
- Class 4 Other Flammable Substances
- Class 5 Oxidizing Substances and Organic Peroxides
- Class 6 Toxic (Poisonous) and Infectious Substances
- Class 7 Radioactive Materials
- Class 8 Corrosives
- Class 9 Miscellaneous Dangerous Materials
- Unknown
- Not applicable, my agency/company/organization does not transport HM

Branching Information

- If not 16. Does your agency/company/organization interac... = Yes then Hide 16a. Which mode(s) does your agency/company/organ...
- If 16. Does your agency/company/organization interac... is one of [u'1', u'2', u'3'] then Hide 16a. Which mode(s) does your agency/company/organ...
- If not 19. How are your HM shipments packaged? Please s... contains Non-bulk packaging then Hide 19a. Which types of non-bulk HM packaging are use...
- If not 19. How are your HM shipments packaged? Please s... contains Bulk packaging then Hide 19b. Which types of bulk HM packaging are used? ...
- If not 19. How are your HM shipments packaged? Please s... contains Radioactive HM packaging then Hide 19c. Which types of radioactive HM packaging are ...

14. By what mode(s) does your agency/company/organization transport HM? Please select all that apply:

- Roadway (truck)
- Rail
- Air
- Maritime (vessel--domestic)
- Maritime (vessel--international)
- Unknown

 15. For each mode used to transport HM shipments, does your agency/company/organization utilize your own equipment and personnel or contractor resources?

15a. Roadway:

- Agency/company/organization equipment and personnel
- Contractor resources
- Both agency/company/organization equipment and personnel AND contractor resources
- Unknown
- Not applicable, my agency/company/organization does not transport HM via roadways

 15b. Rail:

- Agency/company/organization equipment and personnel
- Contractor resources
- Both agency/company/organization equipment and personnel AND contractor resources
- Unknown
- Not applicable, my agency/company/organization does not transport HM via rail

 15c. Air:

- Agency/company/organization equipment and personnel
- Contractor resources
- Both agency/company/organization equipment and personnel AND contractor resources
- Unknown
- Not applicable, my agency/company/organization does not transport HM via air

 15d. Maritime (domestic):

- Agency/company/organization equipment and personnel
- Contractor resources
- Both agency/company/organization equipment and personnel AND contractor resources
- Unknown
- Not applicable, my agency/company/organization does not transport HM via maritime (domestic)

 15e. Maritime (international):

- Agency/company/organization equipment and personnel
- Contractor resources

- Both agency/company/organization equipment and personnel AND contractor resources
- Unknown
- Not applicable, my agency/company/organization does not transport HM via maritime (international)

16. Does your agency/company/organization interact with intermodal carriers for HM transfers?

- Yes
- No
- Unknown
- Not applicable

16a. Which mode(s) does your agency/company/organization interact with for intermodal HM transfers? Please select all that apply:

- Roadway (truck)
- Rail
- Air
- Maritime (vessel)
- Unknown

17. Does your agency/company/organization transport less than truckload (LTL) HM shipments?

- Yes
- No
- Unknown
- Not applicable, my agency/company/organization does not transport HM via roadways

18. Approximately how much HM does your agency/company/organization transport annually? Please report this information in at least one of the following measurements:

- Tons per year: _____
- Ton miles per year: _____
- Number of shipments per week: _____
- Number of shipments per month: _____
- Number of shipments per year: _____
- Number of twenty-foot equivalent unit (TEU) containers per week: _____
- Number of TEU containers per month: _____
- Number of TEU containers per year: _____
- Other, please identify: _____
- Unknown

Branching Information

- If not 19. How are your HM shipments packaged? Please s... contains Non-bulk packaging then Hide 19a. Which types of non-bulk HM packaging are use...
- If not 19. How are your HM shipments packaged? Please s... contains Bulk packaging then Hide 19b. Which types of bulk HM packaging are used? ...
- If not 19. How are your HM shipments packaged? Please s... contains Radioactive HM packaging then Hide 19c. Which types of radioactive HM packaging are ...
- If not 22. Does your agency/company/organization use HM ... = Yes then Hide 22a. For what purpose(s)? Please select all that...
- If 22. Does your agency/company/organization use HM ... is one of [u'1', u'2', u'3'] then Hide 22a. For what purpose(s)? Please select all that...

19. How are your HM shipments packaged? Please select all that apply:

- Non-bulk packaging
- Bulk packaging
- Radioactive HM packaging

19a. Which types of non-bulk HM packaging are used? Please select all that apply:

- Drums/pails
- Jerricans
- Barrels
- Boxes
- Bags
- Cylinders
- Other, please identify: _____

19b. Which types of bulk HM packaging are used? Please select all that apply:

- Cargo tanks
- Tank cars (rail)
- Intermediate bulk containers (IBCs)/portable tanks
- Freight containers
- Other, please identify: _____

19c. Which types of radioactive HM packaging are used? Please select all that apply:

- Type A
- Type B
- Industrial
- Excepted, please identify: _____

20. On average, how long does it take to complete a hardcopy HM shipping paper?

- Less than 5 minutes
- 5 to 10 minutes
- 11 to 15 minutes
- 16 to 30 minutes
- 31 to 60 minutes
- One to two hours
- Two to three hours
- More than three hours, identify time: _____
- Unknown

21. On average, how long does it take to complete an e-shipping paper?

- Less than 5 minutes
- 5 to 10 minutes
- 11 to 15 minutes
- 16 to 30 minutes

- 31 to 60 minutes
- One to two hours
- Two to three hours
- More than three hours, identify time: _____
- Unknown
- Not applicable

22. Does your agency/company/organization use HM shipping papers for purposes other than regulatory?

- Yes
- No
- Unknown

22a. For what purpose(s)? Please select all that apply:

- Delivery receipt/confirmation
- Driver/pilot/captain/conductor pay record information
- Trip log
- Other, please identify: _____
- Unknown

Branching Information

- If not 24. In your opinion, what HM information is <stron... contains one of [u'0', u'1', u'2', u'3', u'4', u'5', u'6', u'7', u'8', u'9', u'10', u'11', u'12', u'13', u'14', u'15', u'16', u'17', u'18', u'19', u'20', u'21', u'22', u'23', u'24', u'25'] then Hide 24a. What is the longest timeframe that is accepta...
- If 24. In your opinion, what HM information is <stron... = [u'26'] then Hide 24a. What is the longest timeframe that is accepta...
- If not 24b. Can you think of any additional HM informatio... = Yes, please describe: then Hide 24c. What is the longest timeframe that is accept...
- If 24b. Can you think of any additional HM informatio... = No then Hide 24c. What is the longest timeframe that is accept...
- If not 25. In your opinion, what HM information is <stron... contains one of [u'0', u'1', u'2', u'3', u'4', u'5', u'6', u'7', u'8', u'9', u'10', u'11', u'12', u'13', u'14', u'15', u'16', u'17', u'18', u'19', u'20', u'21', u'22', u'23', u'24', u'25'] then Hide 25a. What is the longest timeframe that is accepta...
- If 25. In your opinion, what HM information is <stron... = [u'26'] then Hide 25a. What is the longest timeframe that is accepta...
- If not 25b. Can you think of any additional HM informatio... = Yes, please describe: then Hide 25c. What is the longest timeframe that is accepta...
- If 25b. Can you think of any additional HM informatio... = No then Hide 25c. What is the longest timeframe that is accepta...
- If not 26. Has your agency/company/organization ever use... = Yes then Hide 26a. Please describe the inspection(s) and or inc...
- If not 26. Has your agency/company/organization ever use... = Yes then Hide 26b. What means was used to provide the HM inform...
- If not 26. Has your agency/company/organization ever use... = Yes then Hide 26c. How quickly was the information provided to ...
- If 26. Has your agency/company/organization ever use... is one of [u'1', u'2', u'3'] then Hide 26a. Please describe the inspection(s) and or inc...
- If 26. Has your agency/company/organization ever use... is one of [u'1', u'2', u'3'] then Hide 26b. What means was used to provide the HM inform...
- If 26. Has your agency/company/organization ever use... is one of [u'1', u'2', u'3'] then Hide 26c. How quickly was the information provided to ...
- If not 27. Has your agency/company/organization ever rec... = Yes then Hide 27a. What entity(ies) provided the HM information...
- If not 27. Has your agency/company/organization ever rec... = Yes then Hide 27b. What HM information was provided? Please se...
- If 27. Has your agency/company/organization ever rec... is one of [u'1', u'2', u'3'] then Hide 27a. What entity(ies) provided the HM information...
- If 27. Has your agency/company/organization ever rec... is one of [u'1', u'2', u'3'] then Hide 27b. What HM information was provided? Please se...

 23. Does your agency/company/organization utilize an outside company to assist with HM information and emergency response communication?

- Yes, please identify: _____
- No
- Unknown
- Not applicable

24. In your opinion, what HM information is essential for emergency responders to receive to assess the hazards and to properly respond to an HM incident after arriving at the emergency site? Please select all that apply:

- Air Waybill Number
- Basic description of the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number

- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- Other, please identify: _____
- Unknown

24a. What is the longest timeframe that is acceptable for receipt of the essential information?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 minutes to one hour

24b. Can you think of any additional HM information that may be helpful for emergency responders to receive after arriving at the emergency site?

- Yes, please describe: _____
- No

24c. What is the longest timeframe that is acceptable for receipt of this additional information?

- Instantaneous
- Within 15 minutes of request
- 16 to 30 minutes from original request
- 31 minutes to one hour from original request
- One to two hours from original request
- Other, please identify: _____

25. In your opinion, what HM information is essential for inspectors to receive to properly conduct an HM inspection? Please select all that apply:

- Air Waybill Number
- Basic description of the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group
- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)

- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- Other, please identify: _____
- Unknown

 25a. What is the longest timeframe that is acceptable for receipt of the essential information?

- Immediately
- Within 15 minutes of request
- 16 to 30 minutes from original request
- 31 minutes to one hour from original request
- One to two hours from original request
- Two to four hours from original request
- Four to eight hours from original request
- One day from original request
- One week from original request
- Other, please identify: _____

 25b. Can you think of any additional HM information that may be helpful for inspectors to receive?

- Yes, please describe: _____
- No

 25c. What is the longest timeframe that is acceptable for receipt of this additional information?

- Immediately
- Within 15 minutes of request
- 16 to 30 minutes from original request
- 31 minutes to one hour from original request
- One to two hours from original request
- Two to four hours from original request
- Four to eight hours from original request
- One day from original request
- One week from original request
- Other, please identify: _____

 26. Has your agency/company/organization ever used wireless or electronic communication to provide law enforcement or emergency response personnel with HM information for an HM shipment involved in an inspection or incident?

- Yes
- No
- Unknown
- Not applicable

 26a. Please describe the inspection(s) and or incident(s):

26b. What means was used to provide the HM information to law enforcement personnel/emergency responders? Please select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals

- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____
- Unknown

26c. How quickly was the information provided to law enforcement personnel/emergency responders?

- Instantaneous
- 5 minutes or less
- 6 to 15 minutes
- 16 to 30 minutes
- 31 minutes to one hour
- More than one hour, identify time: _____

27. Has your agency/company/organization ever received wireless or electronic communication of HM information for an HM shipment involved in an inspection or incident?

- Yes
- No
- Unknown
- Not applicable

27a. What entity(ies) provided the HM information? Please select all that apply:

- Shipper
- carrier
- Driver/pilot/captain/conductor of the transportation conveyance
- PSAP dispatcher
- Police
- Fire personnel
- EMS personnel
- Inspection personnel
- Other, please identify: _____
- Unknown

27b. What HM information was provided? Please select all that apply:

- Air Waybill Number
- Basic description of the HM
- Technical name of the HM
- Proper shipping name
- Immediate hazards to health
- Risks of fire or explosion
- Immediate precautions to be taken in an accident or incident
- Immediate methods for handling fires, spills, or leaks
- Preliminary first aid measures
- Emergency response assistance plan (ERAP) reference number
- 24-hour emergency response telephone number
- Ability of the operator to contact the carrier in an incident involving HM
- UN identification number
- Hazard class or division number
- Packing group

- Tunnel restriction code
- Total quantity of material
- Number and type of packages
- Name and address of the consignor (i.e., shipper)
- Name and address of the consignee (i.e., receiver)
- Date shipping document was prepared or first given to a shipper
- Shipper's statement or supplementary requirements for loading, stowage, carriage, handling, and unloading, including any special stowage provisions
- Shipper's restrictions on the mode of transport and any necessary routing instructions
- Shipper's signed certification statement
- Hazardous Waste Manifest (when necessary)
- Other, please identify: _____
- Unknown

Branching Information

- If not 28. Does your agency/company/organization current... = Yes then Hide 28a. POC information for your agency's/company's/...
- If 28. Does your agency/company/organization current... is one of [u'1', u'2', u'3'] then Skip to Page 15
- If 28. Does your agency/company/organization current... is one of [u'1', u'2', u'3', u'4'] then Hide 28a. POC information for your agency's/company's/...

 28. Does your agency/company/organization currently have an e-system capable of managing and communicating HM shipping paper information?

- Yes
- No
- Unknown
- Not applicable

 28a. POC information for your agency's/company's/organization's e-system (enter "UNKNOWN" in each text field for which you do not have a response):

Name: _____

Title: _____

Address: _____

Phone: _____

Email: _____

Branching Information

- If not 32. What type(s) of electronic data exchange langu... = Yes then Hide 32a1. What are the benefits of using this languag...
- If not 32. What type(s) of electronic data exchange langu... = Yes then Hide 32a2. Are there any challenges or impediments imp...
- If 32. What type(s) of electronic data exchange langu... is one of [u'1', u'2'] then Hide 32a1. What are the benefits of using this languag...
- If 32. What type(s) of electronic data exchange langu... is one of [u'1', u'2'] then Hide 32a2. Are there any challenges or impediments imp...
- If not 32b. Universal Business Language (UBL)? = Yes then Hide 32b1. What are the benefits of using this languag...
- If not 32b. Universal Business Language (UBL)? = Yes then Hide 32b2. Are there any challenges or impediments imp...
- If 32b. Universal Business Language (UBL)? is one of [u'1', u'2'] then Hide 32b1. What are the benefits of using this languag...
- If 32b. Universal Business Language (UBL)? is one of [u'1', u'2'] then Hide 32b2. Are there any challenges or impediments imp...
- If not 32c. Electronic Data Interchange (EDI)? = Yes then Hide 32c1. What are the benefits of using this languag...
- If not 32c. Electronic Data Interchange (EDI)? = Yes then Hide 32c2. Are there any challenges or impediments imp...
- If 32c. Electronic Data Interchange (EDI)? is one of [u'1', u'2'] then Hide 32c1. What are the benefits of using this languag...
- If 32c. Electronic Data Interchange (EDI)? is one of [u'1', u'2'] then Hide 32c2. Are there any challenges or impediments imp...
- If not 32d. United Nations/Electronic Data Interchange f... = Yes then Hide 32d1. What are the benefits of using this languag...
- If not 32d. United Nations/Electronic Data Interchange f... = Yes then Hide 32d2. Are there any challenges or impediments imp...
- If 32d. United Nations/Electronic Data Interchange f... is one of [u'1', u'2'] then Hide 32d1. What are the benefits of using this languag...
- If 32d. United Nations/Electronic Data Interchange f... is one of [u'1', u'2'] then Hide 32d2. Are there any challenges or impediments imp...
- If not 32e. Other? = Yes, please specify language: then Hide 32e1. What are the benefits of using this languag...
- If not 32e. Other? = Yes, please specify language: then Hide 32e2. Are there any challenges or impediments imp...
- If 32e. Other? is one of [u'1', u'2'] then Hide 32e1. What are the benefits of using this languag...
- If 32e. Other? is one of [u'1', u'2'] then Hide 32e2. Are there any challenges or impediments imp...
- If not 33. What format(s) can be used to view and share t... = Yes then Hide 33a1. What are the benefits of using this format?
- If not 33. What format(s) can be used to view and share t... = Yes then Hide 33a2. Are there any challenges or impediments imp...
- If 33. What format(s) can be used to view and share t... is one of [u'1', u'2'] then Hide 33a1. What are the benefits of using this format?
- If 33. What format(s) can be used to view and share t... is one of [u'1', u'2'] then Hide 33a2. Are there any challenges or impediments imp...
- If not 33b. Tagged image file format (tiff)? = Yes then Hide 33b1. What are the benefits of using this format?
- If not 33b. Tagged image file format (tiff)? = Yes then Hide 33b2. Are there any challenges or impediments imp...
- If 33b. Tagged image file format (tiff)? is one of [u'1', u'2'] then Hide 33b1. What are the benefits of using this format?
- If 33b. Tagged image file format (tiff)? is one of [u'1', u'2'] then Hide 33b2. Are there any challenges or impediments imp...
- If not 33c. Joint photographic experts group (jpeg)? = Yes then Hide 33c1. What are the benefits of using this format?
- If not 33c. Joint photographic experts group (jpeg)? = Yes then Hide 33c2. Are there any challenges or impediments imp...
- If 33c. Joint photographic experts group (jpeg)? is one of [u'1', u'2'] then Hide 33c1. What are the benefits of using this format?
- If 33c. Joint photographic experts group (jpeg)? is one of [u'1', u'2'] then Hide 33c2. Are there any challenges or impediments imp...
- If not 33d. Other? = Yes, please specify format: then Hide 33d1. What are the benefits of using this format?
- If not 33d. Other? = Yes, please specify format: then Hide 33d2. Are there any challenges or impediments imp...
- If 33d. Other? is one of [u'1', u'2'] then Hide 33d1. What are the benefits of using this format?
- If 33d. Other? is one of [u'1', u'2'] then Hide 33d2. Are there any challenges or impediments imp...

 29. Does the e-system use or contain any proprietary data or have any special licensing requirements governing its use?

- Yes
- No
- Unknown

 30. Is the e-system custom-made or commercial-off-the-shelf (COTS)?

- Custom
- COTS

Unknown

31. What electronic and wireless technology(ies) are used by your e-system? Please select all that apply:

- Personal digital assistants (PDAs)
- Vehicle laptops
- Workplace computers
- Computer aid dispatch (CAD) terminals
- Home computers
- Landline telephones
- Cellular telephones
- Smartphones
- Videos
- Facsimile (FAX) machines
- Live web cameras
- Pagers
- Two-way radios
- Walkie-talkies
- Tablets
- Other, please identify: _____

32. What type(s) of electronic data exchange language is used by your agency's/company's/organization's e-system? Please select all that apply:

32a. Extensible Markup Language (XML)?

- Yes
- No
- Unknown

32a1. What are the benefits of using this language?

32a2. Are there any challenges or impediments imposed by using this language?

- Yes, please describe: _____
- No
- Unknown

32b. Universal Business Language (UBL)?

- Yes
- No
- Unknown

32b1. What are the benefits of using this language?

32b2. Are there any challenges or impediments imposed by using this language?

- Yes, please describe: _____
- No
- Unknown

32c. Electronic Data Interchange (EDI)?

- Yes
- No

Unknown

 32c1. What are the benefits of using this language?

 32c2. Are there any challenges or impediments imposed by using this language?

- Yes, please describe: _____
- No
- Unknown

 32d. United Nations/Electronic Data Interchange for Administration, Commerce, and Transport (UN/EDIFACT)?

- Yes
- No
- Unknown

 32d1. What are the benefits of using this language?

 32d2. Are there any challenges or impediments imposed by using this language?

- Yes, please describe: _____
- No
- Unknown

 32e. Other?

- Yes, please specify language: _____
- No
- Unknown

 32e1. What are the benefits of using this language?

 32e2. Are there any challenges or impediments imposed by using this language?

- Yes, please describe: _____
- No
- Unknown

 33. What format(s) can be used to view and share the data? Please select all that apply:

33a. Portable document format (pdf)?

- Yes
- No
- Unknown

 33a1. What are the benefits of using this format?

 33a2. Are there any challenges or impediments imposed by using this format?

- Yes, please describe: _____
- No
- Unknown

 33b. Tagged image file format (tiff)?

- Yes
- No
- Unknown

 33b1. What are the benefits of using this format?

 33b2. Are there any challenges or impediments imposed by using this format?

- Yes, please describe: _____
- No
- Unknown

 33c. Joint photographic experts group (jpeg)?

- Yes
- No
- Unknown

 33c1. What are the benefits of using this format?

 33c2. Are there any challenges or impediments imposed by using this format?

- Yes, please describe: _____
- No
- Unknown

 33d. Other?

- Yes, please specify format: _____
- No
- Unknown

 33d1. What are the benefits of using this format?

 33d2. Are there any challenges or impediments imposed by using this format?

- Yes, please describe: _____
- No
- Unknown

 34. Is your e-system scalable (i.e., able to expand if the amount of information increases)?

- Yes
- No
- Unknown

35. If your e-system fails during an HM inspection or emergency, is a backup system/procedures available to ensure continuity of information?

- Yes, please describe system/procedures: _____
- No
- Unknown

36. Who enters HM information into your e-system? Please select all that apply:

- All agency/company/organization personnel
- Only agency/company/organization personnel with appropriate clearances
- Contractor personnel with appropriate clearances
- Shippers
- Carriers
- Other, please identify: _____
- Unknown

37. How long is the HM information stored in your e-system after its initial generation?

- 8 hours or less
- 8+ hours to one week
- One week to one month
- One to six months
- Six months to one year
- Other, please identify storage time: _____
- Unknown

38. When can the HM information in your e-system be accessed?

- 24 hours a day, seven days a week
- During business hours, please specify business hours (use HH:MM AM/PM format) and days of week:

- Other, please identify: _____
- Unknown

39. Who can access the HM information in your e-system? Please select all that apply:

- All agency/company/organization personnel
- Only agency/company/organization personnel with appropriate clearances
- Contractor personnel with appropriate clearances
- Shippers
- Carriers
- External inspection personnel
- Emergency responders
- Other, please identify: _____
- Unknown

Branching Information

- If 40. Which technology readiness level best describ... = Level 5--technology product fully operational in real-world environment then Hide 40b1. What is the anticipated time needed for the...
- If 40. Which technology readiness level best describ... = Level 5--technology product fully operational in real-world environment then Hide 40b2. How much money and labor (in U.S. dollars) ...
- If 40. Which technology readiness level best describ... = Level 5--technology product fully operational in real-world environment then Hide 40b3. What work is needed to bring the technology...
- If 40. Which technology readiness level best describ... = Level 5--technology product fully operational in real-world environment then Hide 40b4. How much more money and labor (in U.S. doll...
- If not 40. Which technology readiness level best describ... = Level 5--technology product fully operational in real-world environment then Hide 40a1. How long did it take for your e-system to g...
- If not 40. Which technology readiness level best describ... = Level 5--technology product fully operational in real-world environment then Hide 40a2. Can your agency/company/organization provid...
- If not 40. Which technology readiness level best describ... = Level 5--technology product fully operational in real-world environment then Hide 40a3. Estimated costs (in U.S. dollars):
 - If 40. Which technology readiness level best describ... is one of [u'1', u'2', u'3', u'4'] then Hide 40a1. How long did it take for your e-system to g...
 - If 40. Which technology readiness level best describ... is one of [u'1', u'2', u'3', u'4'] then Hide 40a2. Can your agency/company/organization provid...
 - If 40. Which technology readiness level best describ... is one of [u'1', u'2', u'3', u'4'] then Hide 40a3. Estimated costs (in U.S. dollars):
 - If not 40. Which technology readiness level best describ... is one of [u'1', u'2', u'3', u'4'] then Hide 40b1. What is the anticipated time needed for the...
 - If not 40. Which technology readiness level best describ... is one of [u'1', u'2', u'3', u'4'] then Hide 40b2. How much money and labor (in U.S. dollars) ...
 - If not 40. Which technology readiness level best describ... is one of [u'1', u'2', u'3', u'4'] then Hide 40b3. What work is needed to bring the technology...
 - If not 40. Which technology readiness level best describ... is one of [u'1', u'2', u'3', u'4'] then Hide 40b4. How much more money and labor (in U.S. doll...
 - If 40. Which technology readiness level best describ... = Unknown then Hide 40a1. How long did it take for your e-system to g...
 - If 40. Which technology readiness level best describ... = Unknown then Hide 40a2. Can your agency/company/organization provid...
 - If 40. Which technology readiness level best describ... = Unknown then Hide 40a3. Estimated costs (in U.S. dollars):
 - If 40. Which technology readiness level best describ... = Unknown then Hide 40b1. What is the anticipated time needed for the...
 - If 40. Which technology readiness level best describ... = Unknown then Hide 40b2. How much money and labor (in U.S. dollars) ...
- ...
- If 40. Which technology readiness level best describ... = Unknown then Hide 40b3. What work is needed to bring the technology...
- If 40. Which technology readiness level best describ... = Unknown then Hide 40b4. How much more money and labor (in U.S. doll...
- If not 40a2. Can your agency/company/organization provid... = Yes then Hide 40a3. Estimated costs (in U.S. dollars):
- If 40a2. Can your agency/company/organization provid... is one of [u'1', u'2', u'3'] then Hide 40a3. Estimated costs (in U.S. dollars):

 40. Which technology readiness level best describes the technology used to operate your agency's/company's/organization's e-system?

- Level 5--technology product fully operational in real-world environment
- Level 4--technology product operational in limited real-world environment
- Level 3--prototype demonstrated in laboratory environment
- Level 2--equipment and process concept formulated
- Level 1--basic technology principles observed
- Unknown

 40a1. How long did it take for your e-system to get to Level 5 from original conception?

- Zero to three months

- Three to six months
- Six months to one year
- One to two years
- More than two years
- Unknown

 40a2. Can your agency/company/organization provide an estimate of the costs to develop, implement, operate, and maintain its e-system?

- Yes
- No
- Unknown
- My agency/company/organization does not want to provide this information at this time

40a3. Estimated costs (in U.S. dollars):

- Development (one-time cost): _____
- Implementation (one-time cost): _____
- Operation (annual cost): _____
- Maintenance (annual cost): _____
- Total costs for development, implementation, operation, and maintenance (fill in this field if breakout costs are unknown):

 40b1. What is the anticipated time needed for the technology to reach Level 5 (i.e., fully operational in real-world environment)?

- Zero to three months
- Three to six months
- Six months to one year
- One to two years
- More than two years
- Unknown

 40b2. How much money and labor (in U.S. dollars) has your agency/company/organization invested to date?

- Less than \$5,000
- \$5,000 to \$10,000
- \$10,000 to \$25,000
- \$25,000 to \$50,000
- \$50,000 to \$100,000
- \$100,000 to \$250,000
- \$250,000 to \$500,000
- Greater than \$500,000, please estimate amount: _____
- Unknown
- My agency/company/organization does not want to provide this information at this time

 40b3. What work is needed to bring the technology to Level 5?

 40b4. How much more money and labor (in U.S. dollars) is needed to bring the technology to Level 5?

- Less than \$5,000
- \$5,000 to \$10,000
- \$10,000 to \$25,000
- \$25,000 to \$50,000
- \$50,000 to \$100,000
- \$100,000 to \$250,000
- \$250,000 to \$500,000
- Greater than \$500,000, please estimate amount: _____
- Unknown

My agency/company/organization does not want to provide this information at this time

Branching Information

- If not 41. Did your agency's/company's/organization's em... = Yes then Hide 41a. How many employees received initial training...
- If not 41. Did your agency's/company's/organization's em... = Yes then Hide 41b. In general, what are the job titles/business...
- If not 41. Did your agency's/company's/organization's em... = Yes then Hide 41c. How long does the initial training take to c...
- If not 41. Did your agency's/company's/organization's em... = Yes then Hide 42. Is refresher training on the e-system provide...
- If not 41. Did your agency's/company's/organization's em... = Yes then Hide 43. Can your agency/company/organization provide ...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 41a. How many employees received initial training...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 41b. In general, what are the job titles/business...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 41c. How long does the initial training take to c...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 42. Is refresher training on the e-system provide...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 42a. How often is refresher training provided?
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 42b. How long does the refresher training take to...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 42c. Are all/most employees who receive initial e...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 43. Can your agency/company/organization provide ...
- If 41. Did your agency's/company's/organization's em... is one of [u'1', u'2'] then Hide 43a. Use any combination of the following categor...
- If not 42. Is refresher training on the e-system provide... = Yes then Hide 42a. How often is refresher training provided?
- If not 42. Is refresher training on the e-system provide... = Yes then Hide 42b. How long does the refresher training take to...
- If not 42. Is refresher training on the e-system provide... = Yes then Hide 42c. Are all/most employees who receive initial e...
- If 42. Is refresher training on the e-system provide... is one of [u'1', u'2'] then Hide 42a. How often is refresher training provided?
- If 42. Is refresher training on the e-system provide... is one of [u'1', u'2'] then Hide 42b. How long does the refresher training take to...
- If 42. Is refresher training on the e-system provide... is one of [u'1', u'2'] then Hide 42c. Are all/most employees who receive initial e...
- If not 43. Can your agency/company/organization provide ... = Yes then Hide 43a. Use any combination of the following categor...
- If 43. Can your agency/company/organization provide ... is one of [u'1', u'2'] then Hide 43a. Use any combination of the following categor...

 41. Did your agency's/company's/organization's employees receive initial training on the e-system?

- Yes
 No
 Unknown

 41a. How many employees received initial training?

- 1 to 10
 11 to 25
 26 to 50
 51 to 100
 101 to 200
 201 to 300
 More than 300, please provide number: _____
 Unknown

 41b. In general, what are the job titles/business classifications of these employees? Enter "UNKNOWN" if you do not know the titles/classifications.

41c. How long does the initial training take to complete?

- Less than 2 hours
- 2 to 4 hours
- 4 to 8 hours
- More than 8 hours
- Unknown

42. Is refresher training on the e-system provided?

- Yes
- No
- Unknown

42a. How often is refresher training provided?

- Quarterly (four times per year)
- Semi-annually (two times per year)
- Annually (once each year)
- Other, please identify frequency: _____
- Unknown

42b. How long does the refresher training take to complete?

- Less than 2 hours
- 2 to 4 hours
- 4 to 8 hours
- More than 8 hours
- Unknown

42c. Are all/most employees who receive initial e-system training provided with refresher training?

- Yes
- No
- Unknown

43. Can your agency/company/organization provide an estimate of the costs for training employees on its e-system?

- Yes
- No
- Unknown
- My agency/company/organization does not want to provide this information at this time

43a. Use any combination of the following categories to quantify the training costs (in U.S. dollars):

- Initial training costs per person: _____
- Initial training costs agency-/company-/organization-wide: _____
- Refresher training costs per person: _____
- Refresher training costs agency-/company-/organization-wide: _____

Branching Information

- If not 44. Did your agency/company/organization incorpor... = Yes then Hide 44a. Can your agency/company/organization provide...
- If 44. Did your agency/company/organization incorpor... is one of [u'1', u'2'] then Hide 44a. Can your agency/company/organization provide...

 44. Did your agency/company/organization incorporate a customer outreach/education program as part of its e-system implementation?

- Yes
- No
- Unknown

 44a. Can your agency/company/organization provide an estimate of the costs (in U.S. dollars) to conduct customer outreach/education on its e-system?

- Yes, please provide estimate (in U.S. dollars): _____
- No
- Unknown
- My agency/company/organization does not want to provide this information at this time

Branching Information

• If not 46. Which of the following entities outside your a... contains one of [u'0', u'1', u'2', u'3', u'4', u'5', u'6', u'7'] then Hide 46a. What type of involvement and input did these...

• If 46. Which of the following entities outside your a... contains one of [u'8', u'9'] then Hide 46a. What type of involvement and input did these...

45. What type(s) of security is in place to prevent unauthorized access to your agency's/company's/organization's e-system?

Please select all that apply:

- Login account
- Password
- Biometric
- Keycard
- Other, please identify: _____
- Unknown

46. Which of the following entities outside your agency/company/organization directly utilize your e-system? Please select all that apply:

- Shippers
- Carriers
- Emergency responders
- Inspection personnel
- Federal government officials
- State governmental officials
- Local government officials
- Other, please identify: _____
- Unknown
- No external entities directly utilize the e-system

46a. What type of involvement and input did these entities have in the design and development of your agency's/company's/organization's e-system?

- No involvement/input
- Minimal involvement/input; they were involved in the final review
- Some involvement/input; they provided input to the draft design
- Significant involvement/input; they were involved in developing the initial design
- Unknown

Branching Information

- If 47c. What benefits resulted from your agency's/co... = [u'7'] then Hide 47c1. What constraints did your agency/company/or...
- If not 47d. Has your agency/company/organization perform... = Yes then Hide 47d1. Can you share the results of these studies ...
- If 47d. Has your agency/company/organization perform... is one of [u'1', u'2'] then Hide 47d1. Can you share the results of these studies ...
- If not 47c. What benefits resulted from your agency's/co... contains one of [u'0', u'1', u'2', u'3', u'4', u'5', u'6'] then Hide 47c1. What constraints did your agency/company/or...
- If not 47g. Has your agency/company/organization identif... = Yes then Hide 47g1. Please select all identified impediments/li...
- If not 47g. Has your agency/company/organization identif... = Yes then Hide 47g2. Please provide additional details regarding...
- If 47g. Has your agency/company/organization identif... is one of [u'1', u'2'] then Hide 47g1. Please select all identified impediments/li...
- If 47g. Has your agency/company/organization identif... is one of [u'1', u'2'] then Hide 47g2. Please provide additional details regarding...

 47. For agencies/companies/organizations with an e-system:

47a. What constraints did your e-system have to overcome to be successfully used by your agency/company/organization? Please select all that apply:

- Provide immediate access to HM information in all geographic areas
- Work with other internal (to the agency/company/organization) electronic systems
- Work with external (outside the agency/company/organization) electronic systems
- Provide a financial benefit
- Integrate with current paper system
- Ease of data entry procedures
- Provide equivalent or better level of security
- Accepted by personnel
- Usability of commercial off the shelf (COTS) system components
- Usability of custom system components
- Other, please describe: _____
- No constraints
- Unknown

 47b. What benefits does the e-system offer over a paper-based system? Please select all that apply:

- Reduced staff time and/or cost to prepare shipping papers
- Reduced costs for transfer between modes or carriers
- Reduced error rate in data entry
- Ease of data entry
- Reduced costs for hardcopy storage and retrieval
- Faster transport times for shipments
- Improved customer satisfaction
- Reduced insurance or risk management costs
- Improved HM inspection data
- Decreased time needed for HM inspections
- Faster delivery of HM information to emergency responders
- More accurate HM data for emergency preparedness and response
- Increased operational efficiency
- Improved regulatory compliance
- More efficient HM tracking and locating
- Improved HM data security
- Other, please describe: _____
- No benefits
- Unknown

 47c. What benefits resulted from your agency's/company's/organization's customer outreach/education efforts regarding your e-system? Please select all that apply:

- Improved customer satisfaction
- Increased business opportunities
- Reduced insurance or risk management costs
- Increased operational efficiency
- Other, please describe: _____
- No benefits
- Unknown
- Not applicable, my agency/company/organization does not have a customer outreach/education program

47c1. What constraints did your agency/company/organization need to overcome during customer outreach/education regarding your e-system? Please select all that apply:

- Work with external (outside the agency/company/organization) electronic systems
- Provide a financial benefit
- Integrate with current paper system
- Ease of data entry procedures
- Provide equivalent or better level of security
- Accepted by personnel
- Other, please describe: _____
- Unknown

47d. Has your agency/company/organization performed any studies/analyses on the effectiveness of your e-system, including the e-system's impacts on your agency/company/organization?

- Yes
- No
- Unknown

47d1. Can you share the results of these studies with us?

- Yes, please describe results: _____
- No

47e. In your opinion, what can improve your e-system's capability? Enter "NO INFORMATION" if you do not have any ideas for how to improve your e-system's capability.

47f. With respect to real-world application, has your agency/company/organization observed any positive or negative interactions between its e-system technology and other e-system technologies?

- Yes, please describe these interactions: _____
- No
- Unknown

47g. Has your agency/company/organization identified any e-system impediments/limitations?

- Yes
- No
- Unknown

47g1. Please select all identified impediments/limitations:

- Lack of access in rural areas
- Incompatibility issues with other internal or external e-systems
- Problems with electronic/wireless devices
- Problems with the data language (e.g., XML, EDI, etc.)
- Problems with the communication mechanism (e.g., email, Internet reference/link, etc.)
- Problems with the data format (e.g., jpeg, tiff, etc.)
- Other, please describe: _____

 47g2. Please provide additional details regarding the impediment(s)/limitation(s), and explain how your agency/company/organization addressed the impediment(s)/limitation(s). Enter "NO INFORMATION" if you do not have any additional details.

48. For agencies/companies/organizations without an e-system:

48a. What constraints would an e-system have to overcome to be successfully used by your agency/company/organization? Please select all that apply:

- Provide immediate access to HM information in all geographic areas
- Work with other internal (to the agency/company/organization) electronic systems
- Work with external (outside the agency/company/organization) electronic systems
- Provide a financial benefit
- Integrate with current paper system
- Ease data entry procedures
- Provide equivalent or better level of security
- Be accepted by personnel
- Use commercial off the shelf (COTS) system components
- Use custom system components
- Other, please describe: _____
- No constraints
- Unknown
- Not applicable

48b. What benefits would an e-system offer over a paper-based system? Please select all that apply:

- Reduced staff time and/or cost to prepare shipping papers
- Reduced costs for transfer between modes or carriers
- Reduced error rate in data entry
- Ease of data entry
- Reduced costs for hardcopy storage and retrieval
- Faster transport times for shipments
- Improved customer satisfaction
- Reduced insurance or risk management costs
- Improved HM inspection data
- Decreased time needed for HM inspections
- Faster delivery of HM information to emergency responders
- More accurate HM data for emergency preparedness and response
- Increased operational efficiency
- Improved regulatory compliance
- More efficient HM tracking and locating
- Improved HM data security
- Other, please describe: _____
- No benefits
- Unknown
- Not applicable

Branching Information

- If not 49. Do you have any lessons learned that should b... = Yes then Hide 49a. Please describe the lesson(s) learned:
- If 49. Do you have any lessons learned that should b... = No then Hide 49a. Please describe the lesson(s) learned:

 49. Do you have any lessons learned that should be considered for improvement of e-commerce?

- Yes
- No

 49a. Please describe the lesson(s) learned:
