



U.S. Department of Transportation
Research and Special Programs Administration

Hazardous Materials Incident Report

Form Approval OMB No. 3137-0039

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

INSTRUCTIONS

Submit this report to the Information Systems Manager, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a separate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at <http://hazmat.dot.gov>. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at <http://hazmat.dot.gov>.

PART I - REPORT TYPE

1. Incident Id: I-1988110134
2. This is to report: A

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident:
10/16/1988
4. Time of Incident (use 24-hour time):
:
5. Enter National Response Center Report Number (if applicable):
6. If you submitted a report to another Federal DOT agency, enter the agency and report number:
7. Location of Incident:
City: HAYWOOD
County:
State: NC
Zip Code: (if known):
Street Address/Mile Marker/Yard Name/Airport/Body of Water/River Mile:
8. Mode of Transportation: Rail
9. Transportation Phase: N/A
10. Carrier/Reporter:
Name: SOUTHERN RAILWAY SYSTEM
Street:
City:
State:
Zip Code:
Federal DOT Id Number:
Hazmat Registration Number:
11. Shipper/Officer:
Name: ATLANTIC RICHFIELD CO (ARCO)
Street:
City: CHANNELVIEW
State: TX
Zip Code:
Waybill/Shipping Paper:
Hazmat Registration Number:
12. Origin (if different from shipper address)
Street:
City: CHANNELVIEW
State: TX
Zip Code:
13. Destination:
Street:
City: RIDGE
State: NC
Zip Code:
14. Proper Shipping Name of Hazardous Material: STYRENE MONOMER, STABILIZED
15. Technical/Trade Name:
16. Hazardous Class/Division: Flammable - Combustible Liquid
17. Identification Number: (E.g. UN2764, NA 2020) UN2055

18. Packing Group: (if applicable)

19. Quantity Released: (Include Measurement Units) 50 Liquid - Gallon

20. Was the material shipped as a hazardous waste?

If yes, provide the EPA Manifest Number:

21. Is this a Toxic by Inhalation (TIH) material?

If yes, provide the Hazard Zone:

22. Was the material shipped under an Exemption, Approval, or Competent Authority Certificate?

If yes, provide the Exemption, Approval, or CA number:

23. Was this an undeclared hazardous materials shipment?

PART III - PACKAGING INFORMATION

24. Check Packaging Type (check only one - if more than one, list type of packaging, copy Part III, and complete for each type:

Tank Car

25. See instructions and enter the appropriate failure codes found at the end of the instructions. Be sure to enter the codes from the list that corresponds to the particular packaging type checked above. Enter the number of codes as appropriate to describe the incident.

Enter the most important failure point in line 1. If there are more than two failure points, provide in this format in part VI.

What Failed: -

How Failed: -

Causes of Failure: - Derailment; Vehicular Crash or Accident Damage

26a. Provide the packaging identification markings, if available.

Identification Markings:

(Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN31H1/Y0493/USA/M9339/10800/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)

26b. For Non-bulk, IBC, or non-specification packaging, if identification markings are incomplete or unavailable, see instructions and complete the following:

Single Package or Outer Packaging:

Single Package or Inner Packaging (if any):

Packaging Type:
Material of Construction:
Head Type (Drums only):

Packaging Type:
Material of Construction:

27. Describe the package capacity and the quantity:

Single Package or Outer Packaging:

Single Package or Inner Packaging (if any):

Package Capacity: 23543 Liquid - Gallon
Amount in Package:
Number in Shipment: 1
Number Failed: 1

Package Capacity:
Amount in Package:
Number in Shipment:
Number Failed:

28. Provide packaging construction and test information, as appropriate:

Manufacturer: NOT REPORTED BY CARRIER
Serial Number: TGOX 13172
Material of Construction: (if Tank Car, CTMV, Portable Tank, or Cylinder)
Design Pressure: (if Tank Car, CTMV, Portable Tank)
Shell Thickness: (if Tank Car, CTMV, Portable Tank)
Head Thickness: (if Tank Car, CTMV)
Service Pressure: (if Cylinder)

Manufacture Date:
Last Test Date:

If valve or device failed:
Type:
Model:
Manufacturer:

29. If the packaging is for Radioactive Materials, complete the following:

Packaging Category:
Packaging Certification:
Certification Number:
Nuclide(s) Present:
Activity:
Critical Safety Index:

Transport Index:

PART IV – CONSEQUENCES

30. Result of Incident (check all that apply):

- | | | | |
|---------------------------|-------|--|-------|
| - Spillage: | True | - Fire: | False |
| - Explosion: | False | - Material Entered Waterway/Storm Sewer: | False |
| - Vapor (Gas) Dispersion: | False | - Environmental Damage: | False |
| - No Release: | False | | |

31. Emergency Response: The following entities responded to the incident: (Check all that apply)

Fire/EMS Report #:
Police Report #:
In-house cleanup:
Other Cleanup:

32. Damages Was the total damage cost more than \$500?

False

If yes, enter the following information: (If no, go to question 33.)

Material Loss: \$ 0.00
Carrier Damage: \$ 0.00
Property Damage: \$ 0.00
Response Cost: \$ 0.00
Remediation/Cleanup Cost: \$ 0.00

(See damage definitions in the instructions)

33a. Did the hazardous material cause or contribute to a human fatality?

False

If yes, enter the number of fatalities resulting from the hazardous material:

Employees:
Responders:
General Public:

33b. Were there human fatalities that did not result from the hazardous material?

False

If yes, how many?

34. Did the hazardous material cause or contribute to personal injury?

False

If yes, enter the number of injuries resulting from the hazardous material:

Hospitalized (Admitted Only):

Employees:
Responders:
General Public:

Non-Hospitalized:

(e.g.: On site first aid or Emergency Room observation and release)

Employees:
Responders:
General Public:

35. Did the hazardous material cause or contribute to an evacuation?

True

If yes, provide the following information:

Total number of general public evacuated:
Total number of employees evacuated:
Total evacuated: 0
Duration of the evacuation:

36. Was a major transportation artery or facility closed?

False

If yes, how many?

37. Was the material involved in a crash or derailment?

True

If yes, provide the following information:

Estimated speed (mph):
Weather conditions:
Vehicle overturned?
Vehicle left roadway/track?

PART V - AIR INCIDENT INFORMATION (please refer to S 175.31 to report a discrepancy for air shipments)

38. Was the shipment on a passenger aircraft?

If yes, was it tendered as cargo, or as passenger baggage?

39. Where did the incident occur (if unknown, check the appropriate box for the location where the incident was discovered)?

40. What phase(s) had the shipment already undergone prior to the incident? (Check all that apply)

- | | |
|--|--|
| - Shipment had not been transported | - Transported by air (first flight) |
| - Transport by air (subsequent flights) | - Initial transport by highway to cargo facility |
| - Transfer at sort center/cargo facility | |

PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

- Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

Describe:

AT APPROXIMATELY 7:15 AM, OCT. 16, 1988, TRAIN NO. 154 DERAILED 20 CARS AT HAYWOOD, S.C., INCLUDING 4 TANK CARS OF CAUSTIC SODA, LIQUID, 1 TANK CAR OF ETHYLENE OXIDE, 3 TANK CARS OF VINYL ACETATE, 1 TANK CAR OF METHYL ETHYL KETONE AND 1 TANK CAR OF STYRENE MONOMER, INHIBITED. TWO TANK CARS OF CAUSTIC SODA, LIQUID AND ONE TANK CAR OF STYRENE MONOMER, INHIBITED RELEASED PRODUCT. TANK CAR UTLX 71723, LOAD OF CAUSTIC SODA, LIQUID, CAME TO REST UPSIDE DOWN, PARALLEL AND TO THE EAST OF THE ROAD BED, LEAKING FROM DAMAGED TOP FITTINGS AND PUNCTURES. APPROXIMATELY 12,000 GALLONS LEAKED BEFORE REMAINING CONTENTS COULD BE TRANSFERRED TO HIGHWAY CARGO TANKS. FREE LIQUID ON GROUND WAS PICKED UP BY VACCUM AND CONTAMINATED SOIL WAS AND IS BEING TRANSPORTED TO LOCAL LAND FILL WITH PERMISSION OF STATE AND FEDERAL AGENCIES. TANK CAR TGOX 13172, LOAD OF STYRENE MONOMER, INHIBITED CAME TO REST UPRIGHT, OFF ITS TRUCKS, CROSSWISE OF THE RAIL BED. WHEN TGOX 13172 WAS LIFTED TO CLEAR THE RAIL BED IT WAS DISCOVERED THE BOTTOM OUTLET WAS SHEARED OFF BELOW THE VALVE SEAT AND WAS DRIPPING AROUND THE VALVE HOUSING. THE VALVE SEAT WAS INTACT AND NOT LEAKING. A PIT WAS DUG ADJACENT TO THE RAIL BED AND LINED WITH POLYETHYLENE. TGOX 13172 WAS THEN MOVED OVER THE PIT WHERE THE DRIPPING MATERIAL WAS CAUGHT AND CONTAINED IN THE POLYETHYLENE. CONTENTS OF TGOX 13172 WAS TRANSFERRED INTO HIGHWAY CARGO TANKS. APPROXIMATELY 40 TO 50 GALLONS OF STYRENE MONOMER, INHIBITED, LEAKED FROM THE CAR AND ALL BUT ABOUT 10 GALLONS WAS RECOVERED. TANK CAR PPGX 3111 LOAD OF CAUSTIC SODA, LIQUID, CAME TO REST LEANING 75 DEGREES AND ACROSS THE RAIL BED, LEAKING FROM PUNCTURES AND DAMAGED TOP FITTINGS. APPROXIMATELY 10,000 GALLONS LEAKED FROM THE PUNCTURES AND DAMAGED FITTINGS BEFORE PRODUCT COULD BE TRANSFERRED TO HIGHWAY CARGO TANKS. FREE LIQUID ON GROUND WAS PICKED UP BY VACUUM AND CONTAMINATED SOIL WAS AND IS BEING TRANSPORTED TO LOCAL LANDFILL WITH PERMISSION OF STATE AND FEDERAL AGENCIES DUE TO THE PRESENCE OF TANK CAR ACFX 86382, LOAD OF ETHYLENE OXIDE, A PRECAUTIONARY EVACUATION OF 1/4 MILE WAS IMPOSED UNTIL CARS WERE RERAILED AND REMOVED FROM THE DERAILMENT SITE. CONTRACTORS EMPLOYEE RECEIVED CAUSTIC BURN DURING CLEANUP OPERATION. HE RECEIVED FIRST AID AT SCENE AND RETURNED TO WORK.

PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE

- Where you are able to do so, suggest or describe changes (such as additional training, use of better packaging, or improved operating procedures) to help prevent recurrence. Provide recommendations for improvement to hazardous materials transportation beyond the control of your individual company. Continue on additional sheets if necessary.

Describe:

PART VIII – CONTACT INFORMATION

Contact's Name:

Contact's Title:

Business Name and Address:

E-mail Address:

Telephone Number:

Fax Number:

Hazmat Registration Number:

Date:

Preparer is:



U.S. Department of Transportation
Research and Special Programs Administration

Hazardous Materials Incident Report

Form Approval OMB No. 3137-0039

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

INSTRUCTIONS

Submit this report to the Information Systems Manager, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a separate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at <http://hazmat.dot.gov>. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at <http://hazmat.dot.gov>.

PART I - REPORT TYPE

1. Incident Id: I-1988110134
2. This is to report: A

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident: 10/16/1988
4. Time of Incident (use 24-hour time):
:
5. Enter National Response Center Report Number (if applicable):
6. If you submitted a report to another Federal DOT agency, enter the agency and report number:
7. Location of Incident:
City: HAYWOOD
County:
State: NC
Zip Code: (if known):
Street Address/Mile Marker/Yard Name/Airport/Body of Water/River Mile:
8. Mode of Transportation: Rail
9. Transportation Phase: N/A
10. Carrier/Reporter:
Name: SOUTHERN RAILWAY SYSTEM
Street:
City:
State:
Zip Code:
Federal DOT Id Number:
Hazmat Registration Number:
11. Shipper/Officer:
Name: OLIN CORP
Street:
City: MCINTOSH
State: AL
Zip Code:
Waybill/Shipping Paper:
Hazmat Registration Number:
12. Origin (if different from shipper address)
Street:
City: MCINTOSH
State: AL
Zip Code:
13. Destination:
Street:
City: CATAWBA
State: SC
Zip Code:
14. Proper Shipping Name of Hazardous Material: SODIUM HYDROXIDE, SOLUTION
15. Technical/Trade Name:
16. Hazardous Class/Division: Corrosive Material
17. Identification Number: (E.g. UN2764, NA 2020) UN1824

18. Packing Group: (if applicable)

19. Quantity Released: (Include Measurement Units) 12000 Liquid - Gallon

20. Was the material shipped as a hazardous waste?

If yes, provide the EPA Manifest Number:

21. Is this a Toxic by Inhalation (TIH) material?

If yes, provide the Hazard Zone:

22. Was the material shipped under an Exemption, Approval, or Competent Authority Certificate?

If yes, provide the Exemption, Approval, or CA number:

23. Was this an undeclared hazardous materials shipment?

PART III - PACKAGING INFORMATION

24. Check Packaging Type (check only one - if more than one, list type of packaging, copy Part III, and complete for each type:

Tank Car

25. See instructions and enter the appropriate failure codes found at the end of the instructions. Be sure to enter the codes from the list that corresponds to the particular packaging type checked above. Enter the number of codes as appropriate to describe the incident.

Enter the most important failure point in line 1. If there are more than two failure points, provide in this format in part VI.

What Failed: -

How Failed: - 309-Punctured

Causes of Failure: - Derailment; Vehicular Crash or Accident Damage

26a. Provide the packaging identification markings, if available.

Identification Markings:

(Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN31H1/Y0493/USA/M9339/10800/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)

26b. For Non-bulk, IBC, or non-specification packaging, if identification markings are incomplete or unavailable, see instructions and complete the following:

Single Package or Outer Packaging:

Single Package or Inner Packaging (if any):

Packaging Type:
Material of Construction:
Head Type (Drums only):

Packaging Type:
Material of Construction:

27. Describe the package capacity and the quantity:

Single Package or Outer Packaging:

Single Package or Inner Packaging (if any):

Package Capacity: 16394 Liquid - Gallon
Amount in Package:
Number in Shipment: 1
Number Failed: 1

Package Capacity:
Amount in Package:
Number in Shipment:
Number Failed:

28. Provide packaging construction and test information, as appropriate:

Manufacturer: NOT REPORTED BY CARRIER
Serial Number: UTLX 71723
Material of Construction: (if Tank Car, CTMV, Portable Tank, or Cylinder)
Design Pressure: (if Tank Car, CTMV, Portable Tank)
Shell Thickness: (if Tank Car, CTMV, Portable Tank)
Head Thickness: (if Tank Car, CTMV)
Service Pressure: (if Cylinder)

Manufacture Date:
Last Test Date:

If valve or device failed:
Type:
Model:
Manufacturer:

29. If the packaging is for Radioactive Materials, complete the following:

Packaging Category:
Packaging Certification:
Certification Number:
Nuclide(s) Present:
Activity:
Critical Safety Index:

Transport Index:

PART IV – CONSEQUENCES

30. Result of Incident (check all that apply):

- | | | | |
|---------------------------|-------|--|-------|
| - Spillage: | True | - Fire: | False |
| - Explosion: | False | - Material Entered Waterway/Storm Sewer: | False |
| - Vapor (Gas) Dispersion: | False | - Environmental Damage: | False |
| - No Release: | False | | |

31. Emergency Response: The following entities responded to the incident: (Check all that apply)

Fire/EMS Report #:
Police Report #:
In-house cleanup:
Other Cleanup:

32. Damages Was the total damage cost more than \$500?

False

If yes, enter the following information: (If no, go to question 33.)

Material Loss: \$ 0.00
Carrier Damage: \$ 0.00
Property Damage: \$ 0.00
Response Cost: \$ 0.00
Remediation/Cleanup Cost: \$ 0.00

(See damage definitions in the instructions)

33a. Did the hazardous material cause or contribute to a human fatality?

False

If yes, enter the number of fatalities resulting from the hazardous material:

Employees:
Responders:
General Public:

33b. Were there human fatalities that did not result from the hazardous material?

False

If yes, how many?

34. Did the hazardous material cause or contribute to personal injury?

False

If yes, enter the number of injuries resulting from the hazardous material:

Hospitalized (Admitted Only):

Employees:
Responders:
General Public:

Non-Hospitalized:

(e.g.: On site first aid or Emergency Room observation and release)

Employees:
Responders:
General Public:

35. Did the hazardous material cause or contribute to an evacuation?

True

If yes, provide the following information:

Total number of general public evacuated:
Total number of employees evacuated:
Total evacuated: 0
Duration of the evacuation:

36. Was a major transportation artery or facility closed?

False

If yes, how many?

37. Was the material involved in a crash or derailment?

True

If yes, provide the following information:

Estimated speed (mph):
Weather conditions:
Vehicle overturned?
Vehicle left roadway/track?

PART V - AIR INCIDENT INFORMATION (please refer to S 175.31 to report a discrepancy for air shipments)

38. Was the shipment on a passenger aircraft?

If yes, was it tendered as cargo, or as passenger baggage?

39. Where did the incident occur (if unknown, check the appropriate box for the location where the incident was discovered)?

40. What phase(s) had the shipment already undergone prior to the incident? (Check all that apply)

- | | |
|--|--|
| - Shipment had not been transported | - Transported by air (first flight) |
| - Transport by air (subsequent flights) | - Initial transport by highway to cargo facility |
| - Transfer at sort center/cargo facility | |

PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

- Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

Describe:

AT APPROXIMATELY 7:15 AM, OCT. 16, 1988, TRAIN NO. 154 DERAILED 20 CARS AT HAYWOOD, S.C., INCLUDING 4 TANK CARS OF CAUSTIC SODA, LIQUID, 1 TANK CAR OF ETHYLENE OXIDE, 3 TANK CARS OF VINYL ACETATE, 1 TANK CAR OF METHYL ETHYL KETONE AND 1 TANK CAR OF STYRENE MONOMER, INHIBITED. TWO TANK CARS OF CAUSTIC SODA, LIQUID AND ONE TANK CAR OF STYRENE MONOMER, INHIBITED RELEASED PRODUCT. TANK CAR UTLX 71723, LOAD OF CAUSTIC SODA, LIQUID, CAME TO REST UPSIDE DOWN, PARALLEL AND TO THE EAST OF THE ROAD BED, LEAKING FROM DAMAGED TOP FITTINGS AND PUNCTURES. APPROXIMATELY 12,000 GALLONS LEAKED BEFORE REMAINING CONTENTS COULD BE TRANSFERRED TO HIGHWAY CARGO TANKS. FREE LIQUID ON GROUND WAS PICKED UP BY VACCUM AND CONTAMINATED SOIL WAS AND IS BEING TRANSPORTED TO LOCAL LAND FILL WITH PERMISSION OF STATE AND FEDERAL AGENCIES. TANK CAR TGOX 13172, LOAD OF STYRENE MONOMER, INHIBITED CAME TO REST UPRIGHT, OFF ITS TRUCKS, CROSSWISE OF THE RAIL BED. WHEN TGOX 13172 WAS LIFTED TO CLEAR THE RAIL BED IT WAS DISCOVERED THE BOTTOM OUTLET WAS SHEARED OFF BELOW THE VALVE SEAT AND WAS DRIPPING AROUND THE VALVE HOUSING. THE VALVE SEAT WAS INTACT AND NOT LEAKING. A PIT WAS DUG ADJACENT TO THE RAIL BED AND LINED WITH POLYETHYLENE. TGOX 13172 WAS THEN MOVED OVER THE PIT WHERE THE DRIPPING MATERIAL WAS CAUGHT AND CONTAINED IN THE POLYETHYLENE. CONTENTS OF TGOX 13172 WAS TRANSFERRED INTO HIGHWAY CARGO TANKS. APPROXIMATELY 40 TO 50 GALLONS OF STYRENE MONOMER, INHIBITED, LEAKED FROM THE CAR AND ALL BUT ABOUT 10 GALLONS WAS RECOVERED. TANK CAR PPGX 3111 LOAD OF CAUSTIC SODA, LIQUID, CAME TO REST LEANING 75 DEGREES AND ACROSS THE RAIL BED, LEAKING FROM PUNCTURES AND DAMAGED TOP FITTINGS. APPROXIMATELY 10,000 GALLONS LEAKED FROM THE PUNCTURES AND DAMAGED FITTINGS BEFORE PRODUCT COULD BE TRANSFERRED TO HIGHWAY CARGO TANKS. FREE LIQUID ON GROUND WAS PICKED UP BY VACUUM AND CONTAMINATED SOIL WAS AND IS BEING TRANSPORTED TO LOCAL LANDFILL WITH PERMISSION OF STATE AND FEDERAL AGENCIES DUE TO THE PRESENCE OF TANK CAR ACFX 86382, LOAD OF ETHYLENE OXIDE, A PRECAUTIONARY EVACUATION OF 1/4 MILE WAS IMPOSED UNTIL CARS WERE RERAILED AND REMOVED FROM THE DERAILMENT SITE. CONTRACTORS EMPLOYEE RECEIVED CAUSTIC BURN DURING CLEANUP OPERATION. HE RECEIVED FIRST AID AT SCENE AND RETURNED TO WORK.

PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE

- Where you are able to do so, suggest or describe changes (such as additional training, use of better packaging, or improved operating procedures) to help prevent recurrence. Provide recommendations for improvement to hazardous materials transportation beyond the control of your individual company. Continue on additional sheets if necessary.

Describe:

PART VIII – CONTACT INFORMATION

Contact's Name:

Contact's Title:

Business Name and Address:

E-mail Address:

Telephone Number:

Fax Number:

Hazmat Registration Number:

Date:

Preparer is:



U.S. Department of Transportation
Research and Special Programs Administration

Hazardous Materials Incident Report

Form Approval OMB No. 3137-0039

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

INSTRUCTIONS

Submit this report to the Information Systems Manager, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a separate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at <http://hazmat.dot.gov>. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at <http://hazmat.dot.gov>.

PART I - REPORT TYPE

1. Incident Id: I-1988110134
2. This is to report: A

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident: 10/16/1988
4. Time of Incident (use 24-hour time):
:
5. Enter National Response Center Report Number (if applicable):
6. If you submitted a report to another Federal DOT agency, enter the agency and report number:
7. Location of Incident:
City: HAYWOOD
County:
State: NC
Zip Code: (if known):
Street Address/Mile Marker/Yard Name/Airport/Body of Water/River Mile:
8. Mode of Transportation: Rail
9. Transportation Phase: N/A
10. Carrier/Reporter:
Name: SOUTHERN RAILWAY SYSTEM
Street:
City:
State:
Zip Code:
Federal DOT Id Number:
Hazmat Registration Number:
11. Shipper/Officer:
Name: OLIN CORP
Street:
City: MCINTOSH
State: AL
Zip Code:
Waybill/Shipping Paper:
Hazmat Registration Number:
12. Origin (if different from shipper address)
Street:
City: MCINTOSH
State: AL
Zip Code:
13. Destination:
Street:
City: CATAWBA
State: SC
Zip Code:
14. Proper Shipping Name of Hazardous Material: SODIUM HYDROXIDE, SOLUTION
15. Technical/Trade Name:
16. Hazardous Class/Division: Corrosive Material
17. Identification Number: (E.g. UN2764, NA 2020) UN1824

18. Packing Group: (if applicable)

19. Quantity Released: (Include Measurement Units) 10000 Liquid - Gallon

20. Was the material shipped as a hazardous waste?

If yes, provide the EPA Manifest Number:

21. Is this a Toxic by Inhalation (TIH) material?

If yes, provide the Hazard Zone:

22. Was the material shipped under an Exemption, Approval, or Competent Authority Certificate?

If yes, provide the Exemption, Approval, or CA number:

23. Was this an undeclared hazardous materials shipment?

PART III - PACKAGING INFORMATION

24. Check Packaging Type (check only one - if more than one, list type of packaging, copy Part III, and complete for each type:

Tank Car

25. See instructions and enter the appropriate failure codes found at the end of the instructions. Be sure to enter the codes from the list that corresponds to the particular packaging type checked above. Enter the number of codes as appropriate to describe the incident.

Enter the most important failure point in line 1. If there are more than two failure points, provide in this format in part VI.

What Failed: -

How Failed: - 309-Punctured

Causes of Failure: - Derailment; Vehicular Crash or Accident Damage

26a. Provide the packaging identification markings, if available.

Identification Markings:

(Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN31H1/Y0493/USA/M9339/10800/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)

26b. For Non-bulk, IBC, or non-specification packaging, if identification markings are incomplete or unavailable, see instructions and complete the following:

Single Package or Outer Packaging:

Single Package or Inner Packaging (if any):

Packaging Type:
Material of Construction:
Head Type (Drums only):

Packaging Type:
Material of Construction:

27. Describe the package capacity and the quantity:

Single Package or Outer Packaging:

Single Package or Inner Packaging (if any):

Package Capacity: 16401 Liquid - Gallon
Amount in Package:
Number in Shipment: 1
Number Failed: 1

Package Capacity:
Amount in Package:
Number in Shipment:
Number Failed:

28. Provide packaging construction and test information, as appropriate:

Manufacturer: NOT REPORTED BY CARRIER
Serial Number: PPGX 3111
Material of Construction: (if Tank Car, CTMV, Portable Tank, or Cylinder)
Design Pressure: (if Tank Car, CTMV, Portable Tank)
Shell Thickness: (if Tank Car, CTMV, Portable Tank)
Head Thickness: (if Tank Car, CTMV)
Service Pressure: (if Cylinder)

Manufacture Date:
Last Test Date:

If valve or device failed:

Type:
Model:
Manufacturer:

29. If the packaging is for Radioactive Materials, complete the following:

Packaging Category:
Packaging Certification:
Certification Number:
Nuclide(s) Present:
Activity:
Critical Safety Index:

Transport Index:

PART IV – CONSEQUENCES

30. Result of Incident (check all that apply):

- | | | | |
|---------------------------|-------|--|-------|
| - Spillage: | True | - Fire: | False |
| - Explosion: | False | - Material Entered Waterway/Storm Sewer: | False |
| - Vapor (Gas) Dispersion: | False | - Environmental Damage: | False |
| - No Release: | False | | |

31. Emergency Response: The following entities responded to the incident: (Check all that apply)

Fire/EMS Report #:
Police Report #:
In-house cleanup:
Other Cleanup:

32. Damages Was the total damage cost more than \$500?

False

If yes, enter the following information: (If no, go to question 33.)

Material Loss: \$ 0.00
Carrier Damage: \$ 0.00
Property Damage: \$ 0.00
Response Cost: \$ 0.00
Remediation/Cleanup Cost: \$ 0.00

(See damage definitions in the instructions)

33a. Did the hazardous material cause or contribute to a human fatality?

False

If yes, enter the number of fatalities resulting from the hazardous material:

Employees:
Responders:
General Public:

33b. Were there human fatalities that did not result from the hazardous material?

False

If yes, how many?

34. Did the hazardous material cause or contribute to personal injury?

False

If yes, enter the number of injuries resulting from the hazardous material:

Hospitalized (Admitted Only):

Employees:
Responders:
General Public:

Non-Hospitalized:

(e.g.: On site first aid or Emergency Room observation and release)

Employees:
Responders:
General Public:

35. Did the hazardous material cause or contribute to an evacuation?

True

If yes, provide the following information:

Total number of general public evacuated:
Total number of employees evacuated:
Total evacuated: 0
Duration of the evacuation:

36. Was a major transportation artery or facility closed?

False

If yes, how many?

37. Was the material involved in a crash or derailment?

True

If yes, provide the following information:

Estimated speed (mph):
Weather conditions:
Vehicle overturned?
Vehicle left roadway/track?

PART V - AIR INCIDENT INFORMATION (please refer to S 175.31 to report a discrepancy for air shipments)

38. Was the shipment on a passenger aircraft?

If yes, was it tendered as cargo, or as passenger baggage?

39. Where did the incident occur (if unknown, check the appropriate box for the location where the incident was discovered)?

40. What phase(s) had the shipment already undergone prior to the incident? (Check all that apply)

- | | |
|--|--|
| - Shipment had not been transported | - Transported by air (first flight) |
| - Transport by air (subsequent flights) | - Initial transport by highway to cargo facility |
| - Transfer at sort center/cargo facility | |

PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

- Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

Describe:

AT APPROXIMATELY 7:15 AM, OCT. 16, 1988, TRAIN NO. 154 DERAILED 20 CARS AT HAYWOOD, S.C., INCLUDING 4 TANK CARS OF CAUSTIC SODA, LIQUID, 1 TANK CAR OF ETHYLENE OXIDE, 3 TANK CARS OF VINYL ACETATE, 1 TANK CAR OF METHYL ETHYL KETONE AND 1 TANK CAR OF STYRENE MONOMER, INHIBITED. TWO TANK CARS OF CAUSTIC SODA, LIQUID AND ONE TANK CAR OF STYRENE MONOMER, INHIBITED RELEASED PRODUCT. TANK CAR UTLX 71723, LOAD OF CAUSTIC SODA, LIQUID, CAME TO REST UPSIDE DOWN, PARALLEL AND TO THE EAST OF THE ROAD BED, LEAKING FROM DAMAGED TOP FITTINGS AND PUNCTURES. APPROXIMATELY 12,000 GALLONS LEAKED BEFORE REMAINING CONTENTS COULD BE TRANSFERRED TO HIGHWAY CARGO TANKS. FREE LIQUID ON GROUND WAS PICKED UP BY VACCUM AND CONTAMINATED SOIL WAS AND IS BEING TRANSPORTED TO LOCAL LAND FILL WITH PERMISSION OF STATE AND FEDERAL AGENCIES. TANK CAR TGOX 13172, LOAD OF STYRENE MONOMER, INHIBITED CAME TO REST UPRIGHT, OFF ITS TRUCKS, CROSSWISE OF THE RAIL BED. WHEN TGOX 13172 WAS LIFTED TO CLEAR THE RAIL BED IT WAS DISCOVERED THE BOTTOM OUTLET WAS SHEARED OFF BELOW THE VALVE SEAT AND WAS DRIPPING AROUND THE VALVE HOUSING. THE VALVE SEAT WAS INTACT AND NOT LEAKING. A PIT WAS DUG ADJACENT TO THE RAIL BED AND LINED WITH POLYETHYLENE. TGOX 13172 WAS THEN MOVED OVER THE PIT WHERE THE DRIPPING MATERIAL WAS CAUGHT AND CONTAINED IN THE POLYETHYLENE. CONTENTS OF TGOX 13172 WAS TRANSFERRED INTO HIGHWAY CARGO TANKS. APPROXIMATELY 40 TO 50 GALLONS OF STYRENE MONOMER, INHIBITED, LEAKED FROM THE CAR AND ALL BUT ABOUT 10 GALLONS WAS RECOVERED. TANK CAR PPGX 3111 LOAD OF CAUSTIC SODA, LIQUID, CAME TO REST LEANING 75 DEGREES AND ACROSS THE RAIL BED, LEAKING FROM PUNCTURES AND DAMAGED TOP FITTINGS. APPROXIMATELY 10,000 GALLONS LEAKED FROM THE PUNCTURES AND DAMAGED FITTINGS BEFORE PRODUCT COULD BE TRANSFERRED TO HIGHWAY CARGO TANKS. FREE LIQUID ON GROUND WAS PICKED UP BY VACUUM AND CONTAMINATED SOIL WAS AND IS BEING TRANSPORTED TO LOCAL LANDFILL WITH PERMISSION OF STATE AND FEDERAL AGENCIES DUE TO THE PRESENCE OF TANK CAR ACFX 86382, LOAD OF ETHYLENE OXIDE, A PRECAUTIONARY EVACUATION OF 1/4 MILE WAS IMPOSED UNTIL CARS WERE RERAILED AND REMOVED FROM THE DERAILMENT SITE. CONTRACTORS EMPLOYEE RECEIVED CAUSTIC BURN DURING CLEANUP OPERATION. HE RECEIVED FIRST AID AT SCENE AND RETURNED TO WORK.

PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE

- Where you are able to do so, suggest or describe changes (such as additional training, use of better packaging, or improved operating procedures) to help prevent recurrence. Provide recommendations for improvement to hazardous materials transportation beyond the control of your individual company. Continue on additional sheets if necessary.

Describe:

PART VIII – CONTACT INFORMATION

Contact's Name:

Contact's Title:

Business Name and Address:

E-mail Address:

Telephone Number:

Fax Number:

Hazmat Registration Number:

Date:

Preparer is: