



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: E-2015010130
2. This is to report: A

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident:
12/29/2014
4. Time of Incident (use 24-hour time):
13:42
5. Enter National Response Center Report Number (if applicable):
1104497
6. If you submitted a report to another Federal DOT agency, enter the agency and report number:
7. Location of Incident:
City: BROKEN ARROW
County: WAGONER
State: OK
Zip Code: (if known):
Street Address/Mile Marker/Yard Name/Airport/Body of Water/River Mile:
22151 E 91st ST S
8. Mode of Transportation: Highway
9. Transportation Phase: In Transit
10. Carrier/Reporter:
Name: Airgas USA, LLC
Street: 31 N. Peoria
City: Tulsa
State: OK
Zip Code: 74120
Federal DOT Id Number: 299712
Hazmat Registration Number: 051011600007TV
11. Shipper/Officer:
Name: Airgas USA, LLC
Street: 9741 E. 56th Street North
City: Tulsa
State: OK
Zip Code: 74117
Waybill/Shipping Paper:
Hazmat Registration Number: 051011600007TV
12. Origin (if different from shipper address)
Street:
City:
State:
Zip Code:
13. Destination:
Street: 22151 E 91st ST S
City: Broken Arrow
State: OK
Zip Code: 74014
14. Proper Shipping Name of Hazardous Material: HYDROGEN, COMPRESSED
15. Technical/Trade Name: Hydrogen
16. Hazardous Class/Division: Flammable Gas
17. Identification Number: (E.g. UN2764, NA 2020) UN1049

18. Packing Group: (if applicable)

19. Quantity Released: (Include Measurement Units) 10 Gas - Cubic Foot

20. Was the material shipped as a hazardous waste? False

If yes, provide the EPA Manifest Number:

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

If yes, provide the Hazard Zone:

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

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

23. Was this an undeclared hazardous materials shipment? False

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:

Cylinder

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: - 111-Cylinder Neck or Shoulder

How Failed: - 308-Leaked

Causes of Failure: - Rollover Accident

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

Identification Markings: DOT-3AAX

(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:
Amount in Package:
Number in Shipment: 11
Number Failed: 2

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

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

Manufacturer: CPI
Serial Number: 60871, 60867
Material of Construction: Steel (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: 2400 PSI (if Cylinder)
If valve or device failed:
Type:
Model:
Manufacturer:

Manufacture Date: 01/31/1997
Last Test Date: 09/30/2010

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

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

- Fire/EMS Report #: False
Police Report #: True C01505-14
In-house cleanup: True
Other Cleanup: False

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

- If yes, enter the following information: (If no, go to question 33.)
- | | |
|---------------------------|--------------|
| Material Loss: | \$ 20.00 |
| Carrier Damage: | \$ 50,000.00 |
| Property Damage: | \$ 4,000.00 |
| Response Cost: | \$ 15,000.00 |
| 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: | 0 |
| Responders: | 0 |
| General Public: | 0 |

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

- If yes, how many? 0

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: | 0 |
| Responders: | 0 |
| General Public: | 0 |

Non-Hospitalized:

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

- | | |
|-----------------|---|
| Employees: | 0 |
| Responders: | 0 |
| General Public: | 0 |

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

- If yes, provide the following information:

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

36. Was a major transportation artery or facility closed? True

- If yes, how many? 2

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

- If yes, provide the following information:

- | | |
|-----------------------------|------------------|
| Estimated speed (mph): | 35 |
| Weather conditions: | Cloudy, Cold 35F |
| Vehicle overturned? | True |
| Vehicle left roadway/track? | True |

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 13:45, Unit 1 was travelling eastbound on 91st Street towing a trailer containing compressed hydrogen. Unit 1 departed the road to the right and travelled approximately 65 feet before rolling approximately one quarter times. Unit 1 impacted a fence and travelled approximately 36 feet. Unit 1 then impacted a utility pole and came to rest on the roadside. Local fire and police were dispatched and secured the scene and maintained initial isolation distance per the emergency response guidebook. Airgas emergency response personnel arrived on scene to assist and determine the condition of the trailer. "Bubbler" type neck leaks were identified on tubes 5 and 10. Bubbler indicates that lead detection fluid bubbled continuously but not rapidly (approximately 1 cc/10 sec). The leaks occurred for approximately 3 hours. An LEL monitor was placed above the leaks to determine atmospheric hazards due to the flammability of hydrogen. The LEL monitor never exceeded 7% of LEL. The decision was made to transfill the two leaking tubes into an empty hydrogen tube trailer. Once complete, the Airgas personnel checked the tubes for leaks again and found none. The LEL in the atmosphere was also measured to be 0% of LEL. After departure of the Unit 2, the tractor and trailer was uprighted by a crane and towing vehicles. Unit 1 and tube trailer were then towed back to the Airgas facility.

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:

The driver was found to be at fault for improper use of lanes. The roadway was narrow in nature but not unsafe. The only recommendation that could be offered is continued training on roadway awareness. There should have been no reason to drive as close as this driver did to right part of the roadway. He stated he was aware of the bar ditch on either side of the roadway but probably did not take into account the softness of the ground just off of the asphalt.

PART VIII - CONTACT INFORMATION

Contact's Name:	Ryan L Bobsein
Contact's Title:	Director of Safety
Business Name and Address:	Airgas USA, LLC 31 N. Peoria Tulsa OK 74120
E-mail Address:	ryan.bobsein@airgas.com
Telephone Number:	918-978-0181
Fax Number:	866-215-4807
Hazmat Registration Number:	
Date:	01/13/2015
Preparer is:	Carrier

01/31/1997