



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-2009050323
2. This is to report: A

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident: 04/22/2009 5. Enter National Response Center Report Number (if applicable): 903651 7. Location of Incident: City: WILSON County: WILSON State: NC Zip Code: (if known): Street Address/Mile Marker/Yard Name/Airport/Body of Water/River Mile: MERCK RD & SANDOZ DR 8. Mode of Transportation: Highway 9. Transportation Phase: In Transit 10. Carrier/Reporter: Name: WATER GUARD INC Street: 1903 HERRING AVE City: WILSON State: NC Zip Code: 27894 Federal DOT Id Number: 543959 11. Shipper/Officer: Name: WATER GUARD INC Street: 1903 HERRING AVE City: WILSON State: NC Zip Code: 27894 Waybill/Shipping Paper: 119322 12. Origin (if different from shipper address) Street: City: State: Zip Code: 13. Destination: Street: City: State: Zip Code: 14. Proper Shipping Name of Hazardous Material: SODIUM HYDROXIDE, SOLUTION 15. Technical/Trade Name: SODIUM HYDROXIDE 16. Hazardous Class/Division: Corrosive Material 17. Identification Number: (E.g. UN2764, NA 2020) UN1824	4. Time of Incident (use 24-hour time): 08:40 6. If you submitted a report to another Federal DOT agency, enter the agency and report number: Hazmat Registration Number: 06060655048OQ Hazmat Registration Number: 06060655048OQ
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18. Packing Group: (if applicable) II

19. Quantity Released: (Include Measurement Units) 1455 Liquid - Pound

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? True
If yes, provide the Exemption, Approval, or CA number: SP 12412

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:
IBC

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: - 108-Chime
How Failed: - 304-Cracked
Causes of Failure: - Broken Component or Device; Dropped

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

Identification Markings: 31H2/Y/USA

(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:

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

Single Package or Inner Packaging (if any):

Packaging Type:
Material of Construction:

27. Describe the package capacity and the quantity:

Single Package or Outer Packaging:

Package Capacity: 330 Liquid - Gallon
Amount in Package: 250 Liquid - Gallon
Number in Shipment: 1
Number Failed: 1

Single Package or Inner Packaging (if any):

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

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

Manufacturer: SNYDER
Serial Number: 0406365874 #T37
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)
If valve or device failed:
Type: IBC
Model: STD 330 STACKABL
Manufacturer: SNYDER IND. INC.

Manufacture Date:
Last Test Date: 02/25/2007

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

Packaging Category:
Packaging Certification:
Certification Number:
Nuclide(s) Present: Transport Index:
Activity:
Critical Safety 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 #: False
Police Report #: False
In-house cleanup: False
Other Cleanup: True

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: \$ 288.00
Carrier Damage: \$ 3,000.00
Property Damage: \$ 500.00
Response Cost: \$ 2,000.00
Remediation/Cleanup Cost: \$ 3,000.00
(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:
Total number of employees evacuated:
Total evacuated:
Duration of the evacuation:

36. Was a major transportation artery or facility closed?

True

If yes, how many? 2.5

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

False

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:

A 330 GAL DOT IBC WITH 250 GAL OF 50% SODIUM HYDROXIDE SOLUTION (CAUSTIC SODA) CRACKED LEAVING THE WILSON, NC SANDOZ SITE. THE TRUCK HAD TRAVERSED A "SPEED BUMP" WHEN A SIGNIFICANT PORTION OF THE LIQUID LEAKED FROM THE TRUCK AND CONTINUED FOR MANY MILES IN NOTICEABLE AMOUNT AS IT DRIED ON THE ROAD SURFACE. LOCAL FIRE DEPT., COUNTY EMERGENCY MGT., NC DOT, AS WELL AS WATER GUARD INC. PERSONNEL RESPONDED WHEN NOTIFIED SEVERAL HOURS AFTER THE INITIAL RELEASE. SODIUM BICARBONATE DRY AND IN SOLUTION WAS APPLIED TO NEUTRALIZED THE PRODUCT. THE NC DOT USED A SPRAY TRUCK TO TREAT THE ROADWAY. THE EMERGENCY PERSONNEL CLOSED US 264 AT THE INTERSECTION WITH MERCK DRIVE FOR SEVERAL HOURS. EXAMINATION OF THE IBC REVEALED A CRACK ABOVE THE VALVE IN THE TANK BODY. THE IBC WAS WITHIN ITS INSPECTION/TEST CYCEL AND DUE FOR TEST IN AUG 2009. ADDITIONAL CLEANUP OF THE SANDOZ SITE WAS COMPLETED 04/23/2009.

FAILURE MODES AND FACTORS

IMMEDIATE CAUSE WAS A 27-INCH CRACK WITH A 1/4 INCH SEPARATION IN THE AREA BETWEEN TWO BASE ATTACHMENT POINTS AND AN AREA 4-6 INCHES ABOVE THE OUTLET VALVE. THE BASE HAD SOME SIGNIFICANT FORKLIFT DAMAGE FROM USE AND APPARENTLY ALLOWED THE VALVE SUPPORT AREA TO FLEX WITHOUT SUPPORT. THE SUDDEN ACCELERATION AND STRESS OF THE IBC AT THE SPEED BUMP EXCEEDED THE ELASTIC STRENGTH. ADDITIONAL ISSUES MAY INCLUDE ABSENCE OF A VACUUM BREAK, INCREASED BRITTLINESS WITH CONCENTRATED CAUSTIC AND OTHERS NOT RECOGNIZED TO DATE. INSPECTION INDICATES NO OTHER PARTIAL CRACKS INSIDE THE TANK.

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:

RECOMMENDATIONS

- 1) INSPECTIONS AND REPLACEMENTS OF ANY FORKLIFT DAMAGED BASE UNITS ON IBC'S PARTICULARLY THE SNYDER STANDARD TYPE INVOLVED IN THIS INCIDENT.
- 2) INSTRUCT LOAD PERSONNEL TO PLACE IBC'S AS FAR FORWARD AS POSSIBLE TO MINIMIZE THE SLOSH ASSOCIATED WITH PARTIAL IBC'S IN THE REAR OF THE TRUCK.
- 3) REVIEW EMERGENCY PLAN AND CONTACTS FOR OFF-SITE INCIDENTS.

NOTE: FINAL DOT REPORTING AWAITS DAMAGE COST ESTIMATES AND ANY ADDITIONAL INSPECTION RESULTS.

PART VIII – CONTACT INFORMATION

Contact's Name:	JAMES MOYER
Contact's Title:	PRESIDENT
Business Name and Address:	WATER GUARD INC
E-mail Address:	jim@waterguardinc.com
Telephone Number:	252-237-5205
Fax Number:	252-237-7028
Hazmat Registration Number:	
Date:	05/08/2009
Preparer is:	Carrier