



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-2015120024
2. This is to report: A

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident: 08/11/2015
4. Time of Incident (use 24-hour time): 10:30
5. Enter National Response Center Report Number (if applicable): 1125452
6. If you submitted a report to another Federal DOT agency, enter the agency and report number:
7. Location of Incident:
City: GRAND RAPIDS
County: KENT
State: MI
Zip Code: (if known): 49504
Street Address/Mile Marker/Yard Name/Airport/Body of Water/River Mile:
421 ANN STREET NW
8. Mode of Transportation: Rail
9. Transportation Phase: Unloading
10. Carrier/Reporter:
Name: HAVILAND ENTERPRISES INC
Street: 421 ANN STREET NW
City: GRAND RAPIDS
State: MI
Zip Code: 49504
Federal DOT Id Number: 179862
Hazmat Registration Number: 062514550010WY
11. Shipper/Officer:
Name: OLIN CHLOR ALKALI PARODUCTS
Street: 1638 INDUSTRIAL ROAD
City: MC INTOSH
State: AL
Zip Code: 36553
Waybill/Shipping Paper:
Hazmat Registration Number:
12. Origin (if different from shipper address)
Street:
City:
State:
Zip Code:
13. Destination:
Street: 421 ANN STREET NW
City: GRAND RAPIDS
State: MI
Zip Code: 49504
14. Proper Shipping Name of Hazardous Material: SODIUM HYDROXIDE, SOLUTION
15. Technical/Trade Name: CAUSTIC 50% COMMERCIAL GRADE
16. Hazardous Class/Division: Corrosive Material
17. Identification Number: (E.g. UN2764, NA 2020) UN1824

- 18. Packing Group:** (if applicable) II
- 19. Quantity Released:** (Include Measurement Units) 173 Liquid - Gallon
- 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:

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: -

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

Identification Markings: NO MARKINGS GIVEN- RAIL CAR #TILX 160565

(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: 15960 Liquid - Gallon
Amount in Package: 15270 Liquid - Gallon
Number in Shipment: 0
Number Failed: 0

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

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

Manufacturer:
Serial Number:
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:
Model:
Manufacturer:

Manufacture Date:
Last Test Date:

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: | True |
| - 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 #: True
Police Report #: True
In-house cleanup: True
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: \$ 180.00
Carrier Damage: \$ 0.00
Property Damage: \$ 0.00
Response Cost: \$ 2,400.00
Remediation/Cleanup Cost: \$ 200.00
(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?

False

If yes, how many?

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 RAIL CAR OF 50% SODIUM HYDROXIDE WAS BEING UNLOADED INTO A STORAGE TANK. THE TANK WAS OVERFILLED AND MATERIAL FLOWED INTO A SECONDARY CONTAINMENT STRUCTURE. A SUMP PUMP USED FOR REMOVING RAINWATER WAS LEFT IN THE SECONDARY CONTAINMENT STRUCTURE AND WHEN THE FLOAT SWITCH ON THE PUMP ACTIVATED THE MATERIAL WAS PUMPED OUT OF CONTAINMENT ONTO A CONCRETE SURFACE. THE MATERIAL FLOWED NORTH THROUGH A GRAVEL LOT TO THE STORM SEWER GRATE LOCATED IN THE SE CORNER OF EDWIN ST NW AND STERLING AVE NW. A PORTION OF THE MATERIAL FLOWED WEST THROUGH THE STORM SEWER SYSTEM TO WILL AVE. NW, THEN SOUTH TO ANN ST. NW, AND WAS DISCHARGED TO INDIAN MILL CREEK. THE VOLUME OF MATERIAL RELEASED WAS DETERMINED BY MASS BALANCE (ATTACHED). ENVIRONMENTAL DAMAGE IS BELIEVED TO BE MINIMAL AS PH READINGS IN INDIAN MILL CREEK ~30 FEET DOWNSTREAM OF THE DISCHARGE WERE MEASURED AT 6-7 PH (PER CARRIE RIVETTE- CITY OF GRAND RAPIDS ENVIRONMENTAL SERVICES). HAVILAND'S HAZMAT TEAM RESPONDED, AS WELL AS THE CITY OF GRAND RAPIDS FIRE DEPARTMENT, POLICE DEPARTMENT, CITY OF GRAND RAPIDS ENVIRONMENTAL SERVICES, AND SET ENVIRONMENTAL SERVICES. MATERIAL WAS DIKED ONSITE AND COLLECTED AS WELL AS MATERIAL FROM THE SECONDARY CONTAINMENT STRUCTURE. THE CITY OF GRAND RAPIDS ENVIRONMENTAL SERVICES DEPARTMENT INSTALLED A STORM SEWER PLUG AT THE CORNER OF ANN ST. NW AND WILL AVE. NW TO PROVIDE ADDITIONAL CONTAINMENT AND ALSO PROVIDED SAND BAGS FROM THE HAVILAND HAZMAT TEAM TO PROVIDE CONTAINMENT FOR THE STORM SEWER DISCHARGE. THE STORM SEWER INLET ORIGINALLY IMPACTED AND THE SAND BAGGED AREA AT THE STORM SEWER DISCHARGE WAS PUMPED. THEN WITH THE HELP OF THE GRFD A HYDRANT WAS USED TO WASH DOWN THE SPILL AREA TO THE STORM SEWER. A VACUUM TRUCK WAS STATIONED AT THE STORM SEWER PLUG TO CAPTURE ALL OF THE WASH DOWN WATER. THE VOLUME OF WASH WATER FOR EACH FLUSH WAS LIMITED TO 1500 GALLONS TO ENSURE CAPACITY IN THE VACUUM TRUCK. THE STORM SEWER WAS FLUSHED TWICE WITH WATER, AND TWO MORE TIMES WITH WATER AND 40 GALLONS OF LIQUID CITRIC ACID (EACH TIME) TO NEUTRALIZE ANY RESIDUAL SODIUM HYDROXIDE IN THE STORM SEWER AFTER THE FOURTH FLUSH THE PH IN THE STORM SEWER WAS MEASURED AT 5.5. THE STORM SEWER PLUG WAS THEN REMOVED. THE NEXT MORNING, 08/12/2015 AT 7:25 AM, THE WATER AT THE STORM WATER DISCHARGE WAS MEASURED AGAIN AND SHOWED IT TO BE 7.5. THE SAND BAGS WERE REMOVED FROM INDIAN MILL CREEK AT 05:1 AM THAT MORNING AND TREATED INTERNALLY FOR ANY RESIDUAL SODIUM HYDROXIDE. WATER AT THE STORM SEWER DISCHARGE WAS MEASURED AGAIN ON 08/13/2015 AT 10:00AM WITH A RESULT OF 8.6 PH, AND 08/14/2015 AT 4:00 PM WITH A RESULT OF 7 PH.

THERE WAS NO PACKAGE FAILURE.

NOTE: SECTION 28 – "PROVIDE PACKAGING CONSTRUCTION AND TEST INFORMATION, AS APPROPRIATE" – HAVILAND ENTERPRISES, INC. DOES NOT OWN THE RAIL CAR INVOLVED IN THE INCIDENT AND DOES NOT HAVE THE RAIL CAR CONSTRUCTION DETAILS.

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:

STANDARD OPERATING PROCEDURES FOR UNLOADING RAIL CARS OF SODIUM HYDROXIDE HAVE BEEN UPDATED TO INCLUDE ACCURATE VOLUMES OF THE STORAGE TANKS. HIGH LEVEL ALARMS HAVE BEEN ADDED TO THE SODIUM HYDROXIDE STORAGE TANKS. OPERATING PROCEDURES HAVE BEEN UPDATED TO ENSURE THAT MATERIAL CAPTURED IN THE SECONDARY CONTAINMENT STRUCTURE IS SENT TO THE INTERNAL PH ADJUST SYSTEM PRIOR TO DISCHARGE TO THE SANITARY SEWER.

PART VIII – CONTACT INFORMATION

Contact's Name:	JOSH MUELLER
Contact's Title:	EHS MANAGER
Business Name and Address:	HAVILAND ENTERPRISES INC 421 ANN STREET NW GRAND RAPIDS MI 49504
E-mail Address:	JOSHM@HAVILANDUSA.COM
Telephone Number:	616 365 6577
Fax Number:	616 361 9772
Hazmat Registration Number:	
Date:	12/01/2015
Preparer is:	Facility owner/operator