



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-2008040479
2. This is to report: A

PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident:
04/21/2008
4. Time of Incident (use 24-hour time):
06:30
5. Enter National Response Center Report Number
(if applicable):
868588
6. If you submitted a report to another Federal DOT agency, enter
the agency and report number:
7. Location of Incident:
- City: PHILADELPHIA
County: PHILADELPHIA
State: PA
Zip Code: (if known): 19145
Street Address/Mile Marker/Yard Name/Airport/Body of Water/River Mile:
TRANSFLO; S. 36th & Moore Sts.
8. Mode of Transportation: Rail
9. Transportation Phase: Unloading
10. Carrier/Reporter:
- Name: Savage Services Corporation
Street: 152 E. High Street; Suite 200
City: POTTSTOWN
State: PA
Zip Code: 19464
Federal DOT Id Number:
Hazmat Registration Number: 0526065500030Q
11. Shipper/Officer:
- Name: Marsulex, Inc.
Street: 6800 W. Central Ave, Suite L-1
City: TOLEDO
State: OH
Zip Code: 43617
Waybill/Shipping Paper:
Hazmat Registration Number:
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: SULFURIC ACID
15. Technical/Trade Name:
16. Hazardous Class/Division: Corrosive Material
17. Identification Number: (E.g. UN2764, NA 2020) UN1830

18. Packing Group: (if applicable)

19. Quantity Released: (Include Measurement Units) 250 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: - 134-Liquid Valve

How Failed: - 306-Failed to Operate

Causes of Failure: - Human Error

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

Identification Markings: TC-111A-100W2

(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: 13124 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:
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: | False |
| - Vapor (Gas) Dispersion: | False | - Environmental Damage: | True |
| - 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: \$ 0.00
Carrier Damage: \$ 0.00
Property Damage: \$ 0.00
Response Cost: \$ 0.00
Remediation/Cleanup Cost: \$ 24,000.00
(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?

True

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

Hospitalized (Admitted Only):

Employees: 1
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?

False

If yes, how many? 0

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

False

If yes, provide the following information:

Estimated speed (mph): 0
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:

On Monday 4/21 at 6:30 AM EST, Transfer Operator - Anthony Marinaccio was setting up to conduct a Marsulex Fresh Sulfuric Acid (H₂SO₄) tank car -to- tank truck transfer; the transfer was scheduled to originate from tank car PROX 60114 and load 48,000 LBS into Contract Chemical Carrier's (CCC) trailer 181. When doing so the employee failed to check whether the tank car's primary and secondary liquid product fitting valves were in the closed position, prior to pressurizing the tank car. The Mr. Marinaccio then proceeded to establish connections on the trailer's end (e.g., apply loading tube and apply the transfer hose), when doing so the H₂SO₄ Acid then began to discharge from the transfer hose uninhibited and Mr. Marinaccio was splashed when the H₂SO₄ deflected off the side of the CCC trailer. The H₂SO₄ Acid came into contact with Mr. Marinaccio's chin area and the back of his neck. Once the employee was splashed with acid, he panicked and immediately descended from the transfer rack without shutting off either the tank car's product valve and the air pressure going into the tank car. Another Transfer Operator - Greg Hepfer who was working in the vicinity on another transfer track heard the commotion and immediately donned this PPE and proceeded to investigate the situation; Mr. Hepfer made the radio call to alert the his fellow team members of the spill and immediately went up to the top of the car and saw that the product (primary & secondary) valves were in fact in the open position. Mr. Hepfer then immediately closed the valves and the product began to stop discharging. Mr. Hepfer then proceeded to rinse off the CCC trailer and establish the trailer connection to purge the residual product from the transfer lines. By 7:00, facility's Emergency Response Plan was fully activated, and onsite personnel then began the process of containing and remediation the spill, by utilizing sodium bicarbonate to neutralize and dike off the spillage. The National Response Center and PADEP were notified of the incident and Emergency Response/Environmental Contractor - React Environmental handled the cleanup efforts and removal of ballast. Approximately 250 Gallons of Sulfuric Acid spilled on the CCC trailer #181, asphalt aisle way in between transfer tracks # 2 and three, corresponding ballast and also onto two adjacent DuPont TiO₂ tank cars ACFX 71636, DUPX 80238.

Mr. Marinaccia sustained a 2nd degree chemical burn to the back of the back of his neck; and was treated and evaluated the physician at Concentra Medical Center located at 7000 Holstein Ave Philadelphia, PA 19153 (215) 365-7510. Mr. Marinaccia was prescribed a pain medication and was released back to full duty the proceeding day (Tuesday 4/22).

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 involved employee shall be disciplined (e.g., company performance improvement process) for his negligence in complying with standard operating procedures for transferring Sulfuric Acid from tank car -to- tank truck.
- Savage's Management shall evaluate the present skills and knowledge of Philadelphia's operational staff to ensure that individuals are complying with the applicable transfer procedures.
- Savage shall accelerate the implementation of their operating procedural (administrative; transfer; equipment) training program, this includes: educating the employees on the specific standards and steps in the procedure; administer procedural exams and proficiency/competency exercises. The facility was previously operated by Kinder Morgan Materials Services and Savage took over operations effective April 1, 2008.

PART VIII – CONTACT INFORMATION

Contact's Name:	Richard Stanley
Contact's Title:	Director of SH&E
Business Name and Address:	Savage Services Corporation 152 East High Street; Suite 200 POTTSTOWN PA 19464
E-mail Address:	richards@savagecompanies.com
Telephone Number:	610-970-9144
Fax Number:	610-970-8910
Hazmat Registration Number:	
Date:	04/28/2008
Preparer is:	Facility owner/operator