



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety Administration**

Office of  
Chief Counsel

1200 New Jersey Avenue, S.E.  
East Building, 2<sup>nd</sup> Floor (PHC-10)  
Washington, D.C. 20590-0001  
Phone: (202) 366-4400  
Fax: (202) 366-7041  
E-mail: shawn.wolsey@dot.gov

***Hazardous Materials Safety Law  
Division***

---

**AMENDED NOTICE OF PROBABLE VIOLATION**

PHMSA Case No. 11-0238-STT-CE Date Issued: December 26, 2012

Respondent: Clean Harbors Recycling Services of Chicago, LLC,<sup>1</sup>  
1445 West 42<sup>nd</sup> Street  
Chicago, Illinois 60609  
ATTN: Alfred Aghapour, General Manager

No. of Alleged Violations: 3

Total Proposed Assessment: \$120,200 (after a \$1,700 increase for Respondent's  
prior violations and a \$0 reduction for  
corrective actions)

The Office of Chief Counsel of the Pipeline and Hazardous Materials Safety Administration (PHMSA) alleges that you have violated certain provisions of the Federal hazardous materials transportation law, 49 U.S.C. § 5101 *et seq.*, and/or the Hazardous Materials Regulations (HMR), 49 C.F.R. Parts 171-180. PHMSA sets forth the specific allegations in Addendum A to this Notice.

What are the maximum and minimum civil penalties that PHMSA can assess? Federal law sets a civil penalty of not more than \$55,000 and a civil penalty of not less than \$250 for each violation of the Federal Hazardous Materials Transportation Law or the (49 U.S.C. § 5123(a)(1)). Furthermore, if a person's violation of the HMR "results in death, serious illness, or severe injury . . . or substantial destruction of property" the maximum civil penalty is \$110,000 (49 U.S.C. § 5123(a)(2)); and if the violation concerns training the minimum civil penalty is \$495 (49 U.S.C. § 5123(a)(3)). Each day of a continuing violation constitutes a separate violation for which the maximum penalty may be imposed (49 U.S.C. § 5123(a)(4)).

---

<sup>1</sup> The Notice of Probable Violation, that was issued on February 24, 2012, incorrectly listed Respondent as Clean Harbors Environmental Services. This Amended NOPV is issued to correctly name Respondent as Clean Harbors Recycling Services of Chicago, LLC.

What factors does PHMSA consider when proposing and assessing a civil penalty? Federal law requires PHMSA to consider certain factors when proposing and assessing a civil penalty for a violation of Federal hazardous materials transportation law or the HMR. Please refer to Addendum B to this Notice for more information concerning these factors, which include corrective actions you take to attain and ensure compliance with the HMR.

How do I respond? You may respond to this Notice in any of three ways:

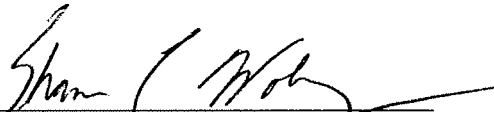
- (1) pay the proposed assessment;
- (2) send an informal response, which can include a request for an informal conference;  
or
- (3) request a formal hearing.

Details on these three options are provided in Addendum B to this Notice and also on the home page of PHMSA's Office of Hazardous Materials Safety (go to <http://www.phmsa.dot.gov/hazmat/enforcement>). PHMSA explains its procedures for assessing civil penalties and imposing compliance orders in 49 C.F.R. § 107.307 through 107.331.

When is my response due? You must respond within thirty (30) days from the date that you receive the Notice (49 C.F.R. § 107.313(a)). You are encouraged to submit your response by e-mail or fax when possible. I may extend the 30-day period for your response if you ask for an extension, and show good cause, within the original 30-day period (49 C.F.R. §107.313(c)).

What happens if I fail to respond? You waive your right to contest the allegations made in Addendum A to this Notice if you fail to respond within thirty (30) days of receiving it (or by the end of any extension). In that event, the Chief Counsel may find that you committed the violation(s) alleged in this Notice and assess an appropriate civil penalty.

The Case Exhibits have been supplied to you on a Compact Disk in a PDF format. If receiving this CD in electronic format creates an undue hardship for you, please contact the attorney listed below.

  
Shawn C. Wolsey, Attorney

Enclosures: Addendum A  
Addendum B  
Addendum C  
Case Exhibits on Compact Disk

cc (w/o Case Exhibits):

Clean Harbors Recycling Services of Chicago, LLC  
c/o William Connors,  
Sr. Vice President of Compliance  
Clean Harbors Environmental Services, Inc  
42 Longwater Drive  
Norwell, Massachusetts 02061

## **SPECIFIC ALLEGATIONS**

### General Factual Allegations/Averments

1. After an incident involving Respondent on July 21, 2011, PHMSA's Investigator observed photographs of the remains of the vehicle in which a shipment of UN1993, Waste flammable liquid, n.o.s. (Methyl Ethyl Ketone), 3, PGII was made and reviewed records of shipments, hazmat employee training, chemical analysis reports, and package test reports during an inspection at Respondent's facility on July 27<sup>th</sup> and 28<sup>th</sup>, 2011,. The PHMSA Investigator also reviewed a video of the explosion of the tanker.

2. Respondent provided the PHMSA Investigator the following documents:

a. Hazardous Materials Registration 070811 550 009TV, issued 7/8/11 and expires 6/30/14.

b. The following Uniform Hazardous Waste Manifests:

i. 000039888 MWI, 7/21/11, one tanker truck, #678, with 4,600 Gallons of UN1993, Waste flammable liquids, n.o.s., (Methyl Ethyl Ketone), 3, PGII;

ii. 000039855 MWI, 4/28/11, 12 drums, truck 568989, with 660 Gallons of UN1993, Waste flammable liquids, n.o.s., (Tetrahydrofuran), 3, PGII;

iii. 000039868 MWI, 6/1/11, 12 drums, truck 5391, with 660 Gallons of UN1993, Waste flammable liquids, n.o.s., (Tetrahydrofuran), 3, PGII;

iv. 000039880 MWI, 6/28/11, 6 drums, trailer 6142, with 330 Gallons of UN1993, Waste flammable liquids, n.o.s., (Tetrahydrofuran), 3, PGII.

c. The following Bills of Lading:

i. 341813, 11/27/10, for 10 totes, 2,625 Gallons (19,110 lbs.) of UN2052, Dipentene, 3, PGIII;

ii. 34196, 3/17/11, for 5 totes, 1,200 Gallons (8,700 lbs.) of UN2052, Dipentene, 3, PGIII;

iii. 342019, 7/13/11, for 7 totes, 2,000 Gallons (16,655 lbs.) of UN1198, Methyl Ethyl Ketone, 3, PGII.

d. The following Material Safety Data Sheets:

- i. UN2052, Dipentene, 3, PGIII, material name: Daiken Terpene, 9/29/10, prepared by Respondent;
  - ii. UN1198, Methyl Ethyl Ketone, 3, PGII, material name: Clean Harbors Methyl Ethyl Ketone, 10/25/10, prepared by Respondent.
- e. The following Analytical Reports:
- i. 111491, sample date: 7/10/11, for 5,973 gallons, listing the pH as 13.3 and the Specific Gravity as 1.193 and flash point of 140°F;
  - ii. 111572, sample date: 7/21/11 (taken prior to the tanker leaving Respondent's facility), listing the pH as 13.3 and the Specific Gravity as 1.227, and flash point of 141°.
- f. The following Waste Materials Profile Sheets:
- i. 7/21/11, Profile No. Ca-Lean, description: Bulk Lean Water, listing pH as 7 and Specific Gravity as 1.0;
  - ii. 7/21/11, Profile No. NaOH-A22, description: NaOH generated onsite, listing pH as  $\geq 12.5$  and Specific Gravity as 1.0-1.2;
  - iii. 7/25/11, Profile No. FB5-inter, description: FB50Shreddable Debris (Haz), listing pH as 7 and Specific Gravity as  $>1.2$ .
- g. Meyer Steel Drum acknowledgement form 820318, 7/12/11, for 30 UN1A2/Y1.6/150 drums, with closure instructions.
- h. Mauser closure instructions MC/PAS-QA-102 for Intermediate Bulk Containers, 6/11/10.
- i. Training Records, dated 4/21/11 and 5/5/11.
3. The PHMSA Investigator observed and photographed the following:
- a. Closure tools: Safety-Kleen torque wrench, rubber mallet, wizard non-sparking bung wrench, and torque wrench with restrictor bar for IBCs;
  - b. Drum marked UN1A2/Y1.6/200/11/USA/M4921 1.2/.9/1.2 with Reike bungs;
  - c. Intermediate Bulk Container marked UN31HA1/Y/110/USA/M4119/3800/2038/1041/56/100/1110/1110, bottle manufactured 10/10.

4. During the course of the investigation, the PHMSA Investigator obtained the following documents:

- a. Interview of Harold Marcus Limited driver Daryl Calvank, obtained from Detective Bill Ford, State of Michigan Department of Environmental Quality.
- b. List of Respondent's loads hauled by Harold Marcus Limited from 2009 to 2011.
- c. Uniform Hazardous Waste Manifest 000039890 MWI, 7/24/11, one tanker truck, with 3,500 Gallons of UN3266, RQ-Waste corrosive liquid, basic, inorganic n.o.s., (Sodium Hydroxide), 8, PGI.
- d. Email from Randy Badiuk, Supervisor of Spill Services, Harold Marcus Limited, dated February 6, 2012, explaining that Respondent determined the proper shipping name and UN Identification Number for the shipment of waste back to Respondent's facility on July 27, 2011 from the incident site..
- e. Photographs of Harold Marcus Limited Cargo Tank that exploded in Sawyer, Michigan on July 21, 2011, with close up of pitted aluminum.
- f. Cargo tank certificate of compliance for Unit No. 678, with accompanying email from Randy Badiuk, Supervisor of Spill Services, Harold Marcus Limited, dated 1/13/12.
- g. Chikaming Township Police Department Incident Report 11-00115, dated August 19, 2011.
- h. Video of July 21, 2011 incident obtained from the Chikaming Township Police Department.

5. On July 21, 2011, Harold Marcus Limited, a commercial carrier, was transporting a load of hazardous materials from Respondent in Unit 678. Respondent loaded the material into the tank. At approximately 5:00 P.M., while stopping at a truck stop in Sawyer, Michigan, the driver, Daryl Calvank, observed that the tank was leaking and that the pressure in the cargo tank was higher than normal. The driver notified the truck stop of a leak and initiated the release of pressure in the tank, which temporarily stopped the leaks. The fire department was called and responded. Sawyer Road was closed by the Chikaming Township Police Department and the area of the truck stop around the tanker was evacuated. The leak from the tank resumed at approximately 8:45 P.M. The tank exploded at approximately 9:15 P.M.

Probable Violation No. 1

Offering a hazardous material for transportation in commerce while failing to describe the material with the proper shipping description, in violation of 49 C.F.R. §§ 171.2(a), 171.2(b), 171.2(f), 172.200(a) and 172.202.

Factual Allegations/Averments

1. The PHMSA Investigator reviewed Respondent's Uniform Hazardous Waste Manifest 000039888 MWI, for the tank which exploded on July 21, 2011, which describes the waste material as UN1993, Waste Flammable Liquids, n.o.s., (Methyl Ethyl Ketone), 3, PGII. The manifest provided additional information about the contents of the trailer describing the material as Ca-Lean.
2. Respondent provided the PHMSA Investigator analytical reports for samples which were taken eleven days prior to the incident (111491) and the day of the incident (111572).
3. A Sodium Hydroxide titration test was conducted in Report 111572 for the sample taken the day of the incident. The Sodium Hydroxide percentage weight was 14%. Report 111572 also indicated that the percentage weight of Ethanol was 0.019% and the percentage weight of Methyl Ethyl Ketone was 0.072%. The remainder of the percentage weight was water.
4. The proper shipping description for Sodium Hydroxide is UN1824, Sodium Hydroxide solution, 8, PGII or PGIII.
5. The PHMSA Investigator did not observe UN1824, Sodium Hydroxide solution, 8, PGII or PGIII as the shipping description on Uniform Hazardous Waste Manifest 000039888 MWI that Respondent prepared for their shipment on July 21, 2011.
6. The PHMSA Investigator did observe UN3266, RQ-Waste corrosive liquid, basic, inorganic n.o.s., (Sodium Hydroxide), 8, PGI on Uniform Hazardous Waste Manifest 000039890 MWI, 7/24/11, which was prepared by Respondent for the waste that was transported back to Respondent's facility after the explosion.
7. Respondent offered for transportation a class 8 hazardous material that was mixed with a minute amount of class 3 hazardous material, and did not properly describe the hazardous material, in violation of the HMR.

- Please see Inspection/Investigation Report Number 11242024 at pages 2 and 3, and the exhibits that accompany this report, which are incorporated herein.

---

Probable Violation No. 2

Offering a hazardous material containing 14% sodium hydroxide, a Class 8 material, for transportation in an aluminum cargo tank, which was not compatible with the lading, resulting in a catastrophic failure of the aluminum cargo tank and an injury to a firefighter, in violation of 49 C.F.R. §§ 171.2(a), 171.2(b), 171.2(e), 172.101 HM Table, 172.102 (c)(5), 173.24(a), 173.24(e)(1) and 173.24(e)(2).

Factual Allegations/Averments

1. The PHMSA Investigator reviewed Respondent's Uniform Hazardous Waste Manifest 000039888 MWI, for the tank which exploded on July 21, 2011, which describes the waste material as UN1993, Waste Flammable Liquids, n.o.s., (Methyl Ethyl Ketone), 3, PGII. The manifest provided additional information about the contents of the trailer describing the material as Ca-Lean.
2. Respondent provided the PHMSA Investigator analytical reports for samples which were taken eleven days prior to the incident (111491) and the day of the incident (111572).
3. A Sodium Hydroxide titration test was conducted in Report 111572 for the sample taken the day of the incident. The Sodium Hydroxide percentage weight was 14%. Report 111572 also indicated that the percentage weight of Ethanol was 0.019% and the percentage weight of Methyl Ethyl Ketone was 0.072%. The remainder of the percentage weight was water.
4. The PHMSA Investigator did observe UN3266, RQ-Waste corrosive liquid, basic, inorganic n.o.s., (Sodium Hydroxide), 8, PGI on Uniform Hazardous Waste Manifest 000039890 MWI, 7/24/11, which was prepared by Respondent for the waste that was transported back to Respondent's facility after the explosion.
5. Respondent loaded Sodium Hydroxide into the Harold Marcus Limited trailer on July 21, 2011.
6. The PHMSA Investigator reviewed the statement that the Harold Marcus Limited driver gave to Detective Bill Ford, which stated that the driver, Daryl Calvank, delivered an aluminum tank to Respondent on July 21, 2011.
7. The PHMSA Investigator reviewed the photographs and video of the July 21, 2011 explosion of cargo tank incident, and observed a photograph of the Tank Specification Plate, as well as the cargo tank Certificate of Compliance for tank 678, which indicates that the tank was constructed of aluminum.
8. The entry for Sodium Hydroxide, solution in the 49 C.F.R. § 172.101 Hazardous Materials Table lists note 34 in column 7 special provisions. Note 34 refers the reader to 49 C.F.R. § 172.102 (c)(5), which states: "Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material."
9. Chikaming Township Police Department Incident Report 11-00115, dated August 19, 2011, indicates that Fireman Irv Hischke was injured as a result of the explosion, experiencing "burns on his face from droplets of the corrosive material as it fell from the sky after the tanker exploded."

10. Respondent loaded and transported sodium hydroxide solution into an aluminum tanker, which is an incompatible package, causing the tanker to explode and the injury of a firefighter, in violation of the HMR.

- Please see Inspection/Investigation Report Number 11242024 at pages 4 to 6, and the exhibits that accompany this report, which are incorporated herein.

---

### Probable Violation No. 3

Offering for transportation in commerce the hazardous materials, UN 1993, Waste Flammable liquids n.o.s., (tetrahydrofuran), 3, PGII, UN 2052, Dipentene, 3, PGIII and UN 1193 Methyl ethyl ketone, 3, PGII in UN certified 1A2 drums and 31HA1 intermediate bulk containers (IBCs) while failing to perform all functions necessary to bring the UN standard packages into compliance, thereby voiding the UN certifications, in violation of 49 CFR §§ 171.2(a), 171.2(b), 173.22(a)(4), 173.24(f)(2), and 178.601(b).

### Factual Allegations/Averments

1. The PHMSA Investigator reviewed the Uniform Hazardous Waste Manifests and Bills of Lading that Respondent prepared for shipments of UN 1993, Waste Flammable liquids n.o.s., (tetrahydrofuran), 3, PGII, UN 2052, Dipentene, 3, PGIII and UN 1193 Methyl ethyl ketone, 3, PGII in UN1A2 drums and UN31HA1 IBCs.
2. Respondent described the methods used to close UN1A2 drums and UN31HA1 IBCs.
3. The PHMSA Investigator observed and photographed the tools Respondent used to close the drums and IBCs, and observed that the wrench for the drums was set at 75 foot pounds and the wrench for IBCs had a maximum reading of 300 inch pounds.
4. The PHMSA Investigator reviewed the closure instructions and observed the following:
  - a. The UN1A2 drums require the ring bolt to be closed to 65-70 foot pounds;
  - b. The IBCs require the six inch fill cap to be closed to 70 foot pounds (840 inch pounds).
5. Respondents tools were not set at the required torques for closing the UN1A2 drums and UN31HA1 IBCs in accordance with the closure instructions.
6. Respondent transported hazardous materials in UN1A2 drums and UN31HA1 IBCs that were not closed in accordance with the closure instructions, in violation of the HMR.



- Please see Inspection/Investigation Report Number 11242024 at pages 7 to 10, and the exhibits that accompany this report, which are incorporated herein.

---

## **FACTS ALREADY CONSIDERED (UNDER 49 C.F.R. § 107.331) IN SETTING PROPOSED PENALTIES**

### Prior Violations:

PHMSA increases proposed penalties when Respondent has committed a prior violation of the Federal hazardous materials transportation law or the HMR, as determined through a civil penalty case, criminal case, or ticket initiated within the last six calendar years (49 C.F.R. § 107.331(d)). In general, a baseline proposed penalty will be increased by 25% for each prior civil or criminal enforcement case, and 10% for each prior ticket – up to a maximum increase of 100% (49 C.F.R. Part 107, Subpart D, Appendix A, Section IV.E).

According to PHMSA's records, Respondent has committed the following prior violations in cases initiated within the past six calendar years:

1. 09T-0282-SD-CE, Respondent paid a \$1,000 ticket for failing to close a package in accordance with the manufacturer's instructions, with a quality control item of failing to mark the package with orientation arrows that meet HMR criteria.
2. 11T—125-SIBC-WE, Respondent paid a \$320 ticket for failure to use the proper shipping name on a shipping paper.

Due to these prior tickets, the civil penalty will be increased by 20%.

### Corrective Action:

An important purpose of PHMSA's enforcement program is to bring the regulated community into compliance with the Hazardous Materials Regulations, and to promote ongoing efforts by that community to maintain compliance. In determining the final penalty assessment, PHMSA considers documented evidence of actions taken by a Respondent to correct violations and ensure that they do not recur (49 C.F.R. § 107.331(g)).

In its August 24, 2011 correspondence, Respondent stated:

For Violation 1, Respondent described its process of analyzing and characterizing the waste to be transported. Respondent is modifying its USDOT shipping description selection process such that there will only be one DOT shipping name available per profile to ensure the final shipping description is consistent with the chemicals present. This information will be provided to the transporter to assure compatibility between the shipment and the tank.

For Violation 2, Respondent described its process to ensure that the proper tank is used to transport the hazardous material. The transporter will be required to provide a certified tank wash receipt. Respondent will inspect the tank to ensure it is empty and clean and then check the specification plate to ensure the tank is compatible with the shipment and that all inspections and permits are current. With regards to the July 21, 2011 incident, Respondent stated that the facility loading personnel were not aware of the fact that the tank was constructed of aluminum. They assumed that all tanks that the transporter provided were constructed of stainless steel. Finally, “all third party transporters, as well as internal transportation resources, have been put on formal notice that aluminum tank trucks or tank trailers will no longer be authorized for use for a majority of hazardous materials shipments within the Corporation.”

For Violation 3, Respondent stated that they purchased additional torque wrench fitting with the specified 840 inch-pound rating for bolt securement on UN-specification packages and put them into service. Respondent also conducted a survey to ensure that all containers have current closure instructions on file and that all necessary tools and supplies are available.

In its April 27, 2012 correspondence, Respondent stated:

For violation 1, Respondent stated that the “analytical report that was available to Clean Harbors at the time of the shipment identified the material as containing three organic solvents with the most concentrated being Methyl Ethyl Ketone at 10.53%. It also identified the material as having a flash point of 140 degrees, a class 3 flammable liquid per 49 CFR §173.120. Although the material was also identified as having a pH of 13, a class 8 liquid, it was described on the shipping papers as a flammable liquid in accordance with the shipping name selection criteria set forth in 49 CFR §173.2a(8) Classification Of A Material Having More Than One Hazard.” Respondent modified its internal database to eliminate the ability for bulk shipment profiles to have multiple shipping names and multiple hazard classes and provided a copy of the policy. Respondent provided copies of current shipping papers, listing the proper shipping name as UN2920, Waste Corrosive Liquids, Flammable, N.O.S. (Sodium Hydroxide, Methyl Ethyl Ketone), 8, II.

For Violation 2, Respondent stated that “the transporter provided Clean Harbors with an aluminum tanker without informing Clean Harbors of the materials of construction. Aluminum tankers are not standard in the waste industry and Clean Harbors did not know it was loading a caustic material onto an aluminum tanker.” Respondent now requires the carrier to provide a certified tank wash receipt, and provided a copy of a tank wash receipt. Respondent also developed a new Outbound Bulk Material Shipment Approval, which requires the examination of the specification plate on the trailer prior to loading. Respondent provided a copy of a blank Outbound Bulk Material Shipment Approval, and one that has been completed. On July 25, 2011, four days after the incident, Respondent advised its contract carriers that they will no longer approve Aluminum tankers unless requested. Respondent provided a copy of the email. Respondent provided a copy of their Standard Operating Procedure for Scheduling and Shipping Bulk Materials from Plants.

For Violation 3, Respondent provided copies of their Shipping Container Policies, procedures and closure instructions, as well as training records for closing containers. Respondent also provided photographs of new torque wrenches and fittings, as well as a receipt for them.

In its November 21, 2012 email, Respondent provided the following documents:

For Violations 1 and 2: Analytical reports for the samples collected on 7/22/11 at the scene of the tanker failure. Laboratory procedure 67SC-LP-019 dated 7/29/11 documenting changes to the sampling and testing criteria to include titration for corrosive materials, initiated within a week of the incident. Training documentation for the new shipping authorization procedure that was developed and implemented within 9 days of the incident (8/1/11) and then subsequently revised twice (11/14/2011 and 2/22/2012).

For Violation 3: Training documentation for retraining on closure procedures. Summary of material shipped off site between 7/21/2011 and 2/28/2012 – confirming no IBCs were shipped off site in that time period.

Based on this information and documentation, the proposed penalties for violations Nos. 1 thru 3 have not been reduced.

#### Financial Status

Under 49 C.F.R. §107.331 (e) and (f), the proposed penalty may be reduced if Respondent demonstrates that it is unable to pay that penalty, or if payment of the proposed penalty would affect Respondent's ability to continue in business. Respondent's poor financial condition may be a basis for reducing the proposed penalty; a healthy financial condition is *not* a basis for increasing the penalty.

PHMSA has no information that indicates that Respondent is unable to pay the proposed penalty or that payment of the proposed penalty will affect Respondent's ability to continue in business. If Respondent wishes its financial condition to be considered in assessing a penalty for the violation(s) alleged in this Notice, it needs to provide current financial information (e.g., a copy of Respondent's last three tax returns, a current balance sheet [certified if possible], or other evidence of its assets and liabilities).

---

**TOTAL CIVIL PENALTY PROPOSED**

Probable Violation	Baseline Penalty	Increase for Priors	Corrective Action	Proposed Penalty
1	\$6,000	\$1,200	\$0	\$7,200
2	\$110,000 <sup>2</sup>	\$0	\$0	\$110,000
3	\$2,500	\$500	\$0	\$3,000
<b>TOTAL</b>	<b>\$118,500</b>	<b>\$1,700</b>	<b>\$0</b>	<b>\$120,200</b>

---

<sup>2</sup>This violation resulted in a severe injury and substantial destruction of property, therefore the maximum civil penalty of \$110,000 is assessed.