

# RECEIPT

DATE 11/14/24

No. 628134

RECEIVED FROM Ross Transportation Services Inc

\$ 1550.00

One thousand five hundred fifty and <sup>00</sup>/<sub>100</sub> DOLLARS

FOR RENT

FOR DE-HW-0009

ACCOUNT	
PAYMENT	
BAL. DUE	

CASH

CHECK

MONEY ORDER

CREDIT CARD

FROM 70032712 TO \_\_\_\_\_

BY M.M.



Ross Transportation Services, Inc.

36790 Giles Rd.  
Grafton, OH 44044

Dawn Palmer  
Executive Assistant to the President  
Transportation Administration Supervisor  
[dpalmer@rosstransportation.com](mailto:dpalmer@rosstransportation.com)

Direct Phone: (440) 748-5904  
Direct Fax: (440) 366-3904  
Cell Phone: (440) 653-1154

RECEIVED

NOV 14 2024

DNREC - WHS

November 11, 2024

Mr. Daquan Davis  
Delaware Department of Natural Resources and Environmental Control  
Compliance and Permitting Section  
89 Kings Highway  
Dover, Delaware 19901

RE: ~~H~~SW permit renewal      PERMIT # DE-~~H~~W-0009

Dear Mr Davis:

Please accept the enclosed 2025 Hazardous Waste Transporter Permit Application for Ross Transportation Services, Inc. All appropriate sections have been completed with appropriate attachments.

Please feel free to contact me at the number above if you need any other information.

Thank you,

Dawn Palmer  
Executive Assistant to the President  
Transportation Administration Supervisor



RECEIVED

NOV 14 2024

DNREC - WHS

STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL  
DIVISION OF WASTE AND HAZARDOUS SUBSTANCES  
COMPLIANCE AND PERMITTING SECTION

89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

TELEPHONE: (302) 739-9403  
FAX: (302) 739-5060

**HAZARDOUS WASTE TRANSPORTER PERMIT APPLICATION**

**Instructions:** You must complete this application in its entirety and attach all applicable documentation.

**(Note:** For applicants renewing an existing permit, this application requires the submission of updated information and documentation.)

The application must be signed by the company owner or a corporate officer. A check payable to the “**State of Delaware**” must accompany this application.

Delaware Department of Natural Resources and Environmental Control  
Compliance and Permitting Section  
89 Kings Highway  
Dover, DE 19901

**1. Type of Permit**

- New – Submit a check or money order, payable to the “State of Delaware,” in the amount of \$350.00.
- Renewal: Permit # DE-HW- 0009 Expiration Date 12/31/24

Please indicate the term for which you desire your permit to be issued. Submit a check or money order, payable to the “State of Delaware,” for the indicated permit fee.

- One Year - \$350.00
- Two Years - \$650.00
- Three Years - \$950.00
- Four Years - \$1250.00
- Five Years - \$1550.00

**2. Release to Public:**

Do you wish to be included on the list of transporters that is provided to persons requesting a list of Delaware permitted hazardous waste transporters?  Yes  No

**3. Company Information:**

Company Name: ROSS TRANSPORTATION SERVICES, INC.

Location Address:	Mailing Address:
36790 GILES ROAD, GRAFTON, OH 44044	SAME

Contact Person: DAWN PALMER Title: EXECUTIVE ASST TO PRES/ADMIN SU.

Business Phone: 440-748-5900 Fax: 440-366-3904

E-mail: dpalmer@rosstransportation.com 24 hr. Emergency Phone: 440-748-5900

EPA Identification Number: OHD980164374

Employer's Federal Tax ID Number: 34-1349259

**4. Type of Company: (Check One)**

- Proprietorship
- Partnership
- Corporation – City, State and Date of Incorporation: Columbus, OH 8/5/81
- Municipality
- Public Institution
- Other – Explanation: \_\_\_\_\_

**5. Parent Company Information:**

Parent Company Name: RT DRIVE  
Parent Company Address: 36790 GILES ROAD  
GRAFTON, OH 44044

**6. Ownership/Stockholder Information:**

For each owner, partner, or corporate officer, list the name, title, home address, and date of birth.

List of owners, partners, or corporate officers: Attachment A

List the name and address of all stockholders owning greater than 5% outstanding shares.

- List of stockholders: Attachment \_\_\_\_\_
- Not Applicable



**7. Company Affiliations:**

List all other companies owned by the same owners, corporate officers, or parent company that are engaged in the business of solid or hazardous waste transportation, treatment, storage, disposal, recovery, or reclamation.

- List of company affiliates: Attachment B
- No company affiliates

**8. Type of Hazardous Waste to be Transported:**

Indicate the waste types to be transported. (Note: Characteristic and listed hazardous wastes identified in Delaware's *Regulations Governing Hazardous Waste* (DRGHW) Part 261 are equivalent to RCRA 40 CFR Part 261 wastes.) Check all that apply.

- Part 261 characteristic or listed hazardous wastes
- Used or waste oils (as defined by Part 279, Used Oil Management Standards)
- Spent antifreeze exhibiting a characteristic of hazardous waste
- PCB-contaminated hazardous waste
- Spent fluorescent lighting tubes and ballasts when managed as non-universal waste

**9. Treatment, Storage, and Disposal Facilities:**

List all treatment, storage, and disposal facilities that have agreed to accept the hazardous wastes identified above.

- List of treatment, storage, and disposal facilities: Attachment C

**10. Other Transporter Permits:**

List all hazardous waste transporter permits held in other states.

- List of transporter permits: Attachment D
- No hazardous waste transporter permits held in other states

**11. Federal DOT and Motor Carrier Numbers:**

Indicate your Federal DOT number and Motor Carrier number:

DOT# 014484 MC# 187846

**12. Proof of Insurance:**

The transporter identified in this application must meet or exceed minimum insurance requirements as set forth in DOT Title 49 CFR Part 387. The DNREC Compliance and Permitting Section must be identified as the certificate holder. Also include a current MCS-90 endorsement or affirmation that the endorsement is still in effect.

- Certificate of insurance and MCS-90: Attachment E

**13. Spill Control and Safety Equipment:**

List all spill control and safety equipment that will be carried on each vehicle.

List of spill control and safety equipment: Attachment F

**14. Spill Control Plan:**

Attach a copy of the Spill Control Plan that describes prevention, containment, and clean up procedures during transportation. The plan must demonstrate compliance with the requirements outlined in DRGHW Sections 263.30, 263.31, and 263.105. **Spill Control Plans must contain the following Delaware Emergency Reporting Telephone Numbers: 1-800-662-8802 and 302-739-9401.**

Spill Control Plan: Attachment G Transporter Contingency Plan pgs 1 - 54

**15. Driver Training:**

Attach a copy of your driver training program. All drivers must be trained in current DOT Motor Carrier Safety Regulations and have knowledge of the proper handling procedures for the type of waste transported, the hazardous waste manifest system, and safe vehicle operation as provided in 49 CFR Parts 383, 390 – 399, and DRGHW Section 263.104. All drivers must be familiar with the approved Spill Control Plan.

Driver Training Program: Attachment H

**16. Controlled Substance Testing:**

Do you maintain a controlled substance testing program for drivers in your employment (including contract drivers) in compliance with Federal DOT 49 CFR Part 391?

Yes

No, Explain:

**17. Vehicle Identification Information:**

List all vehicles to be used for the transportation of hazardous waste into, out of, or through Delaware. You may use the form provided or another printout that contains all required information.

Vehicle Identification Information: Attachment I

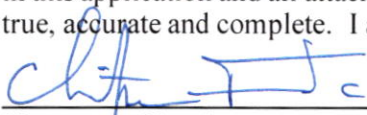
**18. Environmental Record:**

List all criminal citations, arrests or convictions, civil or administrative violations, and civil or administrative enforcement actions, and the disposition(s) thereof for the violation or alleged violation of any environmental statute, regulation, permit, license, approval, or order, regardless of the state in which it occurred. Indicate whether it was a local, state, or federal violation or alleged violation. List all such items for the applicant, and if the applicant is other than an individual, for any employee while employed by the applicant or any partner, officer, or director of the applicant as an individual or for any other former business of such partner, officer, or director. For civil or administrative violations or alleged violations, list all such items for the last five (5) years from the date of application.

- Environmental Record: Attachment \_\_\_\_\_
- Not Applicable – No violations within the specified time period

**19. Signature:**

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments, and that upon personal knowledge and information, the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information.



\_\_\_\_\_  
Signature of legal owner or corporate officer

Christopher Fada

\_\_\_\_\_  
Printed Name

11-11-24

\_\_\_\_\_  
Date

Vice President

\_\_\_\_\_  
Title

ATTACHMENT A  
ROSS TRANSPORTATION SERVICES, INC.

CORPORATE OFFICERS AND DIRECTORS

William E Cromling III – Treasurer/Co-Chairperson/President

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

Christopher M. Fada – Vice President

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

Jon R. Cromling – Co Chairperson

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

Daniel C Urban – Secretary

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

CONFIDENTIAL

ATTACHMENT B

DELAWARE HAZARDOUS WASTE TRANSPORTER PERMIT APPLICATION

**APPLICANT: ROSS TRANSPORTATION SERVICES, INC.**

List of other companies owned by the same owners, corporate officers, or parent company that are engaged in the business of solid or hazardous waste transportation, treatment, storage, disposal, recovery, or reclamation.

Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, OH 44044  
Business Description: Treatment, Storage, Disposal Facility

Ross Environmental Services, Inc.  
150 Innovation Drive  
Elyria, OH 44035  
Grafton, OH 44044  
Business Description: Business end

Ross Transportation Services, Inc.  
36790 Giles Road  
Grafton, OH 44044  
Business Description: Transfer Station



CONFIDENTIAL

ATTACHMENT C

DELAWARE HAZARDOUS WASTE TRANSPORTER PERMIT APPLICATION

**APPLICANT: ROSS TRANSPORTATION SERVICES, INC.**

List of treatment, Storage, Disposal Facilities, Reclamation Facilities and Transfer Stations Waste will be transported:

Ross Incineration Services, Inc.  
36790 Giles Road  
Grafton, OH 44044  
Business Description: Treatment, Storage, Disposal Facility

Ross Transportation Services, Inc.  
36790 Giles Road  
Grafton, OH 44044  
Transfer Station

# ATTACHMENT D

## PERMIT INFORMATION

### Hazardous & Solid Waste Transporter Permits

<u>STATE</u>	<u>PERMIT</u>	<u>EXPIRATION DATE</u>
ARKANSAS	H-1669	6/4/25
CONNECTICUT	CT-HW-849	6/30/26
DELAWARE	DE-HW-0009	12/31/24
DE SOLID WASTE	DE-SW-137	12/31/26
DE BUSINESS LICENSE	1991833723	12/31/24
FLORIDA	OHD980614374	11/30/24
GEORGIA	NO PERMIT NEEDED	
KANSAS	OHD980614374	INDEFINITE
ILLINOIS	SWH 0731	3/31/26
LOUISIANA	NO PERMIT NEEDED	
KENTUCKY	OHD980614374	INDEFINITE
MARYLAND	HWH291	8/31/25
MASSACHUSETTS	161	12/31/24
MASSACHUSETTS VID		12/31/24
MICHIGAN (LIW UNIFORM PROG)	LIW-0014484-MI	4/1/25
MISSISSIPPI	NO PERMIT NEEDED	
MISSOURI	17C24001000	5/10/25
NEW JERSEY	07855	6/30/25
NEW YORK	OH-013	3/31/25
NORTH CAROLINA	OHD980614374	INDEFINITE
PENNSYLVANIA	PA-AH0133	3/31/25
PA-SPOTTED LANTERN FLY	20190504311	Issued 5/9/19 – NO EXPIRATION
RHODE ISLAND	913	6/30/25
SOUTH CAROLINA	OHD980614374	7/21/26
TENNESSEE	OHD980614374	1/31/25
TEXAS	41474	none
UNIFIED CARRIER REGISTRATION		12/31/24
UNIFORM PROGRAM-alliance (MI, NV, OK, WV)	UPW-0014484-MI	4/1/25
US DOT HAZARDOUS MAT'LS SAFETY PERMIT (MCS150B)	14484-OH-HMSP	4/30/25
US DOT HAZMAT REG(pipeline)	041521550002D	6/30/25
VERMONT PERMIT		6/30/27
VERMONT VEHICLE REPORT		6/30/25
VIRGINIA	OHD9806143747	NO LONGER REQ.
WISCONSIN	11176	9/30/25





USDOT Number: \_\_\_\_\_ Date Received: \_\_\_\_\_

Please note, the expiration date as stated on this form relates to the process for renewing the Information Collection Request for this form with the Office of Management and Budget. This requirement to collect information as requested on this form does not expire. For questions, please contact the Office of Registration, Registration Division.

A Federal Agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2126-0008. Public reporting for this collection of information is estimated to be approximately 2 minutes per response, including the time for reviewing instructions, gathering the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Motor Carrier Safety Administration, MC-RRR, Washington, D.C. 20590.



United States Department of Transportation  
Federal Motor Carrier Safety Administration

## Endorsement for Motor Carrier Policies of Insurance for Public Liability under Sections 29 and 30 of the Motor Carrier Act of 1980

# FORM MCS-90

Issued to Ross Transportation Services, Inc. of 150 Innovation Drive Elyria, OH 44035  
(Motor Carrier name) (Motor Carrier state or province)

Dated at Two Ravinia, Drive, Atlanta, GA 30346 on this 8 day of August, 2024

Amending Policy Number: BAP2038027-12 Effective Date: 08/05/2024

Name of Insurance Company: Great Divide Insurance Company

Countersigned by: Chris DeLander  
(authorized company representative)

The policy to which this endorsement is attached provides primary or excess insurance, as indicated for the limits shown (check only one):

This insurance is primary and the company shall not be liable for amounts in excess of \$ 1,000,000 for each accident.

This insurance is excess and the company shall not be liable for amounts in excess of \$ \_\_\_\_\_ for each accident in excess of the underlying limit of \$ \_\_\_\_\_ for each accident.

Whenever required by the Federal Motor Carrier Safety Administration (FMCSA), the company agrees to furnish the FMCSA a duplicate of said policy and all its endorsements. The company also agrees, upon telephone request by an authorized representative of the FMCSA, to verify that the policy is in force as of a particular date. The telephone number to call is: 972-819-8998.

Cancellation of this endorsement may be effected by the company or the insured by giving (1) thirty-five (35) days notice in writing to the other party (said 35 days notice to commence from the date the notice is mailed, proof of mailing shall be sufficient proof of notice), and (2) if the insured is subject to the FMCSA's registration requirements under 49 U.S.C. 13901, by providing thirty (30) days notice to the FMCSA (said 30 days notice to commence from the date the notice is received by the FMCSA at its office in Washington, DC).

Filings must be transmitted online via the Internet at <https://portal.fmcsa.dot.gov/UrsRegistrationWizard/>.

(continued on next page)

**DEFINITIONS AS USED IN THIS ENDORSEMENT**

**Accident** includes continuous or repeated exposure to conditions or which results in bodily injury, property damage, or environmental damage which the insured neither expected nor intended.

**Motor Vehicle** means a land vehicle, machine, truck, tractor, trailer, or semitrailer propelled or drawn by mechanical power and used on a highway for transporting property, or any combination thereof.

**Bodily Injury** means injury to the body, sickness, or disease to any person, including death resulting from any of these.

**Property Damage** means damage to or loss of use of tangible property.

The insurance policy to which this endorsement is attached provides automobile liability insurance and is amended to assure compliance by the insured, within the limits stated herein, as a motor carrier of property, with Sections 29 and 30 of the Motor Carrier Act of 1980 and the rules and regulations of the Federal Motor Carrier Safety Administration (FMCSA).

In consideration of the premium stated in the policy to which this endorsement is attached, the insurer (the company) agrees to pay, within the limits of liability described herein, any final judgment recovered against the insured for public liability resulting from negligence in the operation, maintenance or use of motor vehicles subject to the financial responsibility requirements of Sections 29 and 30 of the Motor Carrier Act of 1980 regardless of whether or not each motor vehicle is specifically described in the policy and whether or not such negligence occurs on any route or in any territory authorized to be served by the insured or elsewhere. Such insurance as is afforded, for public liability, does not apply to injury to or death of the insured's employees while engaged in the course of their employment, or property transported by the insured, designated as cargo. It is understood and agreed that no condition, provision, stipulation, or limitation contained in the policy, this endorsement, or any other endorsement thereon,

**Environmental Restoration** means restitution for the loss, damage, or destruction of natural resources arising out of the accidental discharge, dispersal, release or escape into or upon the land, atmosphere, watercourse, or body of water, of any commodity transported by a motor carrier. This shall include the cost of removal and the cost of necessary measures taken to minimize or mitigate damage to human health, the natural environment, fish, shellfish, and wildlife.

**Public Liability** means liability for bodily injury, property damage, and environmental restoration.

or violation thereof, shall relieve the company from liability or from the payment of any final judgment, within the limits of liability herein described, irrespective of the financial condition, insolvency or bankruptcy of the insured. However, all terms, conditions, and limitations in the policy to which the endorsement is attached shall remain in full force and effect as binding between the insured and the company. The insured agrees to reimburse the company for any payment made by the company on account of any accident, claim, or suit involving a breach of the terms of the policy, and for any payment that the company would not have been obligated to make under the provisions of the policy except for the agreement contained in this endorsement.

It is further understood and agreed that, upon failure of the company to pay any final judgment recovered against the insured as provided herein, the judgment creditor may maintain an action in any court of competent jurisdiction against the company to compel such payment.

The limits of the company's liability for the amounts prescribed in this endorsement apply separately to each accident and any payment under the policy because of any one accident shall not operate to reduce the liability of the company for the payment of final judgments resulting from any other accident.

(continued on next page)



<b>SCHEDULE OF LIMITS - PUBLIC LIABILITY</b>
--

Type of carriage	Commodity transported	January 1, 1985
(1) For-hire (in interstate or foreign commerce, with a gross vehicle weight rating of 10,001 or more pounds).	Property (nonhazardous)	\$750,000
(2) For-hire and Private (in interstate, foreign, or intrastate commerce, with a gross vehicle weight rating of 10,001 or more pounds).	Hazardous substances, as defined in 49 CFR 171.8, transported in cargo tanks, portable tanks, or hopper-type vehicles with capacities in excess of 3,500 water gallons; or in bulk Division 1.1, 1.2, and 1.3 materials, Division 2.3, Hazard Zone A, or Division 6.1, Packing Group 1, Hazard Zone A material; in bulk Division 2.1 or 2.2; or highway route controlled quantities of a Class 7 material, as defined in 49 CFR 173.403.	\$5,000,000
(3) For-hire and Private (in interstate or foreign commerce, in any quantity; or in intrastate commerce, in bulk only; with a gross vehicle weight rating of 10,001 or more pounds).	Oil listed in 49 CFR 172.101; hazardous waste, hazardous materials, and hazardous substances defined in 49 CFR 171.8 and listed in 49 CFR 172.101, but not mentioned in (2) above or (4) below.	\$1,000,000
(4) For-hire and Private (In interstate or foreign commerce, with a gross vehicle weight rating of less than 10,001 pounds).	Any quantity of Division 1.1, 1.2 or 1.3 material; any quantity of a Division 2.3, Hazard Zone A, or Division 6.1, Packing Group 1, Hazard Zone A material; or highway route controlled quantities of a Class 7 material as defined in 49 CFR 173.403.	\$5,000,000

\*The schedule of limits shown does not provide coverage. The limits shown in the schedule are for information purposes only.

## ATTACHMENT F

### 5.6 Emergency Equipment

The following list of equipment is available for use during an emergency. The list includes the location, a physical description, and a brief description of the capabilities of each item. Additionally, protective clothing (appropriate for the types of materials being transported), respirators, gloves, boots, protective suites, etc. is available on each transport vehicle. A first aid kit with eyewash apparatus is also carried on each transport vehicle.

- A. Fire Extinguisher: Carried on all tractors on deck plate behind cab and on tanker trailers. Twenty (20) pound dry chemical variety (B-C type Purple -K). Checked and maintained as necessary. Capable of extinguishing flammable liquid and electrical fires.
- B. Shovels: Carried in cab of all trucks. Capable of diking small spills with earthen material.
- C. Reflective Triangles: Carried in all cabs. Capable of identifying emergency situations.
- D. First Aid Kits: Carried in all tractors. Used for general first aid.
- E. Flashlight: Carried in all tractors. Used for localized lighting.
- F. Protective Clothing including body protective equipment: eyeglasses, chemical resistant gloves, mechanically resistant gloves, fire retardant coveralls, chemical resistant yellow and syranex chemical protective clothing, hard-hats, and respirators are carried in all tractors. Used by the driver during a potential response.
- G. 16oz. eyewash Apparatus: Carried in all cabs. Capable of washing irritants out of eyes.
- H. Emergency Response Guidebook for Hazardous Materials: Carried in all cabs. Used as a reference during a potential response.
- I. Floor Dry: Carried in all van over packs. Used for absorbing liquid spills.
- J. Salvage Drums: Carried in or mounted to all van trailers/containing absorbent material. Used for over packing leaking drums.
- K. List of Rhode Island prohibited travel roads in each vehicle (see Appendix G). Used during transport in RI.
- L. RTS Contingency Plan with emergency procedures and emergency phone numbers. Used during a potential response.
- M. Markings on vehicle (RTS name and RI permit number - three inches high on all four sides of vehicle). Used during transport in RI.
- N. Current, legible, valid registration for each unit (tractor and trailer), note expiration date. Used during transport required by U.S. DOT regulation.
- O. Communication device (mobile phone). Used to communicate during a potential response.
- P. Current safety inspection sticker as required by Motor Carrier Safety Regulations, 49 CFR 396.17 Appendix G. For Tankers, current inspection meeting requirements of 49 CFR 180.352.
- Q. Up-to-date payment and documentation for Rhode Island inspections, required during transport in RI.
- R. Collapsible Utility Tray, used to contain small liquid spills.

All equipment is tested and maintained as necessary to assure its proper operation in time of an emergency. Following an emergency, all equipment will be decontaminated, cleaned, and re-fit for its intended use before normal operations resume.”

*ATTACHMENT G*

**Ross Transportation Services, Inc  
Transporter Contingency Plan**


**Prepared By:**

**Ross Environmental Services, Inc  
150 Innovation Drive  
Elyria, OH 44035  
1-440-366-2000**

**Rev. 10, 3-2024**



Ross Transportation Services, Inc .

	<b>RTS Transporter Contingency Plan</b>
<b>Procedure No: T- 001</b>	<b>Revision #: 10 (3-2024)</b>
<b>Procedure Owner: RTS</b>	

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# Roles and Responsibilities

Position	Acronym	Responsibilities
RTS Driver	N/A	Stays familiar with shipment during transportation, including hard copy paperwork. Maintains and tests emergency equipment, described in Section 5.6. Forwards information to the Emergency Coordinator. Arranges on-scene response. Follows procedures outline in this plan.
Emergency Coordinator	EC	Stays familiar with emergency response fundamentals through participation in training activities. Maintains and tests communication devices while on call. Interfaces with RTS Drivers in the event of an emergency situation.  Provides support after emergency situation has been mitigated for the purpose of notification and record keeping as required. May participate in an audit of the system by conducting mock response tests.
RTS EHS	EHS	Provides information on pick-up and delivery schedules, profiles, and shipping paperwork via the shared directory. Communicates procedural changes, interfaces with drivers and ECs. Maintains records as indicated in this plan.  Audits emergency procedure system to ensure compliance with SOP. Participates in continuous improvement of the emergency procedure system. Maintains procedure. Maintains files documenting procedure implementation events. Provides and documents procedure training.
RTS President/RTS VP of Operations	N/A	Determines course of action and assigns responsibilities after receipt of the initial emergency communication as required.

## 1.0 Purpose

The purpose of the Ross Transportation Services, Inc. (“RTS”) Transporter Contingency Plan is two-fold. First, as a document that must be carried in the transport vehicle to provide information and direction to the driver during an emergency. Second, it is the transporter’s written assurance that certain activities will be conducted in a manner acceptable to the applicable regulating agencies.

## 2.0 Background and Intent

### 2.1 Introduction

The Solid Waste Management Act of 1980 and several corresponding state (e.g., Pennsylvania, Maryland, Massachusetts, Rhode Island) environmental regulations require transporters of hazardous waste to develop and implement a Contingency Plan (“Emergency Procedures Guide” in Massachusetts) to deal with emergencies affecting the environment, public health and safety resulting from an incident while transporting hazardous waste.

## **2.2 Applicability**

These Contingency Plan requirements apply specifically to the transportation of hazardous waste. Transporters who generate, store, treat, or dispose of hazardous wastes may also be required to prepare a second Contingency Plan in accordance with the federal and state regulations for generators of hazardous waste.

Although state mandated Pollution Incident Prevention (“PIP”) Plans prepared in conjunction with certain state regulations such as the Pennsylvania Department of Environmental Protection Agency’s (“PADEPs”) Water Quality Management program or the United States Environmental Protection Agency’s (“USEPAs”) emergency preparedness and prevention plans (e.g., Spill Prevention Control and Countermeasures Plan, Storm Water Pollution Prevention Plan) may already encompass some of the basic Contingency Plan elements, they are not acceptable as a Transporter’s Contingency Plan.

## **3.0 Scope**

The provisions of this Contingency Plan shall be implemented whenever emergencies arise during the course of transportation, which endanger public health and safety or the environment. RTS’ Contingency Plan ensures that all reasonable efforts are made to ensure safety and compliance. Special instructions have been included in Attachment H for certain customer materials transported.

### **3.1 Submission of Contingency Plans for Review and Approval**

Certain states require hazardous waste transporters to submit one copy of its Contingency Plan to the appropriate regulatory authority for review and approval during the licensing process. If the Contingency Plan needs to be revised, prior to approval, one copy of the revisions are typically also submitted for review and approval.

### **3.2 Preparation of the Contingency Plan**

This Contingency Plan was prepared in accordance with good engineering practice by someone familiar with day-to-day operations of the transporter. Ross Environmental Services, Inc. (“RES”) an outside consultant was employed for this purpose. As such, RES has conducted a thorough study of RTS waste handling and transportation practices.

## **4.0 Regulatory Background**

As a transporter of hazardous waste in several states, RTS is required by the following regulating authorities to have a Transporter Contingency Plan:

- Pennsylvania Department of Environmental Protection (Title 25, Chapter 260a-270a)
- Massachusetts Department of Environmental Protection (BWP HW 14)
- Maryland Department of the Environment (COMAR 26)
- Rhode Island Department of Environmental Management (Rules 5.02, 6.03 and 9.08)

Additionally, the Rhode Island Department of Environmental Management (RIDEM) requires that all hazardous waste transporters make arrangements with emergency response contractors to respond immediately in the event of an emergency (Rules 5.02, 6.03 and 9.08). However, the RIDEM and its representatives have the authority to call in the state emergency response contractor if it is determined by RIDEM emergency response staff that the chosen emergency responder cannot respond to the scene within a reasonable amount of time (1 hour or less, depending on the circumstances), or the responder

on scene is inadequate. In the event that the state emergency response contractor is called to the scene, all expenses incurred during that response will be billed to the responsible parties, and for payment of which shall be the sole responsibility of the responsible parties.

Additionally, when hazardous materials are offered for transportation, the United States Department of Transportation (USDOT) requires that certain emergency response information is immediately available for use. The applicable hazardous material regulations are found at 49 CFR 171-180.

## 5.0 Emergency Procedures

### 5.1 Emergency Instructions

5.1.1 Stay with the vehicle, if it is SAFE to do so.

5.1.2. If a spill is involved, warn all non-emergency personnel to remain outside of the spill area, pointing out to them the danger involved.

- Set up warning signals and cordon off the hazard area, if practical. If possible, call the law enforcement or fire authorities.

5.1.3 Render first aid/medical assistance to any personnel that may require it, as needed.

5.1.4 Use a communication device such as a C.B. radio or mobile phone (carried on each tractor) to call law enforcement, fire authorities and (as needed) medical assistance, if they have not already arrived.

- A call is required when the spill is uncontrollable, comes from a large package like a tanker, is possible to enter a waterway or drain, or is of a highly hazardous material.
- A call is required when the event escalates to an emergency.
- **A call is always required to RTS EHS.**
- RTS EHS will call RTS VP of Operations or RTS President.

5.1.5 Upon arrival of law enforcement and fire authorities, provide the following information:

- Shipping Papers (i.e.; manifest, shippers);
- Type and amount, if known, of material spilled;
- Potential hazards, such as poison, corrosive, an irritant, a respiratory hazard, skin hazard, or any other hazard of which the driver is aware;
- If a "Flammable - Solid - W" placard is displayed, advise fire authorities that load includes water reactive material;
- Extent and nature of casualties, if known;
- Actions that the authorities should take to mitigate the situation, to the extent of the driver's knowledge; and
- Any other emergency response information that the driver has access to.

5.1.6 Request that the law enforcement authorities cordon off the area and evacuate for at least 100 feet around the area to prevent bystanders from becoming casualties and to minimize the extent of the hazard.

5.1.7 If it is safe to do so, steps should be taken to contain the spill.

- Drivers may choose to assist in the erection of a barrier that encircles the area of the spill using whatever material is available.
- Driver's may assist in the digging of a drainage drench, covering the material with plastic or other absorbent material, or erecting a dirt curb.
- Driver's should attempt to prevent the spill from reaching waterways, including sewers.
- It is critically important to perform this step as quickly as possible to minimize both the extent of the hazard and the need for subsequent cleanup. Work with the local fire or law enforcement authorities to accomplish this step - use their assistance (or provide them assistance) whenever possible.

5.1.8 Request that the first responder protect the area while the driver contacts RTS EHS . Additionally, the driver will call:

- Ross Transportation Services, Inc., Grafton, OH during normal business hours 1-440-366-2068 or 1-440-537-3183 (RTS VP of Operations). If necessary, call (440) 748-5900 and personnel will be paged. RTS EHS will notify one of the Emergency Coordinators found in Attachment C - List of Emergency Coordinators.
- After normal business hours, (440) 748-5900 contacts the security guard. The driver will provide the guard with a number at which he can be reached. The guard will contact RTS EHS, who will contact the on-call Emergency Coordinator (Refer to Attachment C - List of Emergency Coordinators), by telephone, and provide him with on-scene information.

5.1.9 The driver will provide the following information to RTS EHS:

- Name of the person reporting the spill;
- Name, address and EPA identification number of the transporter;
- Phone number where the person reporting the spill can be reached;
- Date, time and location of the spill;
- Mode of transportation and type of transport vehicle;
- Brief description of the incident; and
- Shipping name, hazardous class, and U.N. identification number and packing group of any other material carried.
- Additionally, for each waste involved in the spill the driver will provide if known:
  1. the name and EPA identification number of the generator of the waste;
  2. shipping name, hazard class, U.N. identification number and packing group of the waste;
  3. estimated quantity of waste spilled;
  4. EPA waste ID number; and
  5. RQ amount if appropriate.

5.1.10 If it is safe to do so, take steps to clean up the spill. Normally, either the generator or a contractor hired by RTS will send crews to execute the cleanup. RTS may send cleanup crews to spills that occur in close proximity to its terminal in Grafton, OH. Generally, material will be absorbed into a commercial absorbent material that is compatible with the material. Any contaminated or potentially contaminated earth will be removed and collected into drums for

treatment and/or disposal at Ross Incineration Services, Inc. (RIS), or another RCRA permitted facility, as appropriate.

The clean-up team will take samples of the area to determine the presence and extent of contamination and send such samples to an EPA approved laboratory for analysis. Sampling techniques, chain-of-custody, and analytical procedure requirements will follow EPA-approved procedures. Any contaminated soils will be treated and/or disposed of in an appropriate manner at a RCRA permitted facility. Damaged containers will be overpacked and treated and/or disposed of at RIS, or other EPA permitted facility.

5.1.11 The driver will remain at the scene and be available until either an Emergency Coordinator (refer to Attachment C - List of Emergency Coordinators) or his designated representative arrives on the scene to assume control, or until the emergency is declared over and he is released by both law enforcement and fire officials.

5.1.12 RTS EHS will be certain that the RTS President has been notified regardless of the time of day at 1-440-653-1227 (cell).

## **5.2 National Response Center**

The National Response Center and Director of the Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C., must be notified in the event:

- a person is killed or requires hospitalization due to injuries;
- carrier or property damage exceeds \$50,000;
- accident/spill involves radioactive materials or etiological agents; or
- of continuing danger to life.

## **5.3 Outside Agency Contacts**

RTS EHS will contact as appropriate, in the order listed, and provide information to the appropriate agencies as listed in Appendix A of this Plan:

- U.S. National Response Center (NRC) at (800) 424-8802 or (202) 426-2675
- Local Police Department and Local Fire Department - Obtain number from local information operator at (area code) 555-1212.
- County Health Department - Obtain number from local information operator at (area code) 555-1212.
- Generator's Emergency Response Phone number for the waste on the manifest.

## **5.4 Follow Up Procedures**

A copy of the "Hazardous Material Incident Report" (Attachment E - DOT Form F 5800.1 (Rev 6/89)) will be completed by RTS EHS or RTS VP of Operations and sent to appropriate agencies listed in **Attachment B** and the following as required by 49 CFR 171.16(b):

Information Systems Manager, DHM-63  
Research and Special Programs Administration  
Department of Transportation  
Washington, D.C. 20590



## **5.5 Personnel Involved in Emergency Mitigation**

### **5.5.1 List of Emergency Coordinators**

Please refer to Attachment C for a list of Emergency Coordinators. RTS has listed a minimum of two Emergency Coordinators and provided their name, address, home and office telephone numbers. Attachment C identifies the designated primary and secondary emergency coordinators.

At all times, there is at least one coordinator on-call with the responsibility for coordinating all emergency response measures. The emergency coordinator is familiar with all aspects of the Contingency Plan, all operations and activities, the characteristics of all materials handled and the location of all records. In addition, this individual has the authority to commit the resources necessary to carry out this Contingency Plan.

### **5.5.2 List of Emergency Response Contractors**

RTS' emergency response actions have been described in Section 5.1. Also included in this Plan (Section 5.6) is a detailed list of RTS emergency response equipment. However, outside contractors have also been listed as contractors within the scope of this plan. Additionally, the Ross companies have current service agreements in place with a wide variety of outside disposal vendors.

The services of the emergency response contractors have been investigated and arrangements made for the prompt performance of contractual services on short notice. Equipment suppliers have been contacted to determine the availability and rapid delivery of equipment for removing pollution hazards by rapid clean-up.

### **5.5.3 Arrangements With Emergency Response Contractors**

RTS has spill clean-up arrangements with its sister company RIS – 1-440-748-5800. RIS has an entire technology network that may be implemented for spill clean-up mitigation.

## **5.6 Emergency Equipment**

The following list of equipment is available for use during an emergency. The list includes the location, a physical description, and a brief description of the capabilities of each item. Additionally, protective clothing (appropriate for the types of materials being transported), respirators, gloves, boots, protective suites, etc. is available on each transport vehicle. A first aid kit with eyewash apparatus is also carried on each transport vehicle.

- A. Fire Extinguisher: Carried on all tractors on deck plate behind cab and on tanker trailers. Twenty (20) pound dry chemical variety (B-C type Purple -K). Checked and maintained as necessary. Capable of extinguishing flammable liquid and electrical fires.
- B. Shovels: Carried in cab of all trucks. Capable of diking small spills with earthen material.
- C. Reflective Triangles: Carried in all cabs. Capable of identifying emergency situations.
- D. First Aid Kits: Carried in all tractors. Used for general first aid.
- E. Flashlight: Carried in all tractors. Used for localized lighting.
- F. Protective Clothing including body protective equipment: eyeglasses, chemical resistant gloves, mechanically resistant gloves, fire retardant coveralls, chemical resistant yellow and syranex chemical protective clothing, hard-hats, and respirators are carried in all tractors. Used by the driver during a potential response.

- G. 16oz. eyewash Apparatus: Carried in all cabs. Capable of washing irritants out of eyes.
- H. Emergency Response Guidebook for Hazardous Materials: Carried in all cabs. Used as a reference during a potential response.
- I. Floor Dry: Carried in all van over packs. Used for absorbing liquid spills.
- J. Salvage Drums: Carried in or mounted to all van trailers/containing absorbent material. Used for over packing leaking drums.
- K. List of Rhode Island prohibited travel roads in each vehicle (see Appendix G). Used during transport in RI.
- L. RTS Contingency Plan with emergency procedures and emergency phone numbers. Used during a potential response.
- M. Markings on vehicle (RTS name and RI permit number - three inches high on all four sides of vehicle). Used during transport in RI.
- N. Current, legible, valid registration for each unit (tractor and trailer), note expiration date. Used during transport required by U.S. DOT regulation.
- O. Communication device (mobile phone). Used to communicate during a potential response.
- P. Current safety inspection sticker as required by Motor Carrier Safety Regulations, 49 CFR 396.17 Appendix G. For Tankers, current inspection meeting requirements of 49 CFR 180.352.
- Q. Up-to-date payment and documentation for Rhode Island inspections, required during transport in RI.
- R. Collapsible Utility Tray, used to contain small liquid spills.

All equipment is tested and maintained as necessary to assure its proper operation in time of an emergency. Following an emergency, all equipment will be decontaminated, cleaned, and re-fit for its intended use before normal operations resume.”

### **5.7 Routine Decontamination Procedures**

All items which may have been exposed to contamination will be decontaminated. Normally, either the generator, RTS, or a contractor hired by RTS will conduct the decontamination. De-contamination will be conducted according to the following guidelines:

- A truck or trailer will be decontaminated on-site to prevent further spread to the environment. If necessary, it will be transported to an authorized facility for further decontamination.
- Each piece of equipment used in the response and cleanup operations will either be containerized to catch all cleaning liquids, and then thoroughly washed and rinsed with a compatible solvent or cleaning compound or transported to RIS or other RCRA permitted facility for treatment and disposal. Any cleaning material, rinseate, and residue will be drained into a tight head container, sealed, and transported to a permitted facility for treatment and/or disposal.
- Clothing will be overpacked in a large overpack container, sealed, and transported to RIS or other EPA permitted facility for treatment and/or disposal.

Equipment used to handle hazardous waste including but not limited to storage containers, processing equipment trucks, and loaders that are contaminated with hazardous waste will be decontaminated prior to being serviced or used for any purpose other than transportation of compatible hazardous waste and prior to being serviced or used for transportation of nonhazardous waste, unless such wastes are compatible and are transported to a permitted hazardous waste storage, treatment or disposal facility.

Generally, decontamination occurs either at the RIS facility or at a subcontracted facility. Decontamination typically consists of tank cleaning and occurs as frequently as necessary and at least before incompatible wastes are transported in a single vehicle. Rinseate is accumulated for treatment and/or disposal in accordance with the applicable federal and corresponding state RCRA regulations.

## **6.0 Communication Systems**

### **6.1 External Communications**

RTS drivers are all equipped with cellular telephones that may be used to contact RTS EHS, an emergency coordinator and/or to notify the emergency response agencies. Additionally, RTS trucks are equipped with CB radios that can be used as a back-up communication system. Please note that certain states require the presence of CB radios when transporting acutely hazardous wastes.

## **7.0 Reporting and Notifications**

### **7.1 Emergency Reporting**

In the event of an emergency or a hazardous waste spill during transportation, RTS will immediately notify the appropriate state environmental agency and the National Response Center with the following information required by 40 CFR Subpart 263.30(c) or other applicable state regulations (e.g., 25 Pa 263a.10):

- 7.1.1. Name of the person reporting the incident.
- 7.1.2. Name, address, and the EPA identification number of the transporter.
- 7.1.3. Phone number where the person reporting the incident can be reached.
- 7.1.4. Date, time and location of the incident.
- 7.1.5. Mode of transportation and type of transport vehicle.
- 7.1.6. A brief description of the incident, including the type of incident.
- 7.1.7. For each waste involved in the spill:
  - a. The name and EPA identification number of the generator of the waste.
  - b. Shipping name, hazard class and UN or NA number of the waste.
  - c. Estimated quantity of the material or the waste spilled.
  - d. The extent of the contamination of land, water, or air.
- 7.1.8. Shipping name, hazard class, and the UN or NA number of any other material carried.

In the event of an emergency or hazardous waste spill during transportation, RTS will immediately notify the affected municipality of the occurrence and the nature of the spill. RTS will also submit a report of the incident in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials

Regulations, Hazardous Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590, and send copies of the report to the Department of Environment Protection, and generator.

## **8.0 Procedure Auditing, Continuous Improvement and Management of Change**

Periodic auditing by RTS staff will occur, in the form of equipment inspections and mock emergencies. Frequency will vary as needed. Results will be reported to the President of RTS, the RTS VP of Operations, and to RTS EHS. RTS personnel are encouraged to suggest improvements to this procedure as appropriate. As well, improvements may result from periodic procedure auditing or evaluations of procedure implementation. During annual training, RTS will solicit ideas for procedure improvements.

RTS EHS is responsible for management of change concerning this plan. All changes are to be documented, and evaluated for impacts they may have on other procedures, processes or departments. All procedural changes will be communicated to RTS Drivers within one week of implementation, and will be reviewed during annual training sessions.

### **8.1 Revisions to the Contingency Plan**

The Contingency Plan shall be periodically reviewed and updated if necessary. At a minimum, this shall occur when:

- Applicable regulations are revised;
- The plan fails in an emergency;
- The mode of operation changes in a manner that materially increases the potential for fires, explosions or releases of hazardous constituents, or changes the response necessary in an emergency;
- The list of emergency coordinators changes;
- The list of emergency equipment changes; or
- As required by the applicable regulating agencies.

## **9.0 Employee Training Program**

At a minimum RTS' driver training program includes the following:

- Knowledge of the materials being transported.
- Safety and health hazards associated with materials being transported.
- Practices for preventing spills.
- Procedures for responding properly and rapidly to spills.
- Emergency procedures (i.e., use of contingency plan, first aid).
- Use of emergency equipment.

### **9.1 Initial Driver Training**

Specifically, RTS provides at least three days of initial on the job driver training. At a minimum RTS' initial driver training includes:

- Use of Hazardous Waste Manifest;
- Drum labeling for USEPA and US DOT;
- Placarding for tankers and van trailers;
- Emergency procedures (including spills);
- Safety Equipment;
- Hazardous Material Emergency Response Guidebook review;
- Accident Reporting;
- Spills Reporting;
- Defensive Driving;
- Specific information on materials shipped as appropriate and/or required including safety and health hazards.
- Practices for preventing spills which would include:
  1. Inspection of each drum before loading and periodic inspection (every 2 hours or every 100 miles, whichever occurs first) of load during shipment.
  2. Inspection of tankers before, during and after loading and periodically (every 2 hours or every 100 miles, whichever occurs first) while in transit.
- Procedures for responding properly and rapidly to spills.

### **9.2 Driver Refresher Training**

Additionally, RTS driver training is updated regularly. Although RTS driver's typically receive at least four hours of refresher training quarterly, at a minimum RTS driver's will receive at least 8 hours of refresher training annually.

### **9.3 Emergency Medical Training**

All RTS drivers are familiar with the American Red Cross Multimedia First Aid Course including, but not limited to, the following:

- Procedures for washing splashed or spilled chemicals, poisons from the body (including eyes).
- Treatment for ingestion of chemicals and poisons.
- Mouth-to-mouth resuscitation.
- Treatment for heart attacks and strokes.
- Treatment for shock.
- Wounds including tourniquets, bandaging, pressure points and splints.

Drivers are also familiar with the Hazardous Material Emergency Response Guidebook (a copy of this handbook is carried in each tractor at all times).

#### 9.4 Rhode Island Hazardous Waste Material Hauler Training Requirements

According to R.I.G.L. 23-19.1-34 only drivers possessing a valid driver's license of appropriate class, and a hazardous waste driver's certificate issued by the Rhode Island Department of Environmental Management shall operate a vehicle hauling hazardous waste through or within the state of Rhode Island. Additionally, the following information, at a minimum, must be included in the driver training program:

- **Hazardous Waste Handling:** RTS must instruct all drivers in the safe and proper handling of hazardous wastes to be transported. These instructions must include:
  - a) Hazardous properties of materials being transported.
  - b) Exposure routes and pathways to protect against.
  - c) Placarding requirements.
  - d) Reportable Quantities requirements and regulations.
  - e) DOT UN and NA codes.
  - f) Labeling requirements.
  - g) Compatibilities of hazardous waste materials.
- **Notification Procedures:** RTS must instruct all drivers in the proper notification procedures to be taken in the event of a discharge of hazardous waste material. These instructions must include:
  - a) State of Rhode Island emergency contact phone numbers.
  - b) Company emergency contact to be notified.
  - c) Phone number of an emergency response contractor in the local area of transportation activity.
  - d) Phone number of the National Response Center.
  - e) Instructions to make note of the exact time, location, type and amount of material released and a detailed description of all/any damage caused by the release.
- **Emergency Procedures:** RTS must instruct all drivers in the proper emergency procedures to be followed in the case of an accident or release of a hazardous waste material. These instructions must include:
  - a) Location and use of all emergency equipment carried with the vehicle.
  - b) Proper response to minimize the release of a hazardous waste material.
  - c) Containerization of all spill debris.
  - d) Notification requirements in accordance with section above.
  - e) Procedures to be taken to ensure human health and safety in the vicinity of the release.

- f) Procedures to be followed in inspecting all emergency equipment to ensure proper working order and effectiveness in dealing with the types of waste materials being transported.
- **Vehicle Operation:** RTS must instruct all drivers in the proper and safe operating requirements to be followed while transporting hazardous waste materials. These instructions must include:
  - a) Procedures to be followed in accordance **with 49 CFR 396** in conducting pre-trip vehicle inspections.
  - b) Procedures to be followed in determining that the vehicle is in full compliance and permitted in accordance with Rhode Island rules and regulations prior to transporting waste through or with the state of Rhode Island.
  - c) Procedures to be followed in locating, distributing and securing cargo before transport.
- **Use of the Hazardous Waste Manifest:** RTS must instruct all drivers of hazardous waste materials in the proper use of the Hazardous Waste Manifest. These instructions must include:
  - a) Inspection of the manifest for completeness and proper signatures from the generator.
  - b) Inspection of the manifest and cargo to ensure no discrepancy exists.
  - c) Inspection of the manifest to ensure that the appropriate waste codes, shipping names and DOT code have been used.
  - d) Procedures to be followed in the case of rejected loads.
  - e) Procedures to be followed when manifest information does not match the cargo being offered for transport.
  - f) Proper distribution of the manifest copies.

## 10.0 Documentation

The RTS EHS is responsible for maintaining documentation related to this Contingency Plan. At a minimum, this will include:

- Current and past versions of this plan;
- Current and past lists of Emergency Contact personnel;
- Records and supporting documents (e.g., logs and reports) for each emergency communication event; and
- Documentation of training.



## Attachment A

### A List of Emergency Response Agencies to be Notified in the Event of a Spill

(Appropriate only to the State where the spill occurred, the following are the minimum agencies and phone numbers to be listed:)

State Regulating Agency	Contact Number
Alabama Department of Public Safety	800-843-0699
Alabama U.S. Coast Guard, Mobile	(251) 450-3400
Arkansas Department of Pollution Control	(501) 682-7890 (24 hours)
Arkansas Office of Emergency Management	(800) 322-4012
Arizona Department of Environmental Quality	(602) 771-2330 or 800-234-5677
California Office of Emergency Services	(916) 845-8911
Colorado Department of Health and Env.	(303) 692-2000
24-hour Emergency Response Line	(877) 518-5608
Colorado Public Utilities Commission	(303) 866-3174 (7:30 - 5:30) or 911
Connecticut Department of Chemical Spills	(860) 424-3338
Connecticut State Police	(860) 685-8190
Delaware Natural Resource and Environmental Control (DNREC)	1-800-662-8802 (In-state only)
	(302) 739-9401
	911
Florida State Warning	(800) 320-0519 (24 hours)
	(850) 413-9911
Georgia Emergency Response	1-800-241-4113 (24 hours) In State
	(404) 656-6905
	(404) 656-4863
Idaho Bureau of Hazardous Materials	(208) 846-7610
Illinois Emergency Response	(217) 782-7860
Indiana Emergency Response	(317) 232-8603
Iowa Department of Natural Resources	(515) 281-8694

<b>State Regulating Agency</b>	<b>Contact Number</b>
Kansas Emergency Management	(785) 296-8013
	(800) 275-0297
Kansas State Police	(785) 296-6800
Kentucky Emergency Response	(502) 564-7815
KY Department of Environmental Protection	(502) 564-2150
Louisiana Office of Environmental Compliance	(225) 925-6595
Maine State Police	(207) 624-7000
Maryland Emergency Operations & Tech. Support	(410) 537-3975
	Refer to Attachment D for Specific State and County response numbers
Massachusetts Department of Environmental Protection (MADEP)	(617) 556-1133 Local 24 hours (Boston Area)
	(888) 304-1133 Toll Free 24 hrs.
MADEP Central Regional Office (CERO)	(508) 792-7650
MADEP Northeast Regional Office (NERO)	(978) 661-7600
MADEP Southeast Regional Office (SERO)	(508) 946-2700
MADEP Western Regional Office (WERO)	(413) 784-1100
Massachusetts State Police	(617) 566-4500
Michigan Emergency Response	1-800-292-4706 In State
	(517) 373-7660 Out of State
Minnesota Pollution Control Agency	(612) 296-8100
	1-800-422-0798
Mississippi Dept of Environmental Quality	(601) 352-9100 or (800) 222-6362
Missouri Emergency Response	(314) 634-2436
Montana Disaster and Emergency Services	(406) 841-3911
Nebraska Dept of Environmental Control	(402) 471-4545
Nevada Division of Emergency Management	(702) 885-5300

<b>State Regulating Agency</b>	<b>Contact Number</b>
New Hampshire State Police	1-800-852-3411 In State
	(603) 271-25753636 Out of State
New Mexico Health and Environment Dept	(505) 827-9329
New Jersey Spill Fund	(609) 292-7172
New York Transportation	(518) 457-7362
North Carolina Dept of Environmental Mgmt.	1-800-662-7956 In State
North Dakota Department of Health	(701) 328-5150
Ohio Emergency Response	1-800-282-9378
	1-800-733-3861 State Patrol
Oklahoma Department of Pollution Control	(405) 271-5600 or (800) 522-0203
Oklahoma State Patrol	(405) 682-4343
Oregon Department of Environmental Quality	(800) 452-0311
Pennsylvania Department of Environment. Protection	717-787-4343 (24 hours)
Pennsylvania Emergency Management Agency	IN PA: 800-424-7362 (24 hours)
	OUTSIDE PA: 717-651-2001
National Response Center	800-424-8802 (24 hours)
Pennsylvania Local Police and Fire Departments	911 or 0 (Operator)
Rhode Island Dept of Environmental Mgmt.	(401) 222-3070 or (401) 222-2797
South Carolina Emergency Response	(888) 481-0125
South Dakota Dept of Natural Resources	(605) 773-3151
Tennessee Emergency Management Agency	(615) 741-1226
Texas Nat. Res. Conservation Commission	(512) 463-7727 (24 hours)
Utah Department of Health	(801) 538-6471
Virginia Department of Emergency Services	1-800-468-8892
Washington Department of Ecology	Northwest (425) 649-7130

<b>State Regulating Agency</b>	<b>Contact Number</b>
(By region of State)	Southwest (360) 407-6375
	Central (509) 454-7829
	Eastern (509) 329-3512
West Virginia Department of Natural Resources	(304) 348-8899
Wisconsin Emergency Response	(608) 266-3232 (24 hours)
Wyoming Department of Environmental Quality	(307) 777-7937

## **Attachment B**

### **Agencies to Receive Written Report In Event of Spill**

(AS APPROPRIATE TO THE STATE WHERE SPILL OCCURRED)

Alabama Dept. of Environmental Management Chief, Land Division 1400 Coliseum Blvd. Montgomery, AL 36110
Hazardous Waste Division Department of Pollution Control & Ecology 8001 National Drive, Little Rock, Arkansas 72209 P.O. Box 8913 Little Rock, Arkansas 72219
California Dept. of Health Services Hazardous Material Management Section P.O. Box 942732 Sacramento, CA 94234-7320
Colorado Public Utilities Commission; Office Level 2 1580 Logan Street Denver, CO 80203 Attention: Transportation
Connecticut Dept. of Environmental Protection 79 Elm Street Hartford, CT 01106-5127
Delaware Dept. of Natural Resources & Environmental Control 89 Kings Highway Dover, DE 19901
Florida Dept. of Environmental Protection 255 Shumard Oak Blvd. Tallahassee, FL 32399
Illinois Emergency Management Agency 110 East Adams Street Springfield, IL 62701
Iowa Department of Natural Resources Emergency Response Wallace Building 502 East 9 <sup>th</sup> Street Des Moines, IA 50319-0034

<p>Kansas State Police  Division of Emergency Preparedness  122 S.W. 7<sup>th</sup> Street  Topeka, KS 66603</p>
<p>Louisiana Dept. Environmental Compliance  P.O. Box 4312  Baton Rouge, LA 70821-4312  Attention: Administrator Hazardous Waste Division</p>
<p>Hazardous Matter, Maine  Bureau of Oil and Hazardous Materials Control  Department of Environmental Protection  State House - Station No. 17  Augusta, ME 04333</p>
<p>Massachusetts Dept. of Environmental Protection  Bureau of Waste Site Clean-up  One Winter Street  Boston, MA 02108</p>
<p>Nebraska Department of Environmental Control  Ground Water Section  Water Quality Division  P.O. Box 94877  Lincoln, NE 68509-4877</p>
<p>New Hampshire Dept. of Environmental Services  Waste Management Division  Hazen Drive  Concord, NH 03301</p>
<p>New York State Dept. of Environmental Conservation Commissioner  50 Wolf Road  Albany, NY 12233</p>
<p>Rhode Island Dept. of Environmental Management  Division of Compliance &amp; Inspections  235 Promenade Street  Providence, RI 02908-5767</p>
<p>South Carolina Department of Health &amp; Environmental Control  2600 Bull Street  Columbia, SC 29201</p>

Texas Natural Resources & Conservation Commission  
Emergency Response Unit  
P.O. Box 13087, Capital Station  
Austin, TX 78711-3087

Wyoming Dept. of Environmental Quality  
122 West 25<sup>th</sup> Street  
Herschler Building  
Cheyenne, WY 82002



## Attachment C

### Facility Emergency Coordinators (40 CFR 262.262(b)(8))

Name	Home Address	Office #	Cell #
Neil Gorman*	[REDACTED]	(440) 748-5816	[REDACTED]
Bob Kleinhenz	[REDACTED]	(440) 748-5814	[REDACTED]
Chad Colman	[REDACTED]	(440) 366-2082	[REDACTED]
George Croftcheck	[REDACTED]	(440) 748-5804	[REDACTED]
Jason Burandt	[REDACTED]	(440) 748-5885	[REDACTED]
Jon Grosse	[REDACTED]	(440) 748-5832	[REDACTED]
Josh Young	[REDACTED]	(440) 748-5821	[REDACTED]
Maryann Veyon	[REDACTED]	(440) 748-5884	[REDACTED]
Michael Christian	[REDACTED]	(440) 748-5874	[REDACTED]
Ron Brown	[REDACTED]	(440) 748-5858	[REDACTED]

\* Neil Gorman is the primary contact while he is at the office. If Mr. Gorman is not available, the assigned, alternate Emergency Coordinator should be contacted next.

# Attachment D

## Maryland Emergency Response Numbers

### AIR AND RESPIRATION

Director .....	410-537-3255
Air Quality Compliance .....	410-537-3220
Air Monitoring and Information .....	410-537-3240
Air Quality Permit .....	410-537-3230
Air Quality Planning .....	410-537-3240
Asbestos and Industrial Hygiene .....	410-537-3200
Field Offices: Western Maryland .....	301-689-5756
Eastern Shore .....	410-543-6913
Mobile Sources .....	410-537-3270
Permits and Compliance Policy .....	410-537-3260
Radiological Health .....	410-537-3300

### TECHNICAL AND REGULATORY SERVICES

Director .....	410-537-3572
Community Right to Know Information .....	410-537-3800
Computer Modeling .....	410-537-3902
Emergency Operations & Technical Support .....	410-537-3975
Environmental Assessment .....	410-537-3906
Regulations Coordination .....	410-537-3173
Shellfish Waters .....	410-537-3906
Water Quality Monitoring .....	443-482-2700
Noise Control .....	410-537-3938

### SOLID WASTE

Director .....	410-537-3304
Field Offices: Western Maryland .....	301-791-4787
Eastern Shore .....	410-758-5020
Southern Maryland .....	410-414-3400
Hazardous and Medical Waste Information .....	410-537-3344
Lead Poisoning Prevention .....	410-537-3859
Oil Control .....	410-537-3386
Recycling .....	410-537-3314
Scrap Tires .....	410-537-3424
Solid Waste and Sewage Sludge Complaints .....	410-537-3424
Solid Waste and Sewage Sludge Permits .....	410-537-3375
Superfund/Voluntary Cleanups .....	410-537-3437
Underground Storage Tank Loan Program .....	410-537-3443

### WATER

Director .....	410-537-3567
Financial Assistance Programs .....	410-537-3574
Individual Drinking Water Supplies .....	410-537-3784
Inspection and Compliance .....	410-537-3510
(Nights/Wknds) .....	866-MDE GO TO
Mining Operations Permitting (Coal) .....	410-537-3557
(Non-Coal) .....	301-689-6104
NonPoint Source Program .....	410-537-3543
Public Bathing Beaches .....	410-537-3778
Public Drinking Water Supplies .....	410-537-3702
Sewage Disposal Systems .....	410-537-3778
Wastewater Permit Program .....	410-537-3599
Wetland Permitting (Tidal) .....	410-537-3837
(Non-Tidal) .....	410-537-3768

### COUNTY ENVIRONMENTAL HEALTH SERVICES

Allegany .....	301-777-5654	(After Hrs.)	301-777-5600
Anne Arundel .....			410-222-7050
Baltimore City ..	410-396-4422	(After Hrs.)	410-396-3100
Baltimore County .....			410-887-3733
Calvert .....	410-535-3922	(D.C. Area.)	410-855-1557
Caroline .....			410-479-3666
Carroll .....			410-876-1884
Cecil .....			410-996-5160
Charles .....			301-934-9294
Dorchester .....			410-228-1167
Frederick .....			301-694-2165
Garrett .....	301-334-8980	(After Hrs.)	301-334-1929
Harford .....	410-838-3047	(After Hrs.)	410-838-6600
Howard (Main Office) .....			410-313-2645
Kent .....	410-778-7047	(After Hrs.)	410-778-3480
Montgomery .....			301-217-1245
Prince George's	301-883-7600	(After Hrs.)	301-350-9735
Queen Anne's .....			410-758-2281
St. Mary's .....			301-475-4321
Somerset .....			410-651-5670
Talbot .....			410-820-8213
Washington .....			301-791-3270
Wicomico .....			410-546-4446

# Attachment E

DOT Form 5800.1 (6/89)

DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS INCIDENT REPORT					Form Approved OMB No. 2137-0039
<p><b>INSTRUCTIONS:</b> Submit this report in duplicate to the Information Systems Manager, Office of Hazardous Materials Transportation, DHM-63, Research and Special Programs Administration, U.S. Department of Transportation, Washington, D.C. 20590. If space provided for any item is inadequate, complete that item under Section IX, keying to the entry number being completed. Copies of this form, in limited quantities, may be obtained from the Information Systems Manager, Office of Hazardous Materials Transportation. Additional copies in this prescribed format may be reproduced and used, if on the same size and kind of paper.</p>					
<b>I. MODE, DATE, AND LOCATION OF INCIDENT</b>					
1. MODE OF TRANSPORTATION <input type="checkbox"/> AIR <input type="checkbox"/> HIGHWAY <input type="checkbox"/> RAIL <input type="checkbox"/> WATER <input type="checkbox"/> OTHER					
2. DATE AND TIME OF INCIDENT <small>(Use Military Time e.g. 8:30am = 0830  noon = 1200 5pm = 1800 midnight = 2400)</small> <div style="display: flex; justify-content: space-between;"> <span>Date</span> <span>TIME</span> </div>					
3. LOCATION OF INCIDENT (Include airport name in ROUTE/STREET if incident occurs at an airport)					
CITY		STATE			
COUNTY		ROUTE/STREET			
<b>II. DESCRIPTION OF CARRIER, COMPANY, OR INDIVIDUAL REPORTING</b>					
4. FULL NAME			5. ADDRESS (Principal place of business)		
6. LIST YOUR OMC MOTOR CARRIER CENSUS NUMBER, REPORTING RAILROAD ALPHABETIC CODE, MERCHANT VESSEL NAME AND ID NUMBER OR OTHER REPORTING CODE OR NUMBER					
<b>III. SHIPMENT INFORMATION (From Shipping Paper or Packaging)</b>					
7. SHIPPER NAME AND ADDRESS (Principal place of business)			8. CONSIGNEE NAME AND ADDRESS (Principal place of business)		
9. ORIGIN ADDRESS (if different from Shipper address)			10. DESTINATION ADDRESS (if different from Consignee address)		
11. SHIPPING PAPER/WAYBILL IDENTIFICATION NO.					
<b>IV. HAZARDOUS MATERIAL(S) SPILLED (NOTE: REFERENCE 49 CFR SECTION 172.101.)</b>					
12. PROPER SHIPPING NAME		13. CHEMICAL/TRADE NAME		14. HAZARD CLASS	15. IDENTIFICATION NUMBER <small>(e.g. UN 2764, NA 2020)</small>
16. IS MATERIAL A HAZARDOUS SUBSTANCE? <input type="checkbox"/> YES <input type="checkbox"/> NO			17. WAS THE RM MET? <input type="checkbox"/> YES <input type="checkbox"/> NO		
<b>V. CONSEQUENCES OF INCIDENT, DUE TO THE HAZARDOUS MATERIAL</b>					
18. ESTIMATED QUANTITY HAZARDOUS MATERIAL RELEASED (Include units of measurement)		19. FATALITIES	20. HOSPITALIZED INJURIES	21. NON HOSPITALIZED INJURIES	
22. NUMBER OF PEOPLE EVACUATED					
23. ESTIMATED DOLLAR AMOUNT OF LOSS AND/OR PROPERTY DAMAGE INCLUDING COST OF DECONTAMINATION OR CLEANUP (Round off in dollars)					
A. PRODUCT LOSS	B. CARRIER DAMAGE	C. PUBLIC/PRIVATE PROPERTY DAMAGE	D. DECONTAMINATION/ CLEANUP	E. OTHER	
24. CONSEQUENCES ASSOCIATED WITH THE INCIDENT <input type="checkbox"/> VAPOR (GAS) DISPERSION <input type="checkbox"/> MATERIAL ENTERED WATERWAY SEWER					
<input type="checkbox"/> SPILLAGE	<input type="checkbox"/> FIRE	<input type="checkbox"/> EXPLOSION	<input type="checkbox"/> ENVIRONMENTAL DAMAGE	<input type="checkbox"/> NONE	<input type="checkbox"/> OTHER
<b>VI. TRANSPORT ENVIRONMENT</b>					
25. INDICATE TYPE(S) OF VEHICLE(S) INVOLVED <input type="checkbox"/> CARGO TANK <input type="checkbox"/> VAN TRUCK/TRAILER <input type="checkbox"/> FLAT BED TRUCK TRAILER					
<input type="checkbox"/> TANK CAR	<input type="checkbox"/> RAIL CAR	<input type="checkbox"/> TOFC/COFC	<input type="checkbox"/> AIRCRAFT	<input type="checkbox"/> BARGE	<input type="checkbox"/> SHIP
<input type="checkbox"/> OTHER					
26. TRANSPORTATION PHASE DURING WHICH INCIDENT OCCURRED OR WAS DISCOVERED					
<input type="checkbox"/> EN ROUTE BETWEEN ORIGIN/DESTINATION	<input type="checkbox"/> LOADING	<input type="checkbox"/> UNLOADING	<input type="checkbox"/> TEMPORARY STORAGE TERMINAL		
27. LAND USE AT INCIDENT SITE <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> AGRICULTURAL <input type="checkbox"/> UNDEVELOPED					
28. COMMUNITY TYPE AT SITE <input type="checkbox"/> URBAN <input type="checkbox"/> SUBURBAN <input type="checkbox"/> RURAL					
29. WAS THE SPILL THE RESULT OF A VEHICLE ACCIDENT/DERAILMENT? <input type="checkbox"/> YES <input type="checkbox"/> NO					
IF YES AND APPLICABLE ANSWER PARTS A THRU C					
A. ESTIMATED SPEED		B. HIGHWAY TYPE		C. TOTAL NUMBER OF LANES	
		<input type="checkbox"/> DIVIDED-LIMITED ACCESS		<input type="checkbox"/> ONE <input type="checkbox"/> THREE	
		<input type="checkbox"/> UNDIVIDED		<input type="checkbox"/> TWO <input type="checkbox"/> FOUR OR MORE	
				SPACE FOR DOT USE ONLY	

FORM DOT F 5800.1 (Rev. 6/89) Supersedes DOT F 5800.1 (10/70) (9/1/76)

THIS FORM MAY BE REPRODUCED



## Attachment F - Permit Information

### Hazardous & Solid Waste Transporter Permits

<u>STATE</u>	<u>PERMIT</u>
ARKANSAS	H-1669
CONNECTICUT	CT-HW-849
DELAWARE	DE-HW-0009
DE SOLID WASTE	DE-SW-137
DE BUSINESS LICENSE	1991833723
FLORIDA	OHD980614374
ILLINOIS	SWH0731
KANSAS	OHD980614374
KENTUCKY	OHD980614374
MARYLAND	HWH291
MASSACHUSETTS	161
MICHIGAN (LIW UNIFORM PROG)	LIW-0014484-MI
MISSOURI	17C240010000
NEW JERSEY	07855
NEW YORK	OH-013
NORTH CAROLINA	OHD980614374
PENNSYLVANIA	PA-AH0133
RHODE ISLAND	913
SOUTH CAROLINA	OHD980614374
TENNESSEE	OHD980614374
TEXAS	41474
UNIFORM PROGRAM (MI, NV, OK, WV)	UPW-0014484-MI
US DOT HAZARDOUS MAT'LS SAFETY PERMIT	14484-OH-HMSP
US DOT HAZMAT REG	050115550053X
VERMONT	N/A
VIRGINIA	OHD9806143747
WISCONSIN	11176
WI SOLID WASTE	12485



## Attachment G – Prohibited Travel Roads in Rhode Island

### Prohibited Travel Roads (for extremely hazardous waste)

TOWN	ROAD	FROM	TO
Scituate, Johnston & Foster	Route 6	Route 94 - Foster	Hopkins Avenue - Johnston
Scituate & Smithfield	Route 116	Scituate Avenue - Scituate	Snake Hill Road - Smithfield
Scituate and Cranston	Route 12	Route 14 - Scituate	Route 116 - Scituate
Scituate	Route 14	Route 102	Route 116
Scituate & Foster	Route 102	Route 94 - Foster	Snake Hill Road - Glocester
Scituate & Foster	Central Pike	Route 94 - Foster	Route 102 - Scituate
Scituate	Danielson Pike	Route 6	Route 6
Foster	Route 94	Route 101	Route 102 - Scituate
Foster & Scituate	Old Plainfield Pike	Route 102	Route 12 - Scituate
Scituate	Rocky Hill Road & Peepood Road	Route 101	Route 116, or Sawmill Road
Foster, Glocester, & Scituate	Route 101	Route 94 - Foster	Route 6 - Scituate
Smithfield & North Smithfield	Reservoir Road	In its entirety	-
Smithfield & Lincoln	Route 295	Douglas Pike (Exit 8) - Smithfield	Route 146 (Exit 9) - Lincoln
Warren	School House Road	Birch Swamp Road	Long Lane
Warren	Serpentine Road	In its entirety	-
Jamestown	North Main Road	Route 138	East Shore Road
Newport & Middletown	Bliss Mine Road	In its entirety	-
Middletown	Miantonami Avenue	Bliss Mine Road	Valley Road
Middletown	Valley Road	Miantonami Avenue	Route 138
Middletown	Aquidneck Avenue	Wave Avenue	Valley Road
Middletown	Wave Avenue	In its entirety	-
Little Compton & Tiverton	Route 77	Peckham Road - Little Compton	Route 179 - Tiverton
Tiverton	Neck Road	In its entirety	-
Little Compton	Peckham Road	Route 77	Burchard Road
Little Compton	Burchard Road	In its entirety	-
Cumberland	Reservoir Road	Route 114	Massachusetts Line
Cumberland	Route 120	Mendon Road	Massachusetts Line



## Attachment H – Phosgene / Chloroformate Transportation

For Emergency’s Involving WPS #47118

### Scope:

This procedure should be used to augment the WPS Handling Instructions for WPS 47188 only. This waste stream contains chloroformates, including isopropyl chloroformate, as well as low concentrations of phosgene. The material is shipped cold and will require additional precautions due to potential frosting.

### Hazards:

Phosgene is a colorless gas with an odor similar to musty hay or mown grass. Phosgene is a poison and inhalation hazard. Isopropyl chloroformate is a clear colorless volatile liquid with a pungent odor. Both compounds will react with water forming hydrochloric acid and isopropyl alcohol.

Because the material is very volatile, it will ship cold (typically less than 30 ° F.) The material must not be allowed to warm to quickly to prevent vaporization and possible over-pressurization of the process lines.

Prevention is critical to phosgene hazard control, since there is little that can be done in the event of an exposure and the health consequences of phosgene exposure can be potentially severe and even fatal in small quantities. Routes of exposure are skin, eyes and respiratory system. (Refer to SDSs for additional information).

### Transportation Route:

A designated route should be travelled when carrying WPS #47118. The route is detailed below.



Daily Detail							
Vehicle: 31							
Date: 2015-05-05							
State	Location	Arrival-Departure	Distance (M)	Stop Time (hh:mm)	% Idle	Idle Time (hh:mm)	Avg Speed (MPH)
	RTS - Yard	- 06:31					
OH	S83		3.1				32.4
OH	S82		8.3				39.1
OH	S82		2.8				26.7
OH	I71		23.8				62.8
OH	I76		10.9				63.3
OH	S21		5.8				47.4
OH	S619		0.5				22.5
N/A	6206 - PPG Industries Inc	07:45 - 07:53		0:08	6	0:00	
OH	8205 - PPG Industries Inc	07:55 - 08:21		0:26	6	0:01	
OH	S619		0.3				2.0
OH	S585		0.3				30.0
OH	S21		0.3				30.0
OH	S21		10.9				56.1
OH	I77		3.0				47.6
OH	S16		1.3				45.9
OH	I271		2.0				42.2
OH	S16		0.3				32.0
OH	I71		14.7				57.1
OH	S82		2.4				26.5
OH	S82		9.1				36.1
OH	S83		0.4				15.3
OH	RTS - Yard	08:38 - 09:45		0:05	15	0:00	

**Personal Protective Equipment:**

A Chemmax 4 suit with hood suit, supplied air, rubber boots over the top of the encapsulated suit with work gloves over the top of the suit are required. **As, RTS Drivers do not typically have this equipment on their trucks, their response is limited to evacuation of the area and notification to Corporate EHS and/or outside emergency responders.**

**Emergency Response:**

If a leak is detected or suspected, RTS personnel should evacuate the area and prevent others from accessing the area. In the event of an emergency situation, i.e., spill, accident, fire, injury, etc.:

- RTS should make an assessment of the situation. In cases where immediate response is required, driver should call 911. After emergency services are notified, RTS Driver should contact the Director, Corporate EHS:
  - (440) 748-5847 or
  - (440) 537-2573
- If after assessment of the situation, the RTS Driver believes immediate response is **not** required, RTS Driver should contact the Director, Corporate EHS who will make a decision on how to respond:
  - (440) 748-5847 or
  - (440) 537-2573
- In either case, EHS will then contact PPG to inform them of the situation. PPG has a corporate contract for emergency response assistance and cleanup efforts. EHS will contact Specialty Response Solutions (“SRS”) and they will send support personnel and equipment through a network of contractors.

Emergency Contact Information

PPG SRS 24-hour Emergency Number 1-877-506-0025

Terry Rockwell (SRS VP) Cell 1-817-692-2048

PPG Emergency Response Team Members

Name	Home Phone	Mobile Phone
Aaron Beyea		603-275-4396
Danielle Chikar		828-337-4423
Ryan Campbell		248-302-9548
Kevin Mathis	330-612-0504	234-565-8481
Jamie Molder	330-854-1283	216-536-2580
Brian Satterfield		330-419-6665
Marisa Seeley		330-391-1098
Mark Thompson		419-571-3292
Shannon Willis		330-620-8570
Bob Yoho		330-819-1940

In the event of an exposure:

- The decision to seek medical attention will be on a case-by-case basis depending on the employee's symptoms. The Director, Corporate EHS will provide guidance with respect to response in the event of an exposure.
- Phosgene exposure symptoms are: eye irritation, burning throat, difficulty breathing, chest pain, rapid or delayed pulmonary edema, vomiting, coughing, and foaming sputum.
- Chloroformate exposure symptoms are – Irritation to eyes, nose and throat, difficulty breathing, irritation to skin. Any description of these symptoms indicates exposure.

**Decontamination Health & Safety:**

- If gross contamination has occurred, (employee was splashed with liquid concentrations on his skin and or clothes) the employee must be fully decontaminated immediately and before transport to medical facilities.
- In the event of gross contamination, personnel must shower to remove any gross contamination for a minimum of 15 minutes, regardless of weather. This must be timed on a watch for 15 minutes to prevent exposure. Protective clothing or other clothing that is contaminated should be removed prior to the removal of respiratory protection.
- All contaminated clothing and protective equipment must be collected and managed as a hazardous waste. Place contaminated clothes and PPE in a plastic bag, then in a second bag.
- Any persons attending to a contaminated employee must have the proper protective gear.
- Do not administer CPR until employee is fully decontaminated. Do not allow anyone to administer CPR on contaminated employees. Administer CPR only with breathing barriers and gloves supplied in the first aid cabinets.
- Send WPS, SDS, Handling Instructions, etc. with the injured employee to the medical facility. Inform the EHS on call person of the attending medical facility.

**SDSs attached.**

# Allyl Chloroformate

## Safety Data Sheet

SIGMA-ALDRICH

[sigma-aldrich.com](http://sigma-aldrich.com)

### SAFETY DATA SHEET

Version 4.3  
Revision Date 07/01/2014  
Print Date 07/27/2016

#### 1. PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Product identifiers

Product name : Allyl chloroformate  
Product Number : 242306  
Brand : Aldrich  
CAS-No. : 2937-50-0

##### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

##### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA  
Telephone : +1 800-325-5832  
Fax : +1 800-325-5052

##### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

#### 2. HAZARDS IDENTIFICATION

##### 2.1 Classification of the substance or mixture

###### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 1), H330  
Skin corrosion (Category 1B), H314  
Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

##### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H226 Flammable liquid and vapour.  
H301 Toxic if swallowed.  
H314 Causes severe skin burns and eye damage.  
H330 Fatal if inhaled.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.



# Allyl Chloroformate

## Safety Data Sheet

P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284	Wear respiratory protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P320	Specific treatment is urgent (see supplemental first aid instructions on this label).
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**  
Lachrymator.

---

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Formula	: C <sub>4</sub> H <sub>5</sub> ClO <sub>2</sub>
Molecular Weight	: 120.53 g/mol
CAS-No.	: 2937-50-0
EC-No.	: 220-916-6

**Hazardous components**

Component	Classification	Concentration
<b>Allyl chloroformate</b>	Flam. Liq. 3; Acute Tox. 3; Acute Tox. 1; Skin Corr. 1B; Eye Dam. 1; H226, H301, H314, H330	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

---

### 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.



# Allyl Chloroformate

## Safety Data Sheet

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

---

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: -20 °C

Vent periodically.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# Allyl Chloroformate

## Safety Data Sheet

---

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

##### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

##### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

##### Personal protective equipment

###### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

###### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

###### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

###### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

###### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

- |   |   |
|---|---|
| a) Appearance                                   | Form: clear, liquid<br>Colour: colourless   |
| b) Odour  | no data available   |
| c) Odour Threshold                              | no data available   |
| d) pH   | no data available   |
| e) Melting point/freezing point                 | no data available   |
| f) Initial boiling point and boiling range      | 27 °C (81 °F) at 15 hPa (11 mmHg) - lit.  |
| g) Flash point                                  | 31 °C (88 °F) - closed cup  |
| h) Evaporation rate                             | no data available   |
| i) Flammability (solid, gas)                    | no data available   |
| j) Upper/lower flammability or explosive limits | no data available   |
| k) Vapour pressure                              | 437.0 hPa (327.8 mmHg) at 55 °C (131 °F)<br>252.9 hPa (189.7 mmHg) at 20 °C (68 °F) |
| l) Vapour density                               | no data available   |
| m) Relative density                             | 1.134 g/cm <sup>3</sup> at 20 °C (68 °F)  |

# Allyl Chloroformate

## Safety Data Sheet

- |   |                   |
|---|-------------------|
| n) Water solubility                       | no data available |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Auto-ignition temperature              | no data available |
| q) Decomposition temperature              | no data available |
| r) Viscosity                              | no data available |
| s) Explosive properties                   | no data available |
| t) Oxidizing properties                   | no data available |

### 9.2 Other safety information

no data available

---

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong bases, acids, Alcohols, Amines

### 10.6 Hazardous decomposition products

Other decomposition products - no data available  
In the event of fire: see section 5

---

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - rat - 244 mg/kg

Remarks: Lungs, Thorax, or Respiration:Dyspnea.

LC50 Inhalation - rat - 32.4 mg/m<sup>3</sup>

Remarks: Lungs, Thorax, or Respiration:Dyspnea.

Dermal: no data available

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.



# Allyl Chloroformate

## Safety Data Sheet

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

no data available

no data available

### Specific target organ toxicity - single exposure

no data available

### Specific target organ toxicity - repeated exposure

no data available

### Aspiration hazard

no data available

### Additional Information

RTECS: LQ5775000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,  
Cough, Shortness of breath, Headache, Nausea

---

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

no data available

---

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

---

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 1722      Class: 6.1 (3, 8)      Packing group: I

Proper shipping name: Allyl chloroformate

Marine pollutant: No

Poison Inhalation Hazard: Hazard zone B

# Allyl Chloroformate

## Safety Data Sheet

### IMDG

UN number: 1722      Class: 6.1 (3, 8)      Packing group: I      EMS-No: F-E, S-C  
Proper shipping name: ALLYL CHLOROFORMATE  
Marine pollutant: No

### IATA

UN number: 1722      Class: 6.1 (3, 8)  
Proper shipping name: Allyl chloroformate  
IATA Passenger: Not permitted for transport  
IATA Cargo: Not permitted for transport

---

## 15. REGULATORY INFORMATION

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

### Massachusetts Right To Know Components

	CAS-No.	Revision Date
Allyl chloroformate	2937-50-0	1993-04-24

### Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Allyl chloroformate	2937-50-0	1993-04-24

### New Jersey Right To Know Components

	CAS-No.	Revision Date
Allyl chloroformate	2937-50-0	1993-04-24

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

---

## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
Flam. Liq.	Flammable liquids
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
Skin Corr.	Skin corrosion

### HMIS Rating

Health hazard:	4
Chronic Health Hazard:	
Flammability:	3
Physical Hazard	0

### NFPA Rating

Health hazard:	4
Fire Hazard:	3
Reactivity Hazard:	0

# Allyl Chloroformate

## Safety Data Sheet

### Further information

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### Preparation Information

Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956

Version: 4.3

Revision Date: 07/01/2014

Print Date: 07/27/2016





# Phosgene

## Safety Data Sheet

**SIGMA-ALDRICH**

[sigma-aldrich.com](http://sigma-aldrich.com)

### SAFETY DATA SHEET

Version 5.1  
Revision Date 07/10/2014  
Print Date 07/27/2016

#### 1. PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Product identifiers

Product name : Phosgene-<sup>13</sup>C

Product Number : 603406

Brand : Aldrich

CAS-No. : 53120-07-3

##### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

##### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

##### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

#### 2. HAZARDS IDENTIFICATION

##### 2.1 Classification of the substance or mixture

###### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Inhalation (Category 1), H330

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

##### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H314

Causes severe skin burns and eye damage.

H330

Fatal if inhaled.

Precautionary statement(s)

P260

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264

Wash skin thoroughly after handling.

P271

Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P284

Wear respiratory protection.

P301 + P330 + P331

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

# Phosgene

## Safety Data Sheet

P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P320	Specific treatment is urgent (see supplemental first aid instructions on this label).
P363	Wash contaminated clothing before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical characterization	:	Isotopically labeled
Formula	:	$^{13}\text{COCl}_2$
Molecular Weight	:	99.91 g/mol
CAS-No.	:	53120-07-3

#### Hazardous components

Component	Classification	Concentration
<b>Phosgene-13C</b>	Acute Tox. 1; Skin Corr. 1B; Eye Dam. 1; H314, H330	90 - 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

no data available

# Phosgene

## Safety Data Sheet

**5.3 Advice for firefighters**  
Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**  
no data available

### 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.  
For personal protection see section 8.
- 6.2 Environmental precautions**  
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- 6.3 Methods and materials for containment and cleaning up**  
Clean up promptly by sweeping or vacuum.
- 6.4 Reference to other sections**  
For disposal see section 13.

### 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling**  
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.  
For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Keep container tightly closed in a dry and well-ventilated place.  
Store under inert gas. hygroscopic
- 7.3 Specific end use(s)**  
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

##### Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Phosgene-13C	53120-07-3	TWA	0.1 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Pulmonary edema Pulmonary emphysema		
		TWA	0.1 ppm 0.4 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		15 minute ceiling value		
		C	0.2 ppm 0.8 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		15 minute ceiling value		
		TWA	0.1 ppm 0.4 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m <sup>3</sup> is approximate.		
		TWA	0.1 ppm 0.4 mg/m <sup>3</sup>	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

#### 8.2 Exposure controls

##### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.



# Phosgene

## Safety Data Sheet

### Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: gaseous
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	-126 °C (-195 °F)
f) Initial boiling point and boiling range	8 °C (46 °F)
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	1,573 hPa (1,180 mmHg) at 20 °C (68 °F)
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available

# Phosgene

## Safety Data Sheet

t) Oxidizing properties      no data available

### 9.2 Other safety information

no data available

---

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

no data available

In the event of fire: see section 5

---

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

LCL0 Inhalation - Human - male - 30.0 min - 360.0 mg/m<sup>3</sup>

Dermal: no data available

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

no data available

no data available

#### Specific target organ toxicity - single exposure

no data available

# Phosgene

## Safety Data Sheet

### Specific target organ toxicity - repeated exposure

no data available

### Aspiration hazard

no data available

### Additional Information

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Symptoms may be delayed. Causes severe destruction of the alveolae of the lungs resulting in pulmonary edema, suffocation and possible death. The onset of the pulmonary edema is delayed due to the slow hydrolysis of the material. Long term effects are emphysema, fibrosis, coughing, bloody sputum and general malaise. These symptoms may last several months.

---

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

no data available

---

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

---

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 1076      Class: 2.3 (8)  
Proper shipping name: Phosgene  
Reportable Quantity (RQ): 10 lbs  
Marine pollutant: No  
Poison Inhalation Hazard: Hazard zone A

### IMDG

UN number: 1076      Class: 2.3 (8)  
Proper shipping name: PHOSGENE  
Marine pollutant: No

EMS-No: F-C, S-U

### IATA

UN number: 1076      Class: 2.3 (8)  
Proper shipping name: Phosgene  
IATA Passenger: Not permitted for transport  
IATA Cargo: Not permitted for transport



# Phosgene

## Safety Data Sheet

### 15. REGULATORY INFORMATION

#### SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

	CAS-No.	Revision Date
Phosgene-13C	53120-07-3	2008-11-03

#### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Phosgene-13C	53120-07-3	2008-11-03

#### SARA 311/312 Hazards

Acute Health Hazard

#### Massachusetts Right To Know Components

	CAS-No.	Revision Date
Phosgene-13C	53120-07-3	2008-11-03

#### Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Phosgene-13C	53120-07-3	2008-11-03

#### New Jersey Right To Know Components

	CAS-No.	Revision Date
Phosgene-13C	53120-07-3	2008-11-03

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### 16. OTHER INFORMATION

#### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
Skin Corr.	Skin corrosion

#### HMIS Rating

Health hazard:	3
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

#### NFPA Rating

Health hazard:	4
Fire Hazard:	0
Reactivity Hazard:	0

#### Further information

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# Phosgene

## Safety Data Sheet

### Preparation Information

Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956

Version: 5.1

Revision Date: 07/10/2014

Print Date: 07/27/2016

# Isopropenyl Chloroformate

## Safety Data Sheet

**SIGMA-ALDRICH**

[sigma-aldrich.com](http://sigma-aldrich.com)

### SAFETY DATA SHEET

Version 3.8  
Revision Date 01/23/2015  
Print Date 02/25/2015

#### 1. PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Product identifiers

Product name : Isopropenyl chloroformate

Product Number : 23195

Brand : Fluka

CAS-No : 57933-83-2

##### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

##### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832

Fax : +1 800-325-5052

##### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

#### 2. HAZARDS IDENTIFICATION

##### 2.1 Classification of the substance or mixture

###### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1B), H314

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

##### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H225

Highly flammable liquid and vapour.

H301 + H311 + H331

Toxic if swallowed, in contact with skin or if inhaled

H314

Causes severe skin burns and eye damage.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P233

Keep container tightly closed.

Fluka - 23195

Page 1 of 8

~~HEAT OF SOLUTION:~~

~~Exothermic~~

Physical State:

Liquid.

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# Isopropenyl Chloroformate

## Safety Data Sheet

P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Lachrymator.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Formula	: C <sub>4</sub> H <sub>5</sub> ClO <sub>2</sub>
Molecular weight	: 120.53 g/mol
CAS-No.	: 57933-83-2
EC-No.	: 261-018-4

#### Hazardous components

Component	Classification	Concentration
Isopropenyl chloroformate	Flam. Liq. 2; Acute Tox. 3; Skin Corr. 1B; Eye Irrit. 2A; STOT SE 3; H225, H301 + H311 + H331, H314, H335	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

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# Isopropenyl Chloroformate

## Safety Data Sheet

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

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## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers.

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13.

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2 - 8 °C

Store under inert gas. Vent periodically. Moisture sensitive. Storage class (TRGS 510): Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# Isopropenyl Chloroformate

## Safety Data Sheet

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

##### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

##### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

##### Personal protective equipment

###### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

###### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

###### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

###### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

###### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: clear, liquid Colour: colourless
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	93 °C (199 °F) at 995 hPa (746 mmHg) - lit.
g) Flash point	10 °C (50 °F) - closed cup
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	1.103 g/cm <sup>3</sup> at 25 °C (77 °F)



# Isopropenyl Chloroformate

## Safety Data Sheet

n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

### 9.2 Other safety information

No data available

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong bases, Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

# Isopropenyl Chloroformate

## Safety Data Sheet

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

No data available

No data available

### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available

### Additional Information

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin..  
Cough, Shortness of breath, Headache, Nausea

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## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

---

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 3489

Class: 6.1 (3, 8)

Packing group: I

Proper shipping name: Toxic by inhalation liquid, flammable, corrosive, n.o.s. (Isopropenyl chloroformate)

Reportable Quantity (RQ):

Poison Inhalation Hazard: Hazard zone B

### IMDG

UN number: 3489

Class: 6.1 (3, 8)

Packing group: I

EMS-No: F-E, S-D

# Isopropenyl Chloroformate

## Safety Data Sheet

Proper shipping name: TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. (Isopropenyl chloroformate)

### IATA

UN number: 3489 Class: 6.1 (3, 8)

Proper shipping name: Toxic by inhalation liquid, flammable, corrosive, n.o.s. (Isopropenyl chloroformate)

IATA Passenger: Not permitted for transport

IATA Cargo: Not permitted for transport

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### 15. REGULATORY INFORMATION

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Isopropenyl chloroformate	57933-83-2	

#### New Jersey Right To Know Components

	CAS-No.	Revision Date
Isopropenyl chloroformate	57933-83-2	

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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### 16. OTHER INFORMATION

#### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H301 + H311 +	Toxic if swallowed, in contact with skin or if inhaled
H331	
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.

#### HMIS Rating

Health hazard:	4
Chronic Health Hazard:	
Flammability:	3
Physical Hazard	0

#### NFPA Rating

Health hazard:	4
Fire Hazard:	3
Reactivity Hazard:	0

# Isopropenyl Chloroformate

## Safety Data Sheet

### Further information

Copyright 2015 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

### Preparation Information

Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956

Version: 3.8

Revision Date: 01/23/2015

Print Date: 02/25/2015



# PPG Emergency Information

## PPG's Transportation Emergency Information

The Transportation Emergency Response Team (TERT) responds to transportation related spills and releases of PPG products in transit outside of PPG property. TERT members will provide support and guidance to outside agencies and clean-up contractors during such incidents. This may include driving to the scene of the incidents if within a reasonable distance (less than 4 hours) to provide onsite support.

**TERT Team Training Requirements.** TERT members are Hazardous Materials Specialists, whose role is to act as liaisons to emergency responders. All TERT members complete the following training:

1. 24 hour HAZMAT
2. 8 hour annual HAZMAT refresher
3. 8 hour Incident Commander
4. NIMS-IS-700 web based training
5. CPR & First Aid
6. Product specific overview
7. Chlorine C-Kit
8. All training is tracked in TRIM.

### **Transportation Emergency Response Procedures**

- Upon notification of a PPG product spill or release during shipment, the TERT member on coverage should be contacted.
- The TERT coverage person should come to the plant to receive additional information about the incident and pick up the "go bag" (located outside the shift supervisor's office). The "go bag" contains PPE and PPG product information.
- Call the PPG Emergency Response Center at Allison Park (412-434-4515) for incidents relating to PPG products.
- PPG has a corporate contract for emergency response assistance and cleanup efforts. Contact Specialty Response Solutions (SRS) and they will send support personnel and equipment through a network of contractors. SRS 24-hour Emergency Number 1-877-506-0025; Terry Rockwell (SRS VP) Cell 1-817-692-2048

<b>TERT Members</b>		
<b>Name</b>	<b>Home Phone</b>	<b>Mobile Phone</b>
<b>Dan Rusnock</b>	330-645-2678	330-310-0926
<b>Randy Brillhart</b>	330-855-9918	330-352-8643
<b>Ross Posey</b>	330-814-2234	330-352-0496
<b>Dave Warner</b>	330-658-8871	330-957-2035
<b>Larry Smart</b>		330-678-4538
<b>Ben Hoff</b>	330-464-7204	330-464-7204
<b>Amy Doty</b>		440-846-0018
<b>Bob Yoho</b>	330-484-4341	330-819-1940

**Transportation route when hauling a full load of phosgene from RTS to PPG:**

- 1) Travel south on 83 to 421 East Intersection
- 2) Take 421 East to PPG

**Transportation route when hauling a full load of phosgene from PPG to RTS:**

- 1) Travel on 421 West to 83 North
- 2) Turn onto 82 West to Giles Road



## RTS Driver Equipment List

Even though RTS has emergency response capabilities, RTS contracts with its affiliated sister companies, RES and RIS, for many response activities. The following list of equipment is available for use during an emergency and includes the location, a physical description, and the capabilities of each item. Additionally, protective clothing, including a respirator and a first aid kit with eyewash apparatus, are carried on each transport vehicle. Absorbent material is also carried in the cab of each transport vehicle when liquids are transported in containers of 110 gallons or less.

<u>Equipment</u>	<u>Location</u>	<u>Capability</u>
Fire Extinguisher:	Carried in all tractors on deck plate behind cab and on tanker trailers.	20 lb. dry chemical extinguishes flammable liquid and electrical fires.
Shovels:	Carried in cab of all trucks	Capable of diking small spills with earthen material.
Reflective Triangles:	Carried in all tractors.	Capable of marking emergency situations.
First Aid Kits:	Carried in all tractors.	Used for general first aid.
Flashlight:	Carried in all tractors.	Localizing lighting.
Body Protective Equipment:	Carried in all tractors.	Eyeglasses, gloves, coveralls, hard-hats, and respirators.
Eyewash Apparatus:	Carried in all tractors.	Capable of washing eye irritants out of eyes.
"Emergency Response Guidebook"	Carried in all tractors.	For hazardous material. Spills and fires.
Floor Dry:	Carried in all tractors.	Used for absorbing liquid spills.
Collapsible Utility Tray	Carried in all tractors.	Used for containing liquid spills.

## RTS Driver Training

RTS facility personnel complete a program of classroom instruction and on-the-job training that teaches them to perform their duties in a way that ensures employee safety and the facility's compliance with the applicable state and federal regulations.

All hazardous material handling/management personnel complete the training program within six months of their date of employment. New employees are not permitted to work in unsupervised positions until they complete the required personnel training. All personnel training is documented and then filed in the employee training records. Training records are maintained for current and former employees in perpetuity. No records are destroyed. Records are typically retained on-site for 3 years, and then archived off-site.

New drivers receive 60 to 120 hours of on the job training on topics such as RTS paperwork, drum condition requirements, manifest requirements, US DOT regulations and US EPA labeling requirements. On-the-job training is conducted by experienced drivers. Additionally, RTS conducts on-going training – quarterly. RTS uses the following types of training:

- lecture,
- personal discussion,
- tape/slides,
- videos,
- literature - self-taught, and
- literature - guided review/discussion.

Topics covered in training include: speeding policy, alcohol / narcotics / drug abuse, Hazardous Materials Regulations, areas critical to security compliance, pre-loading cargo acceptance, compatibility, marking, labeling, hazardous material identification on shipping papers, placarding, emergency procedures, emergency communications, rail / highway grade crossing procedures, driver logs, loading / bracing / blocking, customer site safety rule policy, bulk - loading/unloading procedures, equipment operation, equipment inspections, customer requirements and immediate emergency response measures.



The training is coordinated by a fulltime logistics and transportation safety manager, who reports to the RTS President. Records of training subjects are maintained for each driver and copies of specific driver training course curricula are available. Training is administered by a combination of company staff, professional firms and drivers. Specifically, RTS uses trainers from its sister companies RIS and RES. RTS has also used third party trainers such as JJ Keller, its Insurance Carrier's Loss Prevention group and the Ohio Department of Transportation.

Quarterly, RTS evaluates its transportation related activities to identify training needs. This evaluation identifies needs mandated by regulation, needs critical to safety and needs determined by quarterly operations. Specifically, RTS is in compliance with the DOT hazardous materials training requirements identified in 49 CFR 172.700 through 172.704. In addition to driver training, RTS offers training for managers and supervisors in management responsibility, reporting, investigating and analysis, promotion of safety and quality attitudes.

ATTACHMENT I  
VEHICLE LIST

RTS  
TRACTORS

No.	Yr	Plate	Model	Make	Serial Number	Own	Unladen Weight
511	2018	PWF5952	T680	Kenworth	1XKYD49X7JJ196288	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	22300
512	2019	PWJ8974	T680 Day cab	Kenworth	1XKYDP9XXKJ309864	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	15084
513	2019	PWK3621	T680	Kenworth	1XKYD49X2KJ294047	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	19052
514	2019	PWK3753	T680	Kenworth	1XKYD49X0KJ294046	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	37340
515	2020	PWL2046	T680	Kenworth	1XKYD49X0LJ361262	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	19,061
516	2020	PWL2047	T680	Kenworth	1XKYD49X2LJ361263	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	19,061
517	2020	PWL5269	T680	Kenworth	1XKYD49X5LJ361273	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	18,950
518	2020	PWL5052	T680	Kenworth	1XKYD49X7LJ361274	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	19,012
519	2021	PWN3725	T680	Kenworth	1XKYD49X6MJ447659	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21040
520	2021	PWN4647	T680	Kenworth	1XKYD49X5MJ448690	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	19031
521	2021	PWN4648	T680	Kenworth	1XKYD49X3MJ447652	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	22640
522	2021	PWB3270	T680	Kenworth	1XKYD49X1MJ447651	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	22640
523	2022	PWR4233	579	Peterbilt	1XPBD49X5ND781472	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	22,768
524	2022	PWR4270	579	Peterbilt	1XPBD49X3ND781471	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	22,768
525	2023	PWW1892	579	Peterbilt	1XPBDP9XXPD873827	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21700
526	2023	PWW1397	579	Peterbilt	1XPBDP9X8PD873826	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21700
527	2023	PWW1398	579	Peterbilt	1XPBDP9X9PD876315	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21400
528	2023	PWW1936	579	Peterbilt	1XPBDP9X1PD873828	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21700
529	2024	PWZ1020	579	Peterbilt	1XPBDP9X2RD680123	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21670
530	2024	PWZ1021	579	Peterbilt	1XPBDP9X1RD679884	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21280
531	2024	PWZ1022	579	Peterbilt	1XPBDP9XXRD679883	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21180
532	2024	PWZ1023	579	Peterbilt	1XPBDP9X0RD680122	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21670
533	2025	PWF5950	579	Peterbilt	1XPBDP9X6SD726400	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	22000
534	2025	PWF5951	579	Peterbilt	1XPBDP9XXSD726402	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	22000
535	2025	PWK3621	579	Peterbilt	1XPBDP9X35D726399	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	21000
536	2025	PXA9572	579	Peterbilt	1XPBDP9X8SD726401	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	2200
BT1	2021	PWN4649	T370	Kenworth	2NKHJ7X1MM441681	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	18020
V-1	2002	PWG3553	357 Supersucker	Peterbilt	1NPAL00X32D581071	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	35000
V-2	2022	PWR4234	567	Peterbilt	1NPCLP0X3ND770471	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	44,660
901	2015	PWP9088	579	Peterbilt	1XPBD49X0FD240122	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	17340
902	2014	PWP9811	Cascadia 125	Freightliner	1FUJGEBG3ELFT7292	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	18000
903	2014	PWQ0164	Cascadia 125	Freightliner	1FUJGEBG2ELFV0177	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	18000



ATTACHMENT I  
VEHICLE LIST

TANKERS

No.	Yr	Plate	Make	Serial	Owner	Unladen	Capacity
				Number		Weight	
111	1984	TNQ6809	BRENNER	10BGS6211EF007190	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	17140	6196 Gal.
118	1990	TNQ6810	ACRO	1A9114220L1005094	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	13220	6010 Gal.
129	1996	TTN4227	FRUEHAUF	2LT1D2G22TR000763	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	13300	7210 gal.
130	1997	TNQ6815	BRENNER	10BGB62S5VF0A7536	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	14820	6064 Gal.
131	1999	TPA7719	FRUEHAUF	1L922N2F3X1224086	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	13020	7237 Gal.
132	1998	TPA7706	TRAILMASTER	19DL452OW3G13209	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	10650	8000 Gal.
133	2001	TPC6368	FRUEHAUF	1L922M2F411224020	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	11460	6831 Gal.
134	1991	TPC6367	BRENNER	10BFV7216MF0A2571	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	12960	7032 Gal.
135	2001	TTE1486	FRUEHAUF	1L922N2FX11224061	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	13780	7114 Gal.
136	2004	TNA6807	ACRO	1A911412841005040	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	15180	6005 Gal.
137	2006	TPT3605	BRENNER	10BFB72T36F0B6991	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	12620	7104 Gal.
138	1996	TPV1127	POLAR	1PMS34322T1017722	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	11200	7061 Gal.
139	1996	TPV1129	POLAR	1PMS34324T1017723	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	11200	7061 Gal.
140	2007	TPZ3930	STNTE	1S9T2422670017139	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	14760	6163 Gal.
141	2008	TPL7587	TREMCAR	1T0DL43238S000292	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	9560	7000 Gal.
142	2016	TQR9371	TREMCAR	2TSL4324GB000441	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	16120	6000 Gal.
143	2000	TQS8875	POLAR	1PMS34221Y1021432	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	13420	7000 Gal.
144	1999	TQR9368	POLAR	1PMS34223X1021429	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	13260	7000 Gal.
145	2020	TRL6424	TREMCAR	2TSL4325LB000538	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	17920	6000 Gal.
146	2020	TRM3888	TREMCAR	2TSL4322LB000674	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	16440	6000 Gal.
147	2022	TRW9880	BRENNER	10BAAB238NF346158	ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	16600	6000 Gal.

ATTACHMENT I  
VEHICLE LIST

VANS

No.	Yr	Plate	Model	Make	Serial	Owner	Unladen	Capacity
					Number		Weight	
273	2000	TPC6372	VAN	Wabash	1JJV482W7YF674141	RTS	13721	88 Drums
274	2000	TRB8896	VAN	Wabash	1JJV482W9YF674142	RTS	13722	88 Drums
275	2000	TPT3603	VAN	Wabash	1JJV482W0YF674143	RTS	13723	88 Drums
279	2001	TPA4703	VAN	Great Dane	1GRAA06271B124101	RTS	20200	88 Drums
291	2003	TPJ4104	VAN	Great Dane	1GRAA06233B038637	RTS	15620	100 Drums
295	2003	TTG2323	VAN	Great Dane	1GRAA06283B038519	RTS	15620	100 Drums
299	2005	TPZ3971	VAN	STRICK	1S12E953X5E505100	RTS	10100	100 Drums
300	2005	TPZ3970	VAN	STRICK	1S12E95315E501663	RTS	10100	100 Drums
301	2005	TPZ3969	VAN	STRICK	1S12E95365E501660	RTS	10100	100 Drums
302	2008	TQM2227	VAN	UTILITY	1UYVS25338P260007	RTS	14860	100 Drums
303	2007	TQM2228	VAN	Great Dane	1GRAA06227B701282	RTS	14860	100 Drums
304	2008	TQM2229	VAN	UTILITY	1UYVS25318P260006	RTS	14860	100 Drums
305	2008	TQM2230	VAN	UTILITY	1UYVS25358P260008	RTS	14860	100 Drums
306	2008	TQM2231	VAN	UTILITY	1UYVS25378P260009	RTS	14860	100 Drums
307	2013	TRB6518	VAN	UTILITY	1UYVS2537DG491213	RTS	13620	100 Drums
308	2013	TQQ1669	VAN	UTILITY	1UYVS2536DG491221	RTS	13260	100 Drums
309	2017	TQU4259	VAN	Great Dane	1GRAA0626HB702405	RTS	13920	100 Drums
310	2017	TQU4260	VAN	Great Dane	1GRAA0628HB702406	RTS	13920	100 Drums
311	2017	TQU4261	VAN	Great Dane	1GRAA062XHB702407	RTS	13920	100 Drums
312	2017	TQU4262	VAN	Great Dane	1GRAA0621HB702408	RTS	13920	100 Drums
313	2017	TQU4263	VAN	Great Dane	1GRAA0623HB702409	RTS	13920	100 Drums
314	2017	TQU4264	VAN	Great Dane	1GRAA062XHB702410	RTS	13920	100 Drums
315	2017	TQU4265	VAN	Great Dane	1GRAA0621HB702411	RTS	13920	100 Drums
316	2017	TQU4266	VAN	Great Dane	1GRAA0623HB702412	RTS	13920	100 Drums
317	2017	TQU4267	VAN	Great Dane	1GRAA0625HB702413	RTS	13920	100 Drums
318	2017	TQU4268	VAN	Great Dane	1GRAA0627HB702414	RTS	13920	100 Drums
319	2012	TQV7440	VAN	Utility	1UYVS253XCP378905	RTS	13002	100 Drums
320	2012	TQV7441	VAN	Utility	1UYVS2531CP378906	RTS	13002	100 Drums



ATTACHMENT I  
VEHICLE LIST

LEASED *VANS*

No.	Plate	Model	Make	Serial Number	Owner	Unladen	Capacity
						Weight	
8001	541-5103	Leased Van	Hyundai	3H3V482C7LT400003	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8002	541-5104	Leased Van	Hyundai	3H3V482C9LT400004	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8003	541-5105	Leased Van	Hyundai	3H3V482C0LT400005	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8004	541-5106	Leased Van	Hyundai	3H3V482C2LT400006	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8005	541-5107	Leased Van	Hyundai	3H3V482C4LT400007	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8006	541-5108	Leased Van	Hyundai	3H3V482C6LT400008	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8007	541-5109	Leased Van	Hyundai	3H3V482C8LT400009	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8008	541-5110	Leased Van	Hyundai	3H3V482C4LT400010	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8009	541-5111	Leased Van	Hyundai	3H3V482C6LT400011	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	13390	88 Drums
8010	541-5112	Leased Van	Hyundai	3H3V482C8LT400012	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	88 Drums
9001	541-5083	Leased Van	Hyundai	3H3V532C5LT075111	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9002	541-5082	Leased Van	Hyundai	3H3V532C3LT075110	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9003	541-5079	Leased Van	Hyundai	3H3V532C3LT075107	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9004	541-5098	Leased Van	Hyundai	3H3V532C7LT075126	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9005	541-5078	Leased Van	Hyundai	3H3V532C1LT075106	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9006	541-5081	Leased Van	Hyundai	3H3V532C7LT075109	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9007	541-5084	Leased Van	Hyundai	3H3V532C7LT075112	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9008	541-5085	Leased Van	Hyundai	3H3V532C9LT075113	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9009	541-5086	Leased Van	Hyundai	3H3V532C0LT075114	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9010	541-5087	Leased Van	Hyundai	3H3V532C2LT075115	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9011	541-5088	Leased Van	Hyundai	3H3V532C4LT075116	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9012	541-5089	Leased Van	Hyundai	3H3V532C6LT075117	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9013	541-5090	Leased Van	Hyundai	3H3V532C8LT075118	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9014	541-5091	Leased Van	Hyundai	3H3V532CXLT075119	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9015	541-5092	Leased Van	Hyundai	3H3V532C6LT075120	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9016	541-5093	Leased Van	Hyundai	3H3V532C8LT075121	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9017	541-5094	Leased Van	Hyundai	3H3V532CXLT075122	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9018	541-5095	Leased Van	Hyundai	3H3V532C1LT075123	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9019	541-5096	Leased Van	Hyundai	3H3V532C3LT075124	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9020	541-5097	Leased Van	Hyundai	3H3V532C5LT075125	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9021	541-5080	Leased Van	Hyundai	3H3V532C5LT075108	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9022	541-5099	Leased Van	Hyundai	3H3V532C9LT075127	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9023	541-5100	Leased Van	Hyundai	3H3V532C0LT075128	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9024	541-5101	Leased Van	Hyundai	3H3V532C2LT075129	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9025	541-5102	Leased Van	Hyundai	3H3V532C9LT075130	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9026	508-0884	Leased Van	Hyundai	3H3V532K1PS403286	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9027	510-5524	Leased Van	Hyundai	3H3V532K1PJ536216	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9028	510-5525	Leased Van	Hyundai	3H3V532K3PJ536217	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9029	510-5526	Leased Van	Hyundai	3H3V532K5PJ536218	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9030	510-5527	Leased Van	Hyundai	3H3V532K3PJ536219	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9031	510-5529	Leased Van	Hyundai	3H3V532K5PJ536221	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9032	510-5528	Leased Van	Hyundai	3H3V532K7PJ536220	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9033	510-5535	Leased Van	Hyundai	3H3V532K6PJ536227	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9034	510-5536	Leased Van	Hyundai	3H3V532K8PJ536228	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9035	510-5561	Leased Van	Hyundai	3H3V532K7PJ536253	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9036	529-1663	Leased Van	Hyundai	3H3V532K4RJ181111	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9037	529-2171	Leased Van	Hyundai	3H3V532K3RJ548404	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9038	529-2172	Leased Van	Hyundai	3H3V532K5RJ548405	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9039	529-2174	Leased Van	Hyundai	3H3V532KXRJ548402	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9040	529-1665	Leased Van	Hyundai	3H3V532K8RJ181113	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9041	529-1664	Leased Van	Hyundai	3H3V532K6RJ181112	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9042	529-1666	Leased Van	Hyundai	3H3V532K1RJ548403	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9043	529-2170	Leased Van	Hyundai	3H3V532K8RJ548401	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9044	529-2173	Leased Van	Hyundai	3H3V532K1RJ181115	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums
9045	529-1667	Leased Van	Hyundai	3H3V532KXRJ181114	Transport Services, 10499 ROYALTON RD, N. ROYALTON, OH 44133	14520	100 Drums

ATTACHMENT I  
VEHICLE LIST

**ROLL OFF FRAMES**

No.	Yr	Plate	Model	Make	Serial		Owner	Unladen	
					Number			Weight	Capacity
154	2011	TRA1004	Roll-off Frame	DRAGON	1D9SH4829BC661717		ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	10480	20 tons
156	2014	TTL5338	Roll-off Frame	DRAGON	1D9SH4826EC661176		ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	16600	20 tons
157	2017	TRB3152	Roll-off Frame	DRAGON	591SH4825HC141209		ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044	16440	20 tons
158	2019	TPV6588	Roll-off Frame	DRAGON	591SH4827KC175062		ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044		20 tons
159	2025	TTT9968	Roll-off Frame	BENLEE	1B9D14828SB180161		ROSS TRANSPORTATION SERVICES, INC., 36790 GILES RD, GRAFTON, OH 44044		

ATTACHMENT I  
VEHICLE LIST

**SMALL TRAILERS**

No.	Yr	Plate	Model	Make	Serial	Owner	GVW
					Number		Weight
701	1987	TMS8905	ME510 Trlr	Crosley	UC9ME5105HRCCR075	RIS	960
702	1991	TQM2245	Sm. Trailer	Cleveland	C1091C18B20702330	RTS	900
704	2019	TRM3852	UXT-8.520TA70	United	56JTE202XKA167392	RES	4300
705	2022	TTB7248		United	7RXTE2026NA201044	RIS	5200
TT1	2009	TPF8634	US12S	America	1A9US12S091668344	RES	700
ET-01	2002	TRR7383	5T162ESBTW	Evans	1J9V116B020003618	RIS	2375
EHS-1	1995	TTT9957	DT	Hack	1HHEST21XSF002004	RIS	18020
706						RIS	2860

**CONTAINERS**

No.	Yr	Plate	Model	Make	Serial	Owner
					Number	
RB14				Counts Container	111925-16	RTS
RB15				Counts Container	111920-1	RTS
RB16				Counts Container	111920-2	RTS

## Davis, DaQuan (DNREC)

---

**From:** Dawn Palmer <dpalmer@rosstransportation.com>  
**Sent:** Friday, November 15, 2024 6:54 AM  
**To:** WHStranporters  
**Subject:** RE: Missing Corporate Officer Dates of Birth on Delaware Hazardous Waste Transporter Permit Application  
**Attachments:** RTS officers 2024.docx

Please see attached as requested

**From:** Davis, DaQuan (DNREC) <daquan.davis@delaware.gov> **On Behalf Of** WHStranporters  
**Sent:** Thursday, November 14, 2024 3:15 PM  
**To:** Dawn Palmer <dpalmer@rosstransportation.com>  
**Subject:** Missing Corporate Officer Dates of Birth on Delaware Hazardous Waste Transporter Permit Application

Hi Ms. Palmer,

Thank you for submitting your application to renew your Delaware Hazardous waste transporter permit. Upon review, I have found that some information is missing. Please address the item listed below:

- **Section 6-** Please provide all corporate officers' dates of birth. The dates were missing in Attachment A.

Please provide the information requested above via e-mail within five (5) days.

Thank you,



### DaQuan L. Davis

Environmental Scientist I

**Division of Waste and Hazardous Substances**

☎ 302-739-9403

✉ [daquan.davis@delaware.gov](mailto:daquan.davis@delaware.gov)

📍 89 Kings Hwy SW, Dover, DE 19901

🌐 [dnrec.delaware.gov](http://dnrec.delaware.gov)



ATTACHMENT A  
ROSS TRANSPORTATION SERVICES, INC.

CORPORATE OFFICERS AND DIRECTORS

William E Cromling III – Treasurer/Co-Chairperson/President

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

Birthdate: [REDACTED]

Christopher M. Fada – Vice President

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

Birthdate: [REDACTED]

Jon R. Cromling – Co Chairperson

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

Birthdate: [REDACTED]

Daniel C Urban – Secretary

Personal Address: [REDACTED]

Business Address: 36790 Giles Road, Grafton, OH 44044

Birthdate: [REDACTED]