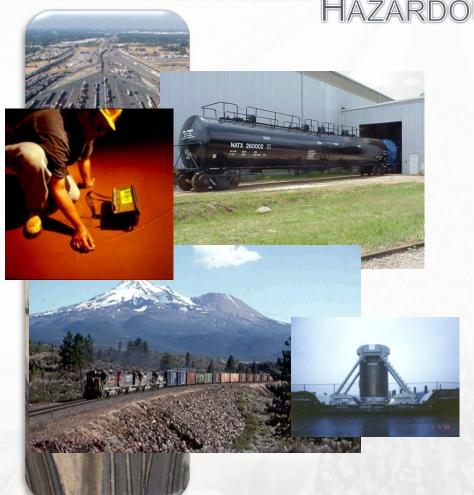


## FRA OFFICE OF SAFETY

## HAZARDOUS MATERIALS DIVISION



Kurt Eichenlaub Railroad Safety Specialist Hazardous Materials Division August, 2018



## **ONE-TIME MOVEMENT APPROVALS**







## ONE-TIME MOVEMENT APPROVALS

- 1. What is an OTMA and why do I need one?
- 2. How do I determine what level of OTMA I need?
- 3. What is the process for obtaining an OTMA?
- 4. What are the requirements for moving a car under an OTMA?
- 5. OTMA examples





# WHAT IS AN OTMA AND WHY DO I NEED ONE?







# PROHIBITED MOVEMENT OF HAZMAT PACKAGES

49 CFR 171.2(g) "(g) No person may represent, mark, certify, sell, or offer a packaging or container as meeting the requirements of this subchapter governing its use in the transportation of a hazardous material in commerce unless the packaging or container is manufactured, fabricated, marked, maintained, reconditioned, repaired, and retested in accordance with the applicable requirements of this subchapter...The requirements of this paragraph apply whether or not the packaging or container is used or to be used for the transportation of a hazardous material."



## ONE-TIME MOVEMENT APPROVAL

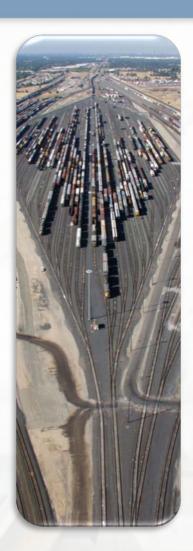
49 CFR §174.50 "Nonconforming or leaking packages. Except as otherwise provided in this section, a bulk packaging that no longer conforms to this subchapter may not be forwarded by rail unless repaired or approved for movement by the Associate Administrator for Safety, Federal Railroad Administration...A leaking bulk package containing a hazardous material may be moved without repair or approval only so far as necessary to reduce or to eliminate an immediate threat or harm to human health or to the environment when it is determined its movement would provide greater safety than allowing the package to remain in place."



# Two Primary Benefits of OTMAs

- Facilitates the safe movement of a damaged or nonconforming hazmat rail car to a destination where appropriate permanent repair and qualification can be performed.
- Provides a centralized data warehouse of in-service failures on tank cars that can be used by the tank car industry and the FRA to identify systemic safety issues and establish appropriate qualification intervals and operating practices.





# HOW DO I DETERMINE WHAT LEVEL OF OTMA I NEED?



## HAZMAT GUIDANCE 127 (HMG-127)

There are three levels of OTMAs specified in the HMG-127 Guidance:

https://www.fra.dot.gov/eLib/details/L15988#p1 z5 gD

- 1. OTMA-1 \* : Relatively higher risk movements
- OTMA-2: Overloaded Tank Cars
- 3. OTMA-3: Relatively low risk movements
- \*OTMA-1 applications may be changed to OTMA-3 via "specialist discretion" if upon initial review no additional information is needed and the FRA HM specialist determines the movement to be low risk.



## CRITERIA FOR DETERMINING OTMA LEVEL

- Nature of the non-conforming condition(s)
- Nature of the commodity
- Quantity of commodity
- Pressure in the Tank
- Route/Distance to Destination
- The nature of the temporary repair (if any) and who performed the repair (loading operator, emergency response contractor, or certified mobile unit)



## OTMA-3 STANDING APPROVAL

- Self-certification through eOTMA application and autogenerated approval confirmation.
- Limited to certain types of low risk defects, low risk material, and low risk quantities.
- Requires selection of a defective condition from the list provided in HMG-127.

(Note: misapplication of OTMA-3 can result in appropriate enforcement action, and could result in removal of OTMA-3 privileges)



## OTMA-3 DEFECTIVE CONDITIONS

#### Applicability for movement under an OTMA-3:

- A Loaded bulk packages (regulated material only)
- B Clean bulk packaging (cleaning certificate required)
- C Residue bulk packages (regulated material only)
- D Bulk package containing (loaded or residue) a nonregulated material

#### OTMA-3 Defect Numbers and Descriptions

#### Service Equipment-Top Fittings

Defect No. 1

Following replacement of a valve or fitting, with a nondefective valve or fitting, or closure to prevent the release of material (e.g., replacement of a defective vacuum relief valve with a pipe plug, or a liquid or vapor valve with a blind flange). A pressure relief device may only be replaced in kind. Applicability: A, B, C, D

Defect No.2

For repair (other than removal of the fitting) performed on a connection that is subject to qualification/requalification. This includes, but is not limited to, replacement of hinged manway cover eye bolts, external "O" rings on safety relief valves, tightening securement fasteners that does not result in damage or deformation of the stud or bolt securing an operating valve stem packing gland nut (other than a top operated bottom outlet). Applicability: A, B, C, D

Defect No.3	A bulk package/packaging with defective manway cover securement bolts where the number of defective manway cover securement bolts does not prevent achieving an adequate seal of the manway cover that would allow the cars to remain in compliance with 49 CFR § 173.24(b)(1) for the duration of the movement to the destination. Applicability: B, C, D
Defect No.4	A bulk package/packaging with <u>missing or damaged service equipment</u> <u>parts</u> , provided the service equipment is free from leakage (e.g., missing magnetic gauging device rod, top or bottom valve handles, a quick-inspect port cable, or pipe-plug chain). Applicability: A, B, C, D
Defect No.5	A bulk package/packaging requiring a leakage pressure test to verify the integrity of the completed repairs. Applicability: B, C, D
Defect No.6	A clean bulk packaging without damage to the tank. Applicability-B
Defect No.7	A general purpose bulk package/packaging (tank car) that has damage to the protective housing. Applicability: A, B, C, D

Administration

### Service Equipment-Bottom Fittings

Defect No. 8

Defective bottom outlet valve, provided the material is contained by the application of the secondary closure. This does not include the flanged connection between the valve and tank, or any other damage inboard of the primary valve. Applicability: B, C, D

Defect No.9

A bulk package/packaging that has the primary bottom discontinuity closure intact, but has incurred damage to the secondary closure portion of the bottom discontinuity and/or bottom discontinuity protection.

Applicability: B, C, D

Defect No. 10

Securing an operating valve stem packing gland nut.

Applicability: A, B, C,D

### Interior Coating/Lining

Defect No. 11

A bulk package/packaging with a defective interior lining or coating that has not resulted in damage to the tank (bulk packages/packaging with a defective coating or lining installed for product purity is not subject to these safety measures). Applicability: B, C, D

### Heater Coils

Defect No. 12

A bulk package/packaging with a defective interior heater coil.

Applicability: B

Defect No. 13

A bulk package/packaging with a defective exterior heater coil provided the defect does not introduce a flow path into the product space or otherwise compromise the integrity of the tank. Applicability: A, B, C, D

### Jacket/Insulation

Defect No. 14

A bulk package/packaging that has incurred damage solely to its jacket, such that the jacket is no longer "weather-tight," provided there is no damage to the tank. Applicability: A, B, C, D

### Derailment Damage

Defect No. 15

A bulk package/packaging with damage resulting from a collision or derailment, which is loaded onto or into another rail car conveyance such as a flatear or goodela car. Applicability: B. C.

Administration

## OTMA-2 OVERLOADS

- Approval for overloaded tank cars
  - Generally not issued for tank cars overloaded by volume (49 CFR 173.24b).
  - Requires Verification that the car is not overloaded by volume. Thus, to be processed efficiently we need specific information from the loader (specific gravity of material at loading temperature and reference temperature, innage/outage tables, capacity of the tank in gallons, scale tickets, etc.)



## OTMA-1 TRADITIONAL

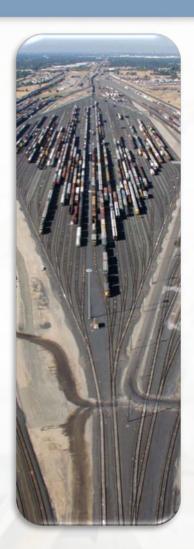
- Applies to all other non-conforming conditions not specified by HMG-127 as OTMA-3 or OTMA-2.
- All damage to the tank shell or heads, unless loaded on a flatcar.
- All non-conforming cars with load or residue of Inhalation Hazard material.
- Most scenarios that require a temporary repair of leaking service equipment or that affect the transport worthiness of the car.



# OTMA-3 VIA SPECIALIST DISCRETION

- An OTMA-1 application that upon initial review by a HM Specialist may be changed to an OTMA-3:
  - Is complete. No additional information is required.
  - All possible precautions have been taken (i.e., temporary repairs, emptying, depressurizing, etc.) for safe transportation.
  - No additional conditions for movement are necessary.





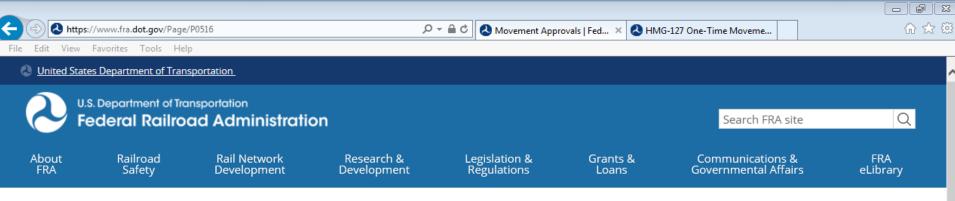
# WHAT IS THE PROCESS FOR REQUESTING AND OTMA?

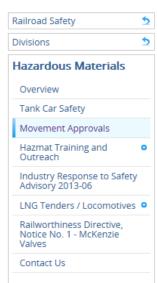




Administration

## MOVEMENT APPROVAL WEBSITE





Home Page // Railroad Safety // Divisions // Hazardous Materials // Movement Approvals

### **Movement Approvals**

FRA has the enforcement authority and responsibility to ensure the safe transportation of hazardous materials. Movement approvals are required for certain types of hazardous material shipments, such as a one time shipment of hazardous material carrying tank cars for repair and other non-conforming packagings designed, marked or otherwise represented for the transportation of hazardous material. On January 31, 2012, FRA issued HMG-127 and implemented a 4-tier approval process for such movements. HMG-127 was revised on March 27, 2012, resulting in a 3-tier approval process. The most recent version of HM-127 was issued October 7, 2014 and should be followed when applying for a one-time movement approval in accordance with 49 CFR § 174.50.

eOTMA: Web Based Application for One-Time Movement Approval

#### Contact Us

- Federal Railroad
  Administration
  RRS-12 Mail Stop 25
  1200 New Jersey Ave,
  SE Washington, DC 20590
- 202-366-2535

#### eLibrary

Approval Application for Nonconforming Packages

FRA Policy With Respect to Overweight Tank Cars

HMG-127 - One Time Movement Approvals



### Information Necessary to Obtain Federal Railroad Administration Movement Approval

[Collection of this information is authorized under OMB Control Nos. 2137-0557 and 2137-0559.]

Cover Letter | Electronic OTMA Application (Rel. v3.0) | Electronic Submissions Instructions

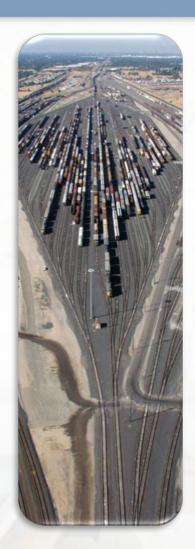
Action:   Submit a New A	pplication				
Date of Application:	07/24/2018			Approval Number:	TBD
☐ Check here if you have submitted an application in the past					
Company Name: *	FRA Chemical				
Mailing Address: *	1200 New Jersey Avenue, SE				
	City: * Washington			State: * District of Co 🗸 Zip:	* 20590
	☐ Click here if foreign address				
Company Fax (facsimile) #:					
Company Contact: *	Kurt Eichenlaub				
Title / Position: *	HM Specialist				
Contact Telephone # *	(202) 493-6050 Ext	t C	ontact Email Address: *	kurt.eichenlaub@dot.g	ov
☐ Is the Tank Car Owner th	e same as the Company a	and Contact inf	ormation entered in the p	previous section?	
Tank Car Owner: *	FRA Tank				
Contact Name: *	Ernie Sirotek				
Contact Telephone # *	(916) 409-9359 Ext	t C	ontact Email Address: *	ernie.sirotek@dot.gov	
Reporting Mark & Number: * FRAX - 12345					
Type of Rail Car/Bulk Package: * Tank Car					
DOT tank car/bulk package DOT117J100W1					
☐ Special Permit Packaging? If so, enter the special permit number (e.g., SP-00001)					

Complete Hazardous Materials Description: Is the packaging * O Full • Residue O Cleaned and Empty				
Note: If "Cleaned and Empty" is selected, the cleaning certificate must be attached.				
DOT Proper Shipping Name: * petroleum crude oil				
Technical Name (Chemical Name):				
Click here to enter a Non-Hazardous Materials description				
DOT Hazard Class: * Subsidiary Hazard Class:				
UN/NA Identification #: * UN1267 ✓ P.G. Number: * U				
Where did this shipment originate?				
Facility: * DOT HQ				
City: * Washington				
Original Shipper Point of Contact				
Name: * Max Phone #: * (555) 555-5555 Email Address: * Max@abcd.com				
Present Location of Car				
Check here if address and contact information is the same as shipment origination provided in the previous section				
Facility or Carrier: * DOT HQ				
City: ★ Washington State: ★ District of Columbi: ✔ □ Click here if foreign address				
Present Location Point of Contact				
Name: * Kurt Eichenlaub Phone #: * (555) 555-5555 Email Address: * kurt.eichenlaub@dot.gov				
Planned Destination 1 of this move				
Facility: * TTCI				
City: * Pueblo State: * Colorado ✓ ☐ Click here if foreign address				
Planned Destination 1 Point of Contact				
Name: * Ernie Sirotek Phone #: * (916) 409-9359 Email Address: * ernie.sirotek@dot.gov				
Total mileage from present location to destination 1: * 1600 miles				
Planned rail route: * CSX-NS-BNSF-UP				

What is the defective condition? *	OOTMA-1 OOTMA-2 ●OTMA-3				
Railroad Notifications: (Select railroads to receive email copy of approval)	☑ BNSF Railway (BNSF) ☐ Canadian National Railway (CN) ☐ Canadian Pacific Railway (CP) ☐ Conrail (CR)	✓ CSX Transportation (CSX)  ☐ Interimage (II)  ☐ Kansas City Southern (KCS)  ✓ Norfolk Southern (NS)			
OTMA-3 Defect Category: *	Service Equipment-Top Fittings				
OTMA-3 Criteria: *	• Defect No. 1: Following replacement of a valve or fitting, with a nondefective valve or fitting, or closure to prevent the release of material (e.g., replacement of a defective vacuum relief valve with a pipe plug, or a liquid or vapor valve with a blind flange). A pressure relief device may only be replaced in kind.				
	O Defect No. 2: For repair (other than removal of the fitting) performed on a connection that is subject to qualification/requalification. This includes, but is not limited to, replacement ofhinged manway cover eye bolts, external "0" rings on safety relief valves, tightening securement fasteners that does not result in damage or deformation of the stud or bolt securing an operating valve stem packing gland nut (other than a top operated bottom outlet).				
	O Defect No. 3: A bulk package/packaging with defective manway cover securement bolts where the number of defective manway cover securement bolts does not prevent achieving an adequate seal of the man way cover that would allow the cars to remain in compliance with 49 CFR § 173.24(b)(l) for the duration of the movement to the destination.				
	O Defect No. 4: A bulk package/packaging with missing or damaged service equipment parts, provided the service equipment is free from leakage (e.g., missing magnetic gauging device rod, top or bottom valve handles, a quick-inspect port cable, or pipe-plug chain).				
	O Defect No. 5: A bulk package/packaging requiring a leakage pressure test to verify the integrity of the completed repairs.				
	O Defect No. 6: A clean bulk packaging without damage to the head or shell.				
	O Defect No. 7: A general purpose bulk package/packaging that has damage to the protective housing.  O Rail Worthiness Directive (RWD)				
OTMA-3 Applicability: *	C - Residue bulk packages				
Defective Conditions: *	9	Selected Defective Conditions:			

OTMA-3 Applicability: *	C - Residue bulk packages
Defective Conditions: *	Selected Defective Conditions:
Service Equipment Connection - Flanged Service Equipment Connection - Threade Top Fitting - Air Inlet Valve Top Fitting - Gauging Device Top Fitting - Pressure Plate/Fittings Plate Top Fitting - Pressure Relief Device Top Fitting - Sample Valve Top Fitting - Vacuum Relief Valve Top Fitting - Vapor Valve	d The state of the
Provide a detailed explanation of the d	efective condition: 3-End liquid valve was found to be leaking product in the closed position.
	n, the measures you are taking to ensure the safe movement of this car: * aced with a blind flange. The car is empty and only contains residual
**** Note	e: Attach with this application a copy of the original shipping paper. *****
Add	Another Attachment
or failure to comply with the conditions compliance with 49 CFR § 174.50, and a	rately represent the defective condition of the tank car, failure to disclose additional defective conditions, and limitations set forth in One-Time Movement Approval Procedures (HMG-127) is considered non-uppropriate enforcement action may be taken.  TE OR INACCURATE INFORMATION WILL RESULT IN DELAY PROCESSING!
INCOMPLE	TE ON INACCONATE INFORMATION WILL RESULT IN DELAT PROCESSING:
Enter verification: *	n not a robot  reCAPTCHA Privacy - Terms
	Reset Form Submit Save PDF Copy





WHAT ARE THE REQUIREMENTS
FOR MOVING A CAR UNDER AN
OTMA?



## GENERAL REQUIREMENTS

- Notifications
- Shipping Paper Notations
- Marking/Labeling
- Root Cause (Appendix A to HMG-127 provides format)
- Additional requirements specified in the written approval (OTMA-1)

Administration

## Notifications

- > Tank Car Owner
- Railroads
- Destination facility





## SHIPPING PAPER NOTATIONS

The offeror must include a notation in association with the basic shipping description on the shipping paper:

"Moving per 174.50: OTMA-1"

"Moving per 174.50: OTMA-2"

"Moving per 174.50: OTMA-3"

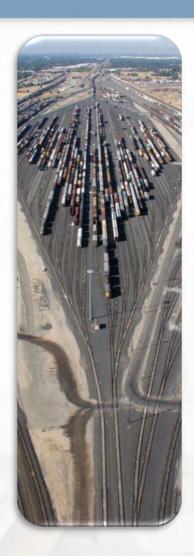


## MARKING/LABELING









# WHAT IS THE PROCESS FOR REQUESTING AND OTMA?



## OTMA-1



U.S. Department Of Transportation Federal Railroad Administration 1200 New Jersey Ave., SE Washington, D.C. 20590

#### FRA-170609275

EXPIRATION DATE: July 31, 2017

GRANTEE: DOT Inc.

1200 New Jersey Ave, SE Washington, DC 20590

- 2. PURPOSE: This approval authorizes the one-time movement of a DOT specification tank car that meets all DOT requirements except there is a small crack in the shell of the car located where the A-end braking system bracket is welded directly to the tank shell. The bracket weld is broken and product seeped out of the crack. The car has been cleaned and purged. The car will be moving to a certified facility for evaluation and repair. This approval addresses non-conformities under the Hazardous Materials Regulations only and provides no relief from any regulation other than as specifically stated.
- REGULATIONS AFFECTED: 49 CFR §171.2(g); §173.22(a)(2)(i) and (ii); §173.24(d)(1); §173.29(a); §173.31(a) & (d); and §179.100-13(a) [as to the disclosed condition]. This approval provides no relief from the regulatory requirement that a hazardous material package offered for transportation retain its contents during transportation.
- BASIS: This authorization is based on the Grantee's written application dated June 23, 2017, and additional documents, submitted in accordance with 49 CFR §174.50.
- HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description				
Identification Proper Shipping Name Number		Hazard Class/Division	PG	
N/A	N/A			

REPORTING MARK, NUMBER AND SPECIFICATION(S):

FRAX 208850 is a DOT 111A100W1 specification tank car.

ROUTING, MOVEMENT and OPERATIONAL CONTROLS:



U.S. Department of Transportation Federal Railroad Administration 1200 New Jersey Ave., SE Washington, D.C. 20590

Confirmation Number: AA000000000 Application was updated on: 07/26/2018

#### Detailed information pertaining to this application:

Reporting Mark/Number: FRAX-40196

Company Name: FRA

Company Contact: KURT EICHENLAUB

Title/Position: FIELD MAINTENANCE COORDINATOR

Contact Telephone # (000) 000-0000

Contact Email Address: Kurt.eichenlaub@dot.gov DOT tank car/bulk package specification: 112J400W

Complete Hazardous Materials Description: Is the packaging Full

DOT Proper Shipping Name: ISOBUTYLENE

Technical Name (Chemical Name):

Non-Hazardous Materials description: N/A

DOT Hazard Class: 2.1

UN/NA Identification # UN1055

P.G. Number: N/A

Present Location of Car: BROOKLAWN, Louisiana

Planned Destination 1 of this move: BATON ROUGE, Louisiana

Destination 1 Planned rail route: KCS

Planned Destination 2 of this move: N/A Destination 2 Planned rail route: N/A

Planned Destination 3 of this move: N/A

Destination 3 Planned rail route: N/A

Total mileage of this movement: 6 miles

OTMA-3 Defect Category: OTMA-3

OTMA-3 Defect No. 14

OTMA-3 Criteria: Defect No. 14: A bulk package/packaging that has incurred damage solely to its jacket, such that the jacket is no longer "weather-tight," provided there is no damage to the tank shell or tank head.

OTMA-3 Applicability: A - Loaded bulk packages

Defective Conditions Items: Jacket Damage - Holes (Corrosion)

Defective Conditions Explanation: HOLES IN JACKET, CORROSION ON STUB SILL



## OTMA-1 SPECIALIST DISCRETION

An OTMA may be changed from an OTMA-1 to an OTMA-3 by specialist discretion. In this case you will receive an OTMA-3 approval that includes:



U.S. Department of Transportation Federal Railroad Administration 1200 New Jersey Ave., SE Washington, D.C. 20590

Approval Number: FRA-XXXXXXXXX \* AUTHORIZED BY SPECIALIST DISCRETION \*



## OTMA-2

#### FRA-XXXXXXX OTMA-2 for FRAX 28821 - Overloaded by

Weight July 26, 2018

GRANTEE: FRA Inc. Kurt.

I have reviewed your One-Time Movement Approval (OTMA) application for FRAX 28821, a load of UN 2315, Polychlorinated Biphenyls, Liquid, 9, PG III, RQ (Polychlorinated Biphenyls) Marine Pollutant, overloaded by 5,700 pounds and have determined it may move under the provisions of OTMA-2. Movement of the car is authorized from its current location at the BNSF Railway's (BNSF) rail yard in Tulsa, OK on to the consignee, XXXXXXXX in LaPorte, TX, routed direct on the BNSF traveling for a total distance of approximately 578 miles.

Please ensure all shipping papers are marked with the required annotations, i.e., the movement approval number assigned, the notation "Moving per 174.50: OTMA-2 – Overloaded by Weight – FRA-XXXXXXXX, DO NOT HUMP and CUT OFF IN MOTION" and ensure that file copies of this approval are maintained. However, due to the fact the car is reported as being overloaded by weight the "HOME SHOP FOR REPAIRS –DO NOT LOAD" stenciling requirement is waived.

Be advised, it is the shipper's responsibility to ensure the car is not overloaded by volume and the car complies with the provisions of  $\S173.24b(a)(1)$ .

Although the FRA has authorized this move the move is contingent on the carriers' agreement and stipulations.

A root cause report is required. No later than 60 days from the date of issuance of this approval the FRA Inc. shall ensure that a root cause report is submitted to the FRA that identifies the root cause on how the car came to overloaded by weight and all actions taken by the Grantee to prevent a recurrence. This report may be provided to the FRA via e-mail at <a href="mailto:HMASSIST@DOT.GOV">HMASSIST@DOT.GOV</a> with the FRA Movement Approval authorization # - FRA-XXXXXXXX referenced in the subject line of the e-mail.

Nothing in this approval limits the Federal Railroad Administration from pursuing enforcement, including the collection of civil penalties, for any violations which pre-date this approval.

Geffrey S. Moore
Hazardous Materials Specialist For,

Robert C. Lauby

Associate Administrator for Railroad Safety/Chief Safety Officer



## OTMA RESOURCES

FRA OTMA Approval Web Page:

https://www.fra.dot.gov/Page/P0516

FRA eOTMA Application:

https://safetydata.fra.dot.gov/otma/

OTMA Procedures (HMG-127 Revision 4)
<a href="https://www.fra.dot.gov/eLib/details/L15988#p1">https://www.fra.dot.gov/eLib/details/L15988#p1</a> z5 gD

OTMA Program Email Address: <a href="mailto:HMASSIST@DOT.GOV">HMASSIST@DOT.GOV</a>



# Questions?