



U.S. DEPARTMENT OF  
**ENERGY**



## U.S. Department of Energy Carlsbad Field Office Update

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Denver, CO

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**EM Environmental Management**

safety ♦ performance ♦ cleanup ♦ closure

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# Roadmap: EM Journey to Excellence

- Dr. Inés R. Triay - *“...It will serve as our guide by clearly defining our destination, the path we will take to reach our destination, the principles by which we will behave, and how we will measure our progress on the way.”*
- **Goal 3. Complete disposition of 90 percent of the legacy transuranic waste by the end of 2015.**
  - CBFO is responsible for providing resources to characterize, transport, and dispose of the certified defense TRU waste at WIPP.
- **Goal 4. Reduce the EM legacy footprint by 40 percent by the end of 2011, leading to approximately 90 percent reduction by 2015.**
  - CBFO will indirectly support Goal 4 by footprint reduction of legacy TRU waste at generator/storage sites

# *WIPP Transportation Services Acquisition*

- The U.S. Department of Energy (DOE) released the Final Request for Proposal (RFP) on March 30, 2011 for the WIPP Transportation Services
  - <http://www.emcbc.doe.gov/WIPP/index.php>
  - For continuation of carrier services to transport TRU waste between sites and WIPP
- Primary point of contact:  
**Lori Conroy**  
**Contracting Officer**  
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- Additional information can be found at:  
[www.emcbc.doe.gov/WIPP/index.php](http://www.emcbc.doe.gov/WIPP/index.php)

# *Financial Picture*

- A budget call has not been issued because of the fiscal uncertainty
- Start preparing budgets for FY-12 taking the following into consideration:
  - Budget increases will not be considered.
  - Plan on a 6% reduction from your FY-11 approved budget.
- CBFO currently considering a 6% reduction for this fiscal year as well.

## Incidents/Accidents September 2010 – March 2011

| Date of Issue |          |     | Carrier | Shipment   | Trailer | Tractor | Event type   | Breakdown notification [link]                        | Delay?                                       | Other info.  |
|---------------|----------|-----|---------|------------|---------|---------|--|--|--|--|
| Year          | Month    | Day |         |            |         |         |  |  |  |  |
| 2010          | 9 (Sep)  | 9   | VS      | INR10027   | n/a     | V04     | Nail in tractor tire                                   | <a href="#">OOS 090910.pdf</a>                       | 3 hrs.                                       | Tractor tire had nail in it. Was not flat but tire had to be repaired prior to shipment release.   |
| 2010          | 9 (Sep)  | 12  | CAST    | MTIN100465 | n/a     | C34     | Dispatch error caused shipment delay                   | <a href="#">CAR 2010-001 rev 2.pdf</a>               | 24 hr delay of corresponding loaded shipment | Dispatch miscommunication caused empty shipment to depart WIPP late for the second time in just over a month. CAST had new driver manager that was learning scheduling process. CAR written. See attached  |
| 2010          | 9 (Sep)  | 27  | VS      | n/a        | n/a     | n/a     | Trailer inspection, Non-shipment related               | <a href="#">Trailer refurbishment 92710.pdf</a>      | no   | Trailer 305 was found to be unacceptable for use after refurbishment work was completed. Tagged OOS by VS personnel. Non-shipment related.   |
| 2010          | 9 (Sep)  | 23  | VS      | IN100497   | n/a     | V10     | Tractor brake chamber air leak                         | <a href="#">OOS 92310.pdf</a>                        | 3 hrs.                                       | Tractor brake chamber had air leak. Discovered at Ft. Collins POE. Repaired on scene and shipment continued trip.  |
| 2010          | 9 (Sep)  | 25  | VS      | IN100501   | n/a     | V12     | Route deviation, No fault                              | <a href="#">Route Deviation 10-06-09.pdf</a>         | 10 minutes                                   | Route deviation occurred due to traffic conditions. Driver immediately notified CMR and followed procedure to get back on route.   |
| 2010          | 10 (Oct) | 4   | VS      | IN100527   | n/a     | V19     | Exhaust leak on tractor                                | <a href="#">OOS 100510.pdf</a>                       | 4 hrs  | Tractor found to have exhaust leak at Ft. Collins POE. Repaired on scene and shipment continued trip   |
| 2010          | 10 (Oct) | 2   | CAST    | MTIN100512 | n/a     | C27     | Tractor defroster blower not working                   | <a href="#">DOE Notification C-27 10-02-2010.pdf</a> | 24 hrs                                       | Driver discovered prior to CVSA inspection. Defroster is a level VI inspection item so this had to be repaired.  |
| 2010          | 10 (Oct) | 6   | CAST    | SR100057   | n/a     | C19     | Route deviation  | <a href="#">DOE Notification C-19 10-06-2010.pdf</a> | 40 minutes                                   | 2nd unauthorized route deviation. Driver removed from qualified driver list per contract terms.  |
| 2010          | 10 (Oct) | 27  | VS      | n/a        | RH-03   | V09     | Trailer dropped during coupling                        | <a href="#">Trailer RH003 drop.pdf</a>               | n/a  | VS driver coupling to trailer at EPD had trailer slide off tractor tail as he was pulling forward. CAR attached.   |
| 2010          | 10 (Oct) | 31  | CAST    | IN100594   | 335     | C24     | False report of vapor/liquid coming out of TRUPACT top | <a href="#">DOE Notification C-24 1-1-10.pdf</a>     | 3 hrs.                                       | Near Walsenburg CO another CMV thought he saw liquid coming from the top of a TRUPACT. He contacted law enforcement authorities and the shipment was stopped for inspection. CO Level VI inspector responded, inspected shipment and found no discrepancy other than lift pocket cover had come loose and was hanging from lanyard. Shipment allowed to continue trip. I-25 was closed by local sheriffs dept. for approx. 30 minutes so CBFO made HQ notifications per procedure. |

# Incidents/Accidents

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|---------------|----------|-----|---------|------------|---------|---------|--|---|--|---|
| Year          | Month    | Day |         |            |         |         |  |   |  |   |
| 2010          | 10 (Oct) |     | VS      | IN100592   | n/a     | V02     | Drive illness  | <a href="#">Shipment delay 110210.pdf</a>           | 48 hr  | Driver became ill at INL prior to shipment departure on a Saturday. Delayed until Monday due to no shipments on Sunday.   |
| 2010          | 11 (Nov) |     | VS      | IN100599   | 376     | V18     | Trailer tire replacement                                 | <a href="#">Shipment delay 110210a.pdf</a>          | 24 hr  | VS drivers pulling CAST trailer discovered bad tire prior to inspection. CAST was unable to get repair done in time for inspection that day causing a 24 hr delay.                                |
| 2010          | 11 (Nov) |     | CAST    | MTIN100598 | 361     | C31     | Trailer dropped while uncoupling                         | <a href="#">DOE Notification 11-06-10 tr361.pdf</a> | n/a  | CAST driver failed to have landing gear down far enough, which caused light-bar damage when he pulled tractor away from trailer during un-coupling  |
| 2010          | 11 (Nov) |     | VS      | SRR10011   | RH06    | V13     | Trailer Wheel Bent                                       | <a href="#">Shipment delay 111210.pdf</a>           | 3 hrs.                                       | Driver hit curb pulling out of parking lot at truck-stop in MS which bent wheel. Wheel was replaced and shipment resumed.   |
| 2010          | 11 (Nov) |     | VS      | AER10036   | n/a     | V17     | Route Deviation  | <a href="#">Route Deviation 11-17-09.pdf</a>        | 10 minutes                                   | (1st deviation) missed exit in Nebraska at I-76/I-80 split. CMR had to notify driver of deviation. CAR in process.  |
| 2010          | 12 (Dec) |     | CAST    | n/a        | CH-MLU3 | C35     | Landing Gear damage                                      | <a href="#">DOE Notification 12-21-10.pdf</a>       | n/a  | CAST drivers picking up MLU trailer from SNL found landing gear damaged. SNL had moved trailer. Investigation ongoing.  |
| 2011          | 2 (Feb)  | 27  | CAST    | MTRS110019 | 337     | C-24    | Tractor breakdown.                                       | <a href="#">DOE Notification C-24 2-27-11.pdf</a>   | 16.5 hours downtime, 24 hour shipment delay. | Tractor had engine problems that required them to wait for a repair shop to open the next morning. Ended up causing a 24 hour delay of loaded shipment.   |
| 2011          | 2 (Feb)  | 28  | CAST    | MTIN110014 | 324     | C-27    | Engine Shutdown Light                                    | <a href="#">DOE Notification C-27 2-28-11.pdf</a>   | 8 hours of downtime, 24 hrs. shipment delay  | Tractor had engine problems that required diagnostics. Ended up causing a 24 hour delay of loaded shipment.   |
| 2011          | 2 (Feb)  | 28  | CAST    | MTIN110016 | 345     | C-31    | Cracked Winshield  | <a href="#">DOE Notification C-31 2-28-11.pdf</a>   | N/A  | Windshield crack was repaired in Pocatello, ID.   |
| 2011          | 3 (Mar)  | 2   | CAST    | SR110016   | 337     | C-26    | Haz-Mat permit   | <a href="#">DOE Notification C-26 3-2-11.pdf</a>    | N/A  | Driver departed from terminal with expired HAZMAT permit for truck. Terminal Manager was able to get new permit to drivers in time to make shipment without delay. CAST will submit NCR on issue. |
| 2011          | 3 (Mar)  | 4   | CAST    | IN110027   | 345     | C-22    | Drivers departed generator site without shipment papers. |   | N/A  | INL personnel drove shipping papers to location of truck. Delay time was while awaiting shipping papers.  |

# *Lessons Learned*

- Incident: Route Deviation
- Lessons Learned:
  - Carriers must take additional steps to ensure drivers are familiar with routes
  - Carriers should investigate installation of “turn-by-turn” navigation system in tractors
  - Drivers required to sign statement that they know the route. (Note: After second unauthorized deviation, driver no longer drives for program.)



# *TRU Waste Transportation Plan*

- Plan Complete
- Final changes made
- Anticipate distribution by late 2011



# Projected Shipping Activity

| To WIPP, from:                   | Year | FY-11 |    | FY-12 |    | FY-13 |    | FY-14 |     |
|----------------------------------|------|-------|----|-------|----|-------|----|-------|-----|
|                                  |      | CH    | RH | CH    | RH | CH    | RH | CH    | RH  |
| Argonne National Laboratory      |      | 0     | 29 | 0     | 48 | 0     | 0  | 0     | 0   |
| Idaho National Laboratory        |      | 521   | 72 | 564   | 57 | 564   | 0  | 60    | 0   |
| Los Alamos National Laboratory   |      | 224   | 0  | 348   | 0  | 384   | 0  | 312   | 0   |
| Oak Ridge National Laboratory    |      | 39    | 87 | 82    | 72 | 0     | 70 | 0     | 12  |
| Savannah River Site              |      | 224   | 28 | 204   | 12 | 60    | 0  | 0     | 0   |
| Hanford Site - Richland          |      | 284   | 7  | 240   | 0  | 60    | 95 | 0     | 108 |
| Bettis Atomic Power Laboratory   |      | 0     | 5  | 0     | 0  | 0     | 0  | 0     | 0   |
| <b>Total WIPP Shipments</b>      |      | 1520  |    | 1627  |    | 1233  |    | 492   |     |
| Intersite<br>(to INL/AMWTP)      |      | FY-11 |    | FY-12 |    | FY-13 |    | FY-14 |     |
| Argonne National Laboratory      |      | 2     |    | TBD   |    | TBD   |    | TBD   |     |
| Hanford Site - Richland          |      | 17    |    | TBD   |    | TBD   |    | TBD   |     |
| Lawrence Berkley National Lab    |      | 1     |    | TBD   |    | TBD   |    | TBD   |     |
| NRD, LLC                         |      | 3     |    | TBD   |    | TBD   |    | TBD   |     |
| <b>Total Intersite Shipments</b> |      | 23    |    | TBD   |    | TBD   |    | TBD   |     |



# TRUPACT-III Status



- NRC Certificate of Compliance received June 1, 2010
- 6 units being manufactured by ABW in Arlington, WA
- Target of July 2011 for first shipment, ramp up to 5 shipments/wk by end of CY 2010
- TRUPACT-III will initially be used for SRS shipments
- Road show/training with the CTU 2 conducted last February



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# TRANSCOM



## Transportation Tracking and Communication System Summary of 2011-12 System Upgrade



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# Overview

## What is TRANSCOM?

- Web-accessible information system for monitoring movement of radioactive materials

## Types of materials tracked:

- TRU Waste
- Spent Nuclear Fuel
- Special Nuclear Materials
- Other non-specific radioactive materials



# *TRANSCOM Program Elements*

- Vehicle Communication System: On-board equipment transmits two-way communications and position data to control center
- Communications Center: Staffed for 24/7 operations, TRANSCOM personnel administer the system, monitor shipments, manage system access, assist users
- Monitoring Application: System software integrates communications, global positioning, and database functions with web application
- System Hardware: Secure servers ensure data preservation, continuous communications, and position tracking; hardware redundancies built-in deter service interruptions



### Qualcomm Satellite



### Production, Application, Data, and Map Servers



### Shipment



### Qualcomm

Frame Relay



### Transcom Communication Center



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# *Contact Information:*

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# Questions



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