

Global
Material
Security



Transportation Operations: “The Dance” – TS-CCAM

Office of Global Material Security

U.S. Department of Energy

National Nuclear Security Administration



U.S. DEPARTMENT OF
ENERGY



Mat King, Moderator – I have been shipping radioactive material in the U.S. since 2006 and got involved with international projects of shipping spent nuclear fuel in 2016-- including projects in Canada, Peru, Indonesia, Canada, Nigeria, and Ghana. Today, I continue to actively manage nuclear transportation projects for my company as well as assist the NNSA as a consultant in this area.



Kenny Self, Moderator – I have 20+ years in the transportation of radiological materials. Primarily in the United States, but also includes many international shipments via aircraft. I am familiar with many of the regulations that govern the transport of radiological materials both domestically to the United States and internationally as well.

Friendly Neighborhood Regulator (1 of 3)

- The nuclear industry is among the most heavily regulated worldwide
- Governments have signed CPPNM, accepting responsibility for safety and security of nuclear material in their authority
- This responsibility is delegated to regulatory agencies in each country
- It's up to operators to implement them



Nuclear Transportation: An Iceberg

- Well-executed transportation event--as short as possible, as smooth as possible, and as boring as possible – the “tip of the iceberg”
- Planning for a transportation event can take weeks, months, or even years – the massive hidden part of “the iceberg that is far larger”
- Let’s talk about some experiences with planning and why it’s so important to secure execution of shipments.



Friendly Neighborhood Regulator (2 of 3)

Can you describe coordination you are required to do with your government prior to a nuclear shipment?

Can you describe what this looks like from regulatory perspective? What goes on behind scenes when someone requests a license to transport?

¿Podría describir las coordinaciones que debe realizar con las instituciones gubernamentales antes de una expedición con materiales nucleares?

¿Podría describir cómo es esto desde la perspectiva del órgano regulador? ¿Qué sucede tras bambalinas cuando alguien solicita una licencia/permiso/autorización de transporte?

Friendly Neighborhood Regulator (3 of 3)



Let's talk about situations where coordination between you two might pay off and how might the coordination with regulator pay off in these situations?

- Radiation leak
- Terrorist attack
- Mass protest

Hablemos de situaciones donde la coordinación podría redundar en beneficio para la expedición y cómo podría beneficiar la coordinación con la autoridad reguladora en estas situaciones?

- Fuga de radiación
- Ataque terrorista
- Manifestación en masa

Predicting the Future: Contingency Planning (1 of 2)

Things don't always go as planned. When things go wrong, we need contingencies.

Are we able to foresee the infinite possibilities of what could go wrong and plan for them all?

A contingency plan is a functional document that should be used in an emergency: "If this happens, then do this."

¿Podemos predecir todas las formas en que las cosas pueden salir mal y planificar con base en ello?

Un plan de contingencia es un documento funcional que debería utilizarse en una emergencia: "Si ocurre esto, entonces hacemos esto".

Predicting the Future: Contingency Planning (2 of 2)

Things don't always go as planned. When things go wrong, we need contingencies.

You don't want a lengthy document that is difficult to navigate:

What formats have you found work best?

No es bueno elaborar un documento extenso donde sea difícil encontrar la información:

¿Qué formatos les han funcionado mejor?

Contingency Planning – Continued (1 of 2)



Let's talk about different levels of contingency planning--from a trucking company up to a national level event:

Trucking company--what kinds of things might they have to plan for and have control over?

What about the shipper?

Hablemos de la planificación de contingencia en distintos niveles – Desde una empresa de transporte hasta un evento nacional:

Empresa de transporte – ¿Qué tipo de cosas tendrían que prever y controlar?

¿Y el remitente?

Contingency Planning – Continued (2 of 2)

Law enforcement must follow their own response protocols and procedures--How does the security plan or shipment planning make their job easier?

What about the regulatory agency? If a large event happens, what kinds of plans can a government agency have that will mitigate consequences of an event?

Las fuerzas del orden pueden seguir sus propios protocolos y procedimientos de respuesta - ¿De qué forma el plan de seguridad física y el plan del transporte facilitan el trabajo de ellos?

¿Qué sucede con el órgano regulador? Si ocurre un evento de gran magnitud, ¿qué tipo de planes puede tener una institución del gobierno para mitigar las consecuencias del suceso?

Pre-Shipment Planning



We've talked about coordinating with the regulator, and we've talked about contingency planning—but what other types of planning goes into operations?

What value do exercises have in planning for a nuclear shipment?

Ya hemos hablado de la coordinación con el órgano regulador y la planificación de contingencia —¿qué otros tipos de planificación requieren las operaciones de transporte?

¿Qué valor tienen los ejercicios en la planificación de una expedición de material nuclear?





Questions?

