

REGION 3 INLAND AREA COMMITTEE MEETING

Tuesday, November 15, 2016

WELCOME, OPENING REMARKS, & INTRODUCTIONS

- Debbie Lindsey – RRT₃ Inland Area Committee Chair

INLAND AREA CONTINGENCY PLAN

- Status Update:

- Annual Review Process – Section 1.6

“Section 311(j)(4)(C)(viii) of CWA requires that the IACP be updated periodically by the Area Committee. This current update will include an electronic version of this plan with access by FOSCs and state/commonwealth, local, and public users. It is anticipated that the users will continually update the plan as new information is available. An ongoing process for this continual update will be established by the Region III Inland Area Committee.”

- (insert status table)

INLAND AREA CONTINGENCY PLAN

Vol	Sub-Area	Lead OSC	Promulgated	DCP	Status
1	Region III	Lindsey	04/28/2014	11/10/16	Updates in progress
2	Washington DC Extended	Fitzsimmons	04/28/2014	11/10/16	Revised fact sheets, added worst case scenario, added Westmoreland County
3	Southeast PA/DE	Towle	12/23/2014	09/30/16	Updated fact sheets, appendix G, F, and Section IV text
4	Northeast PA	Ventura	04/28/2014	09/08/16	Updates in progress
5	Southcentral PA	Ham	09/03/2014		
6	Northcentral PA	DiDonato	In Progress	N/A	Update not required
7	Southwest PA/Wheeling WV	Lindsey	04/28/2014	07/10/16	Updates in progress
8	Northwest PA	Zenone	12/23/2014		Minor changes to contact info
9	Huntingdon/Central WV	Matlock	03/17/2015	09/30/16	No revisions required
10	Shenandoah Valley	McLaughlin	09/03/2014	08/29/16	No revisions necessary
11	Upper Chesapeake	Dennis	09/03/2014	09/22/16	No revisions required
12	Southeast VA	Wagner	In Progress	N/A	Update not required
13	Southcentral VA	Bartos	09/26/2016	N/A	Update not required
14	Northcentral VA	Sharma	09/03/2014	06/07/16	Updated tables and fact sheets
15	Southwest VA/WV	Wenning	03/17/2015	09/15/16	No changes at this time

INLAND AREA CONTINGENCY PLAN

- Consistent Area Plan Content
 - Not uniform format for Area Plans
 - NRT Workgroup to review Area Plans and develop guidance
- IACP November 2015 TTX After Action Report
- OSC Planning Dashboard

INLAND AREA COMMITTEE

▪ Member Agencies as identified in IACP

Federal Agency	State
EPA	Delaware - DEMA & DNREC
USCG – 5 th , 8 th & 9 th Districts	District of Columbia – DC HSEMA & DC DOE
DOI	Maryland – MEMA & MDE
DOC / NOAA	Pennsylvania – PEMA & PADEP
DHHS / ATSDR	Virginia – VDEM & VDEQ
DOD / USACE	West Virginia – WV DHSEM & WVDEP
DHS / FEMA	
Tribal Agencies	

INLAND AREA COMMITTEE

- Member Responsibilities – from IACP and EPA Area Contingency Planning Handbook (2013)
 - Prepare and Submit ACP for approval and update (Refer to EPA 2013)
 - Work with State/Commonwealth and local officials to enhance contingency planning and pre-planning
 - Expedite decisions for use of Subpart J Chemicals and other mitigating substances and devices
 - Outreach Activities
 - Environmental Benefits Analysis
 - Drills & Exercises
 - ACP-related Training

INLAND AREA COMMITTEE

- Outreach to New Members
 - Regional and Local agencies, e.g., LEPCs
 - Non-governmental Organizations
 - Private Sector Entities, including regulated Facilities

FUTURE PLANNING FOR THE IAC

- More working meetings?
- Use of products during spills in inland and areas of shared responsibility
- Inland Area Contingency Plan (IACP) - content consistent with NRT Area Planning Requirements

FUTURE PLANNING, CONTINUED

- Development of outreach and resources for LEPCs (Dashboard and area planning fact sheets)

BREAKOUT SESSIONS

- What priorities would group like to work on?
- Booming strategies in tidal areas, including rail/water and pipeline/water nexus points
- Consultation process (cheat sheet)
- Product use (process to get them approved)
- Other?

BREAKOUT SESSION WRAP-UP

- Other needs:

- Any new Data Layers for Dashboard Viewer
- Wildlife Annexes – need help
- Training on Chapter 5/6 of the MOA on Oil Spill Planning and Response and the Endangered Species Act Guidebook (2002)

- Breakout Session Goals:

- Prioritizing initiatives
- Assigning sub-committee members to facilitate initiatives

DEMONSTRATION

- Spilltration Product – Donny Beaver

When Every Second Counts

Innovations in Oil/Fuel Spill Control

HalenHardy LLC

© 2016

Oil/Fuel Spills happen all the time

Spill Cleanup Professionals
report up to 80% happen in wet weather



Water causes oil/fuel spills
to spread faster than a cheetah on crack



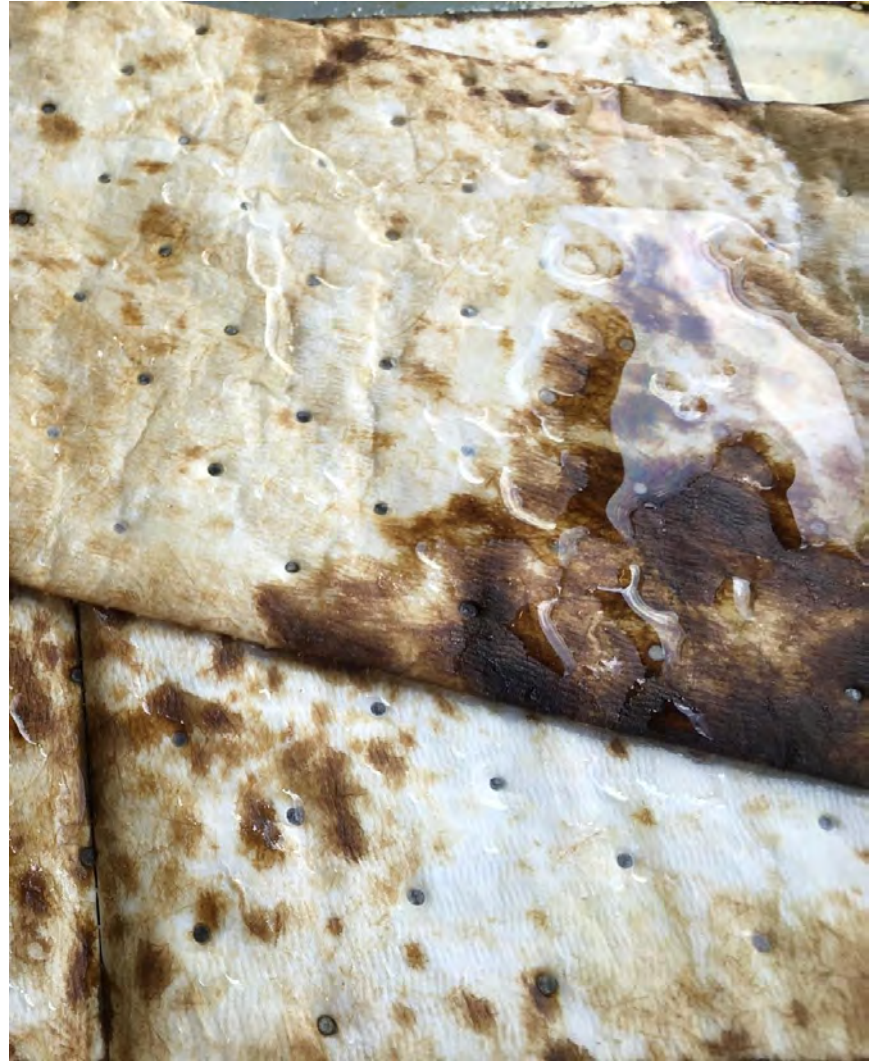
#1 priority is to control & contain the spill



Just say, “No Way to Clay”



White Diapers don't work well in the rain



Socks suck in wet weather



Pads Blow Away



Introducing



SPELLTRATIONTM
PRODUCTS

Oil Sticks. Water Wicks.

New wet-weather oil/fuel spill control Spilltration Strips



Oil is held back
& absorbed

Clean water filters through

Up to 1/2-inch of water











Spillver Bullet rapid response kit



Filters oil from up to 4 inches of water



100 feet fits into 16" x 32" space

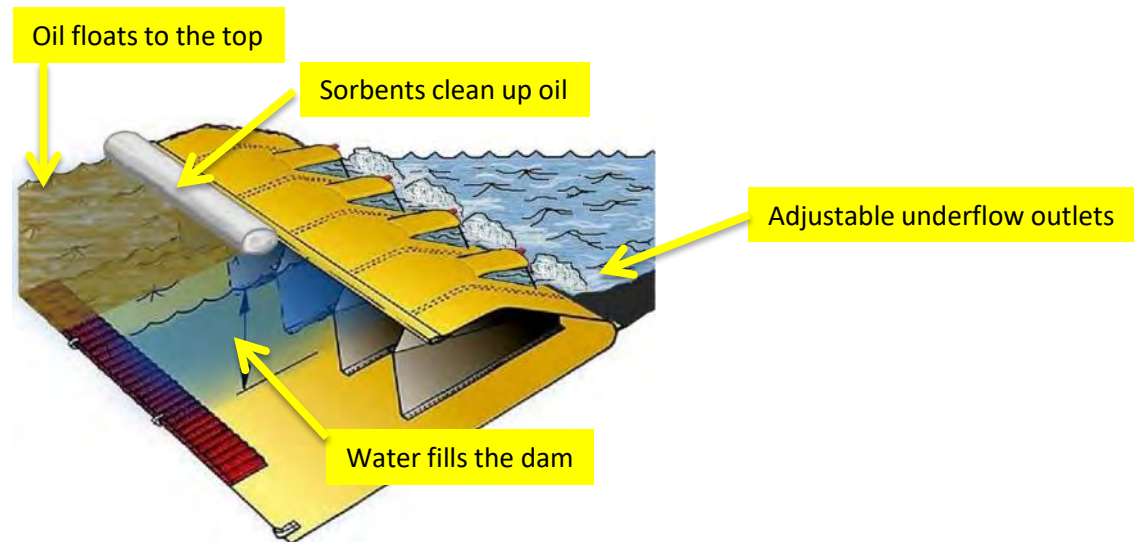
www.halenhardy.com

- Visit website to view videos of various Spilltration[®] products in action.

NEW: Build instant under-flow dams to manage spills in streams & ditches



Quickly create an under-flow dam in a small stream so that skimming and vacuum equipment can be deployed to clean up floating hydrocarbon spills



Lightweight, portable and flexible for instant deployment



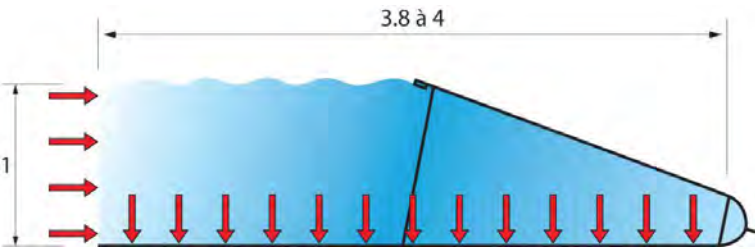
Introducing, the fastest and most flexible way to contain, divert and dam up spills on pavement and concrete.



Dam up water and spilled oil/fuel so efficient cleanup can begin

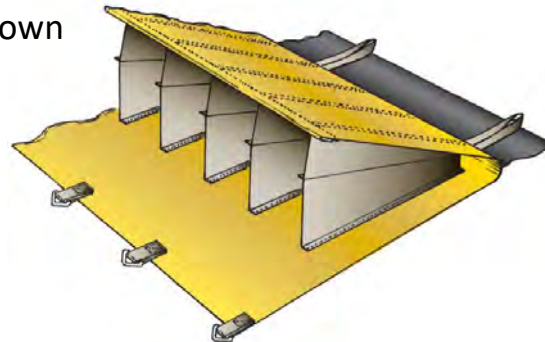


Perfect for temporary dams



As fluids flow in, the weight pushes down

Innovative delta wing design uses the weight and flow of the water (or spill) to create an instant spill wall.



You can even, divert water from flooded roads into nearby streams and rivers

**Explaining the Relationship
Between
the NCP Product Schedule,
Selection Guide for Oil Spill
Applied Technologies,
And ARTES**

History and Background

- Past spill experiences shapes our current decision-making about countermeasures e.g., *Torrey Canyon*, *Ixtoc I* blowout, *Exxon Valdez*, etc.



History, Cont.d

- **Use of “non-traditional” response technologies (e.g., early dispersants) ⇒ perceived damages**
- **Their use resulted in changes in Federal regulations:**
 - **National Contingency Plan, and**
 - **the Oil Pollution Act of 1990**

High Comfort Level

- Traditional countermeasures are a known entity



Applied Oil Spill Technologies, Defined

- a.k.a. – “non-traditional” countermeasures
- Countermeasures that are infrequently if ever used; little experience/knowledge about when these countermeasures could be useful and environmentally beneficial
- Includes:
 - Dispersants
 - Bioremediation Agents
 - Surface Washing Agents
 - Shoreline Pre-treatment Agents
 - Surface Collecting Agents
 - Solidifiers
 - Elasticity Modifiers
 - Emulsion Treating Agents
 - Other Miscellaneous Agents

Discomfort with Applied Technologies

- Decision-maker's wary of non-traditional response technologies



Why?

- **Lack of experience with the various products/strategies**
- **Perceived problems with their use:**
 - **Liability?**
 - **Result in additional environmental damage?**
 - **Lack of experienced application/recovery personnel**
 - **Difficult to interpret product information**
 - **Vendors**

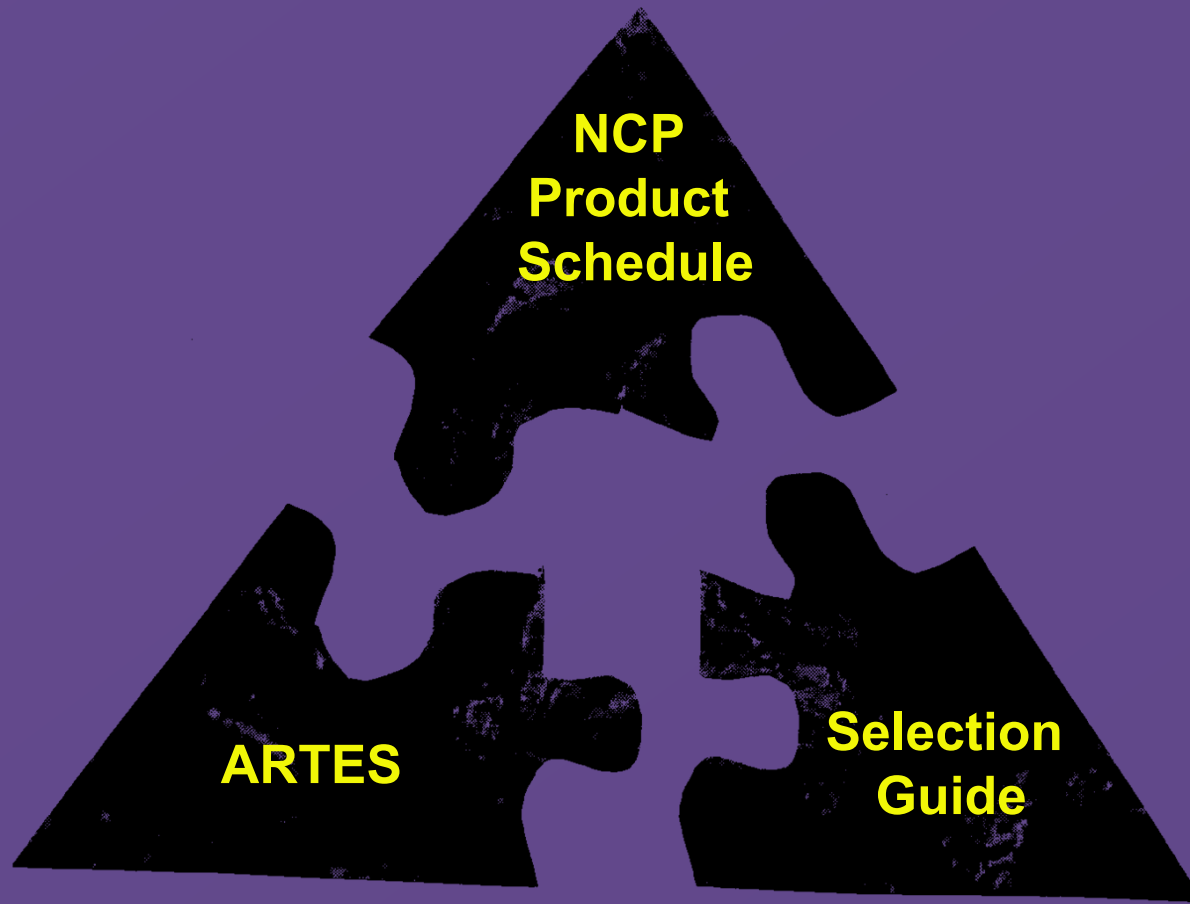
Applied Technologies Today

- **Dispersants significantly changed from past formulations**
- **Standardized effectiveness and toxicity testing required**
- **Must be registered with EPA for use on oil spills in the US**

3-Pronged Approach For Evaluating Applied Technologies

- **Three “tools” available to response decision-makers:**
 - **The National Contingency Plan (NCP) Product Schedule (Subpart J 40CFR Part 300.900)**
 - **Applied Response Tool Evaluation System (ARTES)**
 - **Selection Guide for Oil Spill Applied Technologies**

Putting the Pieces Together for Response Decision-making



3-Prong Review

- Each piece has a specific function, and strengths and limitations relative to the others
- Interaction of the three decision-making tools not well understood by decision-makers or vendors
- 3 “tools” contain information to provide the basis for making informed, appropriate decisions

NCP Product Schedule

- **Functions as regulatory vehicle for use of any applied technologies**
- **Regulated under:**
 - **Section 311(d)(2) of the Clean Water Act, and**
 - **Section 4201 (a) of the Oil Pollution Act of 1990**

NCP Product Schedule, Cont'd

- **Listing is under the direction of the USEPA Oil Program Center**
- **Vendors submit required information and perform specified effectiveness and toxicity tests**
- **Information is posted and updated**

Listing of a product does **NOT**
mean that the product is
recommended or endorsed by
the USEPA for use on an oil
spill;

Only that product has met
minimum information
requirements for listing.

Product Categories on NCP PS

- **Dispersants**
- **Surface Washing Agents**
- **Surface Collecting Agents**
- **Bioremediation Agents**
- **Miscellaneous Oil Spill Control Agents**

NCP PS, Cont'd

- Products that consist of materials that meet the definition of two or more of the product categories are evaluated and products are only listed under one category

NCP PS

Information Requirements

➤ Special Handling	➤ Toxicity
➤ Worker Precautions	➤ Shelf Life
➤ Effectiveness	➤ Recommended Application Procedure
➤ Emergency Procedures From Skin or Eye Contact	➤ Physical Properties (Flash Point, Pour Point, Viscosity, Specific Gravity, pH)
➤ Protective Clothing Requirements	➤ Analyses for Heavy Metals, Chlorinated Hydrocarbons and Cyanide
➤ Minimum and Maximum Storage Temperatures	➤ Temperatures of Phase Separations and Chemical Changes

Strengths of NCP PS

- **Federal requirement – Vehicle for product use during response operations in the US**
- **Minimum information standards must be submitted, including effectiveness and toxicity information**
- **Updated regularly (every 2 months or as necessary)**

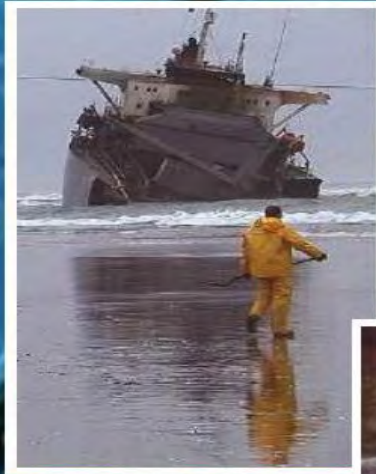
Limitations of NCP PS

- **Not designed for incident-specific decision-making**
- **Does not allow easy comparison of products**
- **No way to capture lessons learned for individual product use**
- **Limited to chemical and biological additive products, that is...not new or advanced mechanical strategies or techniques**

Limitations of NCP PS, Cont'd

- **Does not provide all information needed by decision-makers**
- **Does not provide a basis by which new products (those not yet listed) can be considered prior to listing**
- **Does not provide assistance in choice of products/strategies or guidance in their application**

Selection Guide for Oil Spill Applied Technologies



Why Selection Guide Developed

- **Designed to provide OSCs and other response decision-makers with an easy-to-use technical guidance database for considering applied oil spill technologies for use during an incident.**
- **Developed by Region III in cooperation with Region IV**

Selection Guide, Cont'd

- **Two volumes:**
 - **Decision-making information (Nationally applicable) and**
 - **Implementation/operational support documentation (regionally customizable)**
- **Provides information requested by decision-makers to consider, select, and implement an environmentally-appropriate product or technology**

Selection Guide Information

➤ Technology Categories

- Bioremediation Agents
- Dispersants
- Elasticity Modifiers
- Emulsion Treating Agents
- Fire-Fighting Foam
- *In situ* Burning on Land
- *In situ* Burning on Water
- Shoreline Pre-treatment Agents

➤ Technology Categories

- Solidifiers
- Sorbents
- Surface Collecting Agents
- Surface Washing Agents
- Fast-water Booming Strategies
- Non-floating Oil Strategies
- Oil-in-ice Strategies
- Pyrolytic Oil Strategies
- Water Intake Monitoring Strategies

Information, Cont'd

➤ Information Categories

- Mechanism of action
- Authority required
- Availability
- General application requirements
- Health and safety concerns
- When to use
- Limiting factors/environmental constraints
- Monitoring requirements
- Waste generation and disposal issues
- Who to call for more information and additional resources

Content

- **Instructions and matrices for selecting a strategy or countermeasure using job aid techniques (Human Performance Technologies techniques)**
- **Allows direct product comparisons among products and categories/strategies using product comparison tables**
- **Establishes the need for monitoring and capturing lessons learned**

Content, Cont'd

- **Glossary used with various products/ strategies**
- **History and status of product use (case study examples)**
- **Toxicity primer – how toxicity is measured and what the numbers really mean**

Strengths of Selection Guide

- **Allows comparison of similar products as well as comparison of various strategies to determine the best response**
- **Developed using “job aid” techniques**
- **Allows documentation for the decision-making process**

Strengths, Cont'd

- **Provides situation-specific assistance in the selection of products and strategies during planning and response, including new products/strategies**
- **Provides guidance on the use of response technologies and products**
- **Developed to capture and incorporate lessons learned (not fully initiated)**

Limitations of Selection Guide

- Only as good as the information submitted; data could be limited.
- Should be updated as new information becomes available (e.g., ARTES evaluations, actual use)
- January 2003 Edition available in:
 - paper format,
 - internet download from www.response.restoration.noaa.gov/oilaid.html, and
 - interactive CD version

Limitations, Cont'd

- Decision-makers need to ensure that they are making their decisions with the most current information available
- Not a cook book – still have to evaluate incident-specific information with product in mind

The Applied Response Tool Evaluation System (ARTES)

- A tool for evaluating value of individual products for oil spill response discharges
- Developed to evaluate effectiveness of applied technology response options and evaluate proposed conventional countermeasures
- Evaluators review information provided by vendors and NCP PS to determine/identify the best use or value of the product/technology.

Why ARTES Was Developed

- To provide on-scene coordinators (OSCs) with method for evaluating applied response technologies for use at an oil or chemical spill
- To provide evaluation program to assist OSC and RRT in deciding whether to implement an applied technology
- To get a better understanding of how an applied response technology would/should work
- To evaluate proposed conventional countermeasures

ARTES Information Requirements

- **Chemical/physical properties**
 - Composition, density, specific gravity, viscosity, solubility, etc.
- **Human health and safety concerns**
- **Biological toxicity data, where available**
 - Aquatic, mammal, bird, reptile, vegetation toxicity
- **Application information**
- **Historical success**
- **Recovery/disposal information**
- **Technical monitoring**

Undergoing an ARTES

- Evaluators independently review vendor information
- As a group, Evaluators review vendor information
- Evaluators gather group consensus and product restrictions/ limitations as identified by the group
- Evaluators develop recommendations for the product 's use

Undergoing an ARTES, Cont'd

- Completion of an ARTES evaluation does not mean that a product / technology is pre-approved, recommended, licensed, certified, or authorized for use on an incident

Strengths of ARTES

- **May be used both before and during an incident**
- **Evaluates a response tool on its technical merits and not economic factors**
- **Solely designed to evaluate a product's appropriateness for use during a specific incident under specific circumstances, or as a pre-evaluation to identify likely conditions which favorable outcomes are anticipated by using a product**

ARTES Strengths, Cont'd

- **Rapidly evaluate and provide feedback to the OSC in the form of a recommendation. This enables the OSC to make a well-informed decision on the use of an individual product**
- **Subjecting all proposals to consistent degree of evaluation ensures that vendors are considered on a “level playing field.”**

Current Limitations of ARTES

- Only evaluates a single product; does not facilitate easy comparison among products
- Regionally- and incident-specific. Currently an evaluation is only applicable for the habitat/ climate specific conditions being considered by the Evaluators. *Evaluations are not universally applicable on the National level.*
- Products would have to be put through the evaluation process independently in each region/area to address regionally-specific issues. **\$\$ Limited.**

Limitations, Cont'd

- **Currently, no plan for capturing lessons learned or effectively sharing information from previous ARTES evaluations among regions.**

Proposed ARTES Updates

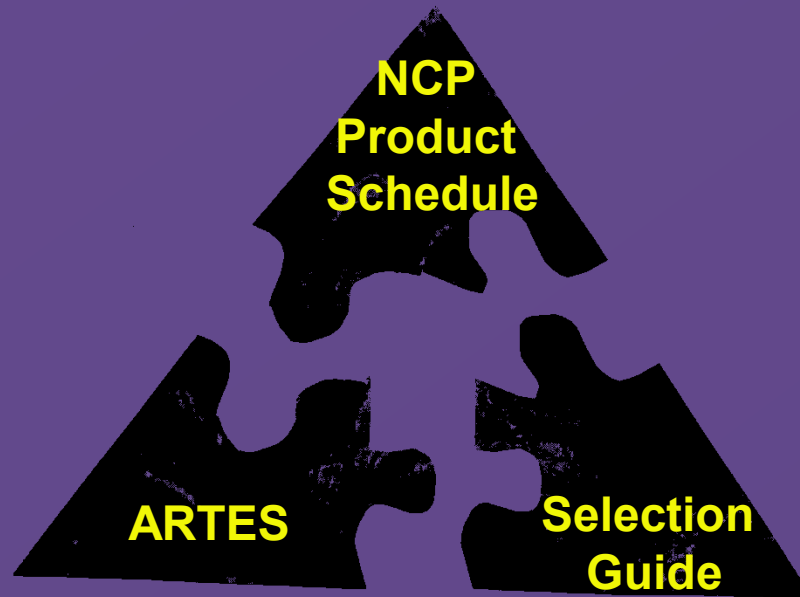
- **Regions II, III and IV submitted request to NRT to take role in “nationalizing” ARTES**
- **Asks NRT to take the lead in the following:**
 - **ID panel of technical experts for each product category**
 - **Have technical experts review products at the National level (not restricted by habitat/climate considerations)**
 - **Make National ARTES evaluations available for adoption and further customization by Regions**

Updates, Cont'd

- **Make vendor information submittal easier; compile a complete list of information requirements to address all possible information needs of NCP, ARTES, and Selection Guide**
- **Have USEPA Oil Program Center warehouse this information for all evaluation methods**

In Summary

- Use all the pieces to solve the puzzle (make a decision)



In Summary, Cont'd

- **Most effective use of these tools is in a coordinated manner**
- **NCP is the first step and requirement; provides guiding legislation; Nationally applicable information**
- **ARTES assists in the evaluation of single product / technology for regional or incident-specific conditions**

In Summary, Cont'd

- **Selection Guide allows:**
 - **Screening the incident for possible strategies/ products that could add value to a response, and**
 - **Comparison of products/strategies of interest relative to other techniques to select the most appropriate technology**

Thanks for your attention!

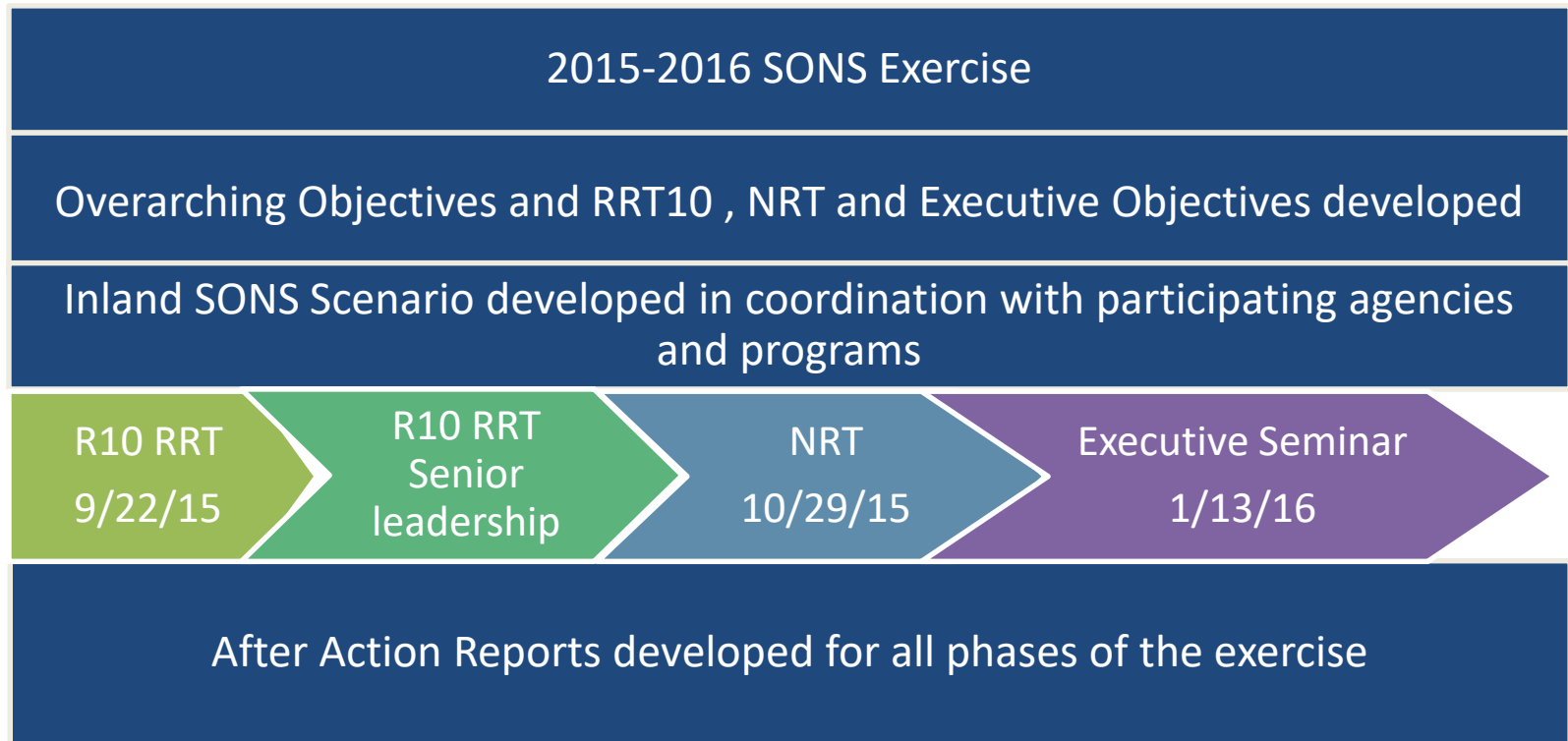


2015-2016 SONS Columbia River Gorge Exercise

**Report out for Regional
Response Team 3**



Exercise Concept



Exercise Participants

- Region 10 RRT Exercise: RRT members with state, tribal and private sector participation
- Region 10 RRT Senior Leadership Seminar: RRT member agency senior leaders with state, tribal and private sector participation
- NRT Exercise: NRT Chair, Vice Chair, agency members and Region 10 RRT Chair
- Executive Seminar: Interagency Deputy Secretaries (plus 1-2 staff for each agency)

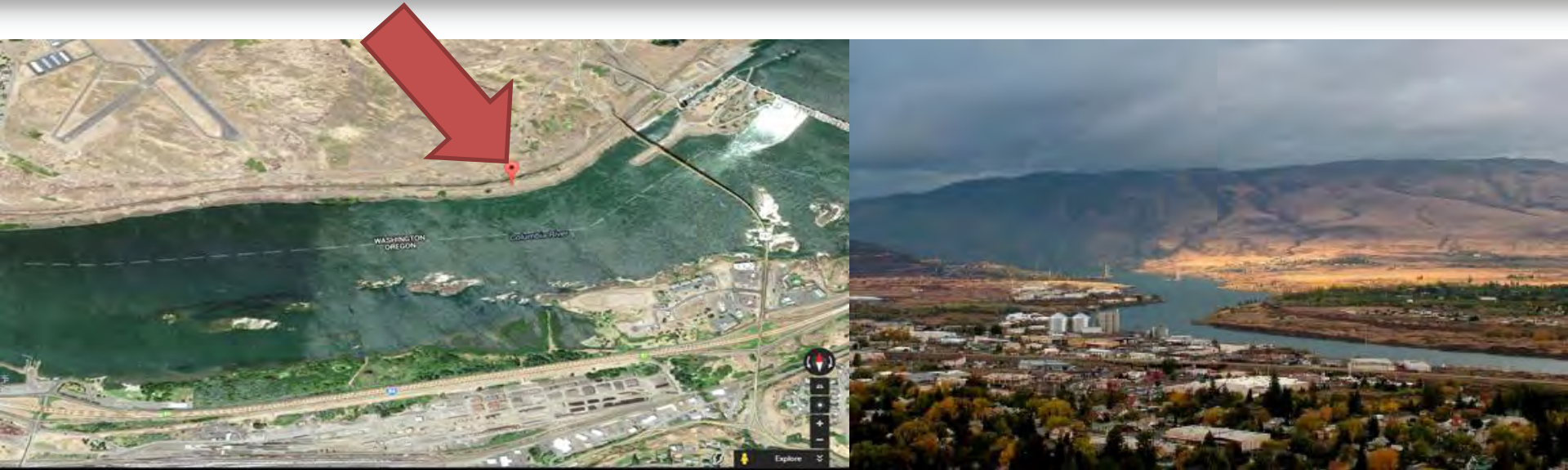
Overarching Objectives

- Examine gaps in the capability to respond to a catastrophic shale crude oil spill caused by a train derailment in an ecologically sensitive area of the Columbia River Gorge.
- Identify gaps in the capability to coordinate the response between the interagency, multi-jurisdictional regions, tribal, and private sector entities.
- Evaluate the effectiveness of coordination with natural resource trustees due to impacts to sensitive resources.
- Evaluate availability of health services for potential impacts to local citizens from water and air contaminants.
- Evaluate coordination with the DOT and the USCG on impacts to navigation and transportation.
- Exercise the effectiveness of coordination and communication between the RRT, NRT, and senior leadership.
- Evaluate unity of effort of messaging to the public.
- Evaluate draft Senior Agency Official (SAO) guidance and other relevant plans and policies.

Scenario

- On April 18, 2016, a major landslide on the Columbia River, approximately 80 miles east of Portland, derails a 100 tank car unit train carrying both Bakken crude oil and diluted bitumen (dilbit). Each rail tank car carrier carries approximately 29,000 gallons. The derailment occurs down river from The Dalles, 44 nautical miles upriver from the Bonneville Dam. The dam will be impacted in three days. Initial reports state that 30 rail cars have derailed and are discharging into the river. Several cars are on fire. There is an evacuation in place for ½ mile. Initial calculations are that 150,000 gallons of crude have been released into the river. There is the potential for 3 million gallons to be released. By April 19, the estimated release is 450,000 gallons. Due to the sensitive ecosystem, disruption to commerce and tourism, impact to tribal treaty rights, media interest, White House interest, multiple federal, state and tribal jurisdictional boundaries, the EPA Administrator declares a SONS.

Incident Date: April 18, 2016



A major landslide occurs along the Columbia River Gorge causing a train derailment near Three Mile Point in Washington.

Columbia River



Initial Reports



- 30 rail tanks have derailed
- 14 rail tank cars have known breaches and are actively discharging

- Several rail tank cars are on fire
- 150,000 gallons of oil are being released onto the shoreline or into the river



Evacuation in Effect



- An evacuation radius is in place for $\frac{1}{2}$ mile from the incident site.
- I-14 East and Westbound is closed
- Westbound traffic is being re-routed across I-197 (The Dalles Bridge).

Situation Update: April 19, 2016



- Aerial overview shows 24 rail tank cars are damaged and discharging oil into the river
- Extensive environmental impacts along the Columbia River Gorge are anticipated

Estimated Bakken Fate From ADIOS2 Model

- After 12 hours about 60% of the floating oil would remain
- After 24 hours about 35% of the floating oil would remain
- After 36 hours about 20% of the floating oil would remain
- After 48 hours about 10% of the floating oil would remain

These estimates are more than what we would expect down river because it doesn't take into account what has beached along the river and oil that has picked up sediment and entered the water column.

Estimated Dilbit Fate from ADIOS2 Model

After about 20% – 25% of the dilbit evaporates and loses its diluent, it is expected that the remaining floating oil would become neutrally buoyant or denser than fresh water and the surface slick would become smaller.

Estimates are that the dilbit would take 6 – 12 hrs to lose 20% - 25% of its mass to evaporation.

This means that we expect the surface slick from the dilbit becoming smaller over time because of oil entrainment into the water column and possibly sinking. We would still expect some dilbit to remain floating in scattered patches past 12 hrs but the amount will become less and less as the patches become denser. Also, as the floating oil deposits along the shoreline, there will be less oil remaining to move downriver.

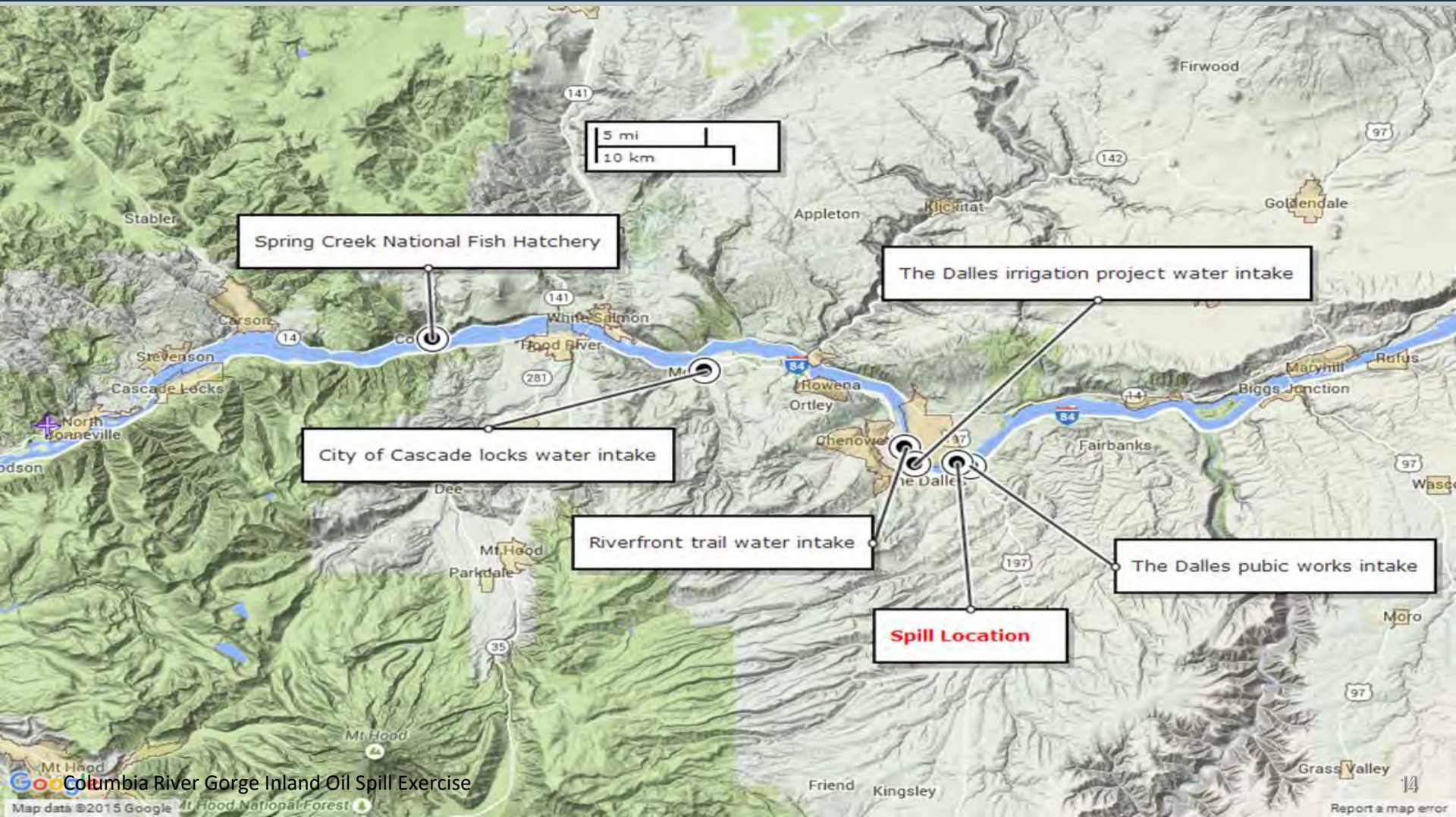
Bonneville Dam Power Plant

- Oil slick will reach Bonneville Dam within 3 days
- Locks to all vessel traffic may need to be closed to reduce the spread of oil.



- The Bonneville Dam Power Plant is looking at a shut down.
- Potential impacts to the Dam's fish ladders causing harm to salmon and steelhead populations

Map of Water Intakes



Estimate Arrival of Oil At Intakes

Label	First Arrival From Spill Time	Notes
The Dalles Public Works	No Oiling expected	Upstream of spill location and on opposite side of the river.
The Dalles Irrigation District Water Intake	1 hr	Heavy shoreline staining with possible dilbit in water column. Black oil on surface.
Riverfront Trail Water Intake Facility	2.5 hrs	Heavy shoreline staining with possible dilbit in water column. Black oil on surface.
Spring Creek National Fish Hatchery	23 hrs	Scattered shoreline staining and possible patches of dilbit in water column. Patches of sheen on surface.
City of Cascade Locks Water Intake	37 hrs	Bakken may not persist this far. Dilbit may all sink before reaching here. Very little scattered surface sheen if any.

Sensitive Areas From Geographic Response Plan

6.2.2 Specific Geographic Areas of Concern

Middle Columbia River, Bonneville Pool (~RM 146-192). See Figure 6-1

1. **Rock Creek Cove and Ashes Lake (~RM 149).** Extensive wetland and impounded water habitat. Concentration area for migratory and wintering waterfowl. Osprey nests associated with Ashes Lake. Salmonid concentration and breeding area (including Bull trout [FT/SC (WA)]).
2. **Lower Wind River (~RM 154).** Forested wetlands and impounded areas. Salmonid concentrations and habitat (including Steelhead trout [FT/SC (WA)], Chinook salmon [FT/SC (WA)], Harlequin ducks (wintering/ roosting), sensitive nesting species. Purple martin [SC (WA)], nesting area.
3. **Drano Lake (~RM 162).** Shallow water habitat/cultural resource, salmonid concentration and habitat (including Steelhead trout [FT/SC (WA)] and hatchery fish, waterfowl concentration area, recreational use, sensitive nesting species (including Bald eagle [SS (WA)], and Northern spotted owl [FT/SE (WA)/ST (OR)]). Fish Hatchery.
4. **Lower White Salmon River (~RM 168).** Impounded area. Concentration area for migratory and wintering waterfowl, salmonid concentrations and habitat (including Bull trout [FT/SC (WA)], Steelhead trout [FT/SC (WA)], and Chinook salmon [FT/SC (WA)]). Peregrine falcon [FCo/SS (WA)].
5. **Rowland Lake (~RM 176).** Impounded area. Waterfowl concentration area, sensitive nesting species (including Osprey and Peregrine falcon [FCo/SS (WA)]).
6. **Chamberlain Lake/Lower Klickitat River (~RM 180).** Forested wetland and impounded area. Salmonid concentrations and habitat (including Steelhead trout [FT/SC (WA)], Bull trout [FT/SC (WA)], resident fish, waterfowl concentration and wintering area. Sensitive nesting species (Lewis' woodpecker [SC], Bald eagle [SS (WA)]), Mayer State Park.

Sensitive Areas Geographic Response Plan Map



Figure 6-1: Middle Columbia River, Bonneville Pool (~RM 146-192).

Estimate Time of Arrival of Oil at Sensitive Areas

Label	First Arrival From Spill Time	Notes
6. Chamberlain Lake/Lower Klickitat River	7 hrs	Heavy shoreline staining with possible dilbit in water column. Black oil on surface.
5. Rowland Lake	10 hrs	Heavy shoreline staining with possible dilbit in water column. Black oil on surface.
4. Lower White Salmon River	17 hrs	Scattered shoreline staining with possible dilbit in water column. Sheens with patches of black oil on surface.
3. Drano Lake	23 hrs	Scattered shoreline staining and possible patches of dilbit in water column. Patches of sheen on surface.
2. Lower Wind River	32 hrs	Bakken may not persist this far. Dilbit may all sink before reaching here. Widely scattered sheens on surface. Possible patchy bathtub ring beach staining.
1. Rock Creek Cove and Ashes Lake	42 hrs	Bakken may not persist this far. Dilbit may all sink before reaching here. Very little surface sheen if any.

Potential Environmental Resources Impacts

- Threatened and endangered salmon species
- Critical habitat
- Migratory waterfowl
- Water quality
- Wetlands



Potential Impacts to Tribal Trust Resources

- Four major tribes in the Columbia River Gorge area.
- Under a treaty, the Tribes were guaranteed the rights to harvest fish in all the tribes' usual and accustomed areas, which include both on and off their reservations.
- The Columbia River Inter-Tribal Fish Commission assists the tribes by coordinating with state and federal agencies to ensure the tribes receive an equitable share of the river salmon.

Potential Impacts on the Economy

- Recreational activities
- Tourism
- Disruption of rail and commercial traffic



Response



- Response personnel onsite
- Over 100 Federal, state, local and tribal officials, industry representatives
- Shoreline protective boom plan is being developed
- Responder safety and health is a concern

Complex spill response

- Media interest is high
- White House National Security is asking for information
- Multiple Federal, state, and tribal jurisdictional boundaries impacted
- EPA Administrator declares a Spill of National Significance and designates a Senior Agency Official



Findings from RRT10 phase of exercise

- Consider the development a Water Use Task Force.
- Create a contact list of regional EOCs that may activate for a National Oil and Hazardous Substances Pollution Contingency Plan (NCP) response.
- Further develop scenario-based plans with USACE and resource trustees to look at river flow management and dam operations as they pertain to meeting spill response objectives.

Findings from RRT10 phase of exercise

- Determine how the Bureau of Indian Affairs (BIA) would integrate in to the response.
- Analyze how the National Response Framework (NRF) functions may be incorporated into an NCP response.
- Clearly define what each agency's tribal trust responsibility is, and how that responsibility will be met.
- Hold further discussions with tribes to define how each would expect to engage during this scenario.

Findings from RRT10 phase of exercise

- Consider mental health issues when evaluating health impacts of the response.
- An effective JIC and public outreach effort will be massive. Determine staffing needs.

June 3rd, 2016

- A Union Pacific unit train carrying Bakken crude oil derailed and caught fire in Mosier, Oregon.
- Sixteen rail cars derailed and four were breached and discharged into the Columbia River approximately 16 miles downriver from The Dalles, the location of the exercise scenario derailment.
- Notifications were made to the natural resources trustees, tribes and downstream water users and both the EPA Region 10 Regional EOC and Region 10 RRT were activated.
- Supporting agencies for this incident included the State Fire Marshal, Oregon DOT, Oregon Health Agency, Oregon Emergency Management, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of Warm Springs, Department of Interior, National Marine Fisheries Service, National Oceanographic and Atmospheric Administration, U.S. Forest Service, USCG, USACE, FEMA, Columbia River Intertribal Fish Commission and the NPFC.



Emergency Consultation for Endangered Species and Essential Fish Habitat

Frank Csulak, NOAA
RRTIII Meeting
November 16, 2016

Documentation of Emergency Consultation with NMFS

Been working with USCG Sectors and NMFS

Significant improvement

Still room for improvement

Response Action Matrix

Endangered Species Screening Tool

Proposing a uniform consultation documentation form

Improve efficiency

Improve consistency



Documentation of Emergency Consultation with NMFS

Federally listed endangered or threatened species under
ESA

Critical habitat designated under ESA

Fishery habitat designated as Essential Fish Habitat (EFH)
under the MSFCMA



Emergency Contacts:

nmfs.ner.emergency.consult@noaa.gov

NMFS ESA and EFH biologists maybe contacted by telephone or email.

Document!!

Maine to Virginia – NMFS Gloucester, MA

North Carolina to GOM – NMFS St. Petersburg, FL

For ESA concerns: Protected Resources Division

For EFH concerns: Habitat Conservation Division

Note: Staffed only during normal business hours

NMFS Emergency Contact

NMFS should be contacted as soon as possible

Consultation maybe completed via telephone or email

Document all correspondence

NMFS will be available for further consultation and coordination as requested

Responding agency implement any Best Management Practices (BMPs) recommended by NMFS to avoid or minimize impacts



Awaiting a response
from NMFS should not
delay emergency
response activities

Work with your NOAA Scientific
Support Coordinator

Post Response Only if ESA Species or Critical Habitat Present

Once response actions are completed, Responding Agency notifies NMFS of response actions taken, how were they implemented, and any reports of incidental takes, adverse modification of or destruction of critical habitat.

If no impacts occurred, ESA consultation complete.

If any adverse impacts resulted from the response, formal consultation will be required with NMFS



Proposed Consultation Form

Emergency Consultation for Endangered Species and Essential Fish Habitat

Email completed form to: nmfs.ser.emergency.consult@noaa.gov

Name of Incident

Date of Incident

Name and Title (FOSC Designee for ESA/EFH Consultation)

Today's Date

E-mail

Telephone

Incident Location

Waterbody

City (or County/Parish), State

Latitude

Longitude

(Check All That Apply)

Riverine

Inshore/Estuarine

Coastal/State

Offshore/Federal

Port/Harbor

Industrial



Proposed Consultation Form

Response Action Checklist
(Provide any needed details in spill description)

Chemical Countermeasures		Response Actions	
Solidifiers	<input type="checkbox"/>	Skimmers	<input type="checkbox"/>
Surface dispersants	<input type="checkbox"/>	Manual oil removal	<input type="checkbox"/>
Subsea dispersants	<input type="checkbox"/>	Debris removal	<input type="checkbox"/>
Emulsion treating agents	<input type="checkbox"/>	Vegetation removal/cutting	<input type="checkbox"/>
Chemical Herding	<input type="checkbox"/>	Sediment removal	<input type="checkbox"/>
Surface washing agents	<input type="checkbox"/>	Sediment reworking/tilling	<input type="checkbox"/>
Bioremediation	<input type="checkbox"/>	Barriers/berms	<input type="checkbox"/>
In-situ burning	<input type="checkbox"/>	Vacuuming	<input type="checkbox"/>
		Surface net tows	<input type="checkbox"/>
		Bottom/mid-water trawls	<input type="checkbox"/>
Wildlife Response Actions		Physical Herding	<input type="checkbox"/>
Aerial surveys	<input type="checkbox"/>	Sorbents	<input type="checkbox"/>
Vessel surveys	<input type="checkbox"/>	Booming	<input type="checkbox"/>
Capture and rehabilitation	<input type="checkbox"/>	Flooding/Flushing	<input type="checkbox"/>
Capture and relocation	<input type="checkbox"/>	Aerial surveys	<input type="checkbox"/>
Deterrence/Hazing	<input type="checkbox"/>	Vessel surveys	<input type="checkbox"/>
Nest protection	<input type="checkbox"/>	Shoreline surveys	<input type="checkbox"/>
Temporary holding location	<input type="checkbox"/>	Vessel/Ship sinking	<input type="checkbox"/>

Use this space for any additional response details relevant to the consultation.



Proposed Consultation Form

Habitat Checklist

Seagrass	<input type="checkbox"/>	Saltmarsh	<input type="checkbox"/>	Riverine	<input type="checkbox"/>
Hard Bottom	<input type="checkbox"/>	Oyster/Shell	<input type="checkbox"/>	Estuarine Open Water	<input type="checkbox"/>
Coral Reef	<input type="checkbox"/>	Sand/Mud Bottom	<input type="checkbox"/>	Marine Open Water	<input type="checkbox"/>
Mangroves	<input type="checkbox"/>	Beach/Sand Shoreline	<input type="checkbox"/>	Other	<input type="checkbox"/>
<input style="width: 100%; height: 20px;" type="text"/>					

Endangered and Threatened Species

Critical Habitat in Response Area

Loggerhead sea turtle	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="---"/>
Kemp's ridley sea turtle	<input type="text" value="---"/>	NA	
Green sea turtle	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="If yes, select designated area"/>
Leatherback sea turtle	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="If yes, select designated area"/>
Hawksbill sea turtle	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="If yes, select designated area"/>
Olive ridley sea turtle	<input type="text" value="---"/>	NA	
Gulf sturgeon	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="If yes, select designated area"/>
Shortnose sturgeon	<input type="text" value="---"/>	NA	
Atlantic sturgeon	<input type="text" value="---"/>	NA	
Scalloped hammerhead	<input type="text" value="---"/>	NA	
Smalltooth sawfish	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="If yes, select designated area"/>
Johnson's seagrass	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="If yes, select designated area"/>
Whales (any species)	<input type="text" value="---"/>	<input type="text" value="---"/>	<input type="text" value="If yes, select designated area"/>

(type in whales present)

Corals (any species)

(type in corals present)

Critical habitat maps can be accessed at:
sero.nmfs.noaa.gov/maps_gis_protected_resources/critical_habitat/index.html



Proposed Consultation Form

NMFS Recommendations - Endangered Species Act
(Any pre-approved response conditions should be included.)

Name and Title

Date



Proposed Consultation Form

Emergency Consultation for Endangered Species and Essential Fish Habitat

NMFS Recommendations - Essential Fish Habitat

(Any pre-approved response conditions should be included.)

Name and Title

Date



NRT National Environmental Compliance Sub-Committee

- - The ESA MOA Workgroup has been working on several products as a result of the April 2016 Pre-spill ESA Consultation Workshop, including:
 - a. a summary of the workshop proceedings (completed)
 - b. Creation of a "Response Action Matrix" which details information about approximately 34 oil spill response tools and potential effects on listed species. (Very close to being complete)
 - c. "Endangered species screening tool" - which details species, what regions of the country they are found in, and a generalized guide as to the impacts of various response actions. (NMFS species are done, USFWS has some regions completed for DOI listed species)
 - * d. Annotated BA template (a "How to" document) - in process

SSC Agenda

Over the next several months will be working with each USCG D5 Sector to use proposed NMFS consultation form

Work with USCG D1 and D7 (RRT1,2,3,4, CRRT) to use same consultation format

Coordinate with USFWS to develop a similar consultation form for their respective species and critical habitat

Petroleum Oil Incident Annex 2016

Crude Oil Subcommittee

Oil Incident Annex 2010

What we had...

- Facilitate rapid establishment of an incident command team in order to respond to an oil spill
- Unified Command Organization & Objectives
- IC/UC Considerations
- Incident Command Structure

Petroleum Oil Incident Annex

2016

- Guide for first responders
- Ensures:
 - Responder can assess the incident
 - Ensure proper notifications are made
 - Guidelines for initial actions to protect:
 - nearby persons
 - critical infrastructure
 - environmentally sensitive areas

Table of Contents

- Safety Guidelines
- Quick Response Guide
- Group I Oils
- Group II Oils
- Group III Oils
- Group IV Oils
- Group V Oils
- Notifications
- Other Points of Contact
- Special Teams
- References

Five Types of Oil Classifications

Table 1 * SAFETY MESSAGE, Guidance not legally mandating*

Characteristics Of The Five Types Of Oil Classifications				
Gasoline Products (Group I)	Diesel-like Products and Light Crude Oils (Group II)	Medium-grade Crude Oils and Intermediate Products (Group III)	Heavy Crude Oils and Residual Products (Group IV)	Low API Oils - heavier than water (Group V)
Examples – Gasoline	Examples – No. 2 fuel oil, jet fuels, kerosene, West Texas crude, Alberta crude	Examples – North Slope crude, South Louisiana crude, No. 4 fuel oil, IFO 180, lube oils	Examples – Venezuela crude, San Joaquin Valley crude, Bunker C, No. 6 fuel oil	Examples – Very heavy No. 6 fuel oil, Residual Oils, Vacuum Bottoms, Heavy slurry oils
<ul style="list-style-type: none"> • Very volatile and highly flammable (flash point near 100°F/40°C) 	<ul style="list-style-type: none"> • Moderately volatile (flash point varies 100-150°F/40-65°C) 	<ul style="list-style-type: none"> • Moderately volatile (flash point higher than 125°F/50°C) 	<ul style="list-style-type: none"> • Slightly volatile (flash point greater than 150°F/65°C) 	<ul style="list-style-type: none"> • Very low volatility
<ul style="list-style-type: none"> • High evaporation rates; narrow cut fraction with no residues 	<ul style="list-style-type: none"> • Refined products can evaporate to no residue; crude oils do have a residue after evaporation is completed 	<ul style="list-style-type: none"> • Up to one-third will evaporate in the first 24 hours 	<ul style="list-style-type: none"> • Very little product loss by evaporation 	<ul style="list-style-type: none"> • No evaporation when submerged
<ul style="list-style-type: none"> • Low viscosity; spread rapidly to a thin sheen 	<ul style="list-style-type: none"> • Low to moderate viscosity; spread rapidly into thin slicks • Specific gravity of <0.85; API gravity of 35-45 	<ul style="list-style-type: none"> • Moderate to high viscosity • Specific gravity of 0.85-0.95; API gravity of 17.5-35 	<ul style="list-style-type: none"> • Very viscous to semisolid • Specific gravity of 0.95-1.00; API gravity of 10-17.5 	<ul style="list-style-type: none"> • Very viscous to semisolid • Specific gravity greater than 1.00; API gravity less than 10
<ul style="list-style-type: none"> • High acute toxicity to biota 	<ul style="list-style-type: none"> • Moderate to high acute toxicity to biota; product-specific toxicity related to type and concentration of aromatic compounds 	<ul style="list-style-type: none"> • Variable acute toxicity, depending on amount of light fraction present 	<ul style="list-style-type: none"> • Low acute toxicity relative to other oil types 	<ul style="list-style-type: none"> • Low acute toxicity relative to other oil types
<ul style="list-style-type: none"> • Does not emulsify 	<ul style="list-style-type: none"> • Can form stable emulsions 	<ul style="list-style-type: none"> • Can form stable emulsions 	<ul style="list-style-type: none"> • Can form stable emulsions 	<ul style="list-style-type: none"> • Can form stable emulsions
<ul style="list-style-type: none"> • Will penetrate substrate; non-adhesive 	<ul style="list-style-type: none"> • Tend to penetrate substrate; fresh spills are not adhesive • Stranded light crudes tend to smother organisms 	<ul style="list-style-type: none"> • Variable substrate penetration and adhesion • Stranded oil tends to smother organisms 	<ul style="list-style-type: none"> • Little penetration of substrate likely, but can be highly adhesive • Stranded oil tends to smother organisms 	<ul style="list-style-type: none"> • Little penetration of substrate likely, but can be highly adhesive • Stranded and submerged oil tends to smother organisms

Group I Oils

- Ex: Gasoline
- Very volatile and highly flammable (flash point near 100°F/40°C)
- High evaporation rates; narrow cut fraction with no residues
- Low viscosity
- Does not emulsify



Group II Oils

- Ex: No. 2 fuel oil, jet fuels, kerosene, West Texas crude
- Moderately volatile (flash point varies 100-150°F/40-65°C)
- Refined products can evaporate to no residue
- Low to moderate viscosity
- Can form stable emulsions



Group III Oils

- Ex: North Slope crude, South Louisiana crude, No. 4 fuel oil
- Moderately volatile (flash point higher than 125°F/50°C)
- Up to one-third will evaporate in the first 24 hours
- Moderate to high viscosity
- Can form stable emulsions



Group IV Oils

- Ex: Venezuela crude, San Joaquin Valley crude, Bunker C
- Slightly volatile (flash point greater than 150°F/65°C)
- Very little product loss by evaporation
- Very viscous to semisolid
- Can form stable emulsions

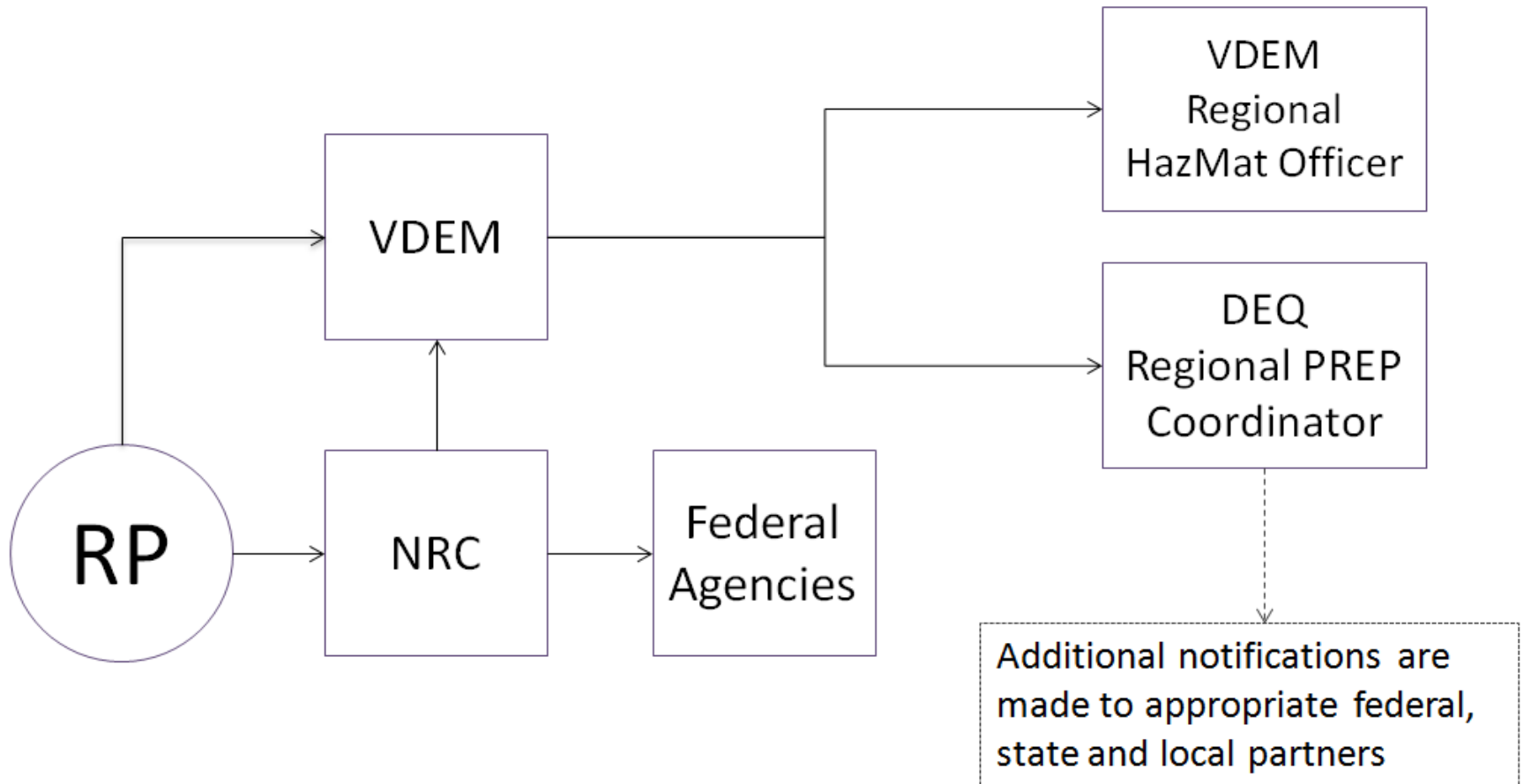


Group V Oils

- Ex: Very heavy No. 6 fuel oil, residual oils, vacuum bottoms
- Very low volatility
- No evaporation when submerged
- Very viscous to semisolid
- Low acute toxicity relative to other oil types
- Can form stable emulsions



State and Local Notifications



Special Teams

- National Oceanic Atmospheric Administration (NOAA) Scientific Support Coordinator (SSC)
- Atlantic Strike Team
- Air Station Elizabeth City (*if overflights are required*)
- Navy Supervisor of Salvage
- United States Fish and Wildlife Service
- Animal Plant Health Inspection Service
- Historic Property Specialist
- Water Intake Specialist
- Army Corps of Engineers, Norfolk District

*See full list in Petroleum Oil Incident Annex

Acknowledgements

- EPA
- NOAA SSC
- Norfolk Southern Railroad
- Plains Marketing
- USCG Sector Hampton Roads
- Virginia Department of Emergency Management
- Virginia Department of Environmental Quality
- Virginia Pilot Association
- Virginia Port Authority

Questions?

Pipeline & Hazardous Materials Safety Administration (PHMSA)

Notice of Proposed Rulemaking: Oil Spill Response Plans and Information Sharing for High-Hazard Flammable Trains

HM-251B

Victoria Lehman

Office of Hazardous Materials Safety

Regulations Specialist

7/29/16

RRT III Conference at Plymouth Meeting, PA- November 17, 2016



Enhanced Tank Car Standards & Operational Controls for High-Hazard Flammable Trains

- Secretary Anthony Foxx and Canadian Transport Minister Lisa Raitt announced Final Rule HM-251 effective July 7, 2015

Enhanced DOT Specification Rail Tank Car 117 for HHFT

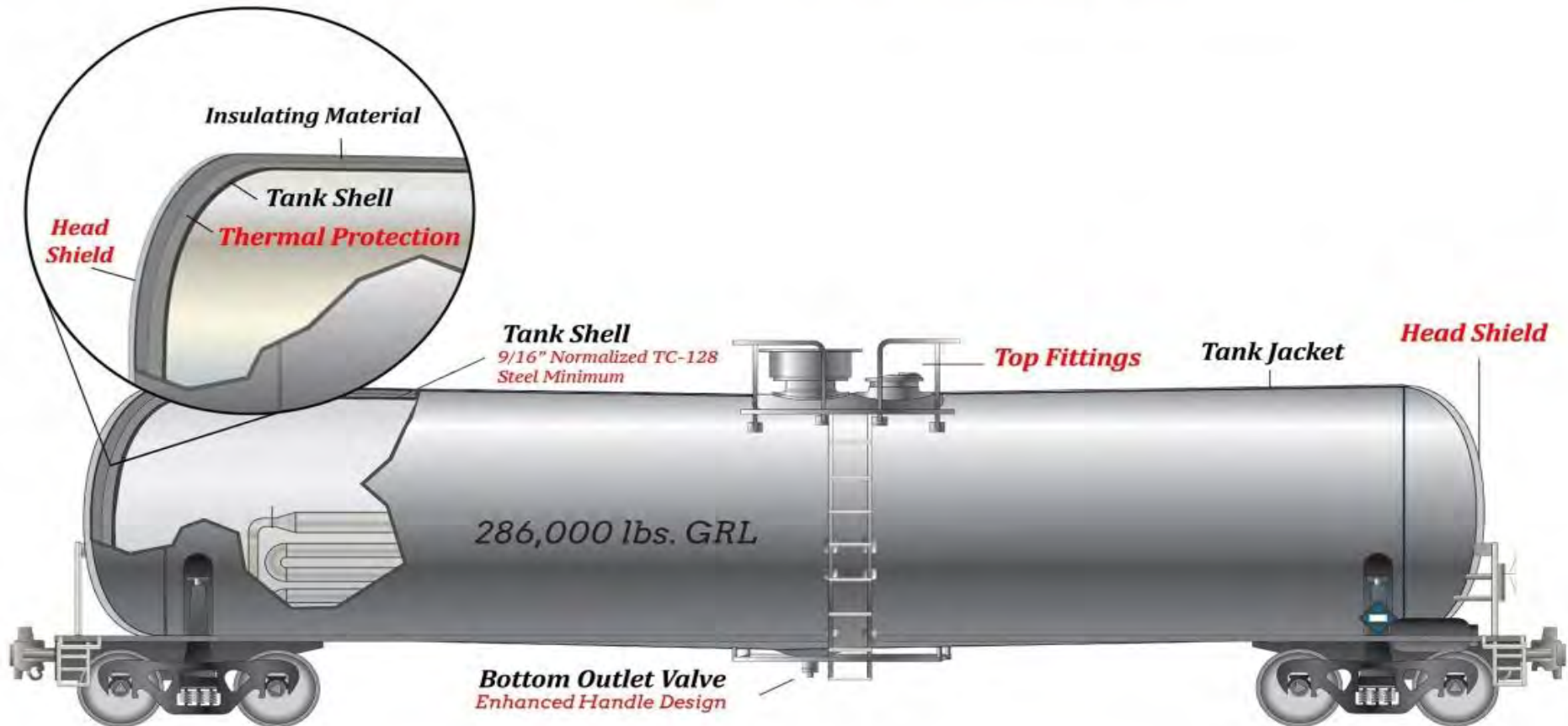
Improve puncture resistance
(thicker shells and full-height
head shielding)

Improve thermal protection
and survivability
(Thermal jacketing and
Pressure relief devices)

Protect equipment (top fittings protection and
bottom outlet protection / securement)



DOT 117 Specification Car



Safety enhancements of DOT Specification 117 Tank Car:

- Full-height ½ inch thick head shield
- Tank shell thickness increased to 9/16 inch minimum TC-128 Grade B, normalized steel
- Thermal protection
- Minimum 11-gauge jacket
- Top fittings protection
- Enhanced bottom outlet handle design to prevent unintended actuation during a train accident

Enhanced Tank Car Standards & Operational Controls for High-Hazard Flammable Trains

Enhanced Braking System – Electronically Controlled Pneumatic Speed Restrictions

Rail Routing and Notification

Sampling and Testing Program

Oil Spill Response Plans for HHFT -

HM-251B - NPRM



Hazardous Materials: Oil Spill Response Plans and Information Sharing for HHFTs

- Dates
 - Notice of Proposed Rulemaking (NPRM) published July 29, 2016 – HM-251B
 - Comments due by September 27, 2016.
- Purpose
 - Improve oil spill response readiness and mitigate effects of rail incidents involving petroleum oil and certain High-Hazard Flammable Trains (HHFTs).



Who is included by the proposed rule's expanded applicability?

- Proposes to expand applicability for comprehensive oil spill response plans to railroads transporting High-Hazard Flammable Trains (HHFT) with 20 or more cars in a continuous block or 35 or more cars throughout the train loaded with liquid petroleum oil



What is the purpose of the proposed comprehensive OSRPs?

- Better integrate rail requirements into the federal oil spill response plan structure.
- Comprehensive plans require railroads to identify response zones (12 hours)
- Comprehensive plans ensure by contract or other means the capability to respond to a worst-case discharge (WCD).
 - Proposed method for calculating the WCD = the greater of: 300,000 gallons; or 15% of the largest quantity of oil reasonably expected to be transported by any single train in a response zone

1
0



What does the rule propose OSRPs include?

- Front-page information summaries to facilitate usability and enforceability of the plans;
- Communication — Checklist of emergency response notifications listed by priority with specified time frames.
- Response zone specific information
 - Location of resources or certification of Oil Spill Response Organization (U.S. Coast Guard certified)
 - Description of response zone
 - Identification of environmentally sensitive areas

1
2



What does the rule propose OSRPs include?

- Other requirements
 - Certification of consistency with National Contingency Plan (NCP) /Area Contingency Plan (ACP) to integrate into the federal oil spill response structure;
 - Use of National Incident Management System (NIMS)/Incident Command Structure (ICS) for ability to operate in a unified command,
 - Procedures for training, drills, equipment testing, and recordkeeping

1
3



Where and when are comprehensive plans proposed to be submitted?

- Initial plans are submitted to the Federal Railroad Administration (FRA) for approval.
- Railroads must re-submit plans to the FRA for approval if there are significant changes.
- Railroads must review the plans every five years (or after an incident).



Who must the railroads notify for the new HHFT requirement?

- Railroads must notify State Emergency Response Centers (SERCs), Tribal Emergency Response Centers (TERCs), or other appropriate state designated entities who share information with other state and local public agencies upon request, as appropriate.
- Railroads provide the notification to DOT officials upon request.



How to submit online comments for the proposed rule?

Regulations.gov - Home

regulations.gov
Your Voice in Federal Decision-Making

Home Help Resources Contact Us

Search Browse Learn

Make a difference. Submit your comments and let your voice be heard.

SEARCH for: Rules, Comments, Adjudications or Supporting Documents:

PHMSA-2014-0105 Search

> Advanced Search

What's Trending

- Obstetrics and Gynecology Devices Panel of the Medical Devices Advisory Committee; Notice of Meeting
Closing on Aug 31, 2015
- Mitigation of Exposure to Bees from Acutely Toxic Pesticide Products; Extension of Comment Period
Closing on Aug 28, 2015
- Food Labeling: Nutrition and Supplement Facts Labels; Revision
Closing on Oct 13, 2015
- Instructions on Filing a Submission to FAA for applications/petitions/exemptions and any other items for which a Docket...

Comments Due Soon

- Today (34)
- Next 3 Days (93)
- Next 7 Days (221)
- Next 15 Days (414)
- Next 30 Days (793)
- Next 90 Days (1,167)

Newly Posted

- Last 3 Days (168)
- Last 7 Days (376)
- Last 15 Days (983)
- Last 30 Days (2,019)
- Last 90 Days (5,893)

Browse by Category

- Unified Agenda Spring 2015
- APIs for Developers



Additional Information

- Hazardous Materials Information Center
 - (800) HMR-4922 or (202) 366-4488
 - *Hours:* 9 AM to 5 PM, EST
 - *Email:* infocntr@dot.gov
- Safe Transport of Energy Products (STEP):
 - www.phmsa.dot.gov/hazmat/osd/chronology

