# Mayflower Pipeline Release Response Clean-up Criteria - April 6, 2013 - Draft

#### Introduction

This Response Clean-up Criteria document has been prepared for use to help evaluate when active emergency response-related cleanup activities by the Operations Section of the Mayflower Pipeline Incident (Mayflower) have been completed. These Response Clean-up Criteria are based on standard spill response guidance and practices, oil spill cleanup documents, and experiences from other oil spills. They were developed with guidance from the federal, state, local and responsible parties involved in active emergency response-related cleanup activities.

The practical reasons and objectives for assigning qualitative Response Clean-up Criteria are as follows.

Define the conditions beyond which further active emergency response-related cleanup activities would provide **no net environmental benefit** and may delay, rather than accelerate, recovery of impacted habitats and natural resources;

Define the target conditions that must be achieved before active emergency responserelated cleanup may transition to non-emergency response-related remediation activities, i.e. monitoring and maintenance; and

Provide Operations with clear clean-up targets for when active response-related treatment activities are completed.

The process uses agreed-upon qualitative operational criteria to assess whether active responserelated cleanup activities have been completed. It is recognized that the stakeholders (e.g., State of Arkansas) may have additional requirements, beyond the Response Clean-up Criteria specified in this document, which may include quantitative sampling of surface water, soils, sediments and groundwater and comparison of results to applicable state and federal standards. These Response Clean-up Criteria only apply to the non-residential impacted areas (listed below). It is also understood that these Response Clean-up Criteria do not limit further non-emergency responserelated remediation activities that may be required by the stakeholders.

#### **Approved Treatment Methods**

To date, the following nine approved treatment methods (ATMs) are being used for removing oil:

- 1. Cutting oiled vegetation being careful not to disturb the root system
- 2. Removing dead, oiled vegetation and small oiled woody debris
- 3. Cleaning large oiled woody debris or other hard surfaces
- 4. Manually removing oiled (surface) sediment
- 5. Using sorbent boom, sweep, pads and snare to remove (surface deposited) oil
- 6. Removing oiled debris by using heavy equipment providing the equipment does not unduly affect the vegetation
- 7. Natural attenuation
- 8. Refer to Unified Command and other Interested Parties
- 9. Light mechanical equipment use in the affected areas, e.g., use of shovels/hand tools, miniexcavators and marsh haulers.

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## **General Operational Criteria**

In general the overall objectives are to:

Capture mobile oil (oil that is capable of being refloated when inundated).

Remove visibly stained soils.

Recover oily vegetation/woody debris

Where practical, un-oiled debris, sediment and vegetation will be left in place.

Provide Operations with clear clean-up criteria for when active response-related treatment activities are completed. Oil staining or sporadic coat may remain if it does not rub off on contact (residual oil is not easily removed and does not pose a significant contact hazard to wildlife because it does not wipe off on feathers or fur, and is not a source of persistent/chronic sheen). Additional treatment requirements may supplement those listed above and will be studied on a case by case with stakeholder and Environmental Unit agreement.

## Area-specific Response Clean-up Criteria

Table 1 lists areas (see Mayflower Pipeline Incident Approved Treatment Methods - April 3, 2013 document) where surveys have found oiling. Table 1 also provides area-specific Response Clean-up Criteria. Note that Table 1 does not include the residential area as residential clean-up criteria are not considered in this document.

| Table 1: Cor | relation of Area-specific Response Clean-up Criteria |
|--------------|--|
| Clean-up     | Areas  |

|  | R a i l<br>- M a i n<br>S t r<br>e e t | W o o d e d A r e a - M a i n S t r e e t t o W e s t a n d E a s t o f H i g h w a y 3 6 5 | C u<br>l v<br>e<br>r<br>t<br>h<br>H<br>i<br>g<br>h<br>W<br>a<br>y<br>I<br>4<br>0 | W o o d e d A r e a a s t o f I 4 0 t o "C o v e (( w a t e r ))" | "Cove<br>((wwaterr))"<br>Area |  |
|--|--|---|--|---|-------------------------------|--|
| Oil stains and coatings that do not rub off on contact may be allowed to weather and degrade naturally if there is no threat to wildlife and/or a low likelihood of re-suspension        |  | X   | x  | X   | X                             |  |
| Inaccessible oil stains and coating may be allowed to weather and degrade naturally if removal is not readily feasible or is unsafe.   | X                                      | X   | X  | X   | X                             |  |
| Areas ranging up to light oiling coverage may be left to recover naturally if aggressive cleanup may cause long-term damage, i.e., no net environmental benefit would occur from removal | X                                      | X   | X  | X   | X                             |  |

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#### **Inspecting and Documenting Response Clean-up Criteria**

Clean-up criteria will be visually assessed using the methodology and terminology provided below:

**Informal pre-inspection.** After Operations believe that the active emergency responserelated cleanup activities are complete, the Deputy Operations Chief will perform an informal Area inspection. The Deputy Operations Chief will:

- 1. Recommend additional cleanup or
- 2. Notify the Environmental Coordinator of his recommendation that treatment is complete.

**Post-Operations assessment.** If treatment is considered complete by the Deputy Operations Chief, a Clean-up Assessment Review Team (CART), consisting of the Unified Command representatives, that is:

- FOSC, Environmental Protection Agency
- SOSC, Arkansas Department of Environmental Quality
- LOSC, Faulkner County
- RP, ExxonMobil

**Post-Operations assessment**. Specific Areas will require additional CART members. For example, the Area known as the Cove will require assessment and input from the Arkansas Game and Fish Commission. The CART will either:

- 1. recommend additional clean-up; or
- 2. determine that active emergency response-related clean-up activities are complete and meet the Response Clean-up Criteria allowing that Area to be transitioned to the non-emergency response-related remediation activities, i.e. monitoring and maintenance; or
- 3. determine that no current clean-up should be performed because further clean-up actions would potentially cause greater harm; i.e., there is no net environmental benefit to continuing the clean-up activities.

Results will be documented for each Area.