ALTERNATIVE RESPONSE TOOL - SUMMARY EVALUATION WORKSHEET (SEW)

The Summary Evaluation Worksheet is a scoring worksheet, to be filled out by the ARTES review committee, with a copy sent to the solicitor or vendor and another archived with the DRAT.

INSTRUCTIONS FOR COMPLETING THE SEW

1. In Items A through C, ensure that no spaces are left blank.

2. In Item D, for each evaluation factor in the Summary Evaluation Matrix, check the best rating description. Check Non-Applicable (N/A) if a given evaluation factor doesn't apply to the tool/product under review.

3. Compute an average score for the response tool/product by totaling the numbers checked for all applicable factors (ignore any checked N/A values), then dividing this total by the total number of applicable factors (the factors for which you did not check N/A). Write this score in the Average Score space.

3. In Items E and F, write in relevant comments and the RTS's or ARTT s final recommendations.

INSTRUCTIONS FOR USING THE COMPLETED SEW

1. Review the average scores of each Alternative Response Tool Proposal (ARTP) evaluated to select the best alternative. While generally, the ARTP with the highest average score is likely to be the one selected, two caveats apply:
   - Average scores are useful only for comparing similar technologies.
   - ARTPs that receive a score of 1 or 2 in any factor should be carefully scrutinized. In most cases, ARTPs that score a 1 or 2 in any factor will not be considered as an alternative.

2. The RTS or ARTT should check YES or NO to make their final recommendation, and also may choose to discuss their recommendation in Item E (Comments).

ALTERNATIVE RESPONSE TOOL - SUMMARY EVALUATION WORKSHEET (SEW)

A. Method/Technology: _____
B. Operational Need Addressed: _____
C. Type ARTP: A ○ B ○ C ○ D ○
D. Summary Evaluation Matrix:

FACTORS	RATING DESCRIPTION					
Toxicity	Extremely Toxic 1 ○	Toxic 2 ○	Slightly Toxic 3 ○	Possible Toxic Effects 4 ○	Non-Toxic 5 ○	Non-Applicable N/A ◉
Application	Extremely Difficult 1 ○	Very Difficult 2 ○	Difficult 3 ○	Slightly Difficult 4 ○	Not Difficult 5 ○	Non-Applicable N/A ○
Pre-test Procedures	Extremely Difficult 1 ○	Very Difficult 2 ○	Difficult 3 ○	Slightly Difficult 4 ○	Not Difficult 5 ○	Non-Applicable N/A ○
Historical Success	Negative Data 1 ○	No Data 2 ○	In-House Data 3 ○	Small Spill Data 4 ○	Large Spill Data 5 ○	Non-Applicable N/A ○
Recovery Potential	None 1 ○	Low 2 ○	Moderate 3 ○	Good 4 ○	High 5 ○	Non-Applicable N/A ○
Time of Arrival On Scene	Greatly Exceeds Window of Opportunity 1 ○	Exceeds Window of Opportunity 2 ○	Meets Window of Opportunity 3 ○	Precedes Window of Opportunity 4 ○	Greatly Precedes Window of Opportunity 5 ○	Non-Applicable N/A ○
Required Outside Support	Very Difficult to Obtain 1 ○	Not Reasonably Obtainable 2 ○	Slightly Difficult to Obtain 3 ○	Easily Obtainable 4 ○	None 5 ○	Non-Applicable N/A ○
Disposal	Extremely Difficult 1 ○	Very Difficult 2 ○	Difficult 3 ○	Slightly Difficult 4 ○	Not Difficult 5 ○	Non-Applicable N/A ○
Operational Parameters	Poor 1 ○	Fair 2 ○	Good 3 ○	Excellent 4 ○	Excellent & performs in harsh conditions 5 ○	Non-Applicable N/A ○
Technical Monitoring	Extremely Difficult 1 ○	Very Difficult 2 ○	Difficult 3 ○	Slightly Difficult 4 ○	Not Difficult 5 ○	Non-Applicable N/A ○
Environmental Impacts	Severe 1 ○	Moderate 2 ○	Slight 3 ○	Minimal 4 ○	None 5 ○	Non-Applicable N/A ○

Average Score: _____

E. Comments: _____

F. Recommendations: _____

YES ☐	NO ☐

G. Signature of ARRT/RTS Leader: _____ Date: _____ Time: _____

DEFINITIONS

TOXICITY: Data for exposure concentrations and duration consistent with expected use patterns should be assembled since they may be more appropriate than standard test data (e.g., LC_{50}). These standard toxicity tests have been designed for testing readily soluble materials. Products which are sparingly soluble, chemical-treating agents will present methodological problems as to how to prepare a test solution. These problems may lead to highly variable test results depending on how individual laboratories interpret test procedures. Use of readily available toxicity data may be misleading, so all information should be used with caution.

APPLICATION: When determining the degree of difficulty in putting a response tool into action, one must consider sophistication of the application system, the level of operator training required, and the available stockpile of the response tool. Sophisticated response tools that have application systems with multiple mechanical and power components and that require a high degree of training are least desirable and therefore "extremely difficult" to use. Those response tools that are used in bulk or that are not available in sufficient quantities to aid in the response, are also least desirable.

PRE-TEST PROCEDURES: If insufficient information is submitted or data are not available, evaluators may require additional testing of the tool to augment the evaluation. This may also be a requirement of use under specific conditions at the time of a spill. The evaluators will need to determine whether this is a necessity and, if so, the degree of difficulty associated with this requirement.

HISTORICAL USE: This is a measure of the documented success of the response tool under actual spill situations, based on the availability of data. This data can be in the form of photo and video documentation, third-party letters of support, and independent scientific field tests. Those response tools having any negative data, i.e., information that indicates the response tool as being adverse to response operations, would get the lowest rating. Response tools having little or no data to support historical success would receive the next lowest rating.

RECOVERY POTENTIAL: This is a measure of the response tool's ability to remove the pollutant of concern. This entails a review of the tool's recovery efficiency (percentage of pollutant recovered in a mixture) and recovery rate (rate at which pollutant is recovered (usually expressed in volume/unit time)). The response tool should be evaluated on its enhancement of recovery efficiency and rate.

TIME OF ARRIVAL ON SCENE: Each response tool is assumed to have an optimal window of opportunity for use. It is preferable for a response tool to arrive on scene well in advance of its window of opportunity to allow for field-testing and troubleshooting if required.

REQUIRED OUTSIDE SUPPORT: The evaluators must determine what auxiliary support the response tool requires, such as special fuels, respirators, hoses, boats, and eductors. An ideal response tool is one that comes with all the support equipment needed to put the tool into service.

DISPOSAL: Federal, state, and local permits and requirements differ for various waste products. All conditions for removal, storage, and final disposition must be met.

OPERATIONAL PARAMETERS: The performance of the response tool under current spill conditions needs to be assessed. "Spill conditions" in this context refer to the parameters that make up the spill operating environment, for example, sea state, wind, wave, currents, and temperature. For evaluations conducted before a spill, N/A would be selected for this factor. However, the evaluation team will need to define the best operating spill conditions for the response tool and write their findings in the comments section of this worksheet.

TECHNICAL MONITORING: The evaluators will need to determine the necessity for environmental monitoring and/or sampling and, if required, the degree of difficulty to perform the prescribed tasks. These tasks may include measurements in the air, water, and/or sediment, for biological, chemical, and/or physical components.

ENVIRONMENTAL IMPACTS: As opposed to specific toxicity issues, some of the factors to be considered here are possible smothering effects, adherence to feathers and fur, fate and degradation time for unrecovered product, effects on surrounding habitats, and effects of setting up and operating equipment.