

SPILL RESPONSE MANAGEMENT: SHORELINE CLEAN- UP ASSESSMENT TECHNIQUE



Shoreline Clean-up Assessment Technique (SCAT) is a systematic and comprehensive approach to surveying, collecting and documenting real-time data on shore oiling conditions during a spill response. The SCAT process begins as soon as the threat of shoreline oiling is identified, with shoreline assessment data collected quickly and clean-up endpoints established early.

SCAT AND SPILL RESPONSE

SCAT is an integral component of the response organization and is fully integrated into the Incident Command System during a spill response. Each component of the SCAT process is fully scalable to meet the needs of an incident.

SCAT became an integral component of spill response after the Exxon Valdez spill in 1989, which was the first spill where standard approaches for documentation, terminology and decision making were applied. Many organizations have since developed SCAT programs, manuals, field forms, job-aids and training courses, including Environment and Climate Change Canada and the BC Ministry of Environment.

GETTING INVOLVED IN SHORELINE CLEANUP

Oiled shorelines contain hazardous materials and are not a safe environment for untrained people. Assessing and cleaning up oil and oily waste from shoreline areas is conducted by specialized professionals using proper equipment. If a spill was of a size that required public involvement in shoreline cleanup, volunteers would be given real-time training and be integrated into the paid response workforce. Anyone interested in volunteering should immediately contact the response—under no circumstances should volunteers organize themselves.

WHEN IS SCAT USED?

A SCAT program can be applied to any type of response, including oil, chemical or marine debris, and in any type of habitat, such as shorelines, wetlands, lakes, rivers, streams or uplands.

WHAT TYPE OF DATA DOES SCAT COLLECT?

SCAT provides crucial field data on the location, degree and character of shoreline oiling, including shoreline habitats, oil type, degree of shoreline contamination, spill-specific physical processes, and ecological and cultural resource issues.

HOW IS THE DATA USED?

Data is used by decision makers to set strategies and objectives for a shoreline cleanup plan that maximizes the recovery of oiled habitats and resources, while minimizing the risk of further ecological injury from cleanup efforts.

When determining the shoreline cleanup plan, the following is also considered:

- Potential for human exposure, by direct contact or by consuming contaminated seafood
- Extent and duration of environmental impacts if the oil is not removed
- Natural removal rates
- Potential for remobilized oil to affect other sensitive resources
- Likelihood that clean-up could cause greater harm than oil alone

HOW DOES SCAT WORK?

During a spill response, SCAT teams are deployed to:

- Continuously assess the nature and extent of shoreline oiling and the logistical requirements for deploying field teams
- Determine the best treatment options by compiling maps and spatial data on sensitive resources and shorelines
- Develop initial clean-up guidelines and endpoints
- Apply clean-up constraints to reduce further harm
- Organize and train teams, conduct shoreline surveys, provide data to decision makers
- Obtain stakeholder/agency agreement for when a shore is considered clean
- Manage and present field data to planners and decision makers to ensure the appropriate methods and treatments are selected

WHO IS ON A SCAT TEAM?

SCAT teams are typically small and can include representatives from provincial and federal agencies, the Responsible Party, municipalities and First Nations.

WHAT ARE THE RECOMMENDED TACTICS?

Tactics suggested by SCAT teams during a spill response could include natural recovery, manual/mechanical oil removal, closures of oiled shoreline areas and shoreline flushing.



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North Coast | Prince Rupert: 250-624-5666

Sources

BC Marine Oil Spill Prevention and Preparedness Strategy | gov.bc.ca
U.S. National Oceanic and Atmospheric Administration | noaa.gov