

IPIECA/OGP GUIDE TO OILED SHORELINE ASSESSMENT (SCAT) SURVEYS

Ed Owens and Helen Dubach¹

Abstract

Despite the best intentions of an on-water response to an oil spill at sea or in rivers, the likelihood is that at least some of the spilled oil will eventually reach the shoreline. When shoreline impact occurs, or is likely to occur, a shoreline assessment is a critical component of the response program and provides essential information for setting objectives, priorities, constraints, and end points for shoreline cleanup operations.

Shoreline assessment surveys are carried out to:

- Define and document the scale and character of shoreline oiling
- Identify and document the shoreline type and coastal character within the affected area
- Develop recommendations for treatment endpoints and treatment techniques which provide a Net Environmental Benefit
- Provide support throughout the treatment program so that shoreline operations understand the expectations and concerns of the response managers
- Provide a process for sign off once treatment has been completed
- Involve appropriate representatives to ensure consensus throughout the shoreline response program.

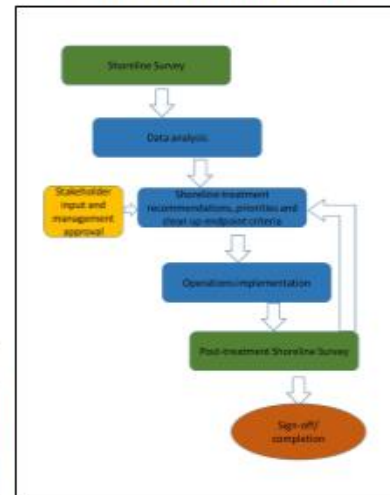
The IPIECA/OGP Guide (subtitled "Good practice guidelines for incident management and emergency response personnel") has been designed to explain why and how an effective shoreline assessment program supports the planning, decision making and implementation process for a shoreline response and how the key components of a shoreline assessment program are integrated into the data generation, decision process, and implementation and closure stages of a shoreline response.

The Guide contains the following sections:

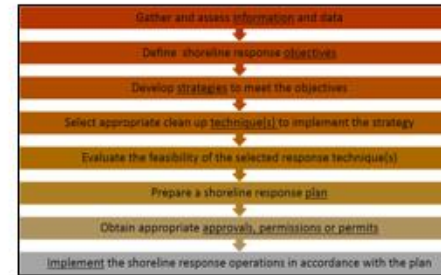
- **Why is a Shoreline Oiling Assessment Program Important?**
- **What are the objectives of a Shoreline Oiling Assessment Program?**
- **How does Shoreline Oiling Assessment fit into a Shoreline Response Program and the Management Organisation?**
- **Who is Involved in a Shoreline Oiling Assessment Program?**
- **What are the Key Information Requirements for Decision Makers**
- **How is a Shoreline Oiling Assessment Program Implemented?**
- **Variations in Time and Space**
- **What Types of Data are Generated?**
- **How is a Shoreline Treatment Plan Completed?**
- **Appendix A - Example of an Oiled Shoreline Assessment Survey form**
- **Appendix B - Shoreline Oiling Assessment Program Checklist**



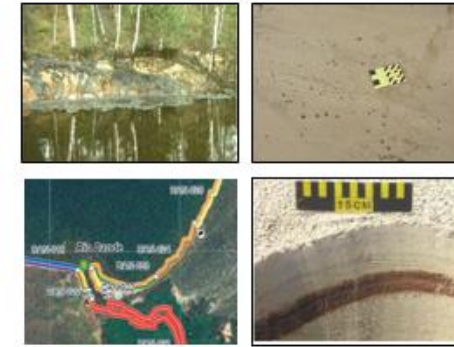
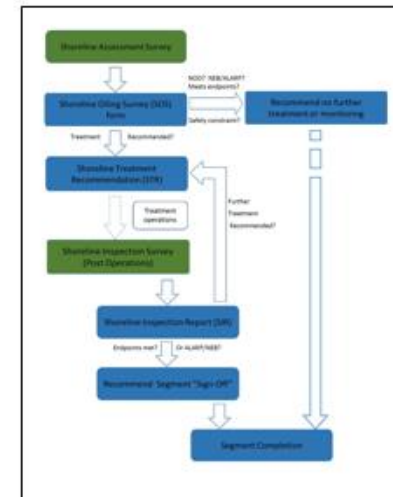
Strategy for Shoreline Treatment Completion:



Information Flow and the Decision Process:



Segment Completion Process:



Why is a Shoreline Oiling Assessment Program Important?

A well-managed oiled shoreline assessment, or SCAT (Shoreline Cleanup Assessment Technique) program generates systematic data while fully engaging stakeholders and integrating into the response management organization. SCAT provides:

- Comprehensive documentation of oiling and shoreline conditions
- Objective scientific data and recommendations
- Standard measurements, terminology and descriptions
- Recommended treatment strategies
- Recommended endpoint criteria for segment sign off
- Operational constraints, safety and security issues.
- Ecological, cultural and socio-economic constraints
- Best Management Practices
- Management decision making process which includes stakeholder and regulatory input
- Monitoring of treatment progress
- Trained and calibrated inspection teams for completion
- Data that can be useful for a number of other purposes, that can include damage assessment or recovery studies.

Without this set of information, effective response planning and prioritisation for shoreline operations would not be possible and operations would have to make spontaneous, on-site decisions regarding treatment. Instead, SCAT provides experts to survey shorelines ahead of operations to assess the need for treatment and to produce recommendations and objectives that, along with stakeholder input, allow for efficient and effective planning. In addition, SCAT provides a strategy for completion (see Figure 1), without which a spill response would be unable to ensure an efficient process and an appropriate and sensible conclusion, which may lead to under- or over-utilization of resources and potential negative environmental impacts due to excessive treatment. Shoreline assessment surveys therefore provide valuable information and support for decision makers, planners and operations to effectively treat or clean oiled shorelines by accelerating recovery without causing additional harm to the environment.

