

WEBINAR 3: YOUR PREPAREDNESS JOURNEY

A Best Practice Guide to Selecting, Organizing, Storing, and Maintaining your Tier 1 Oil Spill Resources

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SESSION OBJECTIVE

Examine some of the most effective ways to select, locate, organize, store, and maintain your facility's Tier 1 Response Resources and establish a program that ensures your response personnel have the opportunity to practice the safe use and deployment of the equipment.

Session Description

During this session, we will be looking at six different areas we should consider when looking to make our on-site Tier 1 Response Resources as effective as possible should they be needed in the event of an oil spill incident.

These are:

- ❖ Selecting the right Tier 1 oil spill response resources for your operations
- ❖ Locating your response resources
- ❖ Types of storage facilities
- ❖ Organizing your resources
- ❖ Establishing an effective maintenance program
- ❖ Sustaining response readiness



1: SELECTING YOUR RESPONSE RESOURCES

Selecting Tier 1 Oil Spill Response Equipment

Equipment Selection Based on Risk, Location, and Manpower

1. Risk Assessment

1. Analyze historical spill data and potential spill scenarios.
2. Consider the types of oil transported or stored.
3. Evaluate sensitive environments and resources at risk.

2. Location Analysis

1. Assess proximity to vulnerable coastlines or habitats.
2. Identify access points for response equipment.
3. Examine local weather patterns and water currents.

3. Manpower Considerations

1. Determine the availability and training level of personnel.
2. Project the number of responders required for an initial response.
3. Plan for integration with local response teams and volunteers.

Selecting Tier 1 Oil Spill Response Equipment cont.

Equipment Selection Based on Risk, Location, and Manpower

1. Equipment Selection

1. Skimmers: Match oil types and spill conditions.
2. Containment Booms: Choose based on waterway classification and currents.
3. Sorbents: Select for versatility and waste management practices.

2. Logistics and Storage

1. Ensure equipment is readily accessible and deployable.
2. Secure storage locations near high-risk areas.
3. Organize frequent maintenance checks and drills.

3. Local Coordination

1. Collaborate with local agencies and industry partners.
2. Align resources with regional response plans.
3. Invest in community preparedness and awareness programs.

Takeaways: *Effective Tier 1 response requires customized equipment choices that align with an in-depth understanding of local risk factors, environmental conditions, and human resources.*



2: LOCATING YOUR RESPONSE RESOURCES

Choosing **Where** to locate your Tier 1 Oil Spill Response Equipment Storage Area.

Your storage location should be close enough to the potential sources of oil spills to allow for easy and quick mobilization using your primary transport method (by hand, road vehicle, or boat etc.). It is important that the storage area and its access routes should not be in any immediate impact zones.

It is likely that in most cases, the equipment will need to be moved from the storage location to spill site; therefore, a storage location should take into account the following points:

❖ Site Accessibility

- ❖ Easy site access minimizes the chance of accidents, and saves time in travelling to, and departing from, the area.

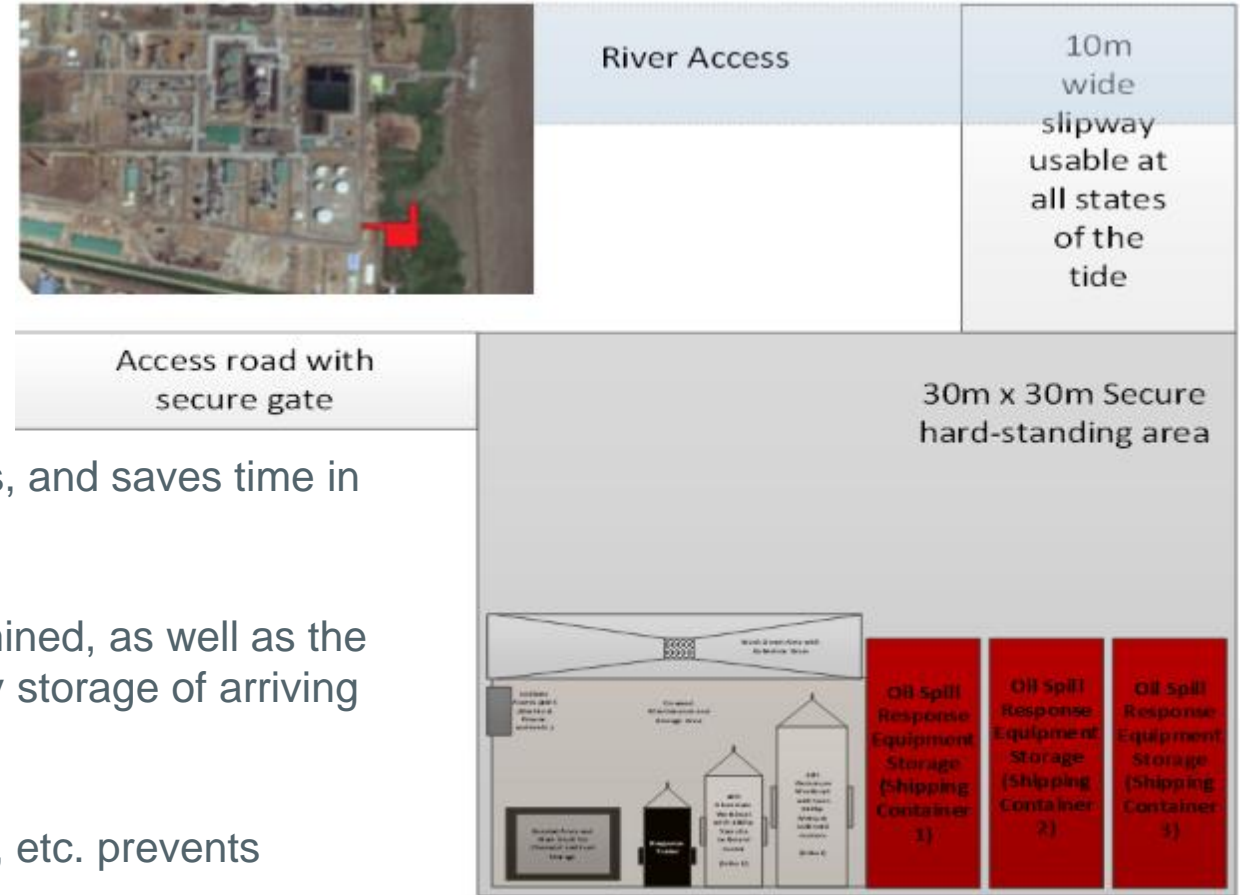
❖ Size of Storage Area

- ❖ The type and size of the equipment should be examined, as well as the need for laydown or holding areas for the temporary storage of arriving materials, vehicles, personnel, equipment, etc.

❖ Security

- ❖ A Controlled Entry and Exit Point, Lighting, Fencing, etc. prevents unauthorized access and keeps the location secure.

❖ Fresh Water Supply and Sanitation Facilities





3: TYPES OF STORAGE FACILITIES

Choosing **What** to store your Tier 1 Oil Spill Response Resources in.

Choosing the right type of storage facility depends on factors such as type and size of resource stockpile, new build or re-purposed area, size of response area, and local environmental conditions.

Ideally, the storage area should:

- ❖ **Secure** against unauthorized entry yet easily accessed when required
- ❖ **Clean**, dry and well ventilated, temperature-controlled in extreme environments
- ❖ **Protected** from direct sunlight and extremes of weather/temperature
- ❖ **Separated** from flammable, explosive or dangerous goods



Choosing **What** to store your Tier 1 Oil Spill Response Resources in.

- ❖ **Organized** so that response equipment can be found and removed from the storage area easily
- ❖ **Allow access** to Safety Resources, i.e., Fire Extinguishers, First Aid Kit, Responder PPE.
- ❖ **Easily Visible** Information Signs, Traffic regulatory signs, Display of safety rules, Site map showing Muster Points and Emergency Escape Routes, etc.
- ❖ **Have a** sheltered maintenance / a wash-down area with closed drains.





4: ORGANIZING YOUR RESOURCES

Consider **When** Organizing your Emergency Response Resources

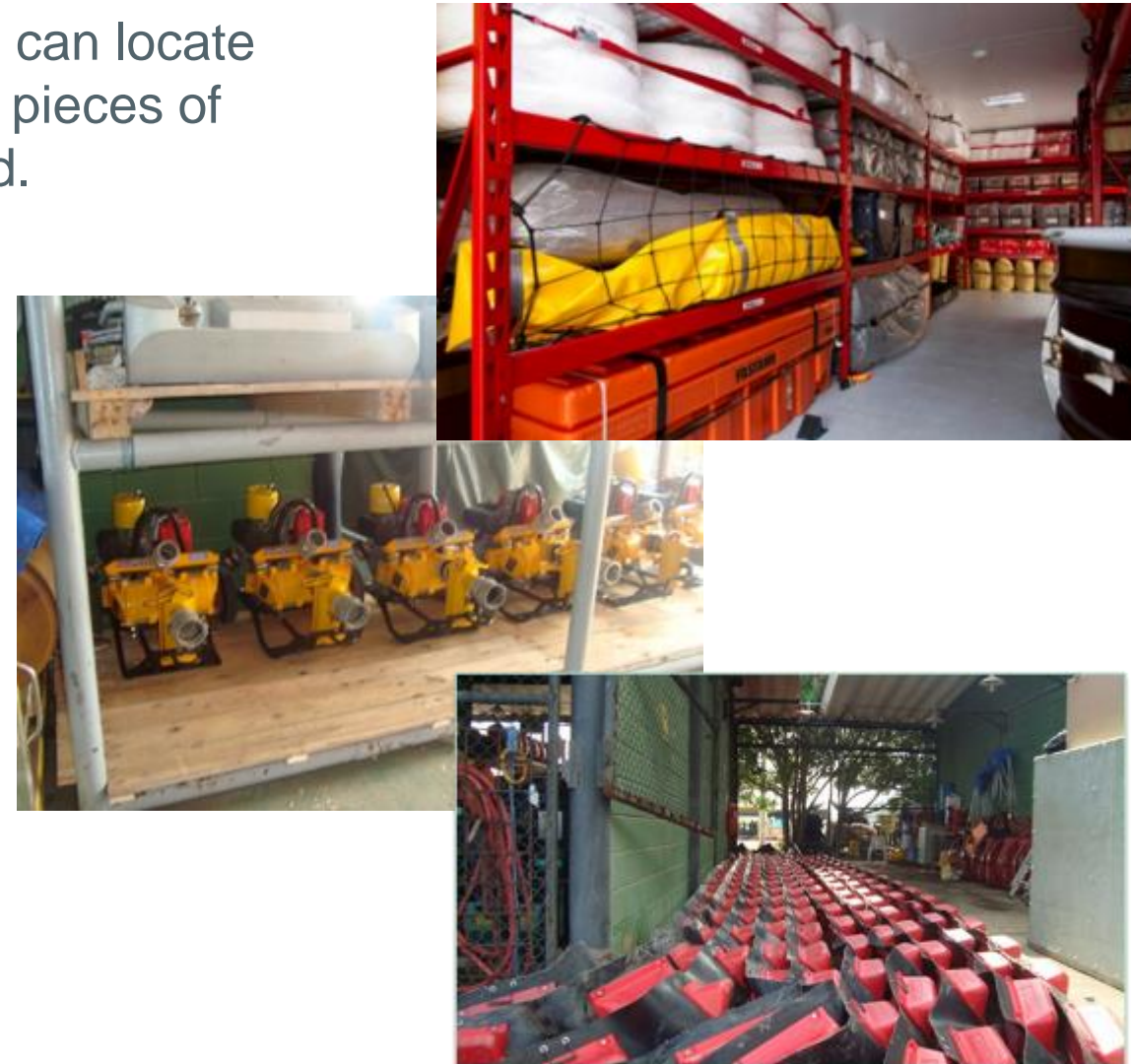
Organize your response resource storage area so you can locate resources quickly, and without the need to move other pieces of equipment out of the way before they can be accessed.

- ❖ **Close to the front of the storage area:**

The lighter, more frequently used equipment like sorbent materials, responder PPE, assessment and warning signs, and hand tools.

- ❖ **Close to the back of the storage area:**

The larger, less frequently used equipment like booming systems, pumps, skimmers, and power-packs.



Consider **When** Organizing your Emergency Response Resources

In general, your resource storage area should be organized as to:

- ❖ **Have clean and clear access** to warehouses, storage areas, and stored materials.
- ❖ **Keep aisles, passageways, and exits clear** and free of slip, trip, and strike-against hazards.
- ❖ **Store flammable, combustible, and hazardous materials** in a way that minimizes the dangers.
- ❖ **Store materials and supplies** in an organized manner to ensure easy access for retrieval and transportation.
- ❖ **Place heavier loads** on lower or middle shelves.
- ❖ **Enable the use of powered equipment** such as a forklift or hydraulic fork jack instead of manually lifting heavy materials.





5: ESTABLISHING AN EFFECTIVE MAINTAINCE PROGRAM

The Maintenance of Oil Spill Equipment is **Essential** to ensure that it remains in a state of readiness.

While the equipment may spend most of its life packed and stored, it must still be maintained. Internationally, most organizations produce a maintenance schedule for their oil spill response equipment based on weekly, monthly, quarterly, and yearly intervals. For each period, a task list outlines the inspection and maintenance procedures to be carried out. The task list will depend on the type of equipment, how regularly it is used, and where it is stored.

Specific maintenance programs provided by equipment manufactures/suppliers must always be followed; however, as a guideline, the following procedures are carried out at the specified intervals:

Weekly

- ❖ Security check (unauthorized access)
- ❖ Brief visual inspection of storage area (walkthrough looking for any major problems; i.e., damaged, leaking or missing equipment)

Monthly

- ❖ Visual check of the equipment for condition and serviceability.
- ❖ Report any issues and arrange for any repairs or other work to be carried out

Quarterly

- ❖ Resource stockpile inventory check.
- ❖ Run all internal combustion engines.
- ❖ Practice the use, mobilization and deployment of one piece of equipment.
- ❖ Keep a record of work completed and report any issues.

Annually

- ❖ Change fuel, oil and all filters e.g. air, fuel, hydraulic etc.
- ❖ Conduct a major mobilization exercise using as many of the response resources as possible using a possible oil spill scenario that could occur at the facility.



6: SUSTAINING RESPONSE READINESS

Maintaining Response Readiness

Communication is Key

Regular Drills, Exercise, and Competency Training are all essential tools in maintaining response readiness. The frequency of these sessions should be established upon the requirements at both a facility, corporate, and legislative level.

An equipment deployment exercise allows response team members to:

- ❖ **Familiarize** with the type and safe usage of the equipment found in their Tier 1 Response Resource Stockpile,
- ❖ **Practice** how they would respond to an oil spill event at their location following the procedures as detailed in the facilities oil spill response plan.



Maintaining Response Readiness

Communication is Key

These practice sessions allow all members of the Response Team to walk through, in slow time, the different response strategies available to them and refresh their knowledge of the other prevention methods that may use.

For example:

- ❖ A facility experiences a release from a truck-loading rack.
- ❖ The Response Plan might call for a nearby shut-off valve to be closed, keeping the spill on-site rather than draining into a nearby ditch. If that's the case, personnel need to check the function of that value during this exercise.



Preparedness Tools and Services from OSRL

How Prepared are You to Handle a Spill?



A Tiered and Integrated Response Strategy Maximizes Response Effectiveness

Self Assessment Tools

- > Ready Check Assessment
- > Capability Review Guides

Drill and Exercise Support

- > Long Term or Short Term Specialist Support

On-line and remote delivery Training

- > Published Courses
- > Client Tailored

Capability Reviews

- > Equipment
- > Logistics
- > Management

Contingency Plans

- > Oil Spill Modeling
- > Risk Assessment
- > Environmental Sensitivity
- > Wildlife

You can get technical advice over the phone, outside of a response.

Staying in Touch

Support Services

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