

## **KISH P & I LOSS PREVENTION CIRCULAR KPI-LP-81-2012** **(Maritime Pollution & Contingency Planning)**

### ► A) Introduction:

Careful planning is an essential preparation for any successful operation, especially an emergency one. Response to accidental spillage of oil is a typical example. Many people may be affected by an oil spill and many organisations have duties to perform apart from the task of physical clean-up. For example, an incident involving an oil tanker may entail search and rescue, lightering of cargo and salvage activities, all of which may impinge upon any spill response. There is often concern for the effects on the environment, fisheries, industry and recreation as well as considerations for public health and safety. There will inevitably be conflicting interests and the news media are always quick to expose any indecision, weakness or disagreement. Such situations are easier to resolve when a well prepared and tested contingency plan is available.

Contingency planning should follow the tiered response concept. *Most oil spills are small and can be dealt with locally (Tier 1). Should the incident prove beyond the local capability or affect a larger area, an enhanced but compatible response will be required (Tier 2). The foundation of this tiered response is the local plan for a specific facility such as a port or oil terminal or for the length of coastline at risk from a spill. These local plans may form part of a larger district or national plan (Tier 3).*

National plans may in turn be integrated into regional response arrangements covering two or more countries.

In general, contingency plans should follow a similar layout irrespective of whether they are local, national or regional in scope though their length and content will vary with the size of the area covered and degree of risk. Similarity in layout will enable the plans to be easily understood, will assist compatibility and ensure a smooth transition from one level to the next.

While the structure will be similar, vessel plans will of necessity require different information to those for land based operations and will be covered separately.

\*Contingency plans are best divided into two distinct parts:

- ✓ -The first should be a descriptive policy document outlining the overall strategy of the plan, while;
- ✓ -the second should form the operational plan concerned with procedures to be followed when a spill occurs.

The strategy segment of the plan should define the policy, responsibilities and rationale for the operational plan which is essentially an action checklist with pointers to information sources. A plan should be reasonably complete in itself and should not entail reference to a number of other publications, which causes delay. A loose-leaf format facilitates regular updating and there should be provision for listing and dating amendments.

### ► B) Strategy:

The strategy section should cover eight main areas:

1. Introduction;
2. Risk Assessment;
3. Resources at Risk and Priorities for Protection;
4. Response Strategies;
5. Organisation and Management; Equipment,
6. Supplies Services and Manpower;
7. Communications & Control; and Training,
8. Exercises and Updating Procedures.

In the introduction, the authority or lead agency responsible for the formulation and implementation of the plan and an explanation of the statutory requirements, if any, should be defined. The geographical coverage of the plan should be outlined and reference made to interfaces with other plans.

The expected frequency and size of spills and the types of oil likely to be encountered should be addressed.

Historical spill data where available may allow a quantitative assessment. The number of calls made by vessels, particularly tankers, is relevant. A range of possible spill scenarios can be developed from an analysis of oil related activities and the types of oil handled in or transported through the area. The probable movement and fate of slicks should be studied and recorded. Details of oil types and prevailing meteorological and oceanographic conditions should be annexed.

Amenity areas, ecologically sensitive areas, sea water intakes, fisheries, mariculture, seabirds and marine mammals and other resources likely to be threatened by an oil spill should be identified. Since it will not be possible to give equal protection to all sensitive resources, priorities need to be determined. Account should be taken of the practical problems as well as the relative economic and environmental values of each resource and their sensitivity to oil pollution. Seasonal variations e.g. of beaches and breeding areas should be noted. Information on the location and sensitivity of resources and priorities for protection is frequently

provided in the form of maps annexed to the contingency plan.

Clean-up strategies should be determined in relation to the perceived risk and agreed response priorities. Account should be taken of the limitations of spill control techniques and the most appropriate equipment chosen for the anticipated weather conditions and oil types. Shoreline clean-up strategies should be prepared for the types of coastline likely to be encountered. Predetermined temporary waste storage sites and disposal routes should be detailed. Maps detailing strategies and restrictions, access points and waste sites should be annexed.

The outline of the response organisation and the responsibilities of those likely to be involved should be detailed. Central coordination under a single organisation which has complete responsibility for handling the operation should be considered in order to minimise confusion. However, procedures for coordination between organisations should be outlined. The size of the response organisation will depend on the area covered by the plan, the severity of the threat and the sensitivity of any threatened resources. Relevant government departments, advisors and experts should be annexed.

The siting of response equipment and the procedures for mobilisation should be determined. An inventory of available equipment should be annexed. Provision for food clothing, shelter, medical facilities and other logistics support should be also detailed. The availability of back-up support should be recorded, both nationally and internationally. In the latter case, provision should be made for customs and immigration procedures as well as financial arrangements. The manpower required to respond to a spill should be estimated. Additional manpower may be required in the case of large spills. Contractors and other sources of manpower should be annexed.

The establishment of a fully equipped communications centre should be predetermined to ensure that the correct information is passed to the correct people. The centre should act as a central channel for all information. Where clean-up operations are conducted over extended distances, portable communications centres should be located close to the scene of operations. Supplies of charts, maps, reports, manuals etc. should be provided for. Accurate recording of all actions and maintenance of appropriate documentation related to the use of manpower, equipment and materials as well as expenditure is vital for future reference and the submission of claims for compensation.

Training programs should be developed for all levels of response personnel. Exercises should be held at regular intervals to ensure the plan functions correctly and to familiarise all participants with its contents. Detailed equipment should be mobilised and deployed to test its actual availability and performance. An oil spill provides

the best opportunity for improving a plan. Events should be reviewed soon after clean-up has been completed and the plan revised on the basis of lessons learnt.

### ► C) Operational plan:

The operational procedure can be divided into six main parts, generally following the chronological order of occurrence during a spill:

1. Notification,
2. Evaluation,
3. Response,
4. Clean-up,
5. Communication,
6. and Termination.



The information required to allow an accurate evaluation of an incident should be detailed i.e. date, time, position, source, cause, amount and type of oil, slick size etc. and the procedure for the evaluation of the seriousness of the incident should be given. A programme for alerting response personnel and the relevant authorities should be included.

Methods for trajectory modelling, procedures for aerial and terrestrial surveillance, for the identification of threatened resources and for notifying pre-identified parties likely to be affected should be included.

The plan should allow the consideration of various response options according to the situation. Procedures for placing manpower and equipment on standby prior to mobilisation should be included.

Procedures should be included for establishing a dedicated response centre, for mobilising & deploying the necessary equipment and manpower, organising logistic support, continuing with any aerial surveillance and considering any disposal options. In addition, provision should be made for locating a command post close to the site of the incident. Procedures for opening channels of communication should be detailed.

Guidelines for the level of clean-up required for each location should be given together with procedures for

standing down equipment. Guidelines for the restoration of temporary storage sites should be outlined.

Listings of information that will be required to facilitate an efficient and effective response should be included as a series of annexes.

- ✓ Contact directory of response personnel - out of office contact details should be included where appropriate.
- ✓ Contact directory of third parties - parties likely to have an interest in an incident e.g. police, media, parties of likely impact and other authorities.
- ✓ Primary response equipment - government, private contractor and oil industry equipment.
- ✓ Auxiliary response equipment - sources of workboats, tugs, helicopters, aircraft, barges, vacuum trucks, tractors, protective clothing, hand tools, radios etc.
- ✓ Logistics suppliers - suppliers of catering, housing, transport, sanitation, laundry etc.
- ✓ Manpower sources - contractors, local authorities, military, fire brigades, volunteer organisations and other sources.
- ✓ Experts and advisors - personnel with detailed knowledge of oil pollution; of the local coastal environment, particularly of flora and fauna; of safety; and of other areas.
- ✓ Maps of sensitive areas - showing detailed information on the location of amenity and ecologically sensitive areas; sea water intakes; fisheries; mariculture; seabirds and marine mammals; and other resources likely to be threatened. Seasonal sensitivity should be highlighted.
- ✓ Maps of the coastal region - showing priorities for protection; illustrating strategies and restrictions; access points; waste sites; etc.
- ✓ Oil types likely to be encountered - detailing their properties; persistence; likely fate and effects; suitable response techniques; etc.

In summary, an effective contingency plan will serve to promote a trained and practised response when personnel are faced with an emergency situation.

**►D) Ten questions for assessing the adequacy of a contingency plan:**

1. Has there been a realistic assessment of the nature and size of the possible threat, and of the resources most at risk, bearing in mind the probable movement of any oil spilled?
2. Have priorities for protection been agreed, taking into account the viability of the various protection and clean-up options?
3. Has a strategy for protecting and cleaning the various areas been agreed and clearly explained?

4. Has the necessary organisation been outlined and the responsibilities of all those involved been clearly stated with no 'grey areas' - will all who have a task to perform be aware of what is expected of them?
5. Are the levels of equipment, materials and manpower sufficient to deal with the anticipated size of spill. If not, have back-up resources been identified and, where necessary, have mechanisms for obtaining their release and entry to the country been established?
6. Have temporary storage sites and final disposal routes for collected oil and debris been identified?
7. Are the alerting and initial evaluation procedures fully explained as well as arrangements for continual review of the progress and effectiveness of the clean-up operation?
8. Have the arrangements for ensuring effective communication between shore, sea and air been described?
9. Have all aspects of the plan been tested and nothing significant found lacking?
10. Is the plan compatible with plans for adjacent areas and other activities?

