ABSTRACT

California’s coastal Area Contingency Planning Committees began the process to develop “California Distressed Vessel/Potential Places of Refuge (PPOR)” data-gathering and decision-making tools in July 2006. The first step in this process was for members of California’s statewide Area Contingency Plan (ACP) Committee to be open to the possibility they may allow a distressed vessel into their backyard. Next, they were challenged with representing non-situational data in a common data collection format for use by all six California coastal Area Committees. Modeled largely on the PPOR products developed in Alaska, the committee relied on the Regional Response Team IX Guidelines, and the Commandant Instruction (COMDTINST) 16451.9 U.S. Coast Guard Places of Refuge Policy Enclosure (2) (POR Job Aid) resources. Stakeholder involvement throughout this process helps to establish realistic expectations in advance and build trust between stakeholders and decision makers. The populated databases, located in the ACPs, will support incident-specific decision-making and risk assessment anywhere in California by any California Federal On-Scene Coordinator or Unified Command during an actual Places of Refuge (POR) event.

INTRODUCTION

Initiated by The M/T Prestige incident off the coast of Spain, November 2002, California Area Contingency Plan committees are preparing to make hard decisions with all port stakeholders about what to do with a vessel in distress. In the past, identifying a place of refuge (formally called a place of “safe” refuge) implied an approval to bring pollution into a community’s back yard. As we learned with the Prestige incident, preparing to make a decision about entry for a distressed vessel based on all the risk factors will ultimately benefit everyone.

A “place of refuge” (POR) is defined as a location where there are resources to stabilize a distressed vessel, protects human life, and reduces a hazard to navigation. A place of refuge may include the vessel’s current location, constructed harbors, ports, natural embankments, temporary grounding sites, or offshore waters. Other options to consider for vessel actions when in distress, that are not considered places of refuge, include transiting to the next port, scuttling, and grounding.

When a vessel is in distress, the most effective way to reduce the risk to the surrounding environment is to stabilize the vessel and prevent discharge into the water. Once product is in the water it is subject to wind, tide, and currents significantly reducing control over which places in the area are impacted. Counter-intuitively, moving a distressed vessel, with potential to discharge product, to an environmentally sensitive area equipped to stabilize the vessel might provide greater overall benefit to the entire area by preventing a catastrophic discharge.

There is no single place of refuge suitable for all vessels and all situations. The best location for a place of refuge at any given point in time is dependent on incident-specific characteristics and real-time input by appropriate stakeholders. When considering places of refuge decisions, we have to consider multiple interests, including, but not limited to, operational, human health and safety, natural resources, security, resource users, land owners and land managers. During an incident, the COTP has overall authority to make this decision but would not make it unilaterally. It is in the best interest for all stakeholders to prepare for this decision together and create tools that facilitate a unified decision.

Related Terms

- Force majeure:
- Intervention on the High Seas Act

These terms have relevance but are difficult to apply blanket statements for their role in POR situations and precedence has not been set.
PRE-PLANNING TOOL DEVELOPMENT

To better prepare for an incident, local ACP Committees should collect non-situational data about their ports. Alaska’s ACP section on POR model this approach to preplanning and highlights the value for collating concrete data that is found in other publications into one document divided by potential places. The POR Job Aid, designed for use during an incident, highlights the value in also collating new information about concerns for the potential impacts on human health and safety, natural resources, and economic consequences for all options a vessel may have to stabilize their situation. A product that has all of this data in one location easily searchable for places in an area is a necessary tool for the COTP to use for risk assessments at the time of an incident.

California’s coastal Area Contingency Planning Committees began the process of developing “California Distressed Vessel/ Potential Places of Refuge (PPOR)” data-gathering and decision-making tools in July 2006. It was decided that all Area Committees will need to provide specific information for potential places of refuge in their area of responsibility, and identify the advantages and consequences in the use of each potential site. There are at least four general California statewide Places of Refuge committee purposes:

1. Information-gathering: Help decide, ahead of each Area Committee working on this issue, the general types, framework and depth of information needed from each area.
2. Adapt/refine the decision-making process: Ensure the decision-making processes among ACP areas, or even among west coast states, are consistent or compatible.
3. Information presentation: Choosing a model to present the information. The RRT IX framework currently suggests a one-page/two-sided presentation of information for each AOR that is similar to information format in the ACP Environmental Sensitive Site information (9800 section).
4. ICS function: Identify where Places of Refuge incident-specific information-gathering, and decision-making fits within the ICS.

The first step in this process was for members of California’s statewide Area Committee to commit to viewing this complex process with a wide-angle perspective. They where charged with developing a general approach to preplanning, common data formats and underlying databases for use by all six California coastal Area Committees.

During early meetings, there were preliminary discussions about how to organize the decision process. For statewide consistency, one committee member believed process identification was more important than putting specific potential place of refuge sites in the plan. On the other hand, others emphasized that using pre-identified potential sites in the plan instead of using a decision process might be more helpful. Task Groups are currently working with Harbor Safety Committees, Harbor Safety Plans, Area Committees, and Area Contingency Plans, to refine the decision-making process and identify where the Places of Refuge process fits within ICS. Further committee discussion revealed a consensus that the main drivers for the decision process during an incident will likely include:

- Each stabilization location option’s feasibility: Salvor’s limitations for each option based on vessel situation
- Regional response resource availability
- Resources at risk
- Local conditions influencing options: major current and wind factors
- Economic / political considerations

The second task for preplanning was to develop a uniform approach for collecting empirical information and stakeholder concerns. The objective was to develop a product that will provide, for any place with the potential for consideration by a vessel for refuge, a decision-making tool that could be used as a resource for the California Federal On-Scene Coordinator or Unified Command. The committee decided to create a database with fields that all areas can populate with their area specific information.

The committee developed a list of data fields that are useful in the risk assessment process and not reliant on situational factors. They referenced the Regional Response Team IX POR Guidelines, the Alaska PPOR ACP model, and U.S. Coast Guard Commandant Instruction (COMDTINST) 16451.9 Enclosure (2) Place of Refuge Risk Assessment Job Aid (POR Job Aid). Applicable fields were incorporated from the Alaska model that were straightforward and found in other resources including depth, lat/long, and currents. We also added fields that directly supported fields in the CG Job Aid and were new territory for PPOR planning requiring intense committee discussion.

CG Job Aid fields required careful thought and consideration to ensure they were used appropriately during an incident. The data field titles were developed using the same terminology (matching word for word when possible) and organization used in the Job Aid for easy conductivity. This approach lead use down a path to enter numbers into these fields that could be directly entered into the Job Aid’s quantitative risk assessment formulas. The committee realized the implication of quantifying in a planning tool and choose to address these items as memo fields to house stakeholder input about concerns.

The data in these memo fields will lead decision makers to appropriately apply high risk values in the overall weighted risk equation for areas where stakeholders describe a high concern for the environmental sensitivity. For this reason it is essential that all potential places vessels may want to seek refuge in are represented in the PPOR database and that planners must understand listing a PPOR in the database does not designate it as an approved place for refuge in all situations. The objective is similar to conducting an environmental impact assessment or ecological risk assessment for places identified as potential places for refuge by vessel experts.

FINALIZING THE FORMAT

This complete set of data fields was put into a Microsoft Access database to increase the likelihood for future compatibility with the State’s Environmentally Sensitive Site information in the ACPs. This was a collaborative effort by the CA Department of Fish and Game Oil Spill Prevention and Response (OSPR), California Coastal Commission, and US Coast Guard. See figures 1-4 showing the data entry forms used for each PPOR.

FIGURE 1. PHYSICAL CHARACTERISTICS PROTOTYPE DATA ENTRY FORM FOR EACH PLACE.
ENTRY FORM ABOUT NATURAL RESOURCE CONCERN
committee-developed method to label PPOR that each area could
Top Exercise (TTX) to learn about the usability and incorporate
works in each port. The economic and geographic differences
a place identification and delineation method to organize data that
loosing consistency.

One unanticipated challenge during this process was to create
a place identification and delineation method to organize data that
works in each port. The economic and geographic differences
in each ACP area highlighted the need for the database to look
at places as both areas and specific places. The solution was a
committee-developed method to label PPOR that each area could
use even when approaching the delineation differently without
loosing consistency.

This database was tested during the San Diego 2007 National
Preparedness for Response Exercise Program (NPREP) Table
Top Exercise (TTX) to learn about the usability and incorporate
lessons learned before a statewide rollout. During one of ten
modules, we provided training on the POR Job Aid for distressed
vessel decision making to the 150 participants. This instruction
included walking the participants through the steps in the POR
Job Aid intended for use when a vessel is distressed. We also
demonstrated how to use the pre-incident data survey form created
to enter information into the PPOR database. We then assigned
each group with a different potential place of refuge in San Diego
(obtained from Harbor Safety Committee Members) to discuss

and collect data to populate the database. The California statewide
database was finalized in August 2006 and is now being populated
by all ACP areas in California.

OSPR also published step by step guidance for populating
the database incorporating stakeholder involvement. Highlighted
in this direction was that the process must start by asking vessel
masters and experts where they would consider seeking refuge.
One approach taken in San Diego was to ask the Harbor Safety
Committee to list the best places for stabilizing a distressed vessel
based on ship repair resources etc. This research resulted in eight
practical locations represented by eight separate forms in the Ac-
cess Database. February 2008, San Diego is bringing a variety of
stakeholders together to populate the empirical and concern data
fields.

One lesson we have learned is that including a variety of
stakeholders in the pre-planning and data-gathering process has
increased stakeholder and natural resource trustee familiarity with
the process. This will help to establish realistic expectations in
advance and build trust between stakeholders and decision mak-
ers. The expected product will provide a single decision-making
process for all of coastal California and will be consistent with
other U.S. west coast states. The end goal is to incorporate the data
reports into the ACPs under the appropriate section.

CONCLUSION
California’s PPOR pre-planning approach was developed for a
wide variety of ports and can be applied outside of California.
There are other models used in Washington State and Oregon
but may not directly feed information into the new POR Job Aid.
Working on this project as a collaborative process was a success in
increasing preparedness based on the dialog it has initiated about
POR decision making.

BIOGRAPHY
LT Dietrich has a background as a civilian Environmental Health
and Safety Specialist and Marine Safety Professional Officer
in the United States Coast Guard. She obtained a B.S. in En-
vironmental Health / Industrial Hygiene (1998) from Bowling
Green State University in Ohio and Master’s in Environmental
Science (2001) from the Medical University of South Carolina.
Her civilian profession focused on environmental hazard assess-
ment, mitigation, and control including occupational safety and
health, exposure assessment, training, and program maintenance.
While on active duty almost 5 of the last 7 years, she qualified as
a FOSCR, Pollution Investigator, Contingency Planner, Harbor
Safety Officer and nearly Port State Control Boarding Officer. She
served as Sector San Diego Area Contingency Plan Coordinator
and Command Duty Officer for the last two years. She was the
lead designer for the 2007 PREP Table Top Exercise in San Diego
which helps facilitate CA Places of Refuge Pre-planning, hazard-
ous substance preparedness, communications, wildlife response,
and applied technologies. She has been an active member in the

Ms. Faurot-Daniels has worked for the California Coastal
Commission since 1998, and has been the agency’s Oil Spill Pro-
gram Supervisor since 1999. Trained as a marine scientist, she has
also been active in many marine conservation planning and policy
activities for the last 17 years. She currently participates actively
on all six California Area Committees and their subcommittees,
co-authored the California Dispersant Plan, and is chair of the
California Distressed Vessel/Places of Refuge Committee.
REFERENCES


U.S. Coast Guard Commandant Instruction (COMDTINST) 16451.9, July 17th, 2007. Enclosure (2) U.S. Coast Guard Places of Refuge Policy.