

PERFORMANCE ASSESSMENT

All stakeholders assess response performance using criteria similar to those identified in Section 3. It is not likely that all stakeholders, applying their individual, disparate, and sometimes conflicting criteria, will agree on a level of performance in a given response. Everyone is entitled to and will draw conclusions, but are all conclusions equally valid? The most likely scenario in a larger spill is that at least some stakeholders will make negative judgments, and those negative judgments will impact perceptions of responders' capabilities adversely. Should those evaluating spill response performance be spill experts or not? This dilemma has faced the response community since the days of the *Torrey Canyon*.

5.1 CURRENT STATUS

In the 1970s and 1980s, spill experts played a primary role in advising spill managers regarding response priorities and strategies. In the 1990s, experts are but one voice among many. With the emergence of other stakeholder groups, spill experts no longer dominate the decision-making process or the assessment of performance. The long and varied list of stakeholder criteria in Table 1 demonstrates their competing perspectives.

In most countries, there is no other agreed on mechanism for assessing response performance, and the media often are regarded as the final judges of response performance. The media may not have expertise to make such judgments, and their criteria may not be clear or consistent, but they are motivated to judge. This points to the importance of debate about who should assess performance and which criteria should be used.

There is a conflict between judging response performance in terms of scientific assessment of impacts and recovery and other measures such as removal of visible oil, the efficiency of the spill management team, or media and public reaction to the incident. If a response goal is to minimize the environmental impacts of the spill, then performance could be easily assessed. Response strategies that have the best chance of minimizing the impacts of the spill should be used as soon as possible to attack the oil during the emergency phase, while it is still concentrated near the source of the release.

Measuring the environmental effects of spills is a well-developed science that has been done for 30 years. Contingency planning, with the goal of minimizing environmental impacts of spills, also is well known. However, no systematic way to evaluate overall spill response performance has yet been proposed. Conflicts arise when stakeholders have differ-

ing expectations. Stakeholders' interests can be determined and discussed during the planning process as well as during a spill. They must be allowed to ask questions and get timely, thoughtful answers. If it is not possible to accommodate these interests, a full explanation should be made. Often, if citizens were told the reasons for scientific recommendations, e.g., leaving a small amount of oil on a beach, they would accept that reasoning.

The importance of rapid, open communication is paramount for education of, and building trust between, stakeholders. Communication among responders and stakeholders is vital. There are many opportunities for this during the contingency planning process when stakeholders may discuss and attempt to reach agreement on response goals and priorities as well as measures they will use to assess spill response performance. Stakeholder agreement and understanding of response goals is essential for the response to be conducted effectively.

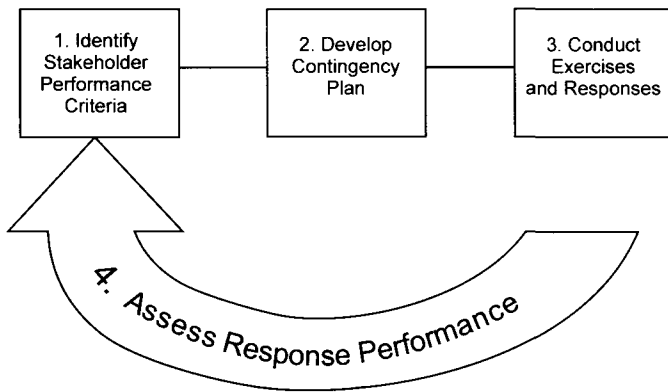
To date, efforts to improve response performance have focused mainly on providing more and better equipment, more personnel, more detailed and deliberate planning, and training and exercises. Until recently, little effort has been expended on devising clear and objective tools to assess the results of those preparedness and response efforts.

5.2 PROCESS FOR ASSESSING PERFORMANCE

The purpose of analyzing and evaluating response performance should be to improve that performance. This section recommends tools to assess spill response performance and make a judgment. Assessing response performance involves agreeing on and adopting performance criteria or standards and measuring performance results against those criteria. What will emerge from an assessment of spill response are aspects of the response where performance was strong and other aspects where improvement is needed. The recommended performance assessment process involves four phases aimed at developing performance criteria and standards for measurement in advance (Figure 4).

The spill response community is familiar with Phases 2 and 3. It is the contention of the author that much more attention is needed on Phase 1 and that a process for improving performance is essential (Phase 4). The feedback loop allows the responders, in consultation with stakeholders, to identify places where improvements are needed. Using lessons learned from exercises and responses the performance criteria can be assessed and contingency plan modified as needed. Discussion of each phase follows.

FIGURE 4.
PROPOSED RESPONSE PERFORMANCE ASSESSMENT PROCESS



PHASE 1: IDENTIFY STAKEHOLDER PERFORMANCE CRITERIA

Developing criteria and standards before a crisis will make it easier to develop response performance measures. This planning process will be further improved if response strategies are developed around stakeholders concerns. The use of external stakeholders in environmental decision making is rapidly increasing. Yosie and Herbst (1998) propose a process for involving both internal and external stakeholders in environmental decision making. This process may be used to identify, evaluate, and adopt criteria and standards by which to assess spill response performance. Performance criteria and measurement standards developed by both internal and external stakeholders become part of contingency plans and form a foundation for response goals and strategies.

The challenge of identifying and engaging stakeholders is difficult. There is not much experience with the stakeholder process yet in spill response planning, but their participation is essential to avoid default negative judgments. Yosie and Herbst (1998) note that some issues may not evoke sufficient interest or concern to merit a stakeholder's involvement. Cultural differences around the world may influence the degree of involvement. The lack of initial involvement should not discourage response organizations. Opportunities to foster stakeholder involvement can often be found following a spill. For example, a spill that attracted much media exposure and public outrage may generate stakeholder interest to participate.

Once stakeholders are engaged, their criteria for assessing response performance can be documented and catalogued. The best defined and most measurable criteria are those of the scientific community and response operations specialists. However, these criteria may not include all concerns of all stakeholders. As additional stakeholder criteria are developed, planners may discover inconsistencies and conflicts that will ultimately have to be resolved. Review of numerous case studies indicated that stakeholders' strategies, tactics, and response performance criteria vary from place to place and incident to incident. Tebeau (1995) studied the *Exxon Valdez*, *American Trader*, and *Morris J. Berman* spills to determine what criteria

were used by FOSCs to determine how clean is clean. For the *Exxon Valdez* spill, cleanup was judged "complete" when:

- no oil was detectable in the water or on adjoining shorelines; or
- further removal caused more environmental harm than good; or
- cleanup was excessively costly in view of risk prevented; and
- activities required to repair unavoidable damage resulting from removal actions had been performed.

For the *American Trader* spill (1990), a beach was determined to be sufficiently cleaned when:

- No hydrocarbon odor, visual evidence of oil, or "oily feel" existed on the beach.
- The average hydrocarbon level of the berm, low tide zone, and high tide zone samples taken every 500 feet along the beach segment was less than 100 ppm (using the EPA 418.1 Method).

For the *Morris J. Berman* spill (1994), how clean is clean guidelines were developed for four habitat type:

- **Sand beaches.** Surface sediments must be free of visible oil, oily feel, and the smell of oil. Tarballs should be minimal and high recreational use beaches should be monitored for tarballs. Sand replacement and sand washing should be completed for heavily oiled, very high use, recreational beaches. Beaches should be sampled at regular intervals for buried oil, which should be removed. Sand that is merely stained may be left in place.
- **Beachrock and riprap.** In areas of high recreational use, heavily oiled natural bedrock areas should be cleaned using shoreline cleaning agents and high-pressure, hot water flushing (one treatment only). Residual oil should be left in place, as the objective is not to remove all oil but to enhance natural removal. In areas with limited recreational use or no access, gross accumulations of oil should be removed from accessible sites, and the remaining oil left for natural removal. Most inaccessible areas were also high-energy areas.
- **Seawalls.** In high recreational use or high visibility areas, hot water, high-pressure washers should be used to the extent that the seawalls do not feel tacky when touched. Residual staining may remain. For other seawalls, gross oil that continues to generate sheen should be removed. Residual staining may remain.
- **Submerged oil.** Accumulations of submerged oil should be removed, particularly in sheltered, shallow lagoons. Scattered accumulations in other areas should be removed consistent with operational limitations. Oil should be recovered until declining effectiveness renders further recovery impractical.

PHASE 2: DEVELOP CONTINGENCY PLAN

As discussed in Section 4, contingency planning is required in every area of the world where oil is produced, handled and transported. The contingency planning phase provides opportunity to gain consensus on response goals and priorities. To the degree that this is achieved, the changes of improving performance are increased.

Abordaif *et al.* (1995) define contingency planning as a *process*, not a product. They emphasize the importance of participants gaining an understanding of problems through the planning process. Relationships, and hopefully trust and mutual respect, are established through resolving issues together in a non-crisis environment. Patry and Rivet (1995) recommend involving as many interested parties as can be identified in the contingency planning process and in training. They list 16 different agencies or groups that are interested parties in their area (Quebec, Canada) with a seventeenth category that could include associations, groups, or businesses that could be affected by the spill such as bird watching groups, fishermen's associations, and environmental groups. Certainly the number of interested parties can be quite large. Ott *et al.* (1993) stress the importance of having the same individuals who will participate in the response work together during the planning and training process. Christopherson and Slyman (1993) and Harbert (1995) also recognize this and recommend team building among responders.

The best way to deal with the competing perspectives of the individual stakeholders is to develop consensus on goals, priorities, and standards to be used by all stakeholders in assessing preparedness and response performance. The process of developing specific goals and critical success factors as part of the contingency planning is described by Ott *et al.* (in press). Their specific success factors are identified below:

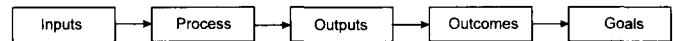
- no worker or public injuries,
- clear and effective notification procedures,
- effective identification and activation of resources,
- establishing a clear chain of command,
- identification and protection of sensitive areas,
- minimizing the impact of the spill and of the cleanup operation,
- positive meetings with interested parties and the public,
- positive media coverage, and
- positive public perception of the response.

Roosen (1997) applies the principles of crisis management, which include both human and organizational factors, to spill response and recommends that such principles be incorporated into contingency plans. Cantwell (1997) discusses the psychological factors involved in a spill response situation, including disrupted biorhythms and high stress. He concludes that the success of a response could be compromised by not recognizing and addressing these factors during the planning process.

Translating each stakeholder's performance criteria into coherent strategies with clear, achievable, and measurable goals is the planning challenge. The contingency planning

process should produce goals that provide responders with clear, specific, realistic, results-oriented measurable response objectives (Ott *et al.*, in press). A process model developed by Brown (1996) is helpful during contingency planning to develop performance measures. The process model was originally applied to business operations and consists of five performance elements that link together in sequence (Figure 5).

FIGURE 5.
MACRO PROCESS OF THE PERFORMANCE OF AN ORGANIZATION



Source: Adapted from Brown (1996).

In the business application, **inputs** are skilled, motivated employees, available raw material, and capital. **Process** includes product and service design and delivery. **Outputs** are the actual products and services and the financial results. **Outcomes** are satisfied customers whose needs are met by the product or services. The **goals** of such a model are repeat business and long-term survival of the company. Each element (input, process, output, and outcome) contains quantifiable performance criteria that can be used to identify performance strengths and areas needing improvement.

During contingency planning, planners can use this model to sort the criteria into performance elements, (e.g., inputs, process, outputs, outcomes) prioritize criteria, and identify conflicting or unachievable criteria. Table 2 lists example stakeholder performance criteria sorted by performance elements. For example,

- Inputs include such criteria as the contingency plan and notification procedures as well as the availability of equipment and trained personnel.
- Processes include the coordination and performance of the response personnel and equipment.
- Outputs include an effective and timely response.
- Outcomes include minimizing the spread of the spilled oil and the amount contaminating shorelines.
- The overall goal of the response is to minimize the impacts of the spill.

To illustrate how Brown's process model can be used to assess spill response performance, Figure 6 uses performance criteria of response operations specialists as an example since their criteria are more easily quantifiable. Specific performance measures that might be developed during the contingency planning process are identified for each model element.

Once the criteria are sorted, stakeholders need to be consulted to resolve conflicts and make compromises. Once conflicts are resolved, planners can develop goals and specific measures of performance for each of the remaining criteria. Brown (1996) stresses the importance of measuring the right variables and offers some general guidelines:

- Fewer are better. Concentrate on measuring the vital few rather than the trivial many.

TABLE 2.
CRITERIA FOR SUCCESS¹

CRITERIA TYPE	STAKEHOLDERS
INPUT	
Ready equipment	Operations, Managers, Environmental groups
Adequate equipment	Operations, Managers, Environmental groups
Adequately trained, available personnel	Operations, Managers
Ability to work together as a team	Managers
Some parties respond as practiced and trained	Managers
Capability for sustained operations	Managers
Expansion capability to accommodate a large spill	Managers
Ability to shift management styles during emergency and project management phases	Managers
PROCESS	
Proper deployment of equipment	Operations
Measure ecological effects on impacted populations	Scientists
Assessment using ACIP (After Contingency Plan)	Scientists
Use of Nat Environmental Benefit Analysis	Scientists
Measure toxicity of spilled oil to specified organisms	Scientists
Chemical analysis of oil residues	Scientists
Clear and effective authority chain of command	Managers
Coordination between all responding entities	Managers
Clear notification and call out procedures	Managers
Effective identification and access of response resources	Managers
Teamwork and cooperation	Managers
Effective and accurate permitting	Managers
Effectively communicate and manage information	Managers
Cooperative media relations	Managers
Involve interested parties in planning process	Managers
Attention to human factors	Managers
Greater interested party representation	Environmental groups

CRITERIA TYPE	STAKEHOLDERS
PROCESS (continued)	
Adequate funding for spill studies	Environmental groups
Timely and accurate reports/responses from sources	Media ^a
24-hour access to information sources	Media
Daily press conferences	Media
Public opinion polls	Media, Elected officials
Interested party interviews	Media
OUTPUT	
Contingency plan effectively implemented	Responsible Party ^a
Effective, timely, complete response	Responsible Party
Efficient performance of equipment (oil controlled/removed)	Operations
Positive Hain and public meetings	Managers
Premata recovery	Scientists
Fate of spilled oil	Scientists
Effects of spilled oil	Scientists
Probed identified sensitive areas	Scientists, Managers, Resource agencies
Protection of birds	Resource agencies, Scientists
Protection of mammals	Resource agencies, Scientists
Protection of fisheries	Resource agencies
Protection of refuges and parks	Resource agencies
No visible oil on water	Managers (G) ^a
No visible oil on shorelines	Managers (G)
Hydrocarbon levels measured below agreed upon standard	Managers (G)
Prompt removal of viscous oil	Businesses, Property owners

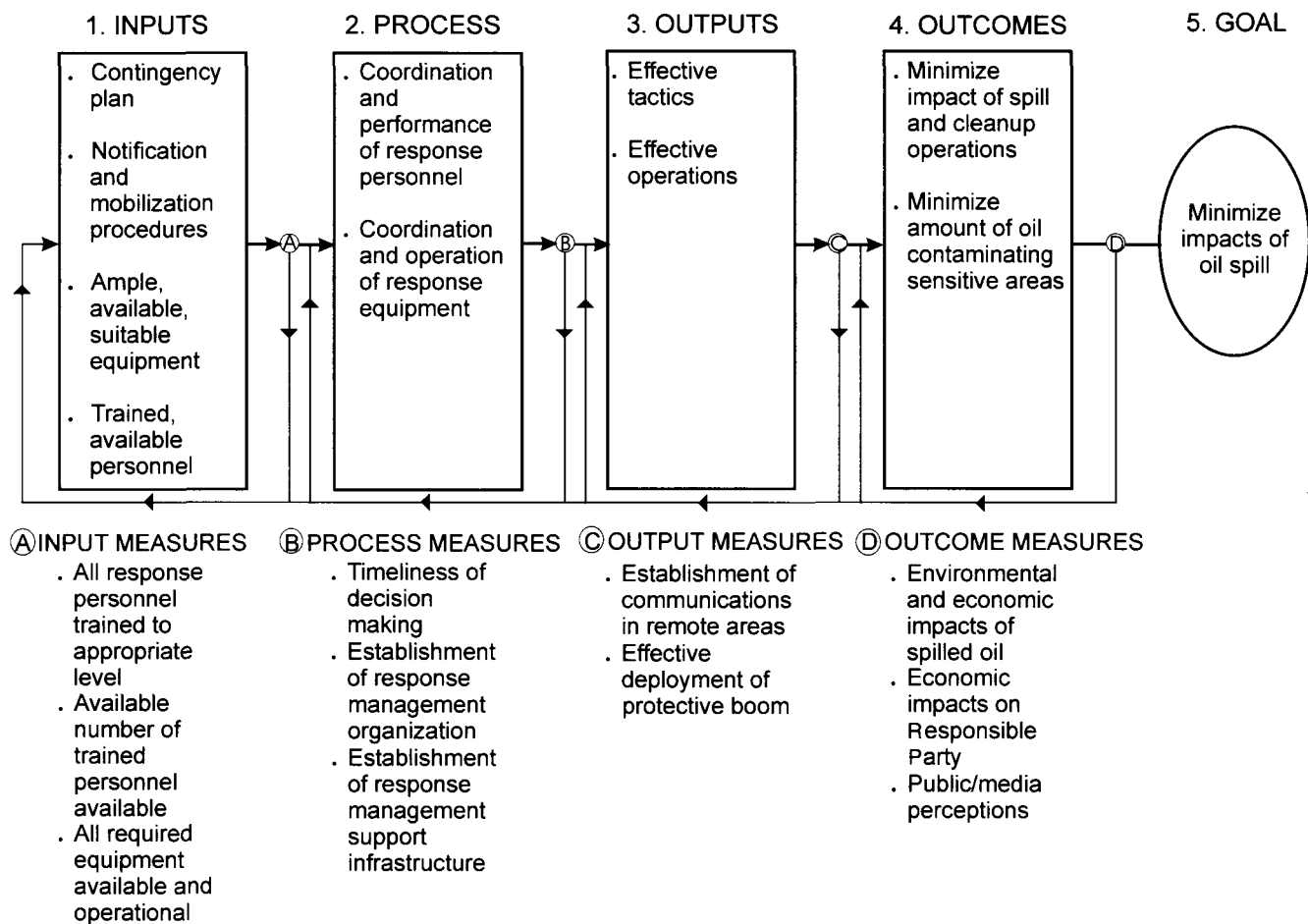
(continued)

TABLE 2.
CRITERIA FOR SUCCESS¹ (continued)

CRITERIA TYPE	STAKEHOLDERS	CRITERIA TYPE	STAKEHOLDERS
		OUTCOME (continued)	
Level of controversy	Media	Protect sensitive resources	Scientists, Resource agencies
Level of viable cleanup activity	Media	Response reduced impacts compared with no intervention	Scientists
Public opinion polls	Media	Minimize resource damage	Resource agencies
		Respond to constituent needs	Elected officials
OUTCOME		Benefits to society	Elected officials
Company survival	Responsible Party	Adequate compensation for those affected	Environmental groups
Minimize liabilities	Responsible Party	Prompt settlement of claims	Fishing industry
Perceived as good corporate citizen	Responsible Party	Healthy fish stocks	Fishing industry
Minimize impact of spill and cleanup	Responsible Party, Managers, Scientists	No closure of harbors	Fishing industry
Salvage operations minimize spillage	Operations	No contamination of fishing gear	Fishing industry
Minimize the spread of oil	Operations	No landing for perceived tainting of fish	Fishing industry
Interested party concerns addressed/ agreement reached	Managers, Media	No interruption of tourist or other businesses	Businesses, Property owners
Positive media coverage	Responsible Party, Managers, Operations, Elected officials	No bad publicity about the city/region of the spill	Businesses, Property owners
		GOAL	
Positive public perception	Managers, Operations	Minimize impacts of the spill	All
Meet public expectations for pollution response	Managers		
No worker injuries	Managers		
No public injuries	Managers		
No visible oil on water	Managers (O)		
No visible oil on shorelines	Managers (S)		
Minimize impacts (economic)	Managers		
Minimize impacts (environmental) of response and cleanup	Scientists, Managers, Resource agencies		

1 Organized by Brown (1996 model)
 2 Both Responsible Party and government spill managers.
 3 Newspapers, television, and radio.
 4 Spill management of the company that had the spill.
 5 Government spill managers/regulators.

FIGURE 6.
MACRO PROCESS MODEL APPLIED TO SPILL RESPONSE — OPERATIONS



Source: Adapted from Brown (1996). The boxes contain the stakeholder performance criteria from Table 2.

- Measures should be linked to the factors most important to the stakeholder.
- Measures should be a mix of past, present, and future measures to ensure the organization is concerned with all three perspectives.
- Measures should start at the top and flow down to all levels in an organization.

Detailed contingency plans will enable responders as well as stakeholders to know what must be done during a response and enable them to assess performance and determine when goals have been met.

PHASE 3: CONDUCT EXERCISES AND RESPONSES

Having an agreed on set of goals and performance criteria that may be included in contingency plans enables at least some assessment of performance, during contingency plan exercises as well as actual response operations. A pollution response exercise provides an ideal forum for “testing” strategies in contingency plans. It also provides opportunities for training, team

building, and building relationships with stakeholders. Effective exercises can help ensure that contingency plans will actually be used when a spill occurs.

PHASE 4: ASSESS RESPONSE PERFORMANCE

Assessing response performance during response is more challenging because of the emergency nature of the situation and because stakeholders are naturally drawn to their original criteria that may not have survived the planning process. However, response performance can and should be assessed as well. There are many stakeholders, many criteria, and many, sometimes competing, perspectives, on response performance. A company that has experienced a spill has company survival and financial integrity as its primary concerns. Being perceived as a good or bad corporate citizen impacts on a company's financial integrity. Therefore, an adequate and successful response is in an RP's interest. What constitutes an adequate response depends on who is judging and what criteria are used. Some stakeholders are concerned with the removal of visible oil (e.g., government spill managers, property owners),

still others want resources devoted to preservation of a single resource, e.g., fish stocks, and therefore wish to prevent any water column impacts (e.g., fishing industry). Other stakeholders are most concerned with minimizing impacts to birds or shorelines and less concerned with water column impacts (e.g., certain resource agencies). The scientific community wants ecological impacts minimized, ecologically sound cleanup methods, and scientifically credible assessment of the spill's impacts. Spill managers are concerned with setting up a workable management structure that can reach and implement decisions rapidly.

Acceptable outcomes can range from removing visible oil to minimizing ecological impacts. Pressure from various stakeholders seems to influence what is acceptable. There is agreement by most stakeholders that safety concerns are paramount. The goals of avoiding worker and public injuries rank above even the goal of minimizing environmental impacts. However, when this may mean that response activities are canceled during unsafe weather conditions, there again may be disagreements.

In Phase 4, response (or exercise) performance in each element is assessed against the specific criteria developed in Phase 1 to quantify performance. These performance standards focus on the ability to achieve planning objectives and overall effectiveness of response strategies. Measuring how quickly a boom is deployed or how much oil is recovered by an individual skimmer produces quantifiable but not necessarily relevant information. It is much more important to assess whether an inlet protection strategy works or environmental conditions are appropriate to effective skimmer operations. The first time the assessment is conducted, baseline measures will be obtained. Results from subsequent assessments can be compared to the baseline to judge where improvements, or declines, in performance have occurred. For example, in Figure 6, one of the performance criteria for response operational specialists is ample, available, suitable equipment. The performance measure for this criterion is "All required equipment available and operational." This assessment of equipment availability can then be judged against planning standards to see if criteria have been met. Subsequent assessments can be used to see if performance has improved. Strengths in performance validate stakeholder criteria and the planning strategy. Where improvement is needed, a response organization needs to examine performance criteria and planning strategies. In some cases, performance criteria may be unrealistic or unachievable and the planning strategy may need to be revised. The important point is that the assessments (Phase 4) must be compared to the performance criteria (Phase 1) so that judgment can be made and adjustments in response strategies made to improve future performance.

In the special case of very large spills, many more groups become involved and have an interest in the spill. In these large spills, each group will be making their own independent judgment of the response. Figure 7 illustrates how complicated it may become during large spills when groups begin to assess the spill response after it has happened. What options are available to make sense of this chaos? Whose assessments are

most valid? Whose assessment should be relied on? Assessment of a response will be easier to make and consensus more likely if standards and criteria were agreed to during the contingency planning process.

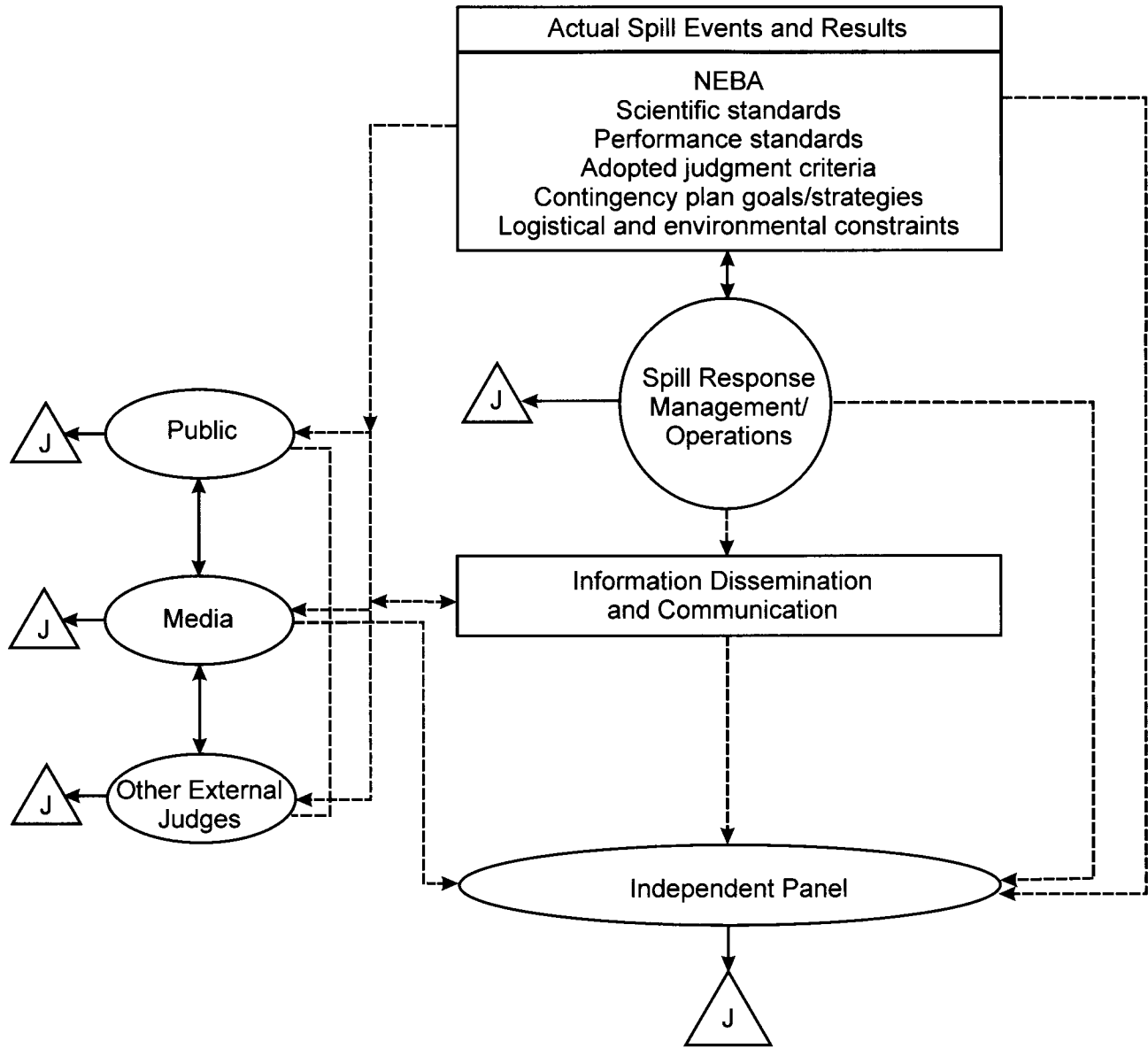
Wells *et al.* (1995) recommend an impartial panel of oil spill scientists to assess spill impact. While both science and management criteria offer quantifiable measurement criteria, neither address all the concerns of all stakeholders. In spite of strengthened requirements for contingency planning in all areas of the world, there may still be conflicting priorities and disputes over the use of certain countermeasures, what shoreline cleanup methods to use, and when to stop cleanup. Some interested stakeholders may call for removal of all visible oil as the measure of "clean." Others favor leaving some visible oil if to remove it will increase environmental impacts or delay natural recovery.

After major spills that require mobilization of large-scale response efforts, use of a third-party panel to evaluate response effectiveness may be valuable. One such independent panel was created at a national level in the UK to review response decision making and performance for the *Sea Empress* spill (Donaldson *et al.*, 1994). A panel or commission could be appointed to study the decisions, the reasons for them, and their impact and effectiveness, and develop recommendations for the future. The panel could be appointed by and report to a national, provincial/state, or local organization. That organization or an independent group (such as the National Research Council in the US) could manage it. The key is to keep the panel management independent of response management or participants. Another approach is to assign one government agency this task, much as the National Transportation Safety Board investigates airplane crashes in the US. A panel could be convened by the designated agency following each major spill.

The independent panel should include not only scientists and response operations specialists but also a variety of disciplines. It could include people in the region of the spill as well as outside. It is critical, however, that panel members have some expertise in spill issues and a framework by which to assess the response. Panelists must be familiar with the goals, objectives, strategies, and constraints that guided the response decision making.

The panel would study the spill case history, fate and effects studies, response operations data, and decisions made during response, as well as the options considered and why they were accepted or rejected. The impacts and effectiveness of these decisions could be documented and analyzed with the ultimate objective of improving the decision-making process during future spills (Figure 7). The review, conducted after the highly charged atmosphere of a spill response is over, would document the reasoning behind the many response decisions and the effects of those decisions on the outcome of the spill event. For example, if spill managers decided to leave some oil on a shoreline because to remove it would cause greater ecological damage, this documentation could vindicate a decision that may have been highly disputed at the time. On the other hand, the review could instill accountability to decision

FIGURE 7.
A RECOMMENDED PROCESS FOR ASSESSING SPILL RESPONSE PERFORMANCE USING AN INDEPENDENT PANEL



- Internal judges of spill response (responsible party, government spill managers, response personnel).
- ◌ External judges (the public, interest groups, media, business and property owners, elected officials) as well as the recommended independent panel.
- ▭ Incident events (programs, goals, standards, and logistical constraints) that influence and guide response and responders' explanation of events.
- △ Judgments of spill response performance by various judges identified.
- Response operations and judgment processes.
- - - Pattern of information collection and communications among spill management team, interest groups, and the media during an incident and communications flow from all stakeholders to the independent panel after an incident.

makers for a poor decision. For example, if spill managers decided against the use of chemical dispersants or *in situ* burning, the independent panel could document whether the decision was justified on scientific and logistical grounds. This analysis would be of great value to improve contingency planning and actual spill responses in the future.

The use of the independent panel offers the opportunity for an objective evaluation of response performance. Optimally, the independent panel would apply consensus criteria, developed using the stakeholder process described in Phase 1, to the assessment model proposed in Phase 2 (Figure 4) to produce a judgment. This independent judgment would then feed directly back to internal and external stakeholders and would be used to improve performance.

Several spill responses provide evidence that effective contingency planning and exercise has improved performance or identified needed improvements. Eldridge *et al.* (1997) studied the response to the tank barge *Buffalo 292* spill in 1996 in Galveston Bay. The barge spilled 3,000 bbls of IFO 380 (intermediate fuel oil). The response included shoreline protection, on-water recovery, and shoreline cleanup (Clark *et al.*, 1997). Eldridge *et al.* (1997) and Clark *et al.* (1997) conclude that the response was successful based on the recovery operations and shoreline cleanup activities. They attribute this success to the training and experience of responding agencies, i.e., the planning process, the large number of drills, and several previous incidents in the Houston-Galveston area during which all parties worked together. The authors stress the close working relationships among federal, state, local, and contractor responders. Martin *et al.* (1997) worked on the shoreline cleanup for the *Buffalo 292* spill and attributed their success to training, which made reaching consensus decisions easier.

The *Kirki* spill occurred 55 miles offshore of western Australia in 1991 where the Australian Maritime Safety Authority (AMSA) was responsible for coordinating the response. In reporting the spill, Brodie (1993) recommends the following changes in Australian response practices:

- clearly define federal, state, and municipal areas of jurisdiction;
- ensure all organizations involved in the response are aware of their regulatory authorities and responsibilities;
- ensure directions issued are in accord with these authorities; and
- ensure persons representing those authorities are given authority to make decisions without constant consultation with parent organizations.

5.3 SUMMARY

Response organizations should be concerned with assessing performance so that improvements can be acknowledged, weaknesses identified, and the ability of the response organization to meet goals increased. A systematic process to evaluate planning, exercise, and response that engages stakeholders and seeks to incorporate their criteria is proposed as the best way to deal with multiple perspectives. Gaining consensus on criteria, strategies, and response goals builds strong relations between response organizations and stakeholders and helps prevent negative judgments of performance.