

OIL SPILL PREVENTION & RESPONSE:
THE REALITY BEHIND "TRUST US"

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INTRODUCTION

Two years ago I was invited by the U.S. Coast Guard to speak at the 1989 International Oil Spill Conference. Representing the United Fishermen of Alaska, I joined other members of the "Open Ocean and Coastal Spill Panel" and presented possible economic effects of a large oil spill in Prince William Sound, Alaska, on the commercial fishing industry and local communities (Ott, 1989).

Five weeks later on March 24, 1989, the Exxon Valdez spill turned academic speculation into grim reality. Since this spill, I have testified before Congressional and State hearings and presented talks at universities and conferences around the country.

The Exxon Valdez spill focused national attention on inadequacies in oil spill prevention and response. Corrective measures, in the form of state and federal legislation, have since been adopted.

National attention is now focused on side effects of our current oil dependency, i.e., the war in the middle East. Proposed corrective measures rely heavily on developing domestic oil fields, particularly in Alaska's Arctic Ocean and Arctic National Wildlife Refuge (ANWR).

We are charging full speed down the path of continued oil dependency - and continued risk of oil spills. The prevailing attitude, once again, from industry and government officials is "Trust us."

Can we, the public, trust the system now in place, or planned, to adequately protect public health and the environment from the next catastrophic spill? First, we must answer two questions as frankly as possible.

1) Were the problems leading to the Exxon Valdez spill correctly identified?

2) Are the corrective measures (legislation) adequate to minimize risk from and maximize response to the next catastrophic spill?

IDENTIFYING PROBLEMS - CORRECTLY

Identifying problems contributing to the Exxon Valdez spill has been the subject of extensive public and private research (Alaska Oil Spill Commission Final Report 1990; National Response Team 1990). However, some of the inadequacies in the present system, for whatever reasons, went unreported. We must work to correct all the problems learned from the Exxon Valdez spill and response, no matter how politically painful, to have confidence in the foundations of our new spill prevention and response programs.

1) We have an attitude problem.

Norway and Scotland have a "no nonsense" attitude regarding oil spill prevention and response. Drills are conducted regularly and evaluated thoroughly. Response personnel and tanker inspectors/operators are trained to consistent and high standards. Equipment is inventoried and stockpiled at strategic locations by responsible or affected parties (Lawn 1990a; Ott 1990). Spill equipment technology is continually advanced through ongoing research. Spill response is combative and organized. People have clearly accepted the fact that oil will be spilled and are working to minimize that risk and make the most out of cleanups.

In the United States, we tolerate a lot of nonsense because the majority of the public has not accepted the risk of spilling oil as part of our reliance on oil. After the Exxon Valdez spill, company representatives claimed: "We're sorry. It was an accident. It won't happen again." Of course it is going to happen again. Until the public accepts this, there will be no long-term public pressure on

our leaders to demand increased controls, and no long-term commitment of public resources to pay for these controls.

Increasing fuel taxes to pay for some of the side effects of our oil dependency, such as increased prevention and response measures and destruction of hazardous waste by-products, is a solution which repeatedly ranks lowest among political leaders. The United States pays the lowest tax on gasoline among developed nations, an average of 27 cents a gallon compared to over \$3.00 in some countries (Nulty 1990). We also have the lowest price per gallon and the highest consumption per person in the world.

Yet without long-term political and financial commitment, we will find ourselves repeating history during the next major oil spill: we won't be able to clean it up.

2) Precautions should be taken when the spiller is left in charge of the cleanup.

The laws are structured to have the spiller responsible for cleanup, while a predesignated On Scene Commander (OSC) ensures operations are conducted properly. If the OSC decides that the spiller is not conducting a "proper" response or the spiller is not known, the OSC is required under the Clean Water Act to assume control of the response.

Realistically, however, in a case like the Exxon Valdez in which the responsible party has enormous financial resources, even if the response is not "proper," the OSC will be under tremendous political pressure to leave the spiller in charge of the cleanup. Caught between company attorneys eager to blame a poor response on another party and the realization that resources available to the OSC may be less than what is available to the spiller, the OSC is likely to stay in an advisory only capacity for the duration of the response.

Now, let's make some assumptions. During a catastrophic spill; 1) a wealthy spiller is politically astute so as to be aware of the small likelihood of the OSC taking over the response, and 2) the spiller will try to minimize long-term financial impact to the company.

Where should the OSC take special precautions to verify the spiller's response? An educated guess would be in the amount of oil reported spilled, and the amount of oil reported cleaned up. Again, the Exxon Valdez spill is a classic example.

2a.) There was never any independent verification of the 11 million gallons reported spilled by Exxon's Frank Iarossi. The three vessels used to litter the Exxon Valdez

were each sent to separate refineries in California and Hawaii to unload their oil-and-water cargo. Recovered amounts of oil were never reported publicly. Investigative reporting of details was simply overlooked by international media rushing to break one story after another - the "drunken skipper," the toll on wildlife, fishermen's efforts to save Sawmill Bay hatchery, the cleanup, etc.

Eleven million gallons became the figure accepted by most people and the amount upon which penalties were levied under state and federal laws. It is not too late to verify and correct, if necessary, this figure.

2b.) There was also never any independent verification of the amounts of oil and oily debris reported removed from beaches by VECO, Exxon's primary contractor for the cleanup.

The Cordova Fact Sheet on June 23, 1989, reported "The ADEC [Alaska Dept. of Environmental Conservation] team leader was informed by a VECO foreman that all VECO foreman have been directed by Exxon officials not to speak to any ADEC representatives, [however], a VECO foreman at one work site informed an ADEC team member that although they had recovered approximately one barrel of oil and 20 bags of oiled fucus from the site, they reported recovery of 8 barrels of oil and 40 bags of oiled fucus" (City of Cordova, 1989).

Realizing that recovered oil may contain 40 to 50 percent water, it would be helpful to have accurate figures for amount of actual oil recovered for both natural resource damage assessment and baseline information for the next major spill.

3) A system for contractor accountability directly to the OSC should be developed through the national contingency plan.

Problems arise with contractor accountability when the spiller can afford to pay extremely high contracts. Contractors, baited in with lucrative fees, rapidly become reluctant to jeopardize their income. Contractors will follow company orders, no matter how outrageous the demands.

For example, the standard rate for a 27' bowpicker prior to the Exxon Valdez spill was \$500-\$600 per day. Exxon set the rate at \$2000-\$3000 after the spill - a rate eagerly accepted by local fishermen. During the 1989 cleanup, dozens of contract workers who came to talk with me started out with: "I don't want to loose my contract, so don't use my name, but you should know what's going on out there..."

The extent of this problem was poignantly pointed out by author Art Davidson in his book In the Wake of the Exxon Valdez. In an interview with a case worker, Marge

"Tillion spoke quietly about one young man who must, she said, remain anonymous. He had been hired by Exxon, along with four others, at the end of the first or second week after the spill. The job was to shoot otters and seals, including pups, that were oiled and alive so that they would sink. He's having trouble living with himself for what he did. He's been near suicide. The money was good. I guess it was cheaper for Exxon to sink the animals than to pay the cost of cleanup and rehabilitation." (pg. 263).

For maximum truth in reporting, contractors should operate under a blind quality control system. Perhaps the national contingency plan should include a system for state or federal agencies to accept contractor fees from the spiller and pay the contractors in order to eliminate the direct contact between the spiller and the contractors. The agency responsible for dispersing these funds could require a log book for each pay period. Log books could be held as confidential information, thus protecting the contractors while identifying problems in a timely manner.

4) During emergencies, bureaucracies should respect and utilize the knowledge of local field staff during high level conferences and decisions.

4a.) Early during the Exxon Valdez spill, local field personnel of state (ADEC) and federal (Coast Guard) agencies worked with industry and the public to respond to the crisis. These field staff were the most familiar with local conditions and people. As the spill attracted national attention, supervisors replaced local staff and assumed "control" of the response. Problems arose immediately as "newly appointed senior officials were overwhelmed by the rush of questions about all aspects of a significant environmental event which they were learning about under stress of both congressional and media questions" (National Response Team 1990). Rotation of supervisors caused further frustration and confusion among public and the press.

Full utilization of local field staff could be achieved by designating a position, like "right hand man," for the state and federal OSC position. Field staff elevated to this position should have input directly to the OSC for all important decisions.

4b.) Because of political pressures, local field staff who served as first responders for ADEC and the Coast Guard during the Exxon Valdez spill were relieved of their posts.

Dan Lawn, the state's expert on contingency plans and Alyeska operations according to past Commissioner Dennis Kelso, has been reassigned to state's drinking water standards; Commander McCall was transferred out of state. These reassignments, particularly Dan Lawn's, caused considerable consternation among fellow employees, who regarded this as unjust political manipulation (Janssen 1990), and citizens, who viewed this as a loss of valuable expertise and continuity.

It is interesting to note that of all the groups involved initially with the Exxon Valdez spill response - ADEC, Coast Guard, Alyeska, Exxon, and public organizations such as Cordova District Fishermen United and the Prince William Sound Conservation Alliance - only the public groups have the same leaders now as before the spill. It seems that all hope for reforming oil industry and governmental practices which led to the spill depends on the continuity of public memory and commitment.

5) Press need to have access and accurate information: the world views the event through the eyes of the media.

During the Exxon Valdez spill response, repeated attempts were made by industry to limit press access in the field. Initial contracts circulated to fishermen contained a clause stating the contractor would not carry press or a camera on board the vessel while working on the spill. Although this clause was removed in the final contracts, Exxon ordered that the entire central and southwestern regions of Prince William Sound be placed in a high security zone. Persons transiting this zone, including the air space above it, were required to obtain permission - press were not permitted. Locals were reluctant to ignore Exxon's orders for fear of jeopardizing boat or plane charters. The situation was absurd.

Keeping the media well-informed should be a fundamental goal of the contingency plan. Press briefings should provide access to industry as well as government spokespersons, including scientists, to provide as balanced views as possible. Press transportation should be provided as part of the contingency plan so the media is not dependent upon the spiller for access to the story. It is to the injured parties' advantage that the press be exposed to a well-balanced view of events.

6) The need to "address worker and public safety and health more thoroughly in contingency plans" was identified by others (National Response Team 1990), but the solution needs some work.

Personal experience indicates the following:

6a.) The spiller will try to minimize attention on health effects of the spill to the general public. For example, Exxon took no steps to evacuate Tatitlek residents during the first three days of the spill even when aware that residents were physically sick from noxious fumes. The City of Cordova voluntarily evacuated pregnant village women. Exxon claimed this was unnecessary. An authority other than the spiller must be responsible for looking after the public health and, if necessary, ordering appropriate action.

6b.) Local doctors most likely will not be able to effectively treat illnesses relating to exposure to oil or hazardous chemicals. Trained experts specializing in human toxicology should be dispatched to local communities where they can either train local doctors or assist with patients suffering from exposure to hazardous substances during the crisis. In addition, trained experts could start a database on human medical problems associated with oil spills.

6c.) First responders to the spill are most likely to be concerned locals rather than trained workers operating under contracts. Efforts should be made to have local equipment depots stocked with gear (like respirators and protective clothing) and to get this gear out to the field to protect these first responders.

7) All parties should endeavor to stick to ground rules established prior to the spill.

7a.) Political maneuvering by the spiller to pressure authorities and influence response decisions in their favor (versus the public welfare) should not be tolerated and should be immediately exposed to the media.

Just weeks prior to the Exxon Valdez spill, the Regional Response Team (RRT) completed a lengthy process of public education and hearings culminating in an agreed upon plan for dispersant application in Prince William Sound. No sooner had the oil from the Exxon Valdez hit the water, than Alyeska demanded to apply dispersants in all zones, including Zone 3 areas of sensitive habitat in which the RRT had decided that dispersant use would not be allowed. Although the initial application of dispersants quickly became a moot issue, Exxon later pressured to apply dispersants on the beaches (Zone 3) for cleanup. Fortunately, the latter was not permitted.

The midst of a crisis is no time for dismissing ground work carefully laid out in advance of the emergency. Spillers should be encouraged to stick with the group game

plan by adopting strong deterrents for acting without OSC approval such as a multiplier of total penalties similar to the gross negligence multiplier under Alaska law.

7b.) Political maneuvering by other responsible authorities to influence response decisions in their favor (versus the public welfare) should also not be tolerated.

After the Exxon Valdez spill, proposals for hundreds of largely untested "miracle cures" for removing oil from beaches and wildlife flooded into the market. The Environmental Protection Agency (EPA) has a systematic tier approach to screening such compounds with scientific tests. This process is used to prevent further injury to impacted areas through wide scale application of unproven technology.

However, when EPA seized one idea itself - bioremediation with a French compound called Inipol EAP 22 - and began promoting it along with Exxon, the screening system fell by the wayside. Within the first summer of testing, EPA pushed for wide scale application of bioremediation despite public concerns about unknown long-term effects on the environment. Notes Walter Parker, past Chairman of Alaska's Oil Spill Commission, "testing and evaluation must be separated from industry and agency promotion if it is to achieve believability" (1991e).

EPA is still promoting wide scale testing of Inipol despite evidence of deleterious effects of Inipol on humans. Workers exposed to large doses of Inipol were hospitalized, while others are currently being treated for health problems stemming from possible chronic exposure (personal communication with City of Seldovia, AK, MD Russell Manuel, Anchorage, AK, and attorney Charles Ray, Jr., Anchorage, AK). Recreational users camping or hiking on unmarked beaches days after Inipol treatment reported nausea, headaches, and dizziness (personal communication with Kelly Weaverling and Susan Ogle, Cordova, AK).

Public trust in industry and government officials is destroyed when these parties are exempted from rules designed to protect public health and the environment. To rebuild the trust, we must all play by the rules.

8) Everyone agrees that more effort needs to be focused on spill response preparation, but already accomplishments are being undermined in this area.

8a.) "Exercises that realistically stress and test plans and response system readiness are not held frequently enough," notes the National Response Team's report (1990). "No government agency routinely conducts exercises that

fully address the difficulties and stresses presented by a major oil pollution incident."

In Alaska, Alyeska and some of its owner companies have conducted drills which always have a successful outcome. In comparison, Norwegian drills are evaluated on concrete criteria and failure is not uncommon. For example, during my visit, companies involved in a towing exercise failed the drill because one tug could not stop a loaded tanker in the allotted space (Ott 1991). The idea is to learn from mistakes and improve the system.

The industry and government in other countries, Norway in particular, train response personnel in programs that consistently produce qualified teams of workers. In comparison, Alyeska recently announced that it would not provide safety training to contract workers in its oil spill response program (Cordova Times 2/21/91). Alyeska also seems "to be withdrawing from its commitment to provide training of hatchery staff and protection to hatcheries in the event of a spill" (Cordova Times 2/21/91).

8b.) "Equipment does not exist in adequate supplies, nor is it sited in appropriate locations," notes the National Response Team's report (1990). "Even the ambitious amounts of equipment included in the proposal of the petroleum industry to establish the Petroleum Industry Response Organization (PIRO) would not be sufficient to respond to a catastrophic oil spill."

According to contingency plan experts, mechanical recovery as a viable option for handling large oil spills must employ very large oil skimmers (VLOS), which have never gone past conceptual stages (Lawn 1990b, Parker 1991c). Tanker conversions into skimmers of impressive dimensions were proposed by Mobil in the early 1970s (20,000 ton), Exxon in the early 1980s (24,000 ton), and Arco most recently (70,000 ton). Proposals were shelved due to lack of industry support. Until VLOS are available for response through the PIRO centers and at Alyeska, we will, according to Walter Parker "go on recovering very small percentages of spilled oil or seek other means of handling large oil spills" (1991c).

Industry commitment to improve spill response preparation after the Exxon Valdez spill is already waning, repeating an all too familiar pattern of pledged improvements following a dramatic spill event, but no follow through. Alyeska, for example, less than two years after the spill has not fulfilled its promise to have cleanup equipment stored in Cordova - fishermen inspecting storage containers in mid-February found them empty, locked, and no keys available to crews (Cordova Times 2/21/91).

APPLYING CORRECTIVE MEASURES - ADEQUATELY

Everyone agrees that prevention is the most significant protection against risk of future spills. Sweeping changes in federal and Alaska state laws outline steps for reforming inadequate practices, but accomplishments are already being undermined.

9a.) Budget cuts in federal spill prevention programs, including the Coast Guard's Vessel Traffic System and EPA's spill prevention, control, and countermeasures (SPCC) program, have severely limited these programs' effectiveness (National Response Team 1990).

In a national survey of structural failures in tankers, the Coast Guard reported in 1989 that tankers involved in the Alaska trade comprise 13 percent of the domestic fleet, but account for 52 percent of the structural failures (Coast Guard 1989). Subsequent studies by the Coast Guard and others have pointed out extensive problems with the oil tanker trade including inadequate crew training and undermanning, inadequate vessel traffic control systems, and additional problems with tanker design, construction, and replacement schedules (U.S. Coast Guard 1989; U.S. Coast Guard 1990; Parker 1991a, 1991b, 1991d).

While the Oil Pollution Act of 1990 attempts to correct many of these problems, the point is that prevention programs should be funded at levels which keep these problems from developing in the first place.

9b.) Problem vessels should be identified and replaced ahead of the schedule outlined in the Oil Pollution Act of 1990.

The Coast Guard has identified 25 vessels - 42 percent of the fleet involved in the North Slope trade - that require special attention and reporting procedures because they account for nearly 73 percent of the documented structural failures (Parker 1991d). Each of these vessels is a disaster waiting to happen. If we proceed at the replacement pace scheduled by Congress, we will be waiting nearly a decade to replace some of these problem tankers.

Standard oil spill prevention precautions in other countries, such as Scotland and Norway, enable port authorities to deny permission to enter the port any vessel with a bad pollution history or inspection record (Lawn 1990a). We need to "Just say NO" to some of these tankers.

10) The effectiveness of newly passed legislation depends on follow through and enforcement, areas which are showing decided lack of commitment.

Whether legislation passed to correct perceived inadequacies in spill preparation and response will actually do so depends now upon the will and work of dedicated staffers and continued public involvement. Studies must be conducted and regulations drafted to fulfill at least the letter of the law. But the spirit of many newly passed laws is already being bent down the same path of complacency and industry favoritism that led to the Exxon Valdez spill.

10a.) For example, at the federal level, the Oil Pollution Act of 1990 requires a thorough audit of the Trans-Alaska Pipeline System (TAPS) by a Presidential Task Force. Congress neglected to appropriate money for this audit and neither the President or Alaska's Governor has appointed members for the task force.

Both the President and Governor are pushing for opening the Arctic Ocean and Arctic Refuge (ANWR) for oil and gas leasing, projects which will rely heavily upon the future integrity of TAPS. Even without any future expansion of North Slope fields, a highly unlikely scenario, the integrity of TAPS is critical to national security as this system currently supplies about 25% of our domestic oil.

10b.) At the state level, spill prevention and response regulations drafted for legislation passed in 1990 were pre-released to the oil industry (Alyeska) prior to public review. Upon receiving industry's comments, whether intentionally or ironically, Governor Hickel's Dept. of Environmental Conservation (ADEC) decided to delay implementation of regulations from June 1, 1991, as mandated by statute, to December (Postman 2/1/91). An ombudsman's investigation of the matter has been requested by citizens.

Ability to enforce environmental laws at federal and state levels is almost nonexistent and this problem is shared by other nations. Increased profits gained from illegal actions provide strong incentives to ignore laws, especially when the odds favor not getting caught. "Coast Guard investigative and prosecution efforts are seriously inadequate and do little to deter polluters... Chances of their being caught are small; of being caught and prosecuted even smaller; if prosecuted, chances of being found guilty are minuscule; if found guilty, fines are paltry" (Coughlin 1991).

10c.) Recent investigations by maritime reporter William Coughlin reveal that a "common practice" in the oil tanker fleet involves mixing wastewater, engine sludge, and hazardous substances from shore refineries with ballast

water. This mixture is then either dumped at sea or run through treatment plants at terminals, notably, Alyeska on the west coast, which are not designed to remove these compounds (Coughlin 1991). Both Coast Guard and EPA officials were apparently unaware of this practice until reported by press.

10d.) Enforcement capabilities at the state level mirror those at the federal level.

An enforcement arm for the Dept. of Environmental Conservation was created by the 1990 legislature who proceeded to not appropriate any funds for the new division. A bill containing increased enforcement provisions for ADEC, similar to measures adopted in 28 other states, failed miserably from strong resource industry lobbying. A bill increasing civil penalties for spilling oil also failed.

Without meaningful incentives to obey the law, such as stiff penalties backed by swift enforcement, industry will continue to cut legal corners to maximize profits.

CONCLUSIONS AND SUMMARY

In summary, it seems only some of the problems leading to the Exxon Valdez spill were correctly identified. The more politically sensitive the problem, the less likely it was to be publicly aired. Extremely sensitive issues, including the ability to enforce our environmental laws, were swept back under the protective folds of carpeting covering the "brotherhood of oil" (Engler 1977).

The public, although outraged by a series of spills in 1989, is still unwilling to face long-term solutions for increased spill prevention and response: increased prices at the pump and a more energy efficient life-style. We are a nation of oil addicts in denial.

We have emerged from one bad trip ending on Bligh Reef only to launch on another high from an overdose of promises of billion barrel fields underlying the Arctic Ocean and North Slope of Alaska.

Never mind that the technology does not yet exist to clean up spills under ice. While U.S. oil companies declare Arctic developments will be "environmentally sound," the same companies in Norway are forbidden to explore in

offshore ice pack until they have proven technology in hand to cleanup spills under ice (Ott 1991).

Never mind that adequate risk analyses will not be calculated for Arctic leasing programs - or any future leasing programs throughout the country - because the most revealing data on damage of spills to the public and the environment will not be available (Lancaster 2/21/91). In-depth damage assessment studies, particularly the economic data, from the Exxon Valdez spill may be locked up forever under the terms of the civil litigation claim settlement negotiated in private by Alaska Governor Hickel and Exxon (Postman 2/27/91).

By locking up the damage assessment data, Hickel and Exxon are promoting oil development irrespective of all risk to the public and the environment. The President of the United States even assures us that Arctic leasing will be environmentally sound.

But with no proven technology to cleanup spills under ice, no solid data available to calculate risk to the public, and no effort to enforce environmental laws, I can only conclude that the President, Alaska's Governor, and big oil mean nothing more than lip-service when they speak of "environmentally sound development in Alaska."

"Trust us. It's time to drill Alaska's Refuge" (Nulty 1991). From the oil industry's perspective, it is time to drill Alaska's Refuge and Arctic Ocean. Now that war in the middle east is over, the specter of reliance on foreign oil may fade in public conscious as rapidly as the environmental consequences of the Exxon Valdez spill, negating the need advocated by industry for a domestic push for oil exploration. Next year the restrictions for offshore lease sales will be stricter as "adequate information" will be required by Mineral Management Service prior to holding lease sales (Greenpeace 1991).

Perhaps it is more than coincidence that most lease sales off the west and east coasts have been deferred for up to ten years. The oil companies can rightfully claim they have no where else to go. It is exactly this type of unified effort by pro-oil forces that it will take to open the Arctic to further drilling.

From the public perspective, it is not time to drill Alaska's Arctic Ocean and Refuge. But it is time, in the words of a renown author on the politics of oil, to make decisions that are "economically just, ecologically sane, and politically accountable" (Engler 1977). I encourage the public to remain vigilant and work towards these goals.

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