State of Alaska Exxon Valdez Oil Spill Response

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# 1991 State Response Plan: Policies, Requirements, Guidelines

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# 1.0 INTENT OF PLAN

The response to the T/V Exxon Valdez oil spill of March 24, 1989, will enter its third field season on or about May 1, 1991. The response activities under state and federal direction have resulted in substantial progress in improving the condition of the shorelines. Continued response, under a carefully designed plan of action, will be necessary in certain areas.

This plan provides the spiller with a clear understanding of the State of Alaska's policies, requirements, and guidelines for the 1991 response season. It explains how the State of Alaska will implement existing oil spill statutes and regulations, given the specific conditions of the T/V Exxon Valdez oil spill.

The spiller will use this document to produce a 1991 workplan that should complete cleanup to the satisfaction of the State of Alaska.

The wreck of the Exxon Valdez was the largest tanker spill in North American history, resulting in at least 1,285 miles of shoreline oiled to some degree. The state considers it neither technically possible nor environmentally practical to remove all remaining contamination. This document explains the state's clear priorities for work, reasonable expectations for results, and methods to achieve those results.

#### **1.1 REQUIREMENT FOR PLAN**

Under state and federal regulations, the party responsible for an oil or hazardous substance spill must submit a cleanup workplan for approval by the Federal and State On-Scene Coordinators.

The FOSC has the option of including all state requirements in the primary, federal-directed workplan. If the FOSC is unable to do so, the state will prepare a supplemental plan. Exxon is scheduled to deliver its draft workplan to the FOSC and SOSC right after the spring survey.

#### 1.2 SCOPE OF WORK

This document sets out the authorities and responsibilities of the state government with respect to oil spill cleanup, and how they will be applied to the 1991 T/V Exxon Valdez response.

These parameters include:

- \* Sources of legal authority for spill response;
- \* Definitions of key terms;
- \* Matters of state policy;
- \* The process for establishing state priorities;
- \* General operational guidelines for cleanup techniques affecting state lands, waters, and other natural resources;
- \* General conditions under which the state will determine adequacy or limits of cleanup;
- \* Other instructions necessary for development of a workplan for 1991 field operations.

#### 1.3 PUBLIC REVIEW

The response to the T/V Exxon Valdez oil spill raises critical issues regarding publicly owned natural resources. Meaningful public participation in decisions about those resources is essential.

The state accepted written comments and held public meetings in communities affected by the spill in January and February. Summaries of the meetings and copies of the written comments may be reviewed at the following address. Copies are also available by mail:

State On-Scene Coordinator Exxon Valdez Oil Spill Response 1991 Workplan Alaska Dept. of Environmental Conservation 4241 B Street, Suite 304 Anchorage, AK 99503

#### **1.4 WORKPLAN DEVELOPMENT**

The state will work with the Coast Guard and Exxon to produce an integrated 1991 field operations plan based on these instructions, on federal requirements, and on the results of spring field surveys.

#### 1.5 STATE-FEDERAL COOPERA-TION

The state continues to support the efforts of the U.S. Coast Guard. The state will continue to cooperate fully in helping the Coast Guard fulfill its duties and responsibilities under the federal Clean Water Act and the National Contingency Plan.

Supplemental activities under state direction are not meant to imply disagreement with, or disapproval of, federal activities.

### **RESPONSE STRUCTURE**

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2.0

The state and federal governments direct the spiller to undertake necessary and appropriate tasks designed to eliminate the pollution caused by the T/V Exxon Valdez oil spill.

Exxon accepted responsibility for the oil spill after the grounding, and has worked directly with the governments or hired contractors to do the work.

#### 2.1 FEDERAL RESPONSE

National pollution control statutes lay the foundation for oil spill response under federal law. The U.S Coast Guard is charged with enforcing those requirements under the direction of the Federal On-Scene Coordinator.

#### 2.2 STATE RESPONSE

The State of Alaska holds a concurrent authority regarding pollution control and oil spill response under provisions of the federal Clean Water Act, other federal pollution control statutes, and Title 46 of the Alaska Statutes.

Federal law provides states with the opportunity to conduct supplemental response efforts as long as state activities do not conflict with federal law or interfere with federal response efforts.

Congress preserved this structure in the Oil Pollution Act of 1990, recognizing the need for states to tailor pollution regulations to local needs and desires.

The state retains the option to require Exxon to do more work at a given site, or throughout the spill area. Work conducted under state direction is supplemental to federal efforts.

#### 2.3 FEDERAL TECHNICAL ADVI-SORY GROUP (TAG)

The federal government has convened the TAG to assist the FOSC in making technical decisions regarding cleanup. The Coast Guard, the National Oceanographic and Atmospheric Administration (NOAA), Exxon, and the State of Alaska are all members of the group. Landowners and other state or federal agencies also participate, depending on specific issues.

**2.3.1** Decision-making process — The TAG considers field information and recommends a course of action to the FOSC on a site-by-site basis. The TAG strives for consensus, but that may not be possible in all cases. Where the state disagrees with a TAG recommendation, the state reserves its right to undertake a supplemental response.

**2.3.2** Net Benefit Analysis — The TAG considers a number of variables in making its recommendation. They include the state and extent of oiling, the accessibility or structure of the beach, ecological recovery, special human uses of the area, and social or economic considerations.

**2.3.3** Decision tree — The TAG reached consensus this winter on a guide

for applying certain cleanup techniques to specific oiling conditions. It is important to emphasize that the "tree" is not a rigid prescription for treatment, and that the state or the entire TAG may recommend deviations from the guide on a site-bysite basis.

# 3.0

### STATUTES AND POLICIES

The state's response to the Exxon Valdez oil spill is conducted primarily through the three resources agencies: the Department of Environmental Conservation, the Department of Natural Resources, and the Department of Fish and Game.

#### 3.1 ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Under Title 46 of the Alaska Statutes, ADEC is the lead agency for oil and hazardous substance spill response. The department has broad responsibilities to "abate and prevent" pollution that may affect everything from the public health to the economy. State regulations (generally, 18 AAC 75) require the SOSC to continue cleanup of a contaminated or polluted site until he or she determines that:

- a) available technology has reached its practical limit;
- b) extracting the pollution will cause greater harm than leaving the pollution in place.

In the case of the Exxon Valdez response, the SOSC will implement the

requirements of 18 AAC 75 in the context of the responsibilities and resource values of all state agencies, particularly the Department of Natural Resources and the Department of Fish and Game. Depending on the situation, the SOSC may place more or less weight on a given resource value when making decisions about a specific site or oiling condition.

# 3.2 ALASKA DEPARTMENT OF NATURAL RESOURCES

Under Title 38 of the Alaska Statutes, ADNR must provide for the maximum use of state resources consistent with the public interest, including use by future generations. The Division of Land and Water Management (DLWM) oversees and encourages a wide variety of activities on state lands, including, but not limited to, uses defined by economic, social, cultural, and aesthetic values. State lands continue to be affected by pollution from the T/V Exxon Valdez.

In addition, Title 41 requires the Division of Parks and Outdoor Recreation (DOPOR) to develop and maintain a system of parks, recreation facilities, and other opportunities with state lands and resources. In the spill area, there are 12 marine parks in Prince William Sound, the Kachemak Bay Wilderness State Park, and Shuyak Island State Park in the Kodiak archipelago.

Further, the Office of History and Archaeology within DOPOR is responsible for the protection of historic, prehistoric, and archaeological resources of the state. The spill area contains many important archaeological and culturally significant sites.

The Exxon Valdez oil spill continues to affect state lands and waters managed by ADNR. The law requires the resources to be cleaned and restored to a condition that allows for the continued and future use and enjoyment by the public.

# 3.3. ALASKA DEPARTMENT OF FISH AND GAME

Under Title 16 of the Alaska Statutes, ADF&G is required to "manage, protect, maintain, improve and extend the fish, game and aquatic resources of the state."

The department must ensure that fish and wildlife populations, habitats, and harvests are given adequate consideration during response and cleanup planning. Specific permitting authorities for cleanup activities apply to anadromous fish streams and legislatively designated special areas (critical habitats, refuges, and game sanctuaries).

The department has a special concern regarding the potential effects of hydrocarbon exposure on fish that inhabit nearshore and intertidal environments. Salmon and herring, in particular, are commercially valuable species whose habitats are threatened by residual oil.

#### 3.4 DEFINITIONS

Following are the definitions of some of the key terms for the purpose of this document:

**3.4.1** Pollution or contamination— Oil, in any form (mousse, asphalt, tarballs, fouled debris, oiled sediments, etc.) spilled from the T/V Exxon Valdez on and after March 24, 1989.

**3.4.2** *Harm* — The presence of pollution or contamination.

**3.4.3** Environment — Any natural resource owned or managed by the State of Alaska, and spatial area containing such a resource, and, by extension, any activity depending on proper management of the resources.

**3.4.4** *Technology* — Techniques or products that have been approved for use during the Exxon Valdez response. The state is basing its plans on those techniques that have already been employed and refined over the course of the spill thus far.

#### 3.5 STATE POLICY: CONTAMINA-TION AND REMOVAL

The pollution spilled from the T/ V Exxon Valdez must be removed from state waters and lands, consistent with the conditions established in Alaska law and regulation. We recognize, however, that complete removal in a spill of this size and complexity is highly unlikely.

Still, the oil on the shorelines and under the surface is not naturally occurring, and its continued presence degrades the natural resources and their values. At sites where it is not possible to remove the oil, a long-term monitoring program should be put in place.

Under the regulatory conditions explained in this section, the state requires the following:

**3.5.1** Surface oiling — Oiling must be reduced to light cover and stain. Pooled oil, mousse, oiled debris, asphalt patches, tarmats, and tarballs must be removed during the 1991 field season.

**3.5.2** Subsurface oiling — Where subsurface oil can, in the SOSC's determination, be reasonably exposed by manual effort or light mechanical equipment, oil-contaminated sediments, mousse, oiled debris, asphalt patches, tarmats and tarballs must be removed during the 1991 field season. At sites where mechanical removal is neither prudent nor practical, the state will consider a passive approach (such as bioremediation) that will help us reach our goals in subsequent seasons.

**3.5.3** Priority exceptions — Certain state resource priority areas (e.g., state parks, certain fish or wildlife habitat) may require cleanup beyond conditions described elsewhere in this section.

**3.5.4** Unrecovered oil — Under the criteria set in Alaska law and the administrative code, the spiller remains liable for damages caused by pollution that is not recoverable.

# RESOURCE AND OILING CATEGORIES

(Note: The draft state plan, released in November 1990, attempted to establish a method for setting priorities for survey and cleanup. Substantial public comment urged the state to revise the section to allow more flexibility and better explain why we put one site ahead of another for cleanup. The following section has been substantially revised from the November draft to better meet community and commercial concerns.)

4.0

The state has established categories for shoreline segments, according to resource or land type, the nature of land or resource use, and remaining oiling. These categories will target spring assessment efforts, guide development of the actual workplan, and establish a framework for determining proper levels of manpower and materiel for the 1991 field season.

These classifications are for 1991 Exxon Valdez oil spill field response only. They reflect priorities established within the context of specific oiling conditions, the state of the weathered oil, the size of the affected area, status or sensitivity of a given population or species, and the special logistical considerations for the area.

They do not necessarily reflect the relative value of the resources in their unoiled state. Further, they represent a guide to sorting sites, and special considerations may lead us to deviate from this model on a site-by-site basis.

#### 4.1 PRINCIPAL CRITERIA

The goal is to get the most attention, most quickly, to the areas that need the most work or pose the most immediate risk to the environment or its uses. Some general criteria allow us to sort the sites.

**4.1.1** State and extent of oiling — This is the most obvious. If there is a lot of oil at a site, this consideration carries greater weight in the sorting system.

**4.1.2** Threat to a particular resource — Different types of fish or wildlife may be more or less threatened by the continued presence of pollution. A moderately oiled site may be put ahead of a more heavily oiled site, for example, if there is a fish and wildlife concern that gives the area more weight in our considerations.

**4.1.3** Threat to a resource use — Subsistence, commercial fishing, commercial tourism, recreation, park management or other special land management requirements are integral to our sorting system. The following is an alphabetical listing of types of resource uses identified by state agencies, local governments, and the public:

- a) Anadromous fish streams and herring spawning areas;
- b) Commercial fishing areas;
- c) Commercial tourism areas;
- d) Hatchery zones, including harvest areas;

- e) Mariculture sites;
- f) Pinniped haulouts and rearing areas;
- g) Recreation areas;
- h) Seabird rookeries;
- i) Shore fishery or leased economic sites;
- j) State parks;
- k) Special legislative designations;
- Subsistence use areas, both onand offshore.

**4.1.4** Effectiveness of treatment — Sites that have a higher likelihood of responding to known treatments are candidates to move up the priority list. There's no reason to put a site at the top of the list if there's not much we can do to solve the problem. This is particularly important in the case of deeply buried oiled sediments.

## 5.0

### WORKPLAN

The state will ask the FOSC to include all State of Alaska requirements in a single, integrated workplan. If the FOSC is unable to do so, the state will prepare with the spiller a supplemental plan to meet state requirements. Logistical efforts will be combined wherever possible. The state believes an early and cooperative planning process will produce a well-integrated joint logistics plan that maximizes worker safety and shoreline results.

#### 5.1 SAFETY

Worker safety continues to be the state's first priority when planning, monitoring, or conducting field operations. Exxon and its contractors, the Coast Guard, the State of Alaska and Local Response Groups have established and maintained high safety standards throughout the cleanup.

The workplan must contain a safety program approved by the state Department of Labor and any applicable federal labor standards.

#### 5.2 STATE PERMITS

The workplan must include all applicable state permits.

#### 5.3 ARCHAEOLOGICAL SITES

The workplan must include a pro-

gram, approved by ADNR, for identification, preservation and protection of significant cultural and archaeological sites. To prevent desecration or destruction of sites, access to information about the locations or descriptions of the sites may be restricted at the discretion of the Commissioner of Natural Resources.

#### 5.4 CONSULTATION WITH PRI-VATE LANDOWNERS

The workplan must contain provisions for consulting private landowners, including Alaska Native regional and village corporations, before operations take place adjacent to private lands. The state will strive to include all private landowner requests in cleanup planning and operations.

#### 5.5 COMPLETION LIST

In November and December, the state released a list that separated shoreline segments into three categories: Segments that were either free of oil or treated to state requirements; segments that are to be reassessed this spring; and segments for which we had incomplete information to make a decision.

After public comment and consultation with other government agencies, the state has refined its list and integrated it with those of other groups. The list shows which shorelines will be assessed during the spring assessment, which begins in late April and will extend into early June.

After the assessment, the list will be further revised and will form the basis for the workplan in 1991.

#### **5.6 WILDLIFE CONSIDERATIONS**

The workplan will include provisions for minimizing the disruption to fish, wildlife and their habitats. The state will consult appropriate federal agencies to reach agreement on timing windows and guidelines for field operations.

#### 5.7 SPECIAL WORK SITES

The most heavily contaminated sites, or sites with special or unique oiling conditions, will be designated by the SOSC as "special work sites." These sites represent the areas that present the most obvious and imminent threats to public health and resources.

These areas will require special commitments of time and resources, including detailed workplans that include discrete calculations of manpower and equipment. It is the state's intention that these sites be worked continually until finished. Crews and equipment should not be diverted from these sites to other tasks until the SOSC determines that work has reached its practical limit.

The state will work with Exxon and the Coast Guard to establish a realistic and practical strategy for special sites, including well-defined schedules and end points.

This is intended to be a selective designation.

#### 5.8 ORDER OF WORK

Order of work will be determined by the classifications in section 4.0, timing "windows" established for reasonable resource management reasons (seal pupping, salmon spawning, bird nesting, etc.), and relevant weather and safety

#### considerations.

Sufficient manpower and equipment must be deployed to make sure that crews are not pulled off the highest priority sites before they have been completed to state requirements. If weather or workload threatens to leave treatable sites without complete attention in the 1991 season, more cleanup crews must be added within a reasonable amount of time.

# 6.0

### TECHNOLOGY

al in the shortest practical time (consistent with environmental concerns) will determine choices about techniques, as well as levels of manpower and equipment required to complete the 1991 response. The state intends to work with the Coast Guard and Exxon to make sure plans made this winter accurately reflect the type and scope of work the state and federal government require, either independently or concurrently.

#### 6.1 REMOVAL

Pooled oil, mousse, tarmats, tarballs, asphalt patches, oil-contaminated sediments, and other forms of weathered oil must be removed, or its presence minimized, consistent with state law and regulation. This may be accomplished with any combination of treatments described in this section.

#### 5.9 WASTE MANAGEMENT

A full waste management program will be part of the workplan. The plan should assume some removal from oilsaturated sediments, as well as oiled debris and trash generated by workers. Waste management should not detract from base cleanup efforts.

The state's policy of maximum remov-

The SOSC may require the use of tracked vehicles such as small tractors and backhoes, either to remove material or to aid manual pickup.

#### 6.3 MANUAL

This includes physical removal of oiled material with conventional hand tools. This type of work should be limited to small areas of contamination. Large tarmats, asphalt patches, pooled oil, contaminated sediments, etc., should be removed with mechanical equipment wherever possible.

#### 6.4 STORM BERM ALTERATION

Sediments under storm berms may be exposed by mechanical means for the purpose of removing or bioremediating the subsurface oil.

The dumping or spreading of pol-

The dumping or spreading of pollution in the intertidal areas to be left for natural degradation is not a generally approved treatment technique, except in cases when oiling is light, and only with the prior approval of the SOSC or his field designee.

#### 6.5 TILLING

Where tilling is used, the equipment must reach to the depth of the oil contained in the shoreline.

#### 6.6 SOLVENTS

Because of logistical and operational considerations, solvents are not anticipated to be approved as a shoreline cleanup technique.

#### 6.7 WASHING

Hot, warm, and cold seawater flooding or flushing will be approved on a site-specific basis. The plan should assume that at least one crew will have the capability to conduct washing operations.

#### 6.8 **BIOREMEDIATION**

The state, through its seat on the Alaska Regional Response Team, approves the use of the chemical fertilizers Inipol EAP 22 and Customblen for a third season of conditional use. The state finds that the fertilizers appear to have some positive effect on some types of oiling conditions. In addition, limited, controlled use of the fertilizers does not appear to raise significant ecological problems.

Bioremediation appears to be a promising technique on marine shoreline cleanup. The state actively seeks more information, analysis, and independent review to see if the technique can be used differently or more expansively.

However, given the state of the oil, the extent of the problem, and the availability of more certain cleanup options in 1991, the state believes it is not prudent to depend primarily on bioremediation to meet state cleanup requirements.

It must be emphasized that there remains substantial disagreement among scientists over the relative effectiveness of fertilizers on Prince William Sound and Gulf of Alaska shorelines. A summary of the EPA bioremediation meeting Feb. 19-20 and copies of independent scientific review of the principal monitoring study are available at the address listed in section 1.0.

Fertilizers must be applied according to state guidelines, which will be developed before the start of the cleanup season. Application of fertilizers is conditioned on the approval of the state monitor on-site, who will determine if site preparation has been completed according to the applicable work order.

Based on existing research, bioremediation is best used as a finishing technique and is not appropriate for heavy or moderate oiling conditions, tarmats, asphalt, or other hardened oil. It may be useful on subsurface oil concentrations on a site-by-site basis.

#### 6.9 SKIMMING CAPACITY

A skimmer and appropriate support equipment should be available to be deployed at sites where recoverable oil is likely to come off of oiled beaches or worksites.

# SPRING SURVEY

The state will participate in the 1991 spring shoreline survey with Exxon and the Coast Guard. The shoreline segment list and the resource classifications from section 4.0 of this document will form the starting point for the assessment plan.

The first phases of the assessment is scheduled from April 26 to May 5. May 5-11 will be a break, as tides during that period are poor for conducting assessment. The second phase will begin May 12 and extend in June, as necessary.

The assessment will include 6 teams

of 12 members each. The teams will include representatives of state and federal agencies, a biologist, a geologist, an Exxon representative, a representative of the upland landowner, and a community observer. There will also be two contract labor members who will conduct limited manual cleanup.

The state plans to have an independent command vessel (or vessels) to provide direct oversight, expand surveys at certain sites, do quality control work, and provide any assistance or support it can.

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### CONTRACT CLEANUP

If the spiller is unable or unwilling to conduct work to the state's requirements and specifications, ADEC may hire contractors to complete the work under the direction of the SOSC. If this situation occurs, the SOSC will continue to work with the Coast Guard to make sure the state's supplemental operation in no way interferes with federally directed operations.

#### 8.1 SOURCE OF FUNDING

The Oil and Hazardous Substance Release Response Fund is the source for all state response activities.

#### 8.2 REQUEST FOR PROPOSALS

The state assumes Exxon will continue its active and attentive involvement in spill response for 1991.

However, as a contingency, the state is preparing a Request for Proposals for spill response and will release it to prospective bidders if it becomes apparent that state-contracted response will be necessary.

#### 8.3 STATE OVERSIGHT

The successful bidder would work under direct supervision of the SOSC.

#### 8.4 WORKER SAFETY TRAINING

The successful bidder would have a demonstrated ability to conduct remote site operations with the special worker safety requirements in place under the current operations scheme.

#### 8.5 LOCAL HIRE PROVISIONS

Bidders may receive bonus points for a hiring plan that maximized employment of Alaskans, particularly those with training and experience gained in oil spill response work in Prince William Sound and the Gulf of Alaska.