FINAL PROJECT REPORT TO
THE STATES/BRITISH COLUMBIA
OIL SPILL TASK FORCE MEMBERS
REGARDING THE PIPELINE SPILL PREVENTION PROJECT
JULY, 1999

Executive Summary

The States/British Columbia Oil Spill Task Force was established by a Memorandum of Cooperation signed by the governors of Alaska, Washington, Oregon and California, and the British Columbia premier in 1989. The continuing focus of the Task Force is on enhancing the ability of its member agencies as well as other public and private stakeholders to effectively prevent, prepare for, and respond to marine oil spills. Pipelines which carry crude oil and refined petroleum products were identified by the Task Force Members as one topic to be addressed under the oil spill prevention objective in their 1994-1999 Strategic Plan. Their concern is supported by spill statistics as noted in the report below.

The first step of the project was to develop a report in matrix format, describing regulatory gaps and redundancies between state and federal authorities governing spill prevention during construction, operation, and maintenance of both inter- and intra-state petroleum product pipelines in Task Force jurisdictions. A core workgroup of qualified persons from each Task Force jurisdiction, plus representatives from the Minerals Management Service (MMS) and the Office of Pipeline Safety (OPS) were recruited to complete questionnaires to gather this information on three types of pipelines: crude oil, refined product, and oil field gathering lines. Information from these completed surveys was then compiled and the information reviewed.

There were only a few areas where spill prevention gaps were identified for crude and refined product transportation lines, although more were identified for oil field gathering lines. It was clear from the survey responses that there are far more areas of overlap between the state and federal agencies. The Pipeline Spill Prevention Workgroup therefore recommended to the Task Force in their Interim Report in 1998 that the workgroup be continued and expanded to address both spill prevention and response coordination. This recommendation was adopted, and the expanded Workgroup met by conference call throughout 1998-1999 to discuss the gaps and overlaps with the intent of developing recommendations to facilitate interagency coordination.

There was agreement that the matrices – by virtue of their generic nature – did not identify all spill prevention gaps, since the nature of multiple regulations may vary considerably from state to state. However, such details could be addressed within each jurisdiction as part of an effort to coordinate regulatory authorities and address the numerous overlap issues identified. The Workgroup recognized that participants, as well as the issues, will vary from one state to another, thus it would be inappropriate for the Task Force to facilitate a coast-wide coordination effort, although many of the same federal agency representatives may be involved. Instead, each Task Force member agency should agree to take the lead in facilitating interagency coordination in their own state.

The subcommittee reviewed a draft list of “Elements of Successful Interagency Coordination” which had been drawn from the experience achieved in a cooperative project involving MMS, OPS, the California State Fire Marshal’s Office, the California Division of Oil, Gas, and Geothermal Resources, and the California State Lands Commission’s Marine Facilities Division. These draft “Elements of Successful Interagency Coordination” were discussed and revised by the Crude Oil Pipeline Subcommittee, then referred to the other Project Workgroup members for their review and comment. The Project Workgroup ultimately agreed to recommend them to the Task Force Members for adoption.

The Workgroup thus finds that the need exists for state, local (where applicable), and federal agencies with authority to regulate crude oil, refined product, and oil field gathering pipeline construction and

operations to improve coordination of that regulatory authority in order to improve spill prevention and enhance spill preparedness and response. In order to address that need, the Project Workgroup recommends that the Alaska Department of Environmental Conservation, the Washington Department of Ecology, the Oregon Department of Environmental Quality, and the Office of Spill Prevention and Response in the California Department of Fish and Game assume a leadership role, if they have not already done so, to facilitate interagency coordination among the key state, local (where applicable), and federal agencies with authority to regulate crude oil, refined product, and oil field gathering pipeline construction and operations in their individual states.

With the objective of reducing regulatory burdens while making government pipeline spill prevention standards more efficient, and improving incentives for industry investments in spill prevention and exceedance of regulatory standards, the Project Workgroup recommends that the following guidelines be applied to interagency coordination efforts in each West Coast state:

- Identify and involve representatives from all state and federal agencies appropriate to the scope of issues. Keep appropriate local agencies informed of issues and progress.
- Identify each agency's issues and concerns, such as spill prevention or response.
- Clearly identify and prioritize areas of regulatory overlap as well as gaps to be addressed, including "gray areas" where no lead agencies are identified.
- Establish that all participants have the necessary authority to speak for their agencies, and are familiar with their agency's issues and jurisdictional authorities.
- Establish and define a goal of consensus.
- Anticipate varying outcomes for each area of overlap, ranging from agreements to adopt uniform standards, to agreements to adopt uniform processes which accommodate differing standards. For example, uniform process may include identifying a lead agency and procedures which guide coordination efforts.
- Consider standardized forms and shared training to improve awareness of other agencies' regulations.
- "Test drive" coordination procedures with a scenario involving an actual pipeline in a coordinated regulatory action.
- After an agreement to uniform standards or coordination processes is finalized, institutionalize it through a formal process such as a Memorandum of Agreement (MOA).
- Agree to a periodic review and update of the MOA and related procedures, in order to make adjustments as needed and review the level of effort and budget invested.
- Include a process for information exchange regarding relevant studies, agency and industry activities, R&D needs, technical assistance efforts, enforcement activities, and grant funds.

The Workgroup recognizes that implementation of these interagency coordination guidelines in each West Coast state is likely to generate unanticipated outcomes and challenges. With this in mind, they further recommend that the States/BC Oil Spill Task Force continue to provide support for this effort by convening periodic conference calls and facilitating electronic and hard copy exchange of written material, in order to relay "lessons learned" throughout the process. These periodic conference calls can serve to facilitate information sharing regarding policy initiatives as well. Finally, the Project Workgroup wishes to note that its discussions and outreach over the last year identified a relative lack of research and development (R&D) focus on pipeline spill prevention in the US. With this in mind, the Workgroup further recommends that the Task Force use its continuing facilitation of these Workgroup conference calls to develop and communicate pipeline spill prevention research priorities.

I. Background on the States/BC Oil Spill Task Force

The States/British Columbia Oil Spill Task Force was established by a Memorandum of Cooperation signed by the governors of Alaska, Washington, Oregon and California, and the British Columbia premier in 1989 following two west coast oil spill incidents:

- The first involved the barge *Nestucca*, which spilled 231,000 gallons of fuel oil off of Grays Harbor, Washington and eventually oiled sections of shoreline from Oregon to Olympic National Park in Washington to as far away as the Canadian Pacific Rim National Park on Vancouver Island. This

incident emphasized how major spills do not respect national boundaries as well as how they affect our most sensitive and valuable natural resources.

- The second incident was the catastrophic spill by the *T/V Exxon Valdez* in Alaska's Prince William Sound in March of 1989. This incident further highlighted the common concerns shared by west coast states and British Columbia regarding spill risks from coastal vessel traffic routes, the need for cooperation and sharing of response resources across shared borders, and a shared commitment among west coast citizens of both the USA and Canada to protect their unique marine resources by placing high priority on spill prevention.

The continuing focus of the Task Force is on enhancing the ability of its member agencies as well as other public and private stakeholders to effectively prevent, prepare for, and respond to marine oil spills. These goals are accomplished by sharing information and resources, fostering regulatory consistency, and coordinating action on issues of common interest.

II. The Pipeline Spill Prevention Project

Pipelines which carry crude oil and refined petroleum products were identified by the Task Force Members as one topic to be addressed under the oil spill prevention objective in their 1994-1999 Strategic Plan. Their concern is supported by spill statistics which show that, internationally, there were an average of 117 pipeline oil spills larger than 10,000 gallons each annually from 1978 to 1997. That figure escalated to 128 pipeline spill incidents worldwide in 1998, resulting in a total of oil product spilled exceeding 22 million gallons. In the *Oil Spill Intelligence Report's International Oil Spill Statistics: 1998*, Dagmar Etkin, the report's editor, states that "From the perspective of evaluating spill prevention efforts and response readiness, the total number of incidents…may be more significant than the total volume spilled." As can be seen in the graph in Attachment 1, the number of pipeline spill incidents has consistently remained higher than the number of spills from other sources.

In the US since 1989, the year the Task Force was formed, pipeline spills have averaged 75 incidents annually for an average total of 5,244,000 gallons spilled each year. An analysis by the *Oil Spill Intelligence Report* in September of 1997 of oil spills onto land shows that pipeline spills outnumber spills from all other sources combined. With these considerations in mind, the Task Force Members approved a project for their 1997-1998 work year focused on conducting a West Coast regulatory review in order to build a stronger foundation for a cohesive and efficient approach to spill prevention in petroleum pipeline operations.

<u>First Phase of the Pipeline Spill Prevention Project - Spill Prevention Regulatory Survey</u>

The first step of the project was to develop a report in matrix format, describing gaps and redundancies between state and federal authorities governing spill prevention during construction, operation, and maintenance of both inter- and intra-state petroleum product pipelines in Task Force jurisdictions. A core workgroup of qualified persons from each Task Force jurisdiction, plus representatives from the Minerals Management Service (MMS) of the US Department of the Interior and the Office of Pipeline Safety (OPS) of the US Department of Transportation were recruited to complete questionnaires to gather this information on three types of pipelines: crude oil, refined product, and oil field gathering lines. Information from these completed surveys was then compiled (please reference Attachment II) and the information reviewed.

There were only a few areas where spill prevention gaps were identified for crude and refined product transportation lines, and there are consistent for both types of pipeline. These included periodic integrity/pressure testing and research focused on pipeline spill prevention. The spill prevention regulatory gaps identified for oil field gathering lines appear to include operator certification, operational and leak detection standards, use of internal inspection devices, annual or periodic leak testing requirements, and technical assistance programs in Alaska for fields where MMS is not involved. Alcohol/drug testing standards and enforcement standards, annual or period leak testing requirements, security standards or protection from third party damage, and standards focused on human error or lessons-learned programs appeared to be identified by the survey results as gaps for oil field gathering lines in California, but comments from the Division of Oil, Gas, and Geothermal Resources clarify these apparent gaps (see Attachment II, Part C)

It was clear from the survey responses that there are numerous areas of overlap between the state and federal agencies. The Pipeline Spill Prevention Workgroup discussed the issue of state/federal interface with regard to regulatory redundancy and noted that OPS regulation has traditionally been focused on pipeline safety issues, which they have delegated only to state agencies with similar pipeline safety mandates. On the West Coast the California State Fire Marshal (CSFM) is certified by the Office of Pipeline Safety (OPS) to regulate intrastate and interstate pipelines in California, and the Washington Utility and Transportation Commission has OPS delegation for intrastate pipelines in Washington.

The other West Coast agencies with spill prevention authorities governing pipelines derive those authorities from their environmental statutes focused on oil spill prevention, preparedness, and response. With new authorities granted to OPS under the 1992 Pipeline Safety Act to protect environmentally sensitive areas, however, the distinction between state and federal authorities for safety versus environmental mandates has become less clear. For instance, the Office of Pipeline Safety recently adopted API pipeline inspection standards which some state authorities such as the Alaska Department of Environmental Conservation, had already adopted. In any event, spills of petroleum products can create both environmental as well as health and safety hazards; this potential convergence of safety and environmental outcomes has been underscored by the tragic pipeline leak and subsequent fire which occurred in Bellingham, Washington in June of 1999. In that incident, a gasoline pipeline ruptured, spilling product which caused a fire and explosion which killed three people, including two young boys, injured eight others, burned one home, and polluted a salmon stream.

The need for improved interface among pipeline regulators applies to the need for coordination between both state and federal agencies, as well as with local governments, which may seek control over pipelines, from siting and construction through the operations phase, by permit conditions. The significance of this burden on pipeline operators of overlapping, differing, or uncoordinated regulatory requirements, especially where new permits are required, is that it can provide a disincentive to proactive replacement of aging pipelines.

The Pipeline Spill Prevention Workgroup therefore recommended to the Task Force Members in their Interim Report in 1998 that the workgroup be continued and expanded to include representation from the OPS Western Regional Office (which is responsible for inspections) in addition to the current representative from OPS headquarters in Washington, DC (which is responsible for administrative rule-making).

<u>Second Phase of the Pipeline Spill Prevention Project - Development of Interagency Coordination Guidelines</u>

The Task Force Members approved an extended project description in their 1998-1999 Annual Workplan as follows:

Task #2: Build a stronger foundation for a cohesive, efficient, and proactive approach to spill prevention in petroleum pipeline operations.

Lead Responsibility: Tom Chapple, Alaska Department of Environmental Conservation

Process and Timeline:

Step 1: Continue the project workgroup and expand as appropriate to review the survey findings and develop recommendations to improve the coordination and efficacy of existing state, federal, and local pipeline spill prevention and response programs.
Target Date: Fall 1998 through Spring 1999

Step 2: The project workgroup should make appropriate recommendations to each member jurisdiction regarding strategies to streamline government processes and improve pipeline spill prevention and response.
Target Date: Summer 1999

Note that the Task Force approved expanding the scope of the project to include discussions of pipeline spill response coordination in addition to spill prevention issues.

The Pipeline Spill Prevention Project Workgroup was expanded to include representation from the OPS Western Regional Office and the Environmental Protection Agency. Please reference Attachment III for a list of workgroup members. Those Workgroup members involved in regulation of crude oil pipelines began meeting by conference call to discuss the gaps and overlaps identified in the crude oil pipeline spill prevention survey, with the intent of developing specific coordination recommendations for each Task Force Member state with crude oil pipelines: Alaska, Washington, and California.

This Crude Oil Pipeline subcommittee met by conference call in October, November, and January. The October call focused on discussion of the spill prevention regulatory gaps which had been identified for crude oil pipelines. The first "gap" in spill prevention regulations which the group discussed was that of "periodic integrity/pressure testing requirement," which shows in the Crude Oil Pipeline matrix as not addressed by either OPS or a state regulation in either Alaska or Washington. Jim Taylor of the Office of Pipeline Safety (OPS) explained that hydrostatic pressure testing only identifies the weakest point in the line, and that OPS prefers the use of internal inspection devices, or "smart pigs." Nancy Wolfe noted that the California State Fire Marshal's office (CSFM) agrees, considering that a sufficient quantity of water for hydrostatic testing can be difficult to find, and post-test, requires disposal as contaminated water. CSFM allows use of smart pigs as an alternative to hydrostatic pressure testing, which is required in California statute. By virtue of design, some older pipelines cannot use smart pigs, however. OPS requires that all new lines be constructed to be "pigable," (CFR 195.120), and is drafting a regulation on internal inspections.

Jim Taylor further explained that OPS adopted a regulation requiring that leak detection systems comply with an American Society for Testing and Materials (ASTM) standard, if installed, but not requiring their installation, since OPS has found it hard to come up with a leak detection standard which would work for all pipeline operators. The large operators have leak detection systems as part of their Supervisory Control and Data Acquisition (SCADA) systems. Smaller operators, for whom such a system would be an economic burden, use different approaches, including visual observations, which are required by OPS rule to be done at least every two weeks. When asked how OPS deals with natural hazard issues, Jim further explained that OPS has stayed away from siting issues, considering land use to be a local issue.

There was agreement that the matrix – by virtue of its general level – does not identify all spill prevention gaps, since the nature of multiple regulations may vary considerably from state to state. However, such details could be addressed within each jurisdiction as part of an effort to coordinate regulatory authorities. After this initial discussion regarding the identified regulatory gaps, the group realized that their goal should be to develop a "road map", or set of generic procedures that could be implemented in each West Coast jurisdiction in order to facilitate state/federal agency coordination with regard to pipeline spill prevention and response regulatory gaps and overlaps. They recognized that participants, as well as the issues, will vary from one state to another, thus it would be inappropriate for the Task Force to facilitate a coast-wide coordination effort, although many of the same federal agency representatives may be involved. Instead, each Task Force member agency should agree to take the lead in facilitating interagency coordination in their own state.

Nancy Wolfe noted that California has solved the state/federal coordination issue, since OPS delegates to the State Fire Marshal's office and MMS and the Division of Oil, Gas, and Geothermal Resources (DOGGR) have developed a Memorandum of Agreement (MOA) on oil field gathering lines. Oregon has no OPS delegated program. In Washington, OPS has delegated safety regulation to the Utilities Transportation Commission, but spill prevention/ environmental protection issues remain the authority of the Washington Department of Ecology. The Joint Pipeline Office in Alaska provides a coordination mechanism for OPS, the Environmental Protection Agency (EPA), and the Alaska Department of Environmental Conservation (ADEC).

Key state and federal agencies will need to be identified and included, but there was consensus that the initial focus should be on state/federal regulatory coordination, and other stakeholders could be added in later phases. It was recommended that the coordination effort invite initial input from the regulated industry on areas of overlap which they consider to provide disincentives to investment in spill prevention. It was also suggested that the States/BC Oil Spill Task Force should facilitate communication among the coordination workgroups in order to share "lessons learned."

The subcommittee reviewed a draft list of "Elements of Successful Interagency Coordination" which had been drawn from a paper on a cooperative project involving MMS, OPS, the California State Fire Marshal's Office, the California State Lands Commission (CSLC) and DOGGR. This was provided to the subcommittee for review and comment. Jim Grant of MMS explained that Chevron Pipeline had come to MMS and pointed out the varying regulations and conflicting standards for inspections and maintenance as a result of overlapping federal, state, and local government authorities. With MMS taking the lead, the concerned agencies took initiative to coordinate, with the goal of reducing the regulatory burden on operators. They eventually developed a performance-based inspection program. They agreed on a list of "red flags" which would trigger coordination efforts, as well as ways for the agencies to cooperate. A formal MOA was adopted this January (1999). One aspect of the agreement calls for coordination among the agencies before any unilateral decisions are made. Standardized data forms have also been developed. Local governments were kept informed of the coordination effort, but were not formally "at the table." Jim Grant noted that MMS and OPS discovered through this process that each agency had some authorities which the other did not have, so coordination had a synergistic effect with regard to both information and regulation. When asked how much time and effort was invested in the coordination project, Jim responded that the team met every two weeks for one and a half years. Industry representatives had been invited to brief the team during early meetings.

The draft "Elements of Successful Interagency Coordination" were discussed and revised by the Crude Oil Pipeline Subcommittee, then referred to the other Project Workgroup members for their review and comment. The Project Workgroup ultimately agreed to recommend them to the Task Force Members for adoption as explained below.

III. Pipeline Spill Prevention Project Concluding Recommendations

The Pipeline Spill Prevention and Response Project Workgroup finds that the need exists for state, local (where applicable), and federal agencies with authority to regulate crude oil, refined product, and oil field gathering pipeline construction and operations to coordinate that regulatory authority in order to improve spill prevention and enhance spill preparedness and response.

In order to address that need, the Project Workgroup recommends that the Alaska Department of Environmental Conservation, the Washington Department of Ecology, the Oregon Department of Environmental Quality, and the Office of Spill Prevention and Response in the California Department of Fish and Game assume a leadership role, if they have not already done so, to facilitate interagency coordination among the key state, local (where applicable), and federal agencies with authority to regulate crude oil, refined product, and oil field gathering pipeline construction and operations in their individual states.

The Project Workgroup reiterates that the recommended goal is to improve agency coordination without compromising any participating agency's authority. There was consensus among Project Workgroup members that, while the issue of federal preemption will arise and needs to be addressed rather than avoided, it should be not be addressed in the context of challenging authorities so much as assuring that all authorities are applied in a coordinated fashion to the common goal of preventing spills from pipelines.

With the objective of reducing regulatory burdens while making government pipeline spill prevention standards more efficient, and improving incentives for industry investments in spill prevention and exceedance of regulatory standards, the Project Workgroup recommends that the following guidelines be applied to interagency coordination efforts in each West Coast state:

- Identify and involve representatives from all state and federal agencies appropriate to the scope of issues. Keep appropriate local agencies informed of issues and progress.

- Identify each agency's issues and concerns, such as spill prevention or response.

- Clearly identify and prioritize areas of regulatory overlap as well as gaps to be addressed, including "gray areas" where no lead agencies are identified.

- Establish that all participants have the necessary authority to speak for their agencies, and are familiar with their agency's issues and jurisdictional authorities.

- Establish and define a goal of consensus.

- Anticipate varying outcomes for each area of overlap, ranging from agreements to adopt uniform standards, to agreements to adopt uniform processes which accommodate differing standards. For example, uniform process may include identifying a lead agency and procedures which guide coordination efforts.

- Consider standardized forms and shared training to improve awareness of other agencies' regulations.

- "Test drive" coordination procedures with a scenario involving an actual pipeline in a coordinated regulatory action.

- After an agreement to uniform standards or coordination processes is finalized, institutionalize it through a formal process such as a Memorandum of Agreement (MOA).

- Agree to a periodic review and update of the MOA and related procedures, in order to make adjustments as needed and review the level of effort and budget invested.

- Include a process for information exchange regarding relevant studies, agency and industry activities, R&D needs, technical assistance efforts, enforcement activities, and grant funds.

The logic of these guidelines may seem obvious on the face of it, but they are based upon the experience gained by the agency participants throughout the coordination process which involved MMS and CSLC in coordinating regulation of offshore oil field gathering lines California. Moreover, they are enhanced by the review and discussion of the Pipeline Spill Prevention Project Workgroup. Nevertheless, the Workgroup recognizes that implementation of these interagency coordination guidelines in each West Coast state is likely to generate unanticipated outcomes and challenges. With this in mind, they recommend that the States/BC Oil Spill Task Force continue to provide support by convening periodic conference calls and facilitating electronic and hard copy exchange of written material, in order to relay "lessons learned" throughout the process.

The Project Workgroup has also found that the Project conference calls over the last year provided a valuable opportunity to share information regarding state or federal policy initiatives, and recommend that these periodic conference calls maintain this venue of coordination as well.

Finally, the Project Workgroup wishes to note that its discussions and outreach over the last year identified a relative lack of research and development (R&D) focus on pipeline spill prevention in the US. It appears that federal agencies are focusing little or no R&D efforts on this area, although it was stated that the Office of Pipeline Safety is funding development of a "smart pig" capable of detecting longitudinal cracks and faults, but this was not verified.

ADEC has put out RFPs on pipeline corrosion and leak detection projects which are designed to help the agency make Best Available Technology (BAT) decisions. ADEC is required by regulation to require BAT, so the purpose of these RFPs is to identify what's out there, what's proven, and what works best. However, these projects are funded with *Exxon Valdez* settlement funds, and were required be completed this year. We could not confirm any R&D funding targeted at pipeline spill prevention by the American Petroleum Institute or by any other states.

It is noteworthy that the National Transportation Safety Board (NTSB) issued a safety report in May of this year (1999) which found that :

1. Since 1989 the US Department of Transportation has initiated a wide range of research projects to address the issue of operator fatigue in the transportation environment, *with the exception of pipeline operations* (emphasis added); and
2. ….The *Research and Special Programs Administration* and the US Coast Guard *need to make a more concerted effort to develop and disseminate educational information on fatigue in pipeline* and marine *operations*, respectively(emphasis added).

The Pipeline Spill Prevention Project workgroup notes that under its Communications Objective in its 1999-2004 Strategic Plan the following task is identified: *Develop and communicate recommendations regarding research priorities*. The Workgroup recommends that the Task Force use its continuing facilitation of the Workgroup's coordination efforts to develop and communicate pipeline spill prevention research priorities.

Attachment 1: Oil Spill Intelligence Report 1998 International Oil spill Stattistics, Figure 7: annual Number of spills over 10,000 gallons by Source Type is available in hard copy from the Pacific States/BC Oil Spill Task Force Executive Coordinator at JeanRCameron@oregoncoast.com

Attachment II, Part A

Pacific States/British Columbia Oil Spill Task Force
Pipeline Spill Prevention Survey Responses for Crude Oil Transportation Pipelines[1]
6/24/98

Part I: Jurisdictional Overview	ALASKA	WASHINGTON	CALIFORNIA	US DOT OFFICE OF PIPELINE SAFETY
State regulatory agencies with authority for spill prevention regulations covering crude oil transportation pipelines	• ADEC • ADNR	• ECOLOGY • WUTC • WASHINGTON STATE FIRE MARSHAL	• OSPR (MARINE) • CALF STATE FIRE MARSHAL • CA FISH & GAME (INLAND)	N/A
Do any agencies listed above operate under delegation from federal agencies?	NO	WUTC has delegation from OPS for intrastate pipelines	State Fire Marshal is interstate agent for USDOT/OPS	N/A
Total linear miles of crude oil transportation pipeline in state	959	66	3,849	Information not available[2]
Maximum potential capacity	9,410,788 bbl	122,094 bbl	unknown	Information not available
Linear miles regulated by state agencies	959	None[3]	3,849	Information not available
Linear miles actively overseen (inspection, enforcement) by state agencies	959	None	3,849	Information not available

Glossary:
ADEC: Alaska Department of Environmental Conservation
ADNR: Alaska Department of Natural Resources (By the lease stipulation for pipelines within State leased land)
ECOLOGY: Washington Department of Ecology
WUTC: Washington Utilities Transportation Commission
SFM: State Fire Marshal (Washington or California)
USDOT/OPS: United Stated Department of Transportation, Office of Pipeline Safety
N/A: Not applicable
bbl: barrels

Part II: Regulatory Overview for Crude Oil Pipelines	ALASKA	WASHINGTON	CALIFORNIA	OPS
Spill prevention construction standards/requirements	ADEC		CSFM	OPS

[1] There are no crude oil transportation pipelines in Oregon. The Office of Pipeline Safety in the US DOT's Research and Special Programs Administration is the federal agency with authority over crude oil transportation pipelines on the West Coast.
[2] DOT does not currently have an annual report requirement for liquid pipeline operators to provide such data. OPS is working with industry to develop an annual report format which will likely include this information.
[3] WUTC has authority to regulate intrastate crude oil pipelines, but WA's one crude oil pipeline is interstate and thus not under WUTC authority

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Spill prevention maintenance standards/requirements	ADEC		CSFM	OPS
Spill prevention closure standards/requirements	ADEC		CSFM	OPS
Spill prevention design standards/requirements	ADEC		CSFM	OPS
Spill prevention planning	ADEC + ADNR	ECOLOGY		OPS
Identification of natural hazards	ADEC + ADNR			OPS
Plans to mitigate natural hazards	ADEC + ADNR			OPS
Operator training	ADEC		CSFM [4]	OPS
Operator certification				OPS[5]
Alcohol/drug testing, standards, enforcement	ADEC		CSFM	OPS
Operational standards			CSFM	OPS
Leak detection system standards	ADEC		CSFM	OPS
Spill history reporting	ADEC +ADNR	ECOLOGY	CSFM	OPS
Use of Internal inspection devices			CSFM	OPS
Periodic integrity/pressure testing requirement			CSFM	
Line/tank transfer requirements	ADEC			OPS
Shutdown procedures	ADEC		CSFM	OPS
Security standards or protection from 3rd party damage	ADEC		CSFM	OPS
Site risk analyses and mitigation measures	ADEC + ADNR	ECOLOGY	CSFM	OPS
Corrosion detection and control standards*	ADEC (buried)		CSFM (both)	OPS (both)
Standards/requirements to prevent human error and lessons learned programs	ADEC			OPS
Technical assistance programs run by regulatory agencies or regulated industry		ECOLOGY + WUTC	CSFM	OPS
Efforts to coordinate state and federal programs	ADEC	ECOLOGY	CSFM	OPS
R&D focus on pipeline spill prevention				
Records preparation and retention	ADEC	ECOLOGY	CSFM	OPS
Integrity requirements for break-out/storage tanks	ADEC	ECOLOGY	CSFM	OPS[6]
Liners/secondary containment for break-out/storage tanks	ADEC	ECOLOGY		OPS"
Operating requirements for tanks	ADEC	ECOLOGY		OPS"

*Please indicate whether "buried" or "above ground"

[4] In development

[5] A DOT/OPS notice of proposed rulemaking which addresses qualifications for pipeline personnel is under review and is expected to be published later in 1998.

[6] Regarding break-out and storage tanks, DOT/OPS is in the process of incorporating five API Standards, one API Specification, four API Recommended Practices, one API Publication, and one NFPA Code into their regulations at 49 CFR 195. These will address the last three items on the checklist: integrity requirements, secondary containment, and operating requirements for tanks. The new regulations will not address liners for tanks.

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Part III: Comments regarding Crude Oil Transportation Pipelines

1. Changes to state or federal pipeline spill prevention regulations being proposed which would cover this type of pipeline?

- WASHINGTON: Not yet, possibly in the future to clarify authorities and improve spill reporting to better utilize spill cause and "lessons-learned" information.
- CALIFORNIA: The California State Fire Marshal adopts all changes implemented by the federal Office of Pipeline Safety (e.g., 49 CFR 195, etc.)

2. Please state your opinion of whether crude oil transportation pipeline spill prevention oversight is adequate in your jurisdiction, what efficiencies could be gained by more cooperation, coordination, delegation among agencies operating in your jurisdiction, and what barriers you perceive, if any, to improved spill prevention in your jurisdiction:

- ALASKA: While the federal DOT pipeline safety regulations and the ADEC environmental regulations do not conflict, they do overlap in some areas. Some arguing over primacy and preemption issue has occurred. We see opportunities for increased efficiencies when ADEC and US DOT work together, since the respective regulations are complementary in most cases.
- WASHINGTON: Noting that the Washington Attorney General's office has determined that the state is not preempted by federal authorities on environmental regulation, only on safety regulations, and that these two are similar in nature and therefore the potential for overlap and conflict exists, we feel that there needs to be improvement in recognition from federal agencies of the states' rights in regulating hazardous liquid pipelines, especially for state environmental agencies.
- CALIFORNIA: The California State Fire Marshal issued a report in 1997 which identified a number of jurisdictional conflicts and confusion. Although there was no perception of conflict among state agencies by the agencies themselves, there was a strong perception on the part of pipeline operators of conflict between state, federal, county, and city agencies. The SFM report recommended that the State appoint a single led agency and grant that agency authority over every aspect of the pipeline permitting process while also requiring it to integrate federal, state, and local policies for crude oil production and transportation of both crude and refined petroleum products. Likewise, this lead agency should look for incentives for operators to repair, replace, or improve pipelines.
- US DOT/OPS: In the opinion of DOT, pipeline spill prevention oversight is adequate nationwide. DOT is eager to continue working closely with our state counterparts to ensure the greatest degree of safety and environmental protection from Hazardous Liquid pipelines.

Part III: Comments regarding Crude Oil Transportation Pipelines, continued:

3. Other comments:

- CALIFORNIA: All state programs in the US which regulate hazardous liquid pipeline safety (either crude oil or refined products) must be certified or approved each year by the federal Office of Pipeline Safety (OPS). While states may adopt and enforce more restrictive requirements for intrastate pipelines, minimum federal standards (primarily found in 49 CFR 195) must be enforced by the state agency. In other than California, Arizona, Minnesota, and New York, OPS is the regulatory and enforcement authority for intestate pipelines.

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Since 1981, OPS has authorized the California State Fire Marshal to serve as an interstate agent in the inspection of interstate pipelines within California.

- US DOT/OPS: DOT has a national MOU with MMS which covers pipelines on the West Coast. DOT also includes states in our compliance program. The California State Fire Marshal's office is an interstate agent for DOT and also regulates intrastate pipelines in California. California has adopted DOT's regulations, and its inspectors conduct pipeline inspections as DOT's agents, forwarding their findings to DOT for enforcement action. The Washington Utilities and Transportation Commission regulates intrastate pipelines in Washington. DOT inspects the interstate pipelines in Washington, Oregon, and Alaska.

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Attachment II, Part B

Pacific States/British Columbia Oil Spill Task Force
Pipeline Spill Prevention Survey Responses For Refined Product Transportation Pipelines[7]
6/24/98

Part I: Jurisdictional Overview	ALASKA	WASHINGTON	OREGON	CALIFORNIA	US DOT OFFICE OF PIPELINE SAFETY
State regulatory agencies with authority for spill prevention regulations covering refined product transportation pipelines	ADEC	• ECOLOGY • WUTC • WASHINGTON STATE FIRE MARSHAL	ODEQ	• OSPR (MARINE) • CA F&G (INLAND) • CALF STATE FIRE MARSHAL	N/A
Do any agencies listed above operate under delegation from federal agencies?	NO	WUTC has delegation from OPA for intrastate pipelines	NO	State Fire Marshal is interstate agent for USDOT/OPS	N/A
Total linear miles of refined product transportation pipeline in state	90	879	525	3,380.49	Information not available[8]
Maximum potential capacity	41,384 bbl	701,843 bbl	9,623 bbl	unknown	Information not available
Linear miles regulated by state agencies	90	15	25.5	3,380.49	Information not available
Linear miles actively overseen (inspection, enforcement) by state agencies	90	15	25.5	3,380.49	Information not available

Glossary:
ADEC: Alaska Department of Environmental Conservation
ECOLOGY: Washington Department of Ecology
WUTC: Washington Utilities Transportation Commission
SFM: State Fire Marshal (Washington or California)
ODEQ: Oregon Department of Environmental Quality
USDOT/OPS: United Stated Department of Transportation, Office of Pipeline Safety
N/A: Not applicable
bbl: barrels

Part II: Standards for Refined Product Pipelines	ALASKA	WASHINGTON	OREGON	CALIFORNIA	OPS
Spill prevention construction standards/requirements	ADEC	WUTC		CSFM	OPS
Spill prevention maintenance standards/requirements	ADEC	WUTC	ODEQ	CSFM	OPS

[7] The Office of Pipeline Safety in the US DOT's Research and Special Programs Administration is the federal agency with authority over refined product transportation pipelines on the West Coast.
[8] DOT does not currently have an annual report requirement for liquid pipeline operators to provide such data. OPS is working with industry to develop an annual report format which will likely include this information.

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Spill prevention closure standards/requirements	ADEC	WUTC		CSFM	OPS
Spill prevention design standards/requirements	ADEC	WUTC		CSFM	OPS
Spill prevention planing	ADEC	ECOLOGY	ODEQ		OPS
Identification of natural hazards	ADEC		ODEQ		OPS
Plans to mitigate natural hazards	ADEC		ODEQ		OPS
Operator training	ADEC		ODEQ	CSFM [9]	OPS
Operator certification		ECOLOGY (limited)			OPS[10]
Alcohol/drug testing, standards, enforcement	ADEC	ECOLOGY (limited)	ODEQ	CSFM	OPS
Operational standards		WUTC	ODEQ	CSFM	OPS
Leak detection system standards			ODEQ	CSFM	OPS
Spill history reporting	ADEC	ECOLOGY	ODEQ	CSFM	OPS
Use of Internal inspection devices		WUTC		CSFM	OPS
Periodic integrity/pressure testing requirement	ADEC[11] (buried)			CSFM	
Line/tank transfer requirements	ADEC		ODEQ		OPS
Shutdown procedures	ADEC	WUTC	ODEQ	CSFM	OPS
Security standards or protection from 3rd party damage	ADEC	WUTC		CSFM	OPS
Site risk analyses and mitigation measures	ADEC	ECOLOGY	ODEQ	CSFM	OPS
Corrosion detection and control standards	ADEC (buried)	WUTC		CSFM	OPS
Standards/requirements to prevent human error and lessons learned programs	ADEC		ODEQ		OPS
Technical assistance programs run by regulatory agencies or regulated industry		ECOLOGY + WUTC		CSFM	OPS
Efforts to coordinate state and federal programs		ECOLOGY+WUTC	ODEQ	CSFM	OPS
R&D focus on pipeline spill prevention					
Records preparation and retention	ADEC	ECOLOGY+WUTC	ODEQ	CSFM	OPS
Integrity requirements for break-out/storage tanks	ADEC	ECOLOGY+WUTC		CSFM	OPS[12]
Liners/secondary containment for break-out/storage tanks	ADEC	ECOLOGY+WUTC	ODEQ		OPS"
Operating requirements for tanks	ADEC	ECOLOGY	ODEQ		OPS"

[9] In development
[10] A DOT/OPS notice of proposed rulemaking which addresses qualifications for pipeline personnel is under review and is expected to be published later in 1998.
[11] To or from docks or vessels only
[12] Regarding break-out and storage tanks, DOT/OPS is in the process of incorporating five API Standards, one API Specification, four API Recommended Practices, one API Publication, and one NFPA Code into their regulations at 49 CFR 195. These will address the last three items on the checklist: integrity requirements, secondary containment, and operating requirements for tanks. The new regulations will not address liners for tanks.

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Part III: Comments regarding Refined Product Transportation Pipelines

1. Changes to state or federal pipeline spill prevention regulations being proposed which would cover this type of pipeline?

- WASHINGTON: Not yet, possibly in the future to clarify authorities and improve spill reporting to better utilize spill cause and "lessons-learned" information.
- CALIFORNIA: The California State Fire Marshal adopts all changes implemented by the federal Office of Pipeline Safety (e.g., 49 CFR 195, etc.)

2. Please state your opinion of whether refined product transportation pipeline spill prevention oversight is adequate in your jurisdiction, what efficiencies could be gained by more cooperation, coordination, delegation among agencies operating in your jurisdiction, and what barriers you perceive, if any, to improved spill prevention in your jurisdiction:

- WASHINGTON: There needs to be improvement in recognition from federal agencies of the states' rights in regulating hazardous liquid pipelines, especially for state environmental agencies.
- OREGON: Oregon DEQ only regulates pipelines that could cause a release to navigable waters as defined by Oregon Administrative Rule 340-47 (Coastal Waters, the Columbia River, and the Willamette River from the mouth to Willamette Falls-Oregon City). The State should regulate pipelines that have any river crossings.
- US DOT/OPS: In the opinion of DOT, pipeline spill prevention oversight is adequate nationwide. DOT is eager to continue working closely with our state counterparts to ensure the greatest degree of safety and environmental protection from Hazardous Liquid pipelines.

3. Other comments received:

- ALASKA: Contingency plans are not specifically required for refined product pipelines themselves; rather, they are managed as appurtenances to a refinery or a tank farm facility.
- CALIFORNIA: All state programs in the US which regulate hazardous liquid pipeline safety (either crude oil or refined products) must be certified or approved each year by the federal Office of Pipeline Safety (OPS). While states may adopt and enforce more restrictive requirements for intrastate pipelines, minimum federal standards (primarily found in 49 CFR 195) must be enforced by the state agency. In other than California, Arizona, Minnesota, and New York, OPS is the regulatory and enforcement authority for intestate pipelines. Since 1981, OPS has authorized the California State Fire Marshal to serve as an interstate agent in the inspection of interstate pipelines within California.
- US DOT/OPS: DOT has a national MOU with MMS which covers pipelines on the West Coast. DOT also includes states in our compliance program. The California State Fire Marshal's office is an interstate agent for DOT and also regulates intrastate pipelines in California. California has adopted DOT's regulations, and its inspectors conduct pipeline inspections as DOT's agents, forwarding their findings to DOT for enforcement action. The Washington Utilities and Transportation Commission regulates intrastate pipelines in Washington. DOT inspects the interstate pipelines in Washington, Oregon, and Alaska.

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Attachment II, Part C

Pacific States/British Columbia Oil Spill Task Force
Pipeline Spill Prevention Survey Responses
For Oil Field Gathering Pipelines[13]
6/24/98

Part I: Jurisdictional Overview	ALASKA	CALIFORNIA	US MINERALS MANAGEMENT SERVICE
State regulatory agencies with authority for spill prevention regulations covering oil field gathering pipelines	• ADEC • ADNR	DOGGR	N/A
Do any agencies listed above operate under delegation from federal agencies?	NO	The division has received primacy from US EPA re: the injection of produced fluids from oil and gas operations, including pollution prevention.	MMS operates under MOUs with USDOT/OPS and US Coast Guard
Total linear miles of oil field gathering pipeline in state	805	The Division does not maintain this information.	31.8*/44.9** in California
Maximum potential capacity	754,456 bbl	The Division does not maintain this information.	32,962*/178,730** in California
Linear miles regulated by state agencies	805	The Division does not maintain this information.	N/A
Linear miles actively overseen (inspection, enforcement)	805	When new pipeline regulations are implemented this information will be available.	31.8*/44.9** in California

* Refers to pipelines between production platforms
** Refers to pipelines between platform and shore in federal waters

Glossary:
ADEC: Alaska Department of Environmental Conservation
ADNR: Alaska Department of Natural Resources (By the lease stipulation for pipelines within State leased land)
DOGGR: Division of Oil, Gas, and Geothermal Resources, California Department of Conservation
MMS: Minerals Management Service, US Department of the Interior
USDOT/OPS: United Stated Department of Transportation, Office of Pipeline Safety
N/A: Not applicable
bbl: barrels

[13] There is no oil production in Washington or Oregon. OPS exercises limited inspection authority for oil field gathering lines as provided under Section 194 in OPA 90, but the Minerals Management Service has primary authority over oil field gathering pipelines in federal waters, most of which are off the California Coast. There is only one production platform in federal waters in Alaska, in the Beaufort Sea off the North Slope. MMS has a role in contingency plan and COFR review for this facility, and ADEC reports they are coordinating with MMS through the Coastal Zone Management Act process.

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Part II: Regulatory Standards for Oil Field Gathering Pipelines	ALASKA	CALIFORNIA	MMS
Spill prevention construction standards/requirements	ADEC	DOGGR	MMS
Spill prevention maintenance standards/requirements	ADEC	DOGGR	MMS
Spill prevention closure standards/requirements	ADEC	DOGGR	MMS
Spill prevention design standards/requirements	ADEC	DOGGR	MMS
Spill prevention planing	ADEC + ADNR	DOGGR	MMS
Identification of natural hazards	ADEC + ADNR		MMS
Plans to mitigate natural hazards	ADEC + ADNR		MMS
Operator training	ADEC		MMS
Operator certification			MMS
Alcohol/drug testing, standards, enforcement	ADEC		
Operational standards		DOGGR	MMS
Leak detection standards		DOGGR	
Spill history reporting	ADEC +ADNR	Pending*	MMS
Use of Internal inspection devices		Pending*	MMS
Annual leak testing requirement		Pending*	
Line/tank transfer requirements	ADEC		
Shutdown procedures	ADEC		MMS
Security standards or protection from 3rd party damage	ADEC		
Site risk analyses and mitigation measures	ADEC + ADNR		MMS
Corrosion detection and control standards	ADEC	Pending*	MMS
Standards/requirements to prevent human error and lessons learned programs	ADEC		Voluntary
Technical assistance programs run by regulatory agencies or regulated industry		DOGGR	
Efforts to coordinate state and federal programs	ADEC	DOGGR	MMS
R&D focus on pipeline spill prevention			MMS
Records preparation and retention	ADEC	DOGGR	MMS
Integrity requirements for break-out/storage tanks	ADEC	DOGGR	
Liners/secondary containment for break-out/storage tanks	ADEC	DOGGR	
Operating requirements for tanks	ADEC	DOGGR	MMS

* When new DOGGR pipeline regulations become active (expected by September 1998)

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Part III: Comments regarding Oil Field Gathering Pipelines

1. Changes to state or federal pipeline spill prevention regulations being proposed which would cover this type of pipeline?

- DOGGR: The Division of Oil, Gas, and Geothermal Resources has proposed regulations to expand the existing pipeline construction standards and establish more substantial prevention measures for pipelines located in environmentally sensitive areas. Environmentally sensitive areas are defined as areas in which a spill may result in a significant threat to public health, safety, or the environment. The proposed regulations contain this definition, as well as procedures to incorporate other areas on a case-by-case basis if needed. The additional prevention measures contained in the proposed regulations include pipeline mapping, pipeline description, and periodic integrity testing of higher volume pipelines. Flexibility is also built into these requirements to ensure that pipeline operators are utilizing the most efficient and effective methods of leak prevention.

2. Please state your opinion of whether oil field gathering pipeline spill prevention oversight is adequate in your jurisdiction, what efficiencies could be gained by more cooperation, coordination, delegation among agencies operating in your jurisdiction, and what barriers you perceive, if any, to improved spill prevention in your jurisdiction:

- ALASKA: The State of Alaska (DEC) should give more oversight to these lines than what is currently allocated. The extent of oversight has increased in the past three years, but it is viewed as less than optimum.
- DOGGR: In April 1995 OSPR sponsored the formation of a series of committees to investigate the current status of oil spill prevention and contingency planning in California. Members included state and federal regulatory agencies and the regulated industry. DOGGR was directly involved in the committee that addressed the adequacy of existing regulations and methodologies of identifying the best achievable protection for near shore and offshore oil facilities. In the report provided to the Administrator in March 1996, the committee members agreed unanimously that the existing regulatory framework is adequate and no new requirements should be introduced. Since that time the Division has continued to improve its regulatory program and continues to review the regulated operations to ensure any necessary changes are made to protect life, health, property, and the environment. In a regulatory scheme as complex as the one in California, there is always room for improvements in coordination and communication between prevention and response agencies. The above-mentioned joint regulatory/industry committee recommended that the State Interagency Oil Spill Committee (SIOSC) be used as a medium to improve interagency communications, but implementation of this recommendation has not been pursued aggressively.
- MMS: The oversight in federal waters is more than adequate. Some areas of jurisdiction in state waters and onshore are unclear and cause problems in a few instances. The agencies are trying to both cooperate and coordinate more often and to improve overall spill prevention and response.

3. Other Comments

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DOGGR responded regarding the inference that there is a need for an alcohol/drug testing and enforcement requirement: The Division has not established this type of program because the statistical information on the production-related spills has not identified any problems in this area. The Division will continue to review the spill statistics and monitor any changes. In addition, the regulated community has independently established programs to ensure that drug and alcohol use does not become a problem in their companies.

The second purported gap identified refers to a need for leak testing requirements. The Division has regulations in effect that requires testing for pipelines in sensitive areas every two years. The State Oil and Gas Supervisor may require testing for other pipelines if there is a history of problems.

The third issue identified is security standards or protection from third party damage. This is not practical given the extensive area involved. There are approximately 400,000 acres of productive oil fields in California, varying in local from densely populated urban areas to remote rural locations. Also, the statistics don't indicate a significant number of spills resulting from vandalism or third party damage.

The last indicated gap in the draft report is a lack of a program to deal with human error and lessons learned. This is another area that showed no significant statistical problem. However, the Division prepares detailed reports on each oilfield-related spill investigated and evaluates those reports for problems and patterns where increased oversight may be warranted. The Division is aware that in other areas of oil transportation there are studies that show otherwise, but given the nature of the production equipment involved there is less of an impact on the volumes spilled.

It is important to remember that most crude oil gathering and flowline pipelines used on the leases are typically short, small diameter, low-pressure, low volume pipelines. To hold these pipelines to the same standards as the larger transportation pipelines would be over regulation.

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Attachment III

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Pipeline Spill Prevention
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7/99

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