

Submitted to Alaska Department of Environmental Conservation
December 18, 2019

re; Comments on 18 ACC 75 Article 4. Oil Discharge Prevention and Contingency Plans and Nontank Vessel Plans

I was encouraged by ADEC's announcement that they were asking for comments on the State's oil spill prevention and response regulations found at 18 ACC 75 Article 4 . Personally, I've thought all our regulatory programs, State and Federal, should under go a 5 to 10 year review to see: 1. Are they accomplishing what the Legislature or Congress intended; 2. If not what changes should take place. 3. If so (i.e. the goal was achieved), does the program need to continue and 4. Has anyone learned anything that might make the regulatory program in question more effective and efficient. So I think asking for ideas is a good idea, as long as its not a foregone conclusion the "Alaska is open to business" is the same as Alaska open to "rape and plunder" of it resources for increased corporate profits.

I'll provide a brief summary of my back ground, which created the basis for my comments. I am retired, so do not represent any employer or client. I spent about 20 years in oil spill response and incident management in Alaska. I was at ARCO Prudhoe Bay when the new ADEC regulations were established and I lead development of the new ARCO Eastern Operations Area OSRP to meet the new requirements. I held positions as Environmental Compliance Supervisor, and IMT Coordinator while at ARCO, and was seconded to Alaska Clean Seas as their Planning Manager. I was also on ARCO's Fire and HazMat teams and Incident Management Team. Post ARCO, I worked on oil spills from the 1999 Alaska Railroad derailments at Gold Creek, and Hurricane and engine fuel tank overtopping in the Anchorage rail yard, as well as the heating fuel spill at the Susan B. English School in Seldovia. I was the Compliance Manager for Alyeska Pipeline, Ship Escort and Response Vessel Service. I completed my time with Alyeska as their first Crisis Preparedness Manager (an all hazards preparedness position).

I'm encouraged by Lynn Kent's Commentary in the Alaska Daily News November12 ,2019 and would like to add a perspective to hers.

In the many exercises I've lead or participated in, there has always been a comment from an engineer, operations, or maintenance personnel that the scenario " wouldn't happen", or "isn't realistic", etc. To their defense, they didn't understand that the scenarios were always developed with participants from engineering, operations, and/or maintenance. But based on their experience, they couldn't see that exercise scenario as realistic.

Before March 24, 1989, I doubt any tanker captain, first mate or crew would say someone would run a tanker aground on well know Blight Reef and spill 260,000 bbl of crude oil into Prince William Sound, while the only response barge sat grounded in the snow with out response equipment aboard.

Before April 20, 2010, I doubt any in the oil well drilling business would think anyone would claim a scenario based on a rush to completion and cut costs that resulted in pressure gauges being misread, cement jobs completions lacking integrity and not checked with bond logs, sea water being used as a well fluid instead of mud to hold reservoir pressure in check, and a faulty

blowout preventer would all resulting is a disaster killing 11 people, injured 17 and discharging almost 5 million barrels of hydrocarbons into the Gulf of Mexico.¹

In March of 2006, BP let a pipeline corrode until it had a quarter inch hole which released 6,400 bbl of oil onto the tundra under snow for at least 5 days before being detected. The investigations afterward concluded BP had negligently reduced corrosion monitoring and prevention. BP pleaded guilty and was fined \$20 million and paid \$25 million to settle a civil suit. This was the largest spill in the history of Prudhoe Bay, and occurred after documented warnings to BP Management that the corrosion program was being reduced to dangerous levels. In this case, BP management had been warned by corrosion operations that their reductions in cost would reduced the corrosion program to an ineffective level. Management ignored the warnings. I doubt that debacle would have been allowed as a drill scenario, but it was a scenario ARCO's Spill Chief viewed as his realistic worst case in 1990's.

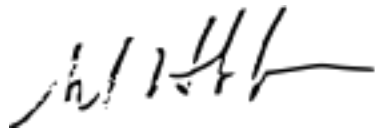
Those are the type of incident that create new legislation.

Major industrial catastrophe's are rare events. They are typically caused by several low probabilities events occurring at the same time, and often after the potential of such a disaster has been raised, but ignored. Noticeable disasters like ARCO's 1990 Lyondell chemical plant explosion and Union Carbide's 1984, Union Carbide pesticide plant disaster in Bhopal, India that killed almost 4,000 people fit this pattern. It's not isolated to large oil spills. All these disasters point to a need to have a third party (i.e. the government) provide over sight to curb the drives of business economics to make unwise decisions based on a narrow, short timeframe internal view of profits and loss. Over time, the record shows petroleum and chemical oil company management has proven they are incompetent to prevent these disasters, often after advice that their decisions were increasing the risk of that disaster.

So in my view, a review of the regulations for efficiency of implementation is fine. A review with an underlying intent to weaken the system would be a tragic mistake. The Alaska oil production and transportation process is under constant economic pressure to reduce cost, and that situation is unlikely to change. Without strong oversight, industry will be pressured to take more chances that risk environmental damage, not less.

Given all that, my comments, as recommendations for ADEC's consideration are provided in Attachment 1. I hope they are useful and encourage more agencies to periodically ask for open ended comments on their regulatory programs.

Sincerely,

A handwritten signature in black ink, appearing to read "Rod Hoffman". The signature is written in a cursive, somewhat stylized font.

Rod Hoffman,

Attachment 1.

Comment by R. Hoffman on 18ACC 75 Article 4.

December 18, 2019 Open Comments

NOTE:

~~Text~~ indicates removal of text.

Text indicated addition of text.

[Text] provides an explanation for deletions or additions of text.

-18 AAC 75.400. Applicability.

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(b) If it determines that an exemption will be protective of human health, safety, and welfare, and of the environment, the department will exempt from the requirements of AS 46.04.030(c) and 46.04.055(f), a vessel that is conducting, or is available only for conducting, an oil discharge response operation. A person seeking an exemption under this subsection must apply on an application form supplied by the department. ~~The department will approve or deny the request for an exemption not later than 10 working days after it receives an application.~~ *[I cannot envision a situation where this would not be under an emergency, and if it were 10 days is too long]*. In an emergency response to an actual discharge, a person seeking an exemption may make a verbal request, and the department may issue a verbal approval. The department will confirm a verbal approval in writing, stating the period during which the approval is valid.

-18 AAC 75.408. General procedures to apply for oil discharge and contingency plans.

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(B) provide copies of the final version of the plan to the Department of Natural Resources, the Department of Fish and Game, regional citizens' advisory councils *(if operating in their designated region)*, and other persons designated by the department; *[RCACs are authorized only for PWS and Cook Inlet]*

-18 AAC 75.415. Procedures to apply for oil discharge prevention and contingency plans; plan amendments.

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(f) ~~If~~ ~~the~~ department will determine that a proposed plan amendment submitted under (a) of this section is a major or minor amendment, and ~~the department will~~ notify the plan holder not later than 10 working days after receipt of the amendment. If the department determines that a proposed plan amendment is a minor amendment, the department will ~~notify the plan holder not later than 10 working days after receipt of the amendment and~~ issue a written decision not later than 30 days after receipt of the proposed plan amendment. *[I thinks this clears up the language of this paragraph]*

-18 AAC 75.425. Oil discharge prevention and contingency plan contents. (a) An oil discharge prevention and contingency plan submitted for approval under 18 AAC 75.400 -18 AAC 75.495 must be in a form that is usable as a working plan for oil discharge prevention, control, containment, cleanup, and disposal. A plan must contain enough information, analyses, supporting data, and documentation to demonstrate the plan holder's ability to meet the requirements of AS 46.04.030 and 18 AAC 75.400 - 18 AAC 75.495.

(b) The plan for a facility comprised of multiple operations as described at 18 AAC 75.442, must describe, for each category of operation at the facility, the appropriate response measures to meet the applicable portion of the response planning standard.

(c) The submitted plan must be accompanied by a cover page or promulgation letter that includes

(1) the name of the plan holder, and the covered vessel, barge, railroad, facility, or operation, followed by the words "Oil Discharge Prevention and Contingency Plan";

(2) the date of the plan; and

(3) a statement, signed by an individual with appropriate authority, committing the oil discharge prevention and response resources necessary to implement the plan.

(d) The plan must

~~(1) include the official plan title;~~ *[isn't this spelled out above?]*

(2) consist of five parts and contain the information described in (e)(1) -

(5) of

(3) contain a complete table of contents and lists of any tables or figures, with corresponding page numbers; and

(4) be presented in the order shown in (e) of this section, or include a cross-reference table that directs the reader to the appropriate information.

(e) The information in the plan must include

(1) Part 1 - Response Action Plan: The response action plan must provide in sufficient detail to clearly guide responders in an oil spill *[to differentiate from other emergencies like terrorism or explosion, or fire]* emergency event, all information necessary to guide response to a discharge of any size, up to and including a discharge that is equal to the applicable response planning standard set out at 18 AAC 75.430 - 18 AAC 75.442; the response action plan must include the following information:

(A) Emergency action checklist - a short checklist of the immediate response and notification steps to be taken if an oil discharge occurs; ~~it is recommended that this summary be duplicated on a wallet-size card, to be carried by the appropriate response personnel while on duty;~~ *[since this is a recommendation, not a requirement, I don't see that it belongs in regulation]*

(B) Reporting and notification - a description of the immediate spill reporting actions to be taken at any hour of the day, including

- (i) the title and telephone number of facility personnel responsible for making the notification; and
- (ii) the telephone number of each appropriate government agency to be notified if a discharge occurs;
- (C) Safety - based on applicable safety standards, a description of the steps process necessary to develop an incident-specific safety plan for conducting a response;
- (D) Communications - a description of field and command communications procedures, including, if applicable, assigned radio channels or frequencies and their intended use by response personnel;
- ~~(E) Deployment strategies – a description of proposed initial response actions that may be taken, including~~
 - ~~(i) procedures for the transport of equipment, personnel, and other resources to the spill site, including plans for alternative methods in adverse weather conditions; and~~
 - ~~(ii) if the operator is not the primary spill responder, procedures to notify and mobilize the response action contractor or other responder identified in the plan, including a description of the interim actions that the operator will perform until the responder identified in the plan initiates a full response to the discharge; [I recommend deletion because deployment and response are an integrated activity and move deployment under the response scenario]~~
- (F) Response scenario - a written description of a hypothetical spill incident and response that demonstrates a plan holder's ability to respond to a discharge of each applicable response planning standard volume within the required time frames using the resources described in the contingency plan, including deployment and logistics of mobilizing equipment and personnel to the incident site (including mobilizing response action contractors as needed) *[I recommend this be added because mobilization and deployment may vary with each season and type of response (response planning standard) and this would integrate deployment and response better]* and that identifies the spill location, time of year, and time of day, the source and cause of the spill, the quantity and type of oil spilled, the relevant environmental conditions, including weather, sea state, and visibility, the spill trajectory, and the expected timeline for response actions, describing response actions to be

taken; the response scenario must be usable as a general guide for a discharge of any size, must describe the discharge control [*controlling-stopping or reducing the discharge rate is critical to minimizing damage*] containment, control, and cleanup actions to be taken, which clearly demonstrate the strategies and procedures adopted to conduct and maintain an effective response, and if the response scenario is for an exploration or production facility, must also meet the applicable requirements of (I) of this paragraph; if required by the department, the plan holder must provide additional response strategies to account for variations in receiving environments and seasonal conditions; if the information required by this subparagraph is contained within a separate document developed by the plan holder or the plan holder's primary response action contractor identified in (3)(H) of this subsection, the plan holder may incorporate the information by reference upon obtaining the department's approval; response strategies must include

(i) procedures to stop the discharge at its source and prevent its further spread;

(ii) a brief description of methods to prevent or control a potential fire for scenario completeness [*ADEC is not authorized to regulate fire response and is not competent to evaluate it*]

(iii) repealed 5/26/2004;

(iv) procedures and methods for real-time surveillance and tracking of the discharged oil on open water and forecasting of its expected points of shoreline contact;

(v) ~~for a stationary facility or operation, or a railroad, and, if requested by the department, for a vessel,~~ a description of site-specific strategies for the protection of environmentally sensitive areas and areas of public concern identified under (3)(J) of this subsection, including, ~~for a land-based facility or railroad,~~ protection of groundwater and public water supplies; if identification of those areas and site-specific strategies for protection of those areas are in an applicable subarea contingency plan, the plan holder may incorporate that information by reference;

(vi) a description of the actions to be taken to contain and control the spilled oil, including, as applicable, boom deployment strategies, construction of permanent or temporary berms, and other methods;

(vii) a description of the actions to be taken to recover the contained or controlled oil using mechanical response options, including procedures and provisions for skimming, absorbing, or otherwise recovering the contained or controlled product from water or land;

(viii) procedures for lightering, transfer, and storage of oil from damaged tanks or from undamaged tanks that might be at risk of discharging additional oil;

(I) response scenario for an exploration or production facility – if the facility is an exploration or production facility, a response scenario that, in addition to complying with (F) of this paragraph, includes as part of the response strategies a summary of planned methods, equipment, logistics, and time frames proposed to be employed to control a well blowout within 15 days; the plan holder shall certify that the plan holder maintains a separate blowout contingency plan; the blowout contingency plan is not part of an application required under 18 AAC 75.410 - 18 AAC 75.420, but must be made available to the department for inspection upon request under 18 AAC 75.480; a plan holder may use for development of a response scenario ~~the July 1997 S.L. Ross oil deposition model for surface oil well blowouts, or another~~ an oil deposition model approved by the department for surface oil well blowouts; if required by the department to account for variations in seasonal conditions, a plan holder must provide a response scenario for a discharge of the applicable response planning standard volume under typical summer environmental conditions and typical winter environmental conditions; if the information required by this subparagraph is contained within a separate document developed by the plan holder or the plan holder's primary response action contractor identified in (3)(H) of this subsection, the plan holder may incorporate the information by reference upon obtaining the department's approval; for purposes of this subparagraph,

(3) Part 3 - Supplemental Information:

(x) any other information required by the department to evaluate the response capability of a vessel, ~~including verifying that the vessel is in compliance with the applicable stability requirements as set out in 46 C.F.R. 109.227, as amended through September 11, 1992; [Is ADEC authorized and competent do verify vessel stability?]~~

(xi) If this information is included in Part I or Part 2, it need not be repeated here. [Recommended to avoid duplication]

(B) receiving environment - for a land-based facility or operation:

(i) the potential routes of travel of oil discharged from the facility or operation to open water in the form of a drainage diagram or map, showing gradients and potential containment sites and features, including identification and explanation of all measures that will be taken to prevent a discharge from entering open water; and

(ii) based on the information in (i) of this subparagraph, an estimate of what percentage of the applicable response planning standard volume set out at 18 AAC 75.430 - 18 AAC 75.436, or 18 AAC 75.442 for the facility or operation will reach open water;

(iii) If this information is included in Part I or Part 2, it need not be repeated here. [Recommended to avoid duplication]

(C) command system - a description of the command system to be used in response to a discharge, including the title, address, telephone number, and affiliation by company, agency, or local government of each person, including a person identified in (1)(B) of this subsection, who by law or through employment, contract, or cooperative agreement, is responsible for responding to a discharge, and each person's functional role in the command system; this list must include command, fiscal, operations, planning, and logistics lead personnel; the command system must be compatible with the state's response structure outlined in the state master plan prepared under AS 46.04.200; Applicant may reference The Alaska Incident Management System Guide for Oil and Hazardous Substance Response (AIMS Guide) 2002 (rev 1) to reduce detail in this section. [Every responder I've know of follows AIMS and allowing citation would reduce plan bulk. AIMS is also publicly available].

(v) other known environmental conditions that might influence the efficiency of the response equipment or the overall effectiveness of a response effort including calm conditions that may allow benzene to reach levels requiring PPE and/or alteration of tactics; [*calm winds present a higher risk of elevated benzene that could modify response tactics*]

(E) logistical support - identification of aircraft, vessels, and other means that may be used to transport equipment and personnel during a discharge response, including information on ownership and availability of identified means of transportation;

~~(F) other detailed information pertinent to emergency response~~ [*too vague*]

-18 AAC 75.432. Response planning standards for oil terminal facilities.

(d) The department will, if not otherwise required by Federal or State law, [*why give a credit if already required by law?*] in its discretion, reduce the requirements of (b) of this section, by a percentage up to that shown, for each of the following prevention measures in place at the facility:

-18 AAC 75.434. Response planning standards for exploration or production facilities.

(g) If an operator proposes the planned voluntary ignition of a well blowout, the operator shall submit data, analyses, and supporting documentation that indicates to the satisfaction of the department that any discharged oil ignition would have an American Petroleum Institute (API) gravity of 35 or greater, a gas-oil ratio in excess of 2,000, and an anticipated combustion efficiency of at least 90 percent, that well ignition would not exceed national ambient air quality standards set under 42 U.S.C. 7409 (Clean Air Act), [*I don't believe this is physically or legally possible and recommend deleting it unless you have modeling data to support it*] ~~and that well ignition will be protective of human health, safety, and welfare, and of the environment. The department will adjust the response planning standard determined under (b) - (e) of this section based on the submitted data. The department may consult with~~

the Alaska Oil and Gas Conservation Commission and other agencies in evaluating the data provided by the operator under this subsection.

-18 AAC 75.436. Response planning standards for crude oil pipelines.

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(c) The department will, in its discretion, reduce the requirements of (b) of this section, by a percentage up to that shown, for each of the following prevention measures if not otherwise required by Federal or State law, [*why give a credit if already required by law?*] in place at the facility:

-18 AAC 75.438. Response planning standards for crude oil tank vessels and barges.

(d) The department will, in its discretion, if not otherwise required by Federal or State law, [*why give a credit if already required by law?*] reduce the requirements of (c) of this section, by a percentage up to that shown, for each of the following prevention measures in place for the vessel or barge:

-18 AAC 75.445. Approval criteria for oil discharge prevention and contingency plans. (a) The department will use the criteria set out in this section to review an oil discharge prevention and contingency plan submitted under 18 AAC 75.425.

(b) General response procedures. The plan must identify the maximum possible discharge that could occur at the facility or operation, and the general procedures to be followed in responding to a discharge of that magnitude, including the identification of resources in addition to those maintained by the plan holder or available under contract to meet the applicable response planning standard for that facility or operation.

~~(c) Deployment strategies. The plan must demonstrate that the identified personnel and equipment are sufficient to meet the applicable response planning standard and can be deployed and operating within the time specified under 18 AAC 75.430 – 18 AAC 75.442. The plan must state what conditions were assumed and must take into account the realistic maximum response operating limitation and their effects on response~~

~~capability and the deployment of resources. Plans using contractual resources must demonstrate that the transition and substitution of equipment and resources will occur without interruption of response or cleanup. [Recommend deleting and including in response. I see deployment and response as an integrated activity]~~

(d) Response strategies. The response strategies must take into account the type of product discharged and must demonstrate that

(1) procedures are in place to stop the discharge at its source within the shortest possible time;

(2) Identify personnel and equipment be deployed and operating within the time specified under 18 AAC 75.430 - 18 AAC 75.442. sufficient to meet the applicable response planning standard. The plan must describe the conditions assumed and take into account the realistic maximum response operating limitation and their effects on response capability and the deployment of resources. Plans using contractual resources must demonstrate that the transition and substitution of equipment and resources will occur without interruption of response or cleanup.

(23) for an exploration or production facility, a summary of planned methods, equipment, logistics, and time frames in place that provide for the control of a well blowout within 15 days; the plan holder shall certify that the plan holder has a blowout contingency plan and shall make the blowout contingency plan available to the department for inspection upon request under 18 AAC 75.480; the department may consult with the Alaska Oil and Gas Conservation Commission, the Department of Natural Resources, or other agencies to determine the adequacy of the planned methods, equipment, logistics, and time frames for the control of a well blowout;

(3-4) procedures and equipment are sufficient to monitor and track the discharge in order to ensure proper allocation and deployment of response personnel and equipment;

(4-5) sufficient oil discharge response equipment, personnel, and other resources are maintained and available for the specific purpose of preventing discharged oil from entering an environmentally sensitive area or an area of public concern that would likely be impacted if a discharge occurs, and that this equipment and personnel will be deployed and maintained on a time schedule that will protect those areas

before oil reaches them according to the predicted oil trajectories for an oil discharge of the volumes established under 18 AAC 75.430 - 18 AAC 75.442; areas identified in the plan must include areas added by the department as a condition of plan approval;

(f) Realistic maximum response operating limitations. In designing a spill response, severe weather and environmental limitations that might be reasonably expected to occur during a discharge event must be identified. The plan must use realistic efficiency rates for the specified response methods to account for the reduction of control or removal rates under those severe weather or other environmental limitations that might reasonably be expected to occur. The department may require the plan holder to take specific temporary prevention or response measures until environmental conditions improve to reduce the risk or magnitude of an oil discharge during periods when planned mechanical spill response options are rendered ineffective by environmental limitations. Plans that propose the use of nonmechanical response options under 18 AAC 75.425(e)(3)(D) must meet the requirements of 18 AAC 75.425(e)(1)(G), 18 AAC 75.425(e)(3)(G), and (h) of this section. Realistic maximum response operating limits needs to include conditions when benzene concentration would exclude working in the recovery area without respiratory protection or due to radiant heat from well ignition. [Approximately 10% of the time in PWS, calm conditions would likely result in benzene levels exceeding the need for respiratory protection. SERVS vessels and barges cannot be used as living platforms under these conditions. For exploration or production wells proposed for ignition, the ignited wells will have a heated perimeter that would prevent unprotected workers and may consume a major portion of small production island. Winds would influence the shape of areas too hot to work in without thermal protection. Plan holders should describe how tactics would be modified for these conditions]

-18 AAC 75.490. Failure to comply. (a) If a plan holder fails to comply with an approved oil discharge prevention and contingency plan or nontank vessel plan, demonstrates an inability to maintain continuous

access to the quality or quantity of resources identified in the plan, fails to respond with those resources in the shortest possible time if a discharge occurs, or is in any other way subject to the terms of AS 46.04.030(f)(1) - (4) or AS 46.04.055, the department may

- (1) revoke the approval of the plan after notice and unless reversed by a ~~opportunity for~~ *[previous statement would allow operation without ability to respond until a hearing was held which could be months]* hearing under (c) of this section;
- (2) suspend its approval of the plan after notice and unless reversed by a ~~opportunity for~~ *[previous statement would allow operation without ability to respond until a hearing was held which could be months]* ~~opportunity for~~ hearing under (c) of this section, stating the conditions under which the department will reinstate the approval and allow operations to resume;