Application of Best Available Technology & the Zero Discharge Standard to Cook Inlet Oil and Gas Development

Hal Shepherd Policy Consultant
Kachemak Bay Conservation Society

"I just hope to God another spill never happens here or any other place again."
Cordova Resident Belen Cook
Sometime after the Exxon Valdez Oil Spill

Executive Summary

The extreme difficulties of responding to the 2010 *Deepwater Horizon* oil and gas blowout in the easily accessible and warm water climate of the Gulf of Mexico during the summer of 2010 highlights the challenges and inadequacy of responding to such incidents in the more harsh, less temperate climate and unfavorable conditions found on waters off the coast of Alaska. Given the experience gained from the Gulf oil spill disaster, application of proven Best Available Technology (BAT) to prevent blow-outs is warranted.

Yet, oil and gas companies, together with state agencies in Alaska, are baulking at stronger blowout prevention standards. They argue that "the circumstances for such an event are unlikely" even as human communities and fish and wildlife populations attempt to recover from the tragedy in the Gulf after similar rationalizations were adopted by industry and government managers just prior to the Deepwater Horizon oil spill. In fact, as in the case of Alaska officials today, the Department of the Interior (DOI) failed to impose a full review of potential environmental impacts of the drilling operation in the Gulf, based on the conclusion from preliminary reviews of the area that a massive oil spill was "unlikely."[1]

The marine waters of Cook Inlet are dominated by extreme tides and temperatures, where high winds, fog and winter ice can make oil spill clean-up impossible for significant portions of the year. Contrary to claims that such incidents are rare in Alaska, several oil well blowouts have occurred on Cook Inlet rigs since 1962[2] and there is an average of one oil spill in the Inlet per month resulting from poor oversight of the industry and outdated pipelines.[3] The threat from such incidents to the unique natural resources of Cook Inlet is higher then ever, as the industry intends to expand exploratory drilling, primarily in the waters of the northern portion of Inlet. In addition, based on the fact that proposed drilling anticipates sinking wells into previously untapped pre-Tertiary formations containing unknown pressures,[4] BAT standards should be applied to ensure that the state's response measures are sufficient to handle a blowout in the Inlet from new wells. At the same time, the rush to be the first to drill in Cook Inlet is spurred by a new state law[5] that provides a 100-percent subsidy to encourage companies to drill a well in the Northern Inlet.[6]

---

[1] http://www.care2.com/causes/doi-concluded-massive-spill-unlikely.html (May 7, 2010).
[2] *A Fair Warning: Diminished State Oversight Of Oil Spill Contingency Plans,* p. 4-5 (February, 2006)(Author Unknown)(Fair Warning).
[3] Hal Shepherd, *BP Gulf Disaster Taught Lessons We Knew*, Homer Tribune (May 11, 2011)(Shepherd, *BP Gulf Disaster*)
[4] *Id.*
[5] *See*, Senate Bill 309, signed by Gov. Sean Parnell on May 14, 2010.
[6] Shepherd, *BP Gulf Disaster*.

Clearly, an oil spill the size of the one that occurred in the Gulf would wreak havoc on the premier commercial, subsistence and sport fishing economies of Cook Inlet. Nor would the cold water environment of the Inlet soon recover from such an event as evidenced from the still unresolved biological impacts of the Prince William Sound 1989 Exxon Valdez oil spill.[7] Further, Alaska is one of the few states in the U.S. that continues to authorize the discharge of oil and gas-related toxic effluent from drilling operations directly into marine waters which exacerbates the potential consequences of blowouts and other incidents.

The risks posed by increased oil and gas exploration and development in Cook Inlet mandate the most stringent review and regulation of drilling rigs be conducted by the State of Alaska including the Department of Environmental Conservation (ADEC). As a means of protecting the unique natural resources of the Inlet and public safety, this paper discusses legal precedent related to the BAT standard as it applies to secondary relief well capacity, or similar blow-out prevention and response tools, and provides a basis for requiring that new oil and gas exploratory wells adopt Zero Discharge practices in Cook Inlet.

I. Background

A. Blowout Laws

In early 1990, following the Exxon Valdez oil spill incident in Prince William Sound, the Alaska Oil Spill Commission (AOSC) determined that "[s]tate government was not fully prepared to oversee industry operations" or "to insure proper response capabilities in case of accident." Recognizing that voluntary efforts to prevent oil spills do not translate into a regulatory commitment or responsibility, the AOSC further stated that "[r]egulatory effectiveness … should be improved" because "[p]rivate voluntary prevention measures, though commendable, are often ignored as memories fade unless backed up by state regulations."[8] Based, in part, on AOSC recommendations,[9] the Alaska legislature strengthened the ability of ADEC to enforce the requirements concerning oil spill contingency plans produced by drilling operators to prevent or control such spills.[10] This was accomplished through the State's enactment of laws that prohibited the operation of an oil terminal facility, pipeline, exploration or production facility, tank vessel or oil barge unless ADEC approved the operator's contingency plan which must ensure that the applicant has access to sufficient resources … to contain, clean up, and mitigate potential oil discharges from the facility or vessel."[11]

B. Blowout Regulations

In the early 1990s, ADEC adopted regulations implementing the new contingency planning statutes addressing blowouts of wells at onshore and offshore oil and gas exploration or production facilities. A blowout, which results in the sudden and violent expulsion of oil, gas, or mud from the well bore, followed by uncontrolled flow of oil from the well, occurs "when high pressure gas is encountered

[7] Rebbecca Luczycki, *The State of the Sound, Twenty Years After the Exxon Valdez Oil Spill, the Recovery of Prince William Sound is Still the Subject of Debate*, Alaska Magazine, p. 22-31 & 75 (September 2009).
[8] State of Alaska, Alaska Oil Spill Commission, *Spill – The Wreck of the Exxon Valdez – Implications for the Safe Transportation of Oil – Final Report*, p. 137, 140 (AOSPC, *Final Report*) (February 1990).
[9] *See* ADEC, *The Exxon Valdez Oil Spill – Final Report, State of Alaska Response* at 156, (June 1993) (ADEC Final Report).
[10] *See,* AOSPC, *Final Report,*at 156.
[11] AS 46.04.030(a)-(c)&(e).

in the well and sufficient precautions, such as increasing the weight of the drilling mud, have not been taken."[12]

As suggested by the Division of Oil and Gas, perhaps the most frustrating aspect of oil and gas well blowouts is that, in almost every case, they are preventable. In 1969, for example, a blowout, taking months to control, occurred at the Union Oil Company oil and gas production platform about six miles off the coast of Santa Barbara, California, after the U.S. Geological Survey (USGS) granted a waiver of federal piping standards intended to prevent such incidents.[13] The Union Oil accident ultimately resulted in a 100,000-barrel crude oil spill that spread over 800 square miles, oiled 35 miles of coastline, killed or injured thousands of birds and other wildlife, and caused severe adverse impacts to important sectors of California's economy.[14]

Similarly, in addition to the mistaken belief among governmental and industry representatives that such a spill was highly "unlikely," the worst oil well blowout in American history occurred as a result of a failure to apply proper state and federal spill prevention laws, set up safeguards such as testing of blowout prevention measures, require adequate relief wells, and set up adequate oil response measures. The blowout was caused by an explosion on the British Petroleum Company's (BP's) Deepwater Horizon well platform operating in the Gulf of Mexico during the summer of 2010, killing eleven people working on the platform.[15] The Deepwater Horizon oil spill, which stemmed from a sea-floor oil gusher, flowed for three months releasing an estimated 4.9 million barrels (205,800,000 gallons) or 53,000 barrels (2,226,000 gallons) per day of crude oil from the well before it was finally capped.[16]

The environmental and economic effects of the Deepwater Horizon oil spill were devastating, making it a show case example of the type of catastrophe that could have been avoided with the proper application of a relief well at the time of, or immediately after, the blowout occurred. Instead, the well spewed oil for months after the blowout and the only option available was the use of, largely ineffective and potentially harmful, dispersants.[17]

Although not to the scale of the BP and Union Oil incidents, Alaska has experienced it's share of well blowouts. In 1985, for example, Union Oil's Grayling Platform spilled oil into Cook Inlet over the course of three days as the result of a short-term natural gas blowout while drilling a well into the McArthur River Field.[18] As the company prepared to drill a relief well, in a process called "bridging", the blowout stopped when the bedrock formation around the well bore collapsed into the bore.[19]

Similarly, in December 1987, a blowout occurred in the Cook Inlet McArther River Field when Marathon Oil's Steelhead Platform well continuously spewed natural gas, water, coal, and rocks into Cook Inlet for a period of 18 months.[20] In part, due to the time it took to complete a relief well, escaping gas from the blowout caught fire which damaged the deck of the platform and caused some injuries as workers attempted to stop the spill.[21]

---

[12] State of Alaska, Division of Oil and Gas, Department of Natural Resources, *Cook Inlet Areawide Oil and Gas Lease Sale Final Finding of the Director,* Chapter 5.C.1 (Jan. 20, 1999)(DOG Final Finding). *See also, Anderson-Prichard Oil Corp. v. Parker*, 245 F.2d 831, 836 (10th Cir. 1957).
[13] *See, Fair Warning* at 6.
[14] *Id.*
[15] http://www.care2.com/causes/10-most-horrifying-facts-about-the-gulf-oill-spill.html.
[16] http://en.wikipedia.org/wiki/Deepwater_Horizon_oil_spill.
[17] www.nature.com/news/2011/110114/full/news.2011.54.html.
[18] http://www.adn.com/2008/12/18/628170/details-of-alaska-blowouts.html.
[19] DOG Final Finding at Chapter 5.C.1.
[20] http://www.incidentnews.gov/incident/6537.
[21] *Id.*

While the state of Alaska and industry have experience in containing smaller oil or gas blowouts, it is clear they are not prepared for a well blowout of the magnitude of the one that occurred in the Gulf. When a series of eruptions from Mount Redoubt, which boarders the Inlet, occurred from March 22 to April 4, 2009, for example, the resultant volcanic mudflows caused extensive flooding at the Drift River Oil Terminal (DROT).[22] Although the six million gallons of oil stored at the DROT, ultimately, did not discharge into the Inlet as a result of the incident, subsequent review indicated that such a spill, with it's incalculable threats to Cook Inlet fisheries, nearly did occur, primarily, due to a combination of ADEC's failure to notify the public of the risk and the lack of a catastrophic spill contingency plan.[23]

Further raising the risk of an oil spill and/or blowout in Cook Inlet is the fact that some platforms, undersea pipelines, and terminals operating in the Inlet have been in production for decades,[24] and sufficient equipment and personnel needed to respond to a multiple spill scenario remain unavailable.[25] The substantially increasing numbers of proposed oil and gas platforms operating in Cook Inlet[26] combined with the burden of old technology unable to handle blowout pressures, and an aging infrastructure substantially increases the risk of spills or blowouts in the Inlet. The primary means of preventing such incidents and the resulting catastrophic effects on sensitive ecosystems, particularly in marine and coastal environments, is for all of these facilities to develop ADEC-approved contingency plans properly utilizing BAT. The risk of a well blowout is obviously much higher when the responsible regulatory agencies are not vigilant in their oversight of such plans and other oil and gas activities.

II. Best Available Technology

a. Relief Wells

Under Alaska state law and ADEC regulations, each blow out prevention contingency plan for marine waters in Alaska must mandate adequate secondary relief well capacity, or similar blow-out prevention and response tools in Cook Inlet. Such plans must include Best Available Technology prevention standards "consistent with the applicable" statutory criteria,[27] including:

> (A) whether each technology is the best in use in other similar situations and is available for use by the applicant;
> (B) whether each technology is transferable to the applicant's operations;

---

[22] http://www.dec.state.ak.us/spar/perp/response/sum_fy09/090324201/090324201_index.htm.

[23] *See,* Cook Inlet Keeper, *Spill Prevention and Response Break-Downs Show that Lessons Learned from the Exxon Valdez Oil Spill Don't Apply in Cook Inlet* (August 24, 2009). According to Cook Inlet Keeper, ADEC and the U.S. Coast Guard allowed:

> Chevron to withhold from the public the volume of oil at the Drift River Terminal when Mt. Redoubt became active in early 2009, even though such information is made public on a daily basis at the Valdez Marine terminal. Had the oil volume been made public, it would have been clear prior to Mt. Redoubt's initial eruption that spill response equipment in Cook Inlet could not address a catastrophic release.

[24] *See e.g.*, Comments of Kachemak Bay Conservation Society on Escopeta Oil Discharge Prevention and Contingency Plan (ODPCP) for Cook Inlet Exploration Program Plan No. 11-CP-5184, p.3 (May 19, 2011) .

[25] In fact, only two of the twelve offshore production platforms now operating off and on in the northern Inlet, was installed after 1967. For the Kenai Peninsula Borough's history of Cook Inlet oil and gas development and a map showing the existing fields and facilities, *see* http://www.cookinletoilandgas.org/kpb/history.htm.

[26] In June 2011, for example, the state received more than 100 bids for that year's Cook Inlet oil and gas lease sale, the highest number since 1983. http://www.alaskapublic.org/2011/06/21/state-receives-record-number-of-bids-on-cook-inlet-lease-sale/.

[27] 18 ACC §78.425(e)(4).

(C) whether there is a reasonable expectation each technology will provide increased spill prevention or other environmental benefits;
(D) the cost to the applicant of achieving [BAT], including consideration of that cost relative to the remaining years of service of the technology in use by the applicant;
(E) the age and condition of the technology in use by the applicant;
(F) whether each technology is compatible with existing operations and technologies in use by the applicant;
(G) the practical feasibility of each technology in terms of engineering and other operational aspects; and
(H) whether other environmental impacts of each technology, such as air, land, water pollution, and energy requirements, offset any anticipated environmental benefits.[28]

ADEC regulations, additionally, require that:

... technology used for oil discharge containment, storage, transfer, and cleanup to satisfy a response planning standard...will be considered [BAT] if the technology of the applicant's oil discharge response system as a whole is appropriate and reliable for the intended use, as well as the magnitude of the applicable response planning standard....[29]

Further, ADEC-approved contingency plans for Cook Inlet must include response strategies demonstrating that:

... procedures are in place to stop the discharge at its source within the *shortest possible time* [and] plan strategies are sufficient to meet the applicable response planning standard...for containment, control, recovery, transfer, storage, and cleanup *within the specified time* and under environmental conditions that might reasonably be expected to occur at the discharge site....[30]

Moreover, "...contingency plans must demonstrate the general procedures to clean up a discharge *of any size*, including the greatest possible discharge that could occur...."[31] and the response technologies and strategies in contingency plans must "include...procedures to stop the discharge *at its source and prevent its further spread*...."[32]

Finally, that action must be taken to stop blowouts at the earliest possible time is illustrated by the fact that unless "containment or cleanup is technically not feasible; or ...if the cleanup or containment activities would result in greater environmental damage than the discharge itself", any "discharge of oil shall be *immediately* contained and cleaned up..."[33]. A "response action" is defined by statute as "an action taken to respond to a release *or threatened* release of oil, including *mitigation*, cleanup, or removal."[34]

---

[28] 18 AAC §75.445(k)(3).
[29] *Id.*
[30] 18 AAC §75.445(d)(1) & (5) (emphasis added). These provisions are similar to 18 AAC § 75.445 (d)(2) which provides that exploration or production facility plans must illustrate that "planned methods, equipment, logistics, and time frames [are] in place for controlling a well blowout, within 15 days...."
[31] 18 AAC §75.430(a)(emphasis added).
[32] 18 AAC §75.425(e)(1)(F)(i). Such strategies must "identify all available technologies and include a written analysis of each technology, using the applicable criteria in 18 AAC §75.445(k) (3)" and "include a written justification that the technology proposed to be used is the best available for the applicant's operation." 18 AAC §75.425. (e)(4)(B) and (C).
[33] AS §46.04.020(a) & (d)(emphasis added).
[34] AS §46.04.900(22) (emphasis added).

Significant to the timing of blow out prevention relief wells is that, the definition of "technology" in the terms Best Available Technology is not limited to just "equipment, supplies, [or] other resources" but also includes "*related practices*."[35] In addition, it is clear that spill prevention contingency plans must pay close attention to detail in achieving the highest possible reduction of impacts from blowouts, including a "calculation of the applicable response planning standards...including a detailed basis for the calculation of reductions, if any, to be applied to the response planning standards."[36] One means of achieving such standards, including the availability of secondary relief wells when they are needed, is to require oil companies to provide copies of contracts they have executed with qualified relief well providers. If, therefore, "a contingency plan submitted to the department for approval relies on the services of an oil spill primary response action contractor, the department may not approve the contingency plan unless the primary response action contractor is registered and approved" by ADEC.[37]

b. *Blowout Control*

Relief wells are appropriately included in the definition of BAT because such practices are the most effective method of stopping a blowout before they can reach catastrophic levels. In fact, the methods most often used for preventing blowouts – "capping"[38] and "pumping drilling mud and/or reactant materials into the capped blowout well"[39] are, not always, practical or reliable. ADEC, itself, provides "[e]ven a successful well capping operation...*does not necessarily signify that the blowout is under control*. If a well kill is not likely to be successful, even when capped or if a blowout well cannot be capped, then other methods must be used."[40] In addition, "[t]he time required to stop or kill a blowout could take between 10 and 30 days if well capping techniques can be used" at all.[41]

III. ADEC's Approach to BAT

Although Alaska state regulations require the immediate drilling of a relief well and such strategies are often the most effective means of stopping blowouts before they turn into environmental and economic disasters, usually, any reference by ADEC to such wells as a practice method for blowout prevention or control is noticeably absent.[42] Even though for purposes of BAT, "technology" means "equipment, supplies, other resources, and *related practices*",[43] during the 2004 Best Available Technology Conference in Anchorage, sponsored by ADEC, for example, relief wells were not even included in the list of technologies presented at the conference.[44]

---

[35] 18 AAC §75.425(f)(emphasis added).
[36] 18 AAC §75.425.(e)(5).
[37] AS §46.04.030(e).
[38] Well capping involves severing the well head and the damaged blowout preventer (BOP) and the installation of a well capping stack. The time required may be from several minutes to several days. Access to the well head may initially require days of clearing away debris. ADEC Best Available Technology, 2004 Conference, Final Report, p. 12 June 2006 (AEDC BAT Report).
[39] *Id.* at 14.
[40] *Id.* (emphasis added).
[41] *Id.* According to ADEC, "[t]he time required to cap a well may be from several minutes to several days. Access to the well head may initially require days of clearing away debris." *Id.* at 12.
[42] 18 AAC §75.425(f)(emphasis added), the ADEC Evaluation Committee for Category 5, for example, refers to "...tools utilized during well control operations, including capping, were evaluated by the committee" and does not include relief wells or any other "related practices." ADEC BAT Report at 53.
[43] *See,* 18 AAC §75.425(f)(emphasis added)
[44] *See e.g.,* ADEC BAT Report at Table of Contents

The omission of relief wells from the discussion related to technologies for blowout control in Alaska is probably due to the conclusion of state agencies and industry that such methods can only "indirectly" control,[45] and constitute the last resort for, a well blow-out.[46] ADEC's reference to relief wells "when all else fails", however, seems to acknowledge that such methods are, more often then not the only directly, effective means of preventing and/or controlling blowouts. Indeed, particularly in Cook Inlet, it appears that relief wells should be the first, rather than a last resort since "[w]hen all else fails, a relief well, drilled to intersect the blowout well, may be the *only option*"[47] and in "some instances, the only practical way to control a well blowout, *particularly for offshore platforms*..., is to drill a relief well."[48]

ADEC's conflicting approach to the practicality of the use of relief wells to control oil spills and blowouts can, perhaps, be explained by the agency's, apparent, hostility for the BAT standard. This is illustrated by the agency's history of weakening it's own regulations and misinterpreting Alaska laws and regulations related to oil and gas accident prevention, rather than strengthen oil spill response capabilities as recommended by the Oil Spill Commission after the Exxon Valdez incident. State regulations, for example, use to require each well operator to include within its contingency plan a time frame for controlling a well blowout, including provisions for drilling a relief well. Specifically, at one time 18 AAC §75.445 required that the contingency plan include response strategies. . . [that] must demonstrate that:

> ...(2) *for an exploration or production facility, plans and time frames are in place for controlling a well blowout, including provisions for drilling a relief well*, taking into account any seasonal environmental conditions that might reasonably be expected to preclude emergency operations from regaining control of well pressure . . . .[49]

Regardless of the appearance of the term "related practices" in the BAT definition, however, today, the reference to relief wells in 18 AAC §75.445 is noticeably absent. [50]

ADEC further weakened its regulations when it began to approve contingency plans that rely on well blowout control services provided by independent contractors not registered with ADEC,[51] which increased the likelihood that platform operators will use unqualified contractors. More importantly, in order to reach this conclusion, ADEC had to engage in rather strained reasoning that "well capping contractors do not provide containment, control, or cleanup of a spill"[52] which, in turn, required the agency to reach the awkward conclusion that controlling a well blowout was *not* a "response action" under the contractor registration statute.[53] The ADEC's reasoning, however, is contrary to the fact that a "response action" is defined as "an action taken to

---

[45] *Id.* at 15.
[46] *Id.* at 14 (emphasis added).
[47] *Id.* (emphasis added).
[48] *Id.* at 15 (emphasis added).
[49] Fair Warning at 7.
[50] 18 AAC § 75.445(d) .
[51] A Fair Warning at 7.
[52] *See,* Email from ADEC's Lydia Miner to Trustees for Alaska (Nov. 27, 2002, 09:53 A.M. AST) Subject: *Conoco Phillips ADEC Plan No. 024-cp-5096* ("As our letter indicates, well capping contractors do not provide containment, control, or cleanup of a spill") (copy on file with Trustees for Alaska).
[53] *See, e.g.,* Letter from Trustees for Alaska to Bill Hutmacher, Program Manager, ADEC, Re: Forest Oil Corporation's Oil Discharge Prevention and Contingency Plan for Cook Inlet Area Production Operations Alaska (Dec. 23, 2002) at 1, and Letter from Stephen W. Geddes, ADEC C-Plan Support Specialist to Trustees for Alaska Re: Comments on ConocoPhillips' Oil Discharge and Contingency Plan Amendments for Puviaq #1 and #2; ADEC Plan No. 024-CP-5096 (September 21, 2002), at 3-4.

respond to a release or *threatened* release of oil, including *mitigation*, cleanup, or removal,"[54] and a "primary response action contractor" is anyone "who enters into a response action contract with respect to a release *or threatened release* of oil and who is carrying out the contract...."[55]

Further, it is obvious that stopping a well from releasing additional oil after a blowout occurs is within the definition of containing and controlling the discharge from an oil spill.[56] Not only, therefore, is ADEC's conclusion that the control of a well blow out does not constitute a "response action" contrary to logic, it conflicts with existing state statutory and regulatory definitions as described above. Essentially, ADEC's conclusion regarding response contractors begs the question that "if such contractors do not engage in blowout prevention services, who does?"

Similarly, in 2004 ADEC amended its spill prevention regulations to eliminate the requirement that contingency plans include a complete plan for controlling a well blowout and, instead, require that the applicant for approval of a proposed contingency plan submit a "summary" of what the holder of the plan intends to do in the event of a blowout.[57] While the amended regulations give ADEC the option to request and inspect the well blowout plan,[58] during the contingency plan review process, the public has no right to review and comment on the blowout plan. In addition, a plan summary does not provide the public with sufficient information to determine whether drilling operators have satisfied statutory requirements. The regulation allowing a summary plan is, therefore, inconsistent with statute since applying it allows ADEC to abdicate its responsibility to ensure that it will have the capacity to comply with AS §46.04.030(k).

In addition, new ADEC regulations provide that the response planning standard for a well blowout will be based on a flow rate of 5,500 barrels per day for a maximum of 15 days regardless of how many days it is expected to take to stop the discharge.[59] Aside from the Gulf oil spill, which took months to control, over the years both ADEC and plan holders have acknowledged that it could take from 30 to 60 days to stop the average sized well blowout.[60] Thus, ADEC is allowing industry to retain only those resources needed to respond to a spill of, at most, 82,500 barrels (5,500 barrels/day x 15 days) when as in the case of the Gulf, a blowout could allow the release of oil for 60 days and beyond, meaning much more than 82,500 barrels would be discharged into the environment.

---

[54] AS §46.04.900(22) (emphasis added). A common dictionary definition of "mitigation", which is not defined in AS 46.04, is "to cause to become less harsh or hostile" and "to make less severe or painful." *Webster's New Encyclopedic Dictionary* 1173 (Merriam-Webster, Inc. 2002).

[55] AS §46.04.035(h)(2) (emphasis added). According to ADEC, however, contractors who provide resources not for the specific purpose of containing, controlling, or cleaning up a discharge are not PRACs. "*This change clarifies that a relief-well drilling company contracted to the plan holder would be considered a ... [primary response action contractor] under the regulations*." Fair Warning at 8, *citing*, ADEC letter, enclosure to interested parties, (June 15, 1993), at 2 (emphasis added)."

[56] *See,* AS §46.04.900(5) (" 'containment and cleanup' includes all direct and indirect efforts associated with the prevention, abatement, containment, or removal of a pollutant, and the restoration of the environment to its former state....").

[57] Specifically, the regulations provide "if the facility is an exploration or production facility, a response scenario that...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...." 18 AAC §75.445(d)(2).

[58] The regulation states: "[T]he plan holder shall certify that the plan holder has a blowout contingency plan..." *Id.* ADEC applied the regulation recently to request the Escopeta Blowout Contingency Plan (BCP). *See,* Patrick S. Galvin, Letter to ADEC Re: Escopeta Blowout Contingency Plan, p. 1 (June 3, 2011)(Escopeta C-Plan)(On File with Kachemak Bay Conservation Society).

[59] *See,* 18 AAC § 75.434(b). Note that ASRC Energy Services indicated that it would take up to *sixty* days to drill a relief well. *See,* ASRC C-Plan, ADEC Plan No. 044-CP-5105, at 1-1, 1.6-4, 1.6-25 (approved Dec. 16, 2004) (ASRC C-Plan) (emphasis added).

[60] *See, e.g.*, ASRC C-Plan, at 1-1, 1.6-4, 1.6-25.

Further, although ADEC is allowed by statute and regulation to impose conditions necessary to ensure contingency plans illustrate that oil and gas permittees have access to resources necessary to respond to potential spills,[61] the agency now asserts that this authority is limited to approving plans that do not contain such assurances, as long as the operator "maintains a blowout contingency plan" that is available upon request to ADEC.[62] Based on the fact, however, that these terms and conditions might require the plan holder to submit documents or take other actions *after* ADEC approves the contingency plan and, therefore, public notice and comment has already taken place, [63] there is no way for the public to comment on whether such actions are sufficiently preventative or to otherwise conduct oversight of agency review.

ADEC's recent approval of the Escopeta Oil Company's Contingency Plan (C-Plan) for the Spartan 151 drilling rig in Cook Inlet during the summer of 2011,[64] illustrates that the agency continues to ignore the legal and practical requirements related to BAT standards including relief wells. Among other shortfalls, the Plan fails to sufficiently identify sensitive areas and to create worst-case scenarios that set out realistic strategies to protect important resources given the unique characteristics of Cook Inlet.[65] The federal Endangered Species Act (ESA),[66] for example, requires state agencies to comply with its provisions including Section 9 which prohibits "any person" from "taking" a listed species. [67]

In addition, Alaska statutes require oil and gas companies to maintain, or have available under contract, sufficient "personnel, equipment, and resources" to "contain or control, and clean up the realistic maximum oil discharge within 72 hours." [68] Escopeta, however, has yet to demonstrate that it has entered into a contract with an appropriate entity to drill a relief well to prevent or control oil spills and/or blowouts in a timely manner.

Further, because the Escopeta Contingency Plan does not require complete information about containment and control of a possible blowout, the public is denied the opportunity to determine and comment on the adequacy of the resources needed for such containment and control. ADEC's response to this issue illustrates its adversity to the need for public review at all significant stages of decision making. The agency states:

> AS 46.04.030(k) refers to the quantity of resources needed to have a sufficient stockpile to clean up the RPS volume of oil. It does not require public review of all the technical issues involved with implementation.... The department does not require that every technical document implementing a contingency plan be reviewed as part of the formal plan. [69]

---

[61] *See,* 18 AAC §75.460(a); AS §46.40.030(e).

[62] 18 AAC §75.445(d)(2). Note that a "Blowout Contingency Plan" as referenced in 18 AAC §75.445(d)(2), is not the same as an Oil Spill Discharge Prevention and Contingency Plan as, generally, referenced in 18 AAC §75.445. ADEC may also "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." 18 AAC §75.445(d)(2).

[63] *See,* 18 AAC §75.455 (setting out the procedures for taking public comment on a proposed contingency plan).

[64] *See,* ADEC Letter to Danny Davis, President Escopeta, Inc. RE: Escopeta Oil Discharge Prevention and Contingency Plan for Cook Inlet Exploration Program, Plan No. 11-CP-5184, Plan Approval (June 30, 2011) (Escopeta Plan Approval).

[65] Escopeto Oil, Oil Discharge Prevention and Contingency Cook Inlet Kitchen Lights Unit (February 2011)(Escopeta C-Plan).

[66] 16 U.S.C. §1531 *et. Seq.*

[67] 16 U.S.C. §16 38(a)(1)(B).

[68] AS §46.04.030(k)(2).

[69] Escopeta Plan Approval at 17.

The conflict between the plan summary regulation and statute is further illustrated by ADEC's claim "that requiring technical 'plans within a plan' can distract the contingency plan review process from the real regulatory issues surrounding contingency plan approval."[70] It is contrary to proper blowout prevent procedures, however, to claim that allowing public review of all information necessary to determine whether a contingency plan will actually be effective "distracts" from the actual regulatory issues since insuring compliance with the regulations is exactly what the public notice and comment process is intended to provide for. In fact, ADEC's conclusion in this regard could be interpreted that the agency does not believe the public is savvy enough to interpret "technical information," or worse, that there is something in (or omitted from) such information that ADEC does not want the public to be aware of.

Moreover, ADEC dismisses concern that the Escopeta C-Plan, refers to it's relief well strategy as an "evolving document" that "cannot be considered to cover all circumstances that may arise" and "no document can cover all potential circumstances and contingencies", by stating that the "department's regulatory requirements ... for [the company's Blowout Contingency Plan] are already described in this document."[71] This completely ignores the point, however, that the Contingency Plan must reflect a realistic relief well scenario, and time table, using an additional rig that must be installed and readily available in Cook Inlet whether brought from outside Alaska or the North Slope. ADEC, itself, admits that the Plan equivocates on this point by stating that the "relief well drilling descriptions includes a disclaimer that the timelines are estimates and actual time to drill a relief well could be longer."[72]

The agency, similarly, dismisses concerns that the "timing to drill a relief well should be reflected in the response planning standard volume and in the end of the season drill date the department establishes," by stating that "Escopeta proposes well capping to control a blowout; relief well drilling would be *planned* concurrently."[73] Escopeta's promises, however, that relief well "planning" will take place at a specified time, are vastly different from providing a date certain upon which the relief well will be completed and, therefore, do not provide any assurance that the well would be ready, in time, to prevent a catastrophic blowout.

Moreover, the Escopeta C-Plan proposes that under "nearly all conditions" the *Spartan 151* drill rig would "drill its own relief well at a distance of 1,500 feet or more from the blowout location",[74] regardless of the fact that there is no documentation to establish that the rig could be moved such distance, especially if it is impacted or disabled by a blowout. In addition, the Plan fails to verify the method, timing and efficacy of drilling and testing the relief well prior to allowing the drilling of the initial exploration well. Further, while the C-Plan acknowledges that drilling a relief well from onshore is unlikely because the locations of the proposed drill sites are more than five miles from shore, the contingency plan lacks a realistic relief well scenario and time table using an additional rig that is brought from the lower 48 or the North Slope to Cook Inlet.[75] The Escopeta Plan, however, dismisses such conflicting statements regarding the relief wells by referring to the Plan as an "evolving document" that "cannot be considered to cover all circumstances that may arise" and "no document can cover all potential circumstances and contingencies."[76]

While ADEC acknowledges the need to incorporate "lessons learned from the Deepwater

---

[70] *Id.*
[71] Escopeta Plan Approval at 18.
[72] *Id.*
[73] *Id.* at 19 (emphasis added).
[74] Escopeta C-Plan at 1-6.5.
[75] KBCS Escopeta C-Plan Comments at 6.
[76] Escopeta C-Plan at 1-6.5.

Horizon incident into our regulations and oversight" in relation to the Escopeta C-Plan, it mostly dismisses this concern by stating that "the level of detail required by [public comments]...is beyond that required for compliance with our regulations and oversight." This, however, conflicts directly with ADEC regulations which provide that contingency plans must provide:

> response strategies [that] demonstrate that...procedures are in place to stop the discharge at its source within the *shortest possible time* [and] plan strategies are sufficient to meet the applicable response planning standard established under 18 AAC 75.430 - 18 AAC 75.442 for containment, control, recovery, transfer, storage, and cleanup *within the specified time* and under environmental conditions that might reasonably be expected to occur at the discharge site.[77]

Additional illustration that the Escopeta relief well proposal and BAT standards are inadequate, are the Company's failure to provide a realistic scenario of the time needed to mobilize and drill such a well other than the Escopeta drill rig multiplied by 5,500 bbl/day to establish a realistic worst case scenario. Moreover, this method should be applied to insure that there is no chance of having to drill a relief well during the ice season in the Inlet.

Finally, ADEC's statement that "concerns about "(source control equipment, personnel, and immediate containment and recovery actions) are addressed in Section 1.6, Response Strategies, and 1.8 Response Scenarios [of the Escopeta C-Plan], in accordance with 18 AAC §75.425(e)(1)(F)"[78] is incorrect because neither of these sections provides for digging a relief well immediately after the original well is drilled. Indeed, a "response scenario", at minimum, must include:

> ...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 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 containment, control, and cleanup actions to be taken, which clearly demonstrate the strategies and procedures adopted to conduct and maintain an effective response...[79]

That the ADEC BAT standard requires the immediate drilling of a relief well as the only truly effective means of stopping blowouts before they turn into environmental disasters, particularly in Cook Inlet, is illustrated by the conclusions of experts and government agencies including ADEC that no contingency plan holder can meet the applicable response planning standard in icy Inlet conditions. [80] In fact, the resistance of the State to apply proper application of the relief well standard appears to conflict with its willingness to apply statutes that institute economic limitations on operations including limitations on winter drilling.[81]

---

[77] 18 AAC §75.445(d)(1) and (5) (2003)(emphasis added).

[78] Specifically, ADEC refers to Section 1.6, Response Strategies, and 1.8 Response Scenarios of the C-Plan. *Escopeta Plan Approval* at 18

[79] 18 AAC §75.445(e)(1)(F).

[80] ADEC & U.S. Minerals Mgt. Serv., *Joint Evaluation, Fall 1999 North Slope Drills and Exercises Response Tactics* (2001) ("[T]he plan holders were not prepared to effectively respond to an oil spill in broken ice conditions.")]

[81] *See e.g., Escopeta Plan Approval* at 4, which provides:

Another means of deflecting attention from proper relief well practices by State agencies and the oil and gas industry is to defer to the CISPRI Technical Manual [82] for standards related to controlling and preventing oil spills. In relation to it's approval of the Escopeta, Inc. Oil Spill Discharge Prevention and Contingency Plan, for example, ADEC states "[s]ince deployment and mobilization considerations, including tides, loading times, and travel times are described in the CISPRI Technical Manual , Tactic CI-LP_1(A), that tactic may be referenced."[83]

The CISPRI Technical Manual is a planning document to demonstrate the potential response capability available to respond to an oil spill. Nothing in the manual, however,:

> is intended to limit the discretion of persons in charge of an actual spill response to select any sequence, and to take whatever actions they deem necessary to maximize the effectiveness of the response, consistent with safety considerations. Response operations in any spill event will be tailored to meet the actual circumstances of such an event.[84]

The Manual, therefore, is unenforceable since it "is not and should not be regarded as a performance guarantee and/*or standard*." [85] In addition, while in some cases, the tactics provided in the CISPRI Technical Manual seem to approach "best available information", [86] such strategies, especially for open water spill clean-up, are not as effective for spill containment as relief wells, which are not even mentioned in the Manual. Further, the wildlife tactic section in the CISPRI Technical Manual [87] does not mention how to prevent impacts to the beluga or other deep water species. This omission is especially pertinent due to the National Marine Fisheries Service's (NMFS') refusal to concur with claims that drilling for oil in Cook Inlet is not likely to adversely effect the beluga.[88]

ADEC's legal interpretation of the BAT definition, itself, has been found lacking by the Courts in Alaska. In *Lakosh v. Alaska Department Of Environmental Conservation, et al,*[89] for example, the plaintiff challenged ADEC's interpretation of it's BAT regulation that would have collapsed BAT into compliance with less restrictive standards.[90] Specifically, the Alaska Supreme Court agreed with the plaintiff that "AS 46.04.030(k)'s mandatory response planning standards and AS 46.04.030(e)'s best available technology requirement evince an intent to impose two separate requirements…"[91]

As in the case of ADEC's approach to relief wells, the Court rejected the agency's interpretation that BAT required technology to provide merely an "appropriate and reliable" way of complying with

---

> To reduce the risk of an oil discharge and to ensure the effectiveness of planned spill response methods prior to periods when the planned response methods are rendered ineffective by environmental conditions, all drilling operations into hydro-carbon bearing formations must be completed by October 31st of each drilling season that the plan approval is in effect. Drilling may not commence until April 15th of each drilling season.

[82] Cook Inlet Spill Prevention and Response, Inc. (CISPRI) Technical Manual (2009) (On file with Kachemak Bay Conservation Soiety).

[83] *Escopeta Plan Approval* at 3.

[84] CISPRI Intro at 1.

[85] *Id.* (emphasis added).

[86] *Id.* These include the tactics for shoreline and near shore spills and wildlife clean-up as they apply to a limited number of species.

[87] *Id.* at W-0-W-6.

[88] *See Supra,* n. 101.

[89] 49 P.3d 1111 (June 28, 2002).

[90] *Id.* at 1114.

[91] *Id.* at 1119.

applicable standards. According to the court, while the less stringent "appropriate and reliable" standard may apply to contingency plan holders under some circumstances, it is imperative that "all applicants must also provide that they will achieve this compliance — which is required as part of their plans — by using "the best technology that was available at the time the contingency plan was submitted or renewed.'"[92]

In contrast to ADEC's refusal to consider "related practices" as part of the BAT definition, including the application of relief wells at the earliest possible time to prevent oil and gas blowouts, therefore, it:

> ...is a well-recognized rule of statutory construction that 'the legislature intended every word, sentence, or provision of a statute to have some purpose, force, and effect, and that no words or provisions are superfluous.' Defining best available technology in terms of statutory minimums, then, cannot be consistent with the legislative intent of requiring that plan holders provide for the use of best available technology.[93]

The Court concluded, therefore, that "[b]ecause agencies are 'not free to disregard any of the standards the legislature has articulated,' ADEC's regulations must reflect both conditions requiring that plan holders meet response planning standards and provide for the use of the best available technology in contingency plans."[94] While C-plan holders must, therefore, "meet the best available technology requirement for oil spill cleanup and containment by planning to use any technology that would be 'appropriate and reliable' to meet the cleanup and containment response planning standards...."[95], as in the case of the proper application of relief wells, AS §46.04.030(e) "requires an additional step: a selection of the best technology from among all that is reasonably capable of meeting the response planning standards."[96]

IV. Will Alaska Learn from Mistakes Made in the Gulf ?

Even now, as communities and fish and wildlife populations are attempting to recover from the tragedy in the Gulf, oil and gas companies together with state agencies in Alaska are baulking at stronger BAT and other accident prevention standards. Escopeta Oil's central argument, for example, for weakening blow out prevention standards is "the circumstances for such an event are unlikely."[97]

Such conclusions, however, are eerily similar to the apathetic rationalization adopted by industry and government managers just before the Gulf Oil spill. In fact, prior to the spill, the Interior Department failed to impose a full review of potential environmental impacts of the BP drilling operation because preliminary reviews of the area concluded that a massive oil spill was "unlikely."[98] Just three months later, when BP submitted its Gulf drilling plans to the Minerals Management Service, the agency chose to ignore the detailed environmental review required by the National Environmental Policy Act by declaring

---

[92] *Id.*
[93] *Id.*
[94] *Id.*
[95] *Id.*
[96] *Id.*
[97] Cook Inlet unlikely scene for Gulf coast-like disaster By Dante Petri | Peninsula Clarion. "It's night and day," said Todd Paxton, the general manager at Nikiski-based Cook Inlet Spill Prevention and Response Inc., comparing production in the deep waters of the gulf and the shallow upper Cook Inlet. "They're drilling in 5,000 feet of water. That's much deeper than what we have in Cook Inlet, of course, and the technology those types of platforms have is just about 180 degrees of what we use." Paxton said that aside from the different geologic formations being tapped, the age of Cook Inlet's reserves would likely play into how much oil could be spilled."
[98] http://www.care2.com/causes/doi-concluded-massive-spill-unlikely.html.

the plan to be "categorically excluded" from environmental analysis because it posed virtually no chance of harming the environment.[99] Similarly, in the course of approving a plan to drill in the delicate Beaufort and Chukchi seas of Alaska, Secretary Salazar accepted the Shell Oil Corporations conclusion that "a large oil spill, such as a crude oil release from a blowout, is extremely rare and not considered a reasonably foreseeable impact."[100]

Unfortunately, the "unlikeliness" strategy for blowout prevention is already making an appearance in Cook Inlet. In relation, for example, to the Army Corp of Engineer's (Corps) request for concurrence under the ESA that Escopeta Oil, Inc.'s permit to drill exploratory oil/natural gas wells within Cook Inlet may affect, but is not likely to adversely affect, the endangered Cook Inlet beluga whale or it's critical habitat, the NMFS admonishes the Corps to consider factors other than the low probably of a major blowout. NMFS states:

> While the Corps has analyzed potential impacts from noise and developed mitigation accordingly, we have received only qualitative information concerning potential impacts from oil spills. If a large or catastrophic (i.e., greater than 1,000 or 150,000 barrels of oil, respectively) oil spill were to occur, there is the potential for adverse effect to beluga whales and their critical habitat from exposure to the oil. While we may agree *that there is a low likelihood of a large or catastrophic oil spill*, the Corps has not demonstrated that the effects from such a spill are discountable.... As a result, we cannot concur that the proposed action is unlikely to adversely affect the Cook Inlet beluga whale or its critical habitat. In other contexts, action agencies have provided NMFS with oil spill risk analysis addressing risks from different size spills, oil spill trajectory simulations, and conditional probabilities of contact. In light of our experience regarding the Deepwater Horizon oil spill, we cannot discount oil spill risks without a thorough understanding of those risks and an analysis of oil spill responses capabilities and effectiveness.[101]

V. Zero Discharge Standard

In regards to offshore oil platforms in marine waters, the goal of the 1972 federal Clean Water Act, to eliminate the discharge of pollutants into navigable waters,[102] is being adhered to by almost every state, except Alaska.[103] This means that from the mid-1960s through the end of 2005, the U.S. Environmental Protection Agency (EPA) allowed the fifteen offshore oil and gas drilling platforms located in upper Cook Inlet to discharge all of their contaminated "produced water," and substantial amounts of contaminated drilling wastes into the sensitive waters of the Inlet.[104]

---

[99] Michael Tolbert, Regional Supervisor, Field Operations, United States Department of Interior, Mineral Management Service, Letter to Sharis Douglas, BP Exploration and Production, Inc. (April 6, 2009).

[100] http://www.care2.com/causes/doi-concluded-massive-spill-unlikely.html.

[101] James W. Balsinger, Letter to Commander, Alaska District U.S. Army Corps of Engineers, RE: Section 7 Consultation on Exploratory Drilling Proposal in Cook Inlet, Alaska, p. 3 (July 14, 2011)(emphasis added).

[102] *See*, 33 U.S.C §1251 *et seq*.

[103] Lois N. Epstein *Dishonorable Discharges: How To Shift Cook Inlet's Offshore Oil & Gas Operations To Zero Discharge*, p. v (May 2006)*(Dishonorable Discharges)*.

[104] According to some experts, the amount of water discharged is "over 1 billion barrels (nearly 45 billion gallons) of oil, 3 trillion cubic feet of natural gas, 1.1 billion barrels (over 48 billion gallons)". *Id.* Most produced water (pumped up from underground) is not directly discharged from Cook Inlet offshore oil and gas platforms and instead, is initially distributed to three onshore facilities. The majority of such water (96%) is sent to the facility at Trading Bay – where the crude oil, natural gas is separated from the produced water which is discharged to Cook Inlet. Due to the fact that such water is treated only minimally before being released in 2005 it contained over 32,000 gallons of oil and grease, over 50,000 pounds of zinc and over 440 pounds of arsenic. *Id.*

EPA continues to allow oil and gas companies to discharge comparable amounts of produced water containing oil and grease and non-oil muds/cuttings during exploration, including metals such as mercury, nickel, copper, manganese and zinc.[105] The original "Kitchen Prospect Exploration Plan", for example, allows oil and gas companies to discharge drilling muds and cuttings, storm water and deck run-off, domestic and sanitation effluent, excess cement slurry, testing and completion fluids, BOP Fluid, produced sand and water, and other daily exploratory well and operational solids and fluids directly into the waters of Cook Inlet.[106]

In addition, while the effects of discharging produced water into the Inlet are not entirely known, new research shows that hydrocarbons have adverse impacts on salmon species at far lower levels of contamination than previously recognized.[107] Similarly, data and Traditional Ecological Knowledge (gathered from native communities) recently compiled by the EPA suggest that oil and gas discharged into Cook Inlet can contaminant and effect the quality/quantity of subsistence foods, including declining populations of the beluga whale.[108] Finally, because the population has continued to decline regardless of restrictions on Alaska Native subsistence hunting, NMFS determined in 2000, to classify the Cook Inlet beluga whales as a "depleted" under the Marine Mammal Protection Act[109]and "endangered" under the federal Endangered Species Act meaning that the beluga will require heightened protection from exposure to toxic discharges from oil and gas platforms in the Inlet.[110]

Based on the fact that discharges of toxic materials from produced water and drilling wastes can cause direct and cumulative harm to Cook Inlet's biologically productive and economically important coastal waters, state and federal agencies should be obligated to require zero discharge in Clean Water Act permits.[111] Similarly, when establishing such standards, state and federally agencies should consider industry's ability to economically achieve Zero Discharge standard including the fact that the price of crude oil has climbed dramatically in recent years and experts expect this trend to continue.[112]

---

[105] U.S. Environmental Protection Agency, Cook Inlet NPDES General Permit, No. AKG-31-50000 MODIFICATION, p. 34-38, (December 10, 2008). Although, oil and gas discharges qualify as hazardous waste under the federal Resource Conservation and Recovery Act 42 U.S.C. §6901, *et seq.(RCRA)*, the oil and gas Industry managed to carve out an exception to the regulation of such waste under the Act. The application of federal and state hazardous waste laws to such discharges, therefore, would likely require a Congressional amendment to RCRA which is unlikely to occur in the near future.

[106] *See,* 2011-2014 Modification, Plan of Operations, 2011-2014 Exploration Drilling Plan, Escopety Oil Company, LLC, Kitchen Lights Unit, p. 8 (Amended February 15, 2011)(Escopeta PO).

[107] *Dishonorable Discharges* at vii.

[108] *Fact Sheet, Oil and Gas Exploration, Development and Production Facilities Located in State and Federal Waters in Cook Inlet*, Permit Number AKG-31-5000, U.S. Environmental Protection Agency Region 10, p. 47 (February 23, 2006); *Dishonorable Discharges* at 6-7.

[109] *Id at 25.*

[110] Escopeto PO at 12.

[111] An exact definition of "Zero Discharge" is hard to come by. According the Shell Corporation, however,:

> The term "zero discharge" can be easily misinterpreted by stakeholders in relation to Oil and Gas operations in Norway. It was believed that drilling in Norway was being undertaken with zero discharge when in fact a more appropriate definition of the practice in Norway would be zero "harmful" discharge. There is one exception, the Barents Sea. Even the Barents Sea (part of the Arctic ocean, north of Norway and Russia), there is 'zero volume' discharge for mud and cuttings, for sections of the hole after a riser has been installed, but that does not include the top-hole section of the well. Even in countries that claim zero discharge, they do not practice zero discharge 100% of the time. In most cases, some waste streams are discharged, under dispensation, including the top-hole sections of drill muds and cuttings.

[112] In 2006, for example, prices of oil coming from Cook Inlet were 448% higher than they were in 1999 (not accounting for inflation), and, in 2005, oil producers in the inlet who were allowed to discharge toxins into marine waters made nearly $59 million in profits. *Dishonorable Discharges* at vi.

The industry, therefore, generally, should be able to economically absorb more stringent discharge requirements.

Adding to the ability of oil and gas operators to assume the cost of meeting Zero Discharge standards is the state of Alaska's enthusiasm for providing financial assistance to develop such resources. In 2003, for example, the legislature reduced the royalties paid to the state by operators of platforms producing less than 1,200-1,500 barrels of oil per day to compensate for the fact that Cook Inlet crude oil was selling for less than $27 per barrel ,[113] and now a new state law provides a 100-percent subsidy – up to $25 million – to the first company to drill a well in the pre-Tertiary zone, with lesser subsidies of 90 percent and 80 percent – up to $22.5 million and $20 million – for the second and third wells, respectively.[114]

In addition, several Cook Inlet drilling platforms remain shut down because the oil and gas fields are so old they produce less oil and gas than in previous years.[115] Coincidentally, such "shut-in" wells provide a unique opportunity to address the Zero Discharge issue through the availability of unused pipelines for transporting produced water back to the shut-in platforms for injection.[116]

Further, Zero Discharge has been demonstrated to be economically feasible for three of the twelve platforms operating in Cook Inlet which have converted to or initiated Zero discharge for produced water and drilling wastes including ConocoPhillips in 2004, Chevron/Unocal in 2005, and Forest Oil in 2002.[117] Similarly, improvements in "grind and inject" and other technologies many of which are currently applied by some of the larger operators in the Inlet[118] have overcome injection well plugging and other problems formally used to justify discharging waste directly into the Inlet.[119]

While some oil and gas companies have successfully and voluntarily achieved Zero Discharge standards in Alaska,[120] other claims of voluntary efforts to obtain such discharge in Cook Inlet, merely illustrate that state regulations must make such standards mandatory. ADEC's recent approval of the Escopeta Oil Company Plan of Operations for the Kitchen Lights Unit in northern Cook Inlet, for example, merely provides that "EOC's current plan as modified and proposed herein, is to make the drilling and exploration operations as close to level of ZERO Discharge as reasonably possible and feasible."[121]

The Escopeta plan, however, illustrates that without a Zero Discharge requirement in place not only will the unique resources of the Inlet remain unprotected from toxic discharges, but that industry declarations that they will "attempt" to attain Zero Discharge as long as governmental agencies cooperate, often have worse consequences than when no such effort is made at all. This is based on the fact that the lack of such requirement provides industry with the opportunity to use efforts to achieve Zero discharge

---

[113] *Id.*
[114] *See*, Senate Bill 309, signed by Gov. Sean Parnell during the summer of 2010; Shepherd, *BP gulf disaster.*
[115] *Dishonorable Discharges* p. vi
[116] *Id.*
[117] *Id.*
[118] Marathon and Chevron/Unocal, both opened new grind and inject facilities for drilling wastes in the Cook Inlet region in 1999 and 2002, respectively. *See, Id.*
[119] *Id.*
[120] Forest Oil's Osprey platform, which is permitted individually under the Clean Water Act, began operations in Cook Inlet in 2002 after issuance of the 1999 Clean Water Act general discharge permit for all other Cook Inlet oil and gas platforms. Forest Oil's Osprey platform permit (U.S. EPA Permit Number AK-005330-9) requires zero discharge. Dishonorable Discharge at 1, n. 2. See also, Shell in Arctic also achieved 0 discharge at the exploration phase.
[121] Escopeta PO at 8.

as a threat so that other regulations related to drilling are ignored. The Escopeta Plan of Operations, for example, provides:

> "... However, should operational circumstances, logistical complications, sub-contractor availability, government delays or non-compliance issues, acts of God, or other unforeseen circumstances prevent any ZERO Discharge operation from occurring, EOC will rely upon the existing NPDES General Permit for the Cook Inlet, until such time as the ZERO Discharge operations can resume."[122]

Conclusion

Cook Inlet is home to a multitude of fish and wildlife species including the beluga whale which is protected under the federal Endangered Species Act. Additionally, Alaska state regulations make plain that oil and gas blowout prevention contingency plans must cover all aspects of responding to an oil spill. As such, the state regulation and practicalities clearly call for the drilling of relief wells immediately after the original well as part of the Best Available Technology standard for prevention of oil and gas drilling accidents including blowouts. Regardless of these mandates, Alaska state agencies including the Department of Environmental Conservation with the support of the oil and gas industry, have diluted the BAT standards and created confusion regarding the use of relief wells by, on the one hand, concluding that relief wells should be applied to prevent and control blowouts only as a "last resort" while, at the same time, implying the such efforts are often the only means of "practically" controlling blowouts especially for off shore platforms. Further, EPA and the state of Alaska should use updated economic, technologic, scientific, and Traditional Ecological Knowledge information to evaluate whether Zero Discharge is warranted in renewing Clean Water Act permits for Cook Inlet oil and gas development given known and projected, adverse, economic and environmental impacts on the region should the discharges continue.

It is, therefore, recommended that stakeholders affected by the expansion of oil and gas development in Cook Inlet partner together to address the environmental, human health and subsistence use issues regarding these effects. As part of this process, it is hoped that this white paper will serve as a resource and, ultimately, to develop a rule making petition that will require ADEC, and other oil and gas oversight agencies, to enforce Best Available Technology Standards for applying relief wells early in the drilling process and Zero Discharge of toxic effluent from oil and gas platforms operating in the Inlet during the exploration phase. In addition, ultimately, this paper and the rule making petition will be submitted to state and federal agencies who are responsible for oversight of oil and gas development in the Inlet in the hopes that such agencies will incorporate such proposed rule making into law. These actions are the best means of achieving safe and environmentally sensitive development of oil and gas resources in Cook Inlet.

[122] *Id.*