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PROTECTING ALASKA'S COOK INLET WATERSHED AND THE LIFE IT SUSTAINS

Drift River Oil Terminal Timeline, Issues & Questions 2009

Background: Cook Inlet Pipeline Company (CIPL) owns the Drift River Oil Terminal (DROT) and associated pipelines on the West Side of Cook Inlet, Alaska. CIPL is partly owned by Chevron Pipeline Company, which operates the DROT. The DROT was constructed in the late 1960's, and at that time, construction of an oil storage facility at the base of an active volcano raised numerous concerns. In 1989-90, the eruption of Mount Redoubt threatened the DROT, which then held over 37 million gallons of crude, though the *Exxon Valdez* Oil Spill in 1989 largely obscured media attention and public concern regarding DROT. In response to the threats posed by the facility's proximity to the volcano and the resulting mud, ice and debris flows (i.e. "lahars"), DROT owners buttressed the facility's protective dike system, installed a safe haven for workers and implemented other measures after the 1989-90 incident. On March 22, 2009, Mount Redoubt erupted again, exposing similar risks and threats experienced in 1989-90. The following is a timeline developed by Cook Inletkeeper using media accounts, state and federal agency documents, and personal knowledge.

Drift River Oil terminal Timeline & Commentary:

January 1965: Mount Redoubt first shows signs of its modern activity phase and despite these early warnings, plans for the Drift River Oil Terminal proceed.¹

January 1966: Mount Redoubt starts a two year long series of eruptions that cause severe flooding in the Drift River flood plain, sending large boulders and blocks of ice "the size of a D-7 cat" downstream. The initial eruption on January 25th "flooded the site of the oil-tanker terminal on Cook Inlet at the mouth of Drift River, forcing the evacuation of a seismic crew" consisting of 22 men. Despite this clear threat and ongoing eruptions, Mobil, Unocal, Marathon and Atlantic Richfield started facility construction later that summer, which continued to facility completion in 1967. The design life of the facility and associated pipelines was not expected to exceed 30 years.²

¹ See www.avo.alaska.edu/volcanoes/volcact.php?volname=Redoubt&page=citations&eruptionid=439

² See www.avo.alaska.edu/volcanoes/volcact.php?volname=Redoubt&eruptionid=441&page=basics;
www.avo.alaska.edu/volcanoes/volcact.php?volname=Redoubt&page=impact&eruptionid=441;
www.adn.com/money/industries/oil/story/773178.html

December 1989: On December 14th, Mt. Redoubt, with less than 24 hours of precursory seismic activity, starts a series of 23 violent eruptions lasting 16 months. Lahars and floods with blocks of ice larger than 33 feet across inundate the oil terminal with mud and ash. DROT storage tanks contain over 37 million gallons of oil. Repeated eruptions - some without any warning - and associated floods cause repeated evacuations and extended shutdown of the DROT. Pyroclastic flows in the Upper Drift River Valley run up the slopes more than 700 m, and associated floods erode stream banks, exposing the buried oil pipeline at Montana Bill Creek. The largest flood on January 2nd produces more water than the average flow of the Mississippi River, left more than 3 feet of mud in the terminal and carried huge blocks of volcanic rock – some measuring more than 25 feet across – into Cook Inlet. Employee evacuations and a lengthy process to reduce oil volumes at the DROT ensue. Media and public attention to DROT are diverted in March 1989, when the Exxon Valdez runs aground in Prince William Sound. Fortunately, no oil storage tanks or pipelines are compromised. In response, permittees construct an improved dike system to protect the storage tanks, bury the pipeline deeper at two locations and reduce the amount of oil stored at the terminal. However, despite these enhancements, the terminal and pipelines remain susceptible to the unpredictable and violent risks posed by volcanic activity and resulting lahars and flooding.³

November 5, 2008: Seismic activity at Mt. Redoubt increases. The Alaska Volcano Observatory raises the Volcano Alert Level to “Yellow/Advisory.” A period of increasing seismic unrest ensues.

January 2009: Public concern mounts over impending volcanic eruption. Chevron refuses to reveal the volume of oil in tanks at the base of Mt. Redoubt, and also refuses to make public its Volcano Readiness Plan, citing Homeland Security Act exclusions. "That's not public information," said Chevron's spokesperson. "We can't release any numbers." The U.S. Coast Guard (USCG), the Alaska Department of Environment Conservation (ADEC) and other entities acquiesce, despite the fact oil tank volumes are routinely made public at the Valdez Marine Oil Terminal in Prince William Sound, Alaska.⁴ As a result, the public has no information to gauge whether spill prevention and response plans and capacities in Cook Inlet are sufficient to address a catastrophic oil spill in Cook Inlet fisheries.

February 18, 2009: CIPL amends its Oil Discharge Prevention and Contingency Plan for DROT, and rewrites sections on spill scenarios and response strategies. Despite Mt. Redoubt's seismic activity, and the substantial nature of the plan revisions, the plan undergoes no public review and contains no reference to volcano-induced oil spills. Furthermore, the plan does not address a worst case spill scenario (i.e. loss of all tanks and pipelines due to volcanic flows) resulting from "specific natural ...conditions [i.e. volcanic eruptions] outside the facility which could place the facility at an increased risk of an oil discharge affecting one or more storage tanks," as required by state law⁵. Instead, the plan does not account for tank spills to open water, and accounts for

³ See www.avo.alaska.edu/volcanoes/volcact.php?volname=Redoubt&eruptionid=442&page=basics; www.avo.alaska.edu/volcanoes/volcact.php?volname=Redoubt&page=impact&eruptionid=442; www.groundtruthtrekking.org/blog/?p=855

⁴ See www.adn.com/news/alaska/story/673773.html

⁵ 18 AAC 75.432(b). “For an increased risk described in (b) of this section, *the response planning standard volume is equal to the capacity of all of the potentially affected oil storage tanks at the facility.* Id. at (c) (emphasis added).

open water spill response for only 9311 barrels (bbl) (391,052 gallons) from associated pipelines. As a result, the DROT's spill response plan does not mandate spill response preparedness for a catastrophic release to Cook Inlet fisheries. ADEC approves the amendments.

March 22, 2009: Mt. Redoubt erupts. Massive floods of water, ice, mud and debris ("lahars") sweep in and around the DROT; Chevron evacuates the facility, leaving it without any spill monitoring or on-site spill response capacity, and finally reveals it has left 6.3 million gallons of oil at the DROT, just above Cook Inlet's valuable salmon, halibut, clam and other fisheries. Sensitive areas at risk from a DROT oil spill include Redoubt Bay Critical Habitat Area, Kalgin Island Critical Habitat Area, Trading Bay State Game Refuge, Clam Gulch Critical Habitat Area, Kachemak bay Critical Habitat Area, the mouths of numerous salmon streams on the East and West sides of Cook Inlet (including the Kenai River) and the Kachemak Bay National Estuarine Research Reserve. Inletkeeper, commercial fishermen and others immediately called for a draw-down of the oil tanks as soon as safely possible to protect valuable commercial, sport and subsistence fisheries.

March 23, 2009: Over flights of the facility by KTUU, the AVO, the USCG and others present alarming images of lahars flooding the facility and lapping up – and occasionally, over – the tops of containment berms protecting the oil tank farm. The debris flows significantly reduce the outside freeboard of the containment berms, and deposit approximately 6 feet of mud in some areas of the terminal, inundating pump houses, power facilities and spill response equipment. Shortly after these images were made public, the U.S. Coast Guard closes the airspace for 2 miles around the facility; subsequent images made public from the Unified Command are from high altitude and/or fail to show details of lahar and flooding impacts.

March 24, 2009: Inletkeeper and others send letters to Department of Homeland Security (DHS) and Governor Sarah Palin, requesting emergency declarations, human health protections and oil tanks draw downs to protect fisheries from a catastrophic spill.⁶ Neither Palin or DHS responds. ADEC claims the facility and pipeline are "shut in" and "secured" but in reality, the facility was simply abandoned, with oil still in the tanks and piping without spill monitoring, active valve and pump control or site security. With no personnel at the facility, and with spill monitoring systems compromised, it thus becomes apparent the facility cannot meet state law regarding spill prevention and response.

March 26, 2009: Alaska Department of Environmental Conservation (ADEC) issues first Incident Action Plan (IAP), four days after the March 22 eruption. The IAP listed the following "Overall & Strategic Objectives:" 1. Ensure the Safety of Citizens and Response Personnel; 2. Monitor damage assessment; participate in over flights; 3. Conduct bottom soundings at tanker loading facility; 4. Coordinate with AVO for notice of eruptions and floods; 5. Identify regulatory requirements for facility re-start of operations; 6. Identify oil storage capacity and inventory management of facilities; 7. Monitoring plans and timeframe for repairs necessary for resumption of operations; 8. Identify and maintain stakeholder communications and engagement.

⁶ Available from Cook Inletkeeper.

ADEC makes no reference to Cook Inlet fisheries protection in its priority list; instead the primary focus is on facility re-start.⁷

March 27, 2009: Trustees for Alaska, on behalf of Cook Inletkeeper, submits a petition to Governor Sarah Palin, requesting a state disaster declaration. Palin refuses to act on the petition. ADEC is joined by the U.S. Coast Guard on the second IAP. In addition to the objectives identified above, two additional objectives added: 1) conduct a risk-based decision process prior to movement of any crude oil product from the facility; 2) identify spill response resources available (CISPRI, CIPL, Chevron) – status, deployment times and location. Thus, 5 days after the eruption, identification of spill response equipment becomes a response objective, although fisheries protection has yet to be considered a priority.⁸ Furthermore, it becomes clear spill response assets in Cook Inlet are not at-the-ready to address a catastrophic release of oil to Cook Inlet fisheries.

March 28, 2009: ADEC and USCG now working as Joint Incident Management team. Two additional objectives added to the IAP list: 1) Prevent the release of oil, hazardous materials, and refuse/terminal debris to the environment. 2) Develop plans for increased monitoring of lahars thru placement of additional instrumentation by AVO. Thus, 6 days after the March 22 eruption, preventing the release of oil to the environment becomes an objective of the IAP, although there remain no plans to address oil spilled in a debris-laden lahar, nor has the spill response capacity needed to respond to a catastrophic release been identified in Cook Inlet or elsewhere.⁹

March 31, 2009: Unified Command – consisting of Chevron, U.S. Coast Guard and Alaska Department of Environmental Conservation finally activates – more than a week after the initial eruption and evacuation of the facility. Unified Command occupies Sheraton Hotel in Anchorage, despite the fact the incident command center at Cook Inlet Spill Prevention and Response Inc (CISPRI) in Nikiski is situated precisely for this type of incident response and lies within view of Mt. Redoubt.

April 1, 2009: In response to calls to draw-down the tanks, the Unified Command insists water cannot be used to ballast the tanks, to keep them from dislodging in the event of a flood. Unified Command issues “Water Use Options Fact Sheet,” which outlines reasons why water cannot be used to ballast the DROT tanks. Among other reasons, the Fact Sheet states: “We know of no tankers that will take on water into their tanks.”¹⁰ The Unified Command insists oil must remain in the DROT tanks. Because ballasting the tanks with water will make facility start-up more difficult – but will also lead to the removal of oil threatening Cook Inlet fisheries - Inletkeeper raises questions about the Water Use Options Fact Sheet. Furthermore, the Spill Response Workgroup determines, for the first time, that oil could indeed spill beyond the secondary containment dikes surrounding the 6.2 million gallons of oil in storage tanks, but makes no effort to revise or amend the existing C-plan - which contends that all oil would be contained inside the dikes – through public notice and comment. Finally, in response to concerns regarding

⁷ See www.dec.state.ak.us/SPAR/perp/response/sum_fy09/090324201/iap/090324201_iap_01.pdf

⁸ See www.dec.state.ak.us/SPAR/perp/response/sum_fy09/090324201/iap/090324201_iap_02.pdf

⁹ See www.dec.state.ak.us/SPAR/perp/response/sum_fy09/090324201/iap/090324201_iap_03.pdf

¹⁰ See www.dec.state.ak.us/SPAR/perp/response/sum_fy09/090324201/090324201_fact_01.htm

inadequate spill response capacity in Cook Inlet, USCG tells public radio audience that spill response equipment can be brought in from California.¹¹

April 2, 2009: Unified Command issues Incident Action plan, though necessary spill response assets in Cook Inlet still not identified, and need for out-of-area spill response assets remains unclear. “Continue conversations with other out of area resources for possible equipment use.” The Unified Command also identifies the use of dispersants as an oil spill response tactic, despite the fact such tools are not designed for on-shore or near-shore use.¹²

April 3, 2009: Inletkeeper obtains an independent engineering assessment that effectively rebuts the assertions made in the Unified Command’s Water Use Options Fact Sheet. The engineering assessment states: “The water usage option obstacles cited by the UC appear as excuses or half-truths to avoid taking more prudent, though more costly, measures that would prevent a large oil spill at the Drift River Terminal into a very sensitive area.”¹³ The Unified Command later revises its Water Use Options Fact Sheet when a tanker does in fact transfer water to DROT tanks for additional ballast.

April 4, 2009: Mt Redoubt erupts again, sending additional lahars in and around the Drift River terminal, just as a tanker approaches to start drawing down oil so upstream production facilities could continue to operate. Dangerous conditions force the tanker to turn back. The Unified Command issues “Drift River Fact Sheet # 3: Spill Response Resources,” which states “[s]hould a major lahar or flooding event cause a wash out of tank containment berms, spill response equipment exists within the Cook Inlet region to address such an event.” But the fact sheet ignores the fact that response vessels and aircraft cannot approach the area during ash hazards, eruptions or electric static events, nor does the document discuss specific spill response assets at the ready in or around Cook Inlet. Instead, the fact sheet makes a blanket assertion that spill response capacity exists in Cook Inlet to address a catastrophic release, despite the fact the assets for such a response have not been adequately identified.

April 5, 2009: Chevron “suspends” operations at the facility, and a tanker calls on DROT to draw-down the tanks to approximately 2.5 million gallons of oil. Contrary to the assertions made in the Water Use Options Fact Sheet, Chevron uses water to ballast the tanks to keep them more stable. When asked what had changed to allow water to now ballast the tanks, ADEC responded: “Now that *Cook Inlet Pipe Line* made the decision to shut down the facility, then that opens up some other options.”¹⁴ In other words, as long as Chevron decided that facility operations remained a priority, fisheries protection received a lower priority. Only after Chevron decided to suspend operations due to the obvious risks posed by an erupting volcano did the ADEC, USCG and other state and federal agencies allow the priorities to change. Additionally, Chevron lays off oil field contractors due to the suspension of operations at the facility.¹⁵

¹¹ KBBI, Coffee Table Show, Apr. 1, 2009.

¹² See www.dec.state.ak.us/SPAR/perp/response/sum_fy09/090324201/iap/090324201_iap_07_abbr.pdf

¹³ See Richard B. Kuprewicz, President, Accufacts Inc., “*Observations on Unified Command Drift River Fact Sheet No 1: Water Usage Options for the current Mt. Redoubt Volcano threat to the Drift River Oil Terminal* (Apr. 3, 2009) (available from Inletkeeper).

¹⁴ See www.adn.com/volcano/story/749408.html (emphasis added)

¹⁵ See www.petroleumnews.com/pnads/122740141.shtml

April 7, 2009: In response to the discrepancy over the use of water to ballast the DROT tanks, the Unified Command issues “Water Use Options Fact Sheet, Updated,” which explains why water was in fact used to ballast the tanks.¹⁶ The revised fact sheet contradicts the previous fact sheet on water use, and supports the assertion that continued facility operations – and not Cook Inlet fisheries protection – was a higher priority since March 22.

April 17, 2009: Nearly four weeks after Chevron first abandons the terminal and pipeline monitoring, it notifies ADEC that “CIPL’s ability to respond to an oil spill and to meet the response planning standards set out at 18 AAC 75.430 – 18 AAC 75.442 has been diminished due to the evacuation of its employees for life safety reasons in response to Mt. Redoubt’s increased volcanic activity and subsequent lahars.”¹⁷ The applicable regulation requires CIPL to notify DEC ten days *before* any planned outage could impair its ability to meet Response Planning Standards through a so-called “notice of non-readiness.” Despite the fact Chevron acknowledges its inability to meet state law requirements regarding spill prevention and response on April 17, it is clear it could not meet such requirements since March 22.

April 28, 2009: Crude oil and ballast seawater offloaded to the tank vessel *Mississippi Voyager* hired by the upstream oil producers through Chevron Shipping Company. Contrary to original Water Use Options Fact Sheet, the tanker pumps roughly 5 million gallons of fresh water from its ballast tanks into DROT storage tanks still containing significant oil. Although the decision to allow this transfer by the Unified Command came approximately a week earlier, the day the tanker called on DROT was the first public notice of the situation.

April 29, 2009: Chevron responds to a DEC request for additional information regarding the Notice of Non-readiness issued on April 17th. The content of that request, and CIPL’s response are: “1) Is the SCADA operational around the clock, or only when personnel are at Drift River running the generators? *Chevron Response: SCADA is operational around the clock.* 2) Can the generators run with no one there? For how long? *Chevron Response: Yes. Indefinitely.*”¹⁸ “SCADA” stands for “Supervisory Control And Data Acquisition,” and includes the systems needed to monitor tank volumes and pipeline oil pressures, among other things, to identify oil spills. This exchange strongly suggests ADEC did not know if the terminal and pipelines were monitored since first abandonment on March 23rd. Furthermore, it’s virtually impossible for any generator to run “indefinitely.” Despite these concerns, ADEC accepts Chevron/CIPL’s abbreviated and cryptic response.

April 30, 2009: The Unified Command issues a press release stating that after the most recent draw-down, approximately 434,000 gallons (10,333 bbl) remains at DROT. Later accounts significantly increase this number.

¹⁶ See www.dec.state.ak.us/SPAR/perp/response/sum_fy09/090324201/090324201_fact_04.pdf

¹⁷ See Letter from Barry Staskywicz, Cook Inlet Pipeline Company, to Betty Schorr, ADEC (Apr. 17, 2009).

¹⁸ See Letter from Barry Staskywicz, Cook Inlet Pipeline Company, to Betty Schorr, ADEC (Apr. 29, 2009).

May 1, 2009: The Alaska Journal of Commerce quotes the Federal On-Scene Coordinator: "[W]e have no record of any spill at the Drift River terminal in its 40 years of operation."¹⁹ Yet the Drift River C-Plan and state and federal records list numerous spills at the facility.

May 6, 2009: Unified Command issues press release correcting volume of oil removed from DROT. After a third party assessment, the volume of oil remaining at the DROT is reported to be 841,860 gallons (20,040 bbl) – almost double the original estimate from April 30.

July 10, 2009: ADEC issues a Situation Report that reveals that weeks earlier the Unified Command had approved a plan to remove the oil from tanks 1 & 2 with submersible pumps and consolidate the oil in tank 3, (previously reported as offline and unavailable), to reduce the potential damage from freezing until the tanks can be cleaned next summer when conditions are assumed to be safer for extended stay of personnel. The oil in tank 3 would be pumped into a tanker but tank 3 will “remain in service in order to provide necessary emergency overpressure protection for future operations”. No information was provided regarding “future operations” or any public amendment of the C-plan that may apply despite the fact that DEC stated: “ADEC’s Industry Preparedness Program is working with Cook Inlet Pipeline Company to review the CIPL Oil Discharge Prevention and Contingency Plan to verify where changes must be made to achieve compliance with state contingency plan regulatory requirements prior to resumption of pipeline operations.”

July 13, 2009: Chevron and Cook Inlet Pipeline announce plans to transport oil stored at facilities at Granite Point and Trading Bay and ship it through a 42-mile pipeline for direct delivery to tankers which will be berthed at its Christy Lee platform located near its Drift River Terminal. As a result of the DROT by-pass, oil tanker transits in Cook Inlet are expected to increase to twice a month, according to Chevron.²⁰

August 3, 2009: ADEC approves revisions to the DROT spill response plan without public notice or comment. Despite the fact the plan revisions included such things as discharge detection and visual inspections, deployment of personnel and spill response elements, volcano information, marine transfer operations, abnormal operations and emergency operations, ADEC considers the plan amendments to be “minor amendments” not requiring public notice and comment.²¹ Yet state law requires openness and transparency in reviewing spill plans, except in circumstances where plan changes are routine or do not result in significant changes to spill response capacity.²² These changes in state law came about to eliminate the secrecy and complacency that proceeded the *Exxon Valdez* Oil Spill. Yet at no time immediately prior to or after Redoubt erupted on March 22 did ADEC make available to the public proposed changes in the DROT’s spill response plan.

¹⁹ See www.alaskajournal.com/stories/050109/loc_news1001.shtml

²⁰ See www.alaskajournal.com/stories/072309/oil_3_012.shtml

²¹ See www.dec.state.ak.us/SPAR/perp/response/sum_fy09/090324201/sitrep/090324201_sr_20.pdf

²² See 18 AAC 75.415(b). According to ADEC rules, “routine plan updates include (1) a deletion to the list of vessels operating under the approved plan; (2) a revision to the list of names, addresses, or telephone numbers of spill command and response personnel; and (3) a revision to a training procedure or course work requirement that does not reduce the amount or quality of training required by this chapter.” *Id.* While regulatory interpretations may differ, it appears from the plain language of the rule that routine plan amendments are meant to be routine.

August 7, 2009: A Tesoro-contracted tanker removes oil and water from DROT tanks 1, 2, and 3. ADEC reports that removal of all oil and water was not feasible due to “current operating conditions.” Tanks 1 and 2 are apparently taken out of service and flanged off. Currently, tanks 1 and 2 each contain 1,396 bbls of oil (117,264 gallons total) and 4,636 bbls of oily water (194,712 gallons). Tank 3 was pumped down to 999 bbls (41,958 gallons) of oil. Chevron now plans to bypass the tank systems at Drift River, and to pump upstream oil directly to tankers at the DROT’s Christy Lee loading platform, with roughly two tanker-visits per week.

August 18, 2009: The USCG withdraws a proposed rule to consider tug escorts for single hull tankers in Cook Inlet and elsewhere.²³ The rulemaking had been ongoing since 1993. The Oil Pollution Act of 1990 mandated tug escorts in Prince William Sound and Puget Sound, and left it to the USCG to determine appropriate safeguards in “other waters.” While most tankers serving Cook Inlet are double hull or double bottom, single hull tankers service the area under contract at times. OPA 90 mandated the phase out of all single hull tankers by 2015.²⁴ The re-routing of oil around the DROT storage facility will increase tanker transits to twice monthly, according to Chevron, thereby increasing the risk of spills from shipping.

Issues & Unresolved Questions:

Note: Many of these issues and questions were presented in writing and as oral testimony to the Unified Command (Chevron, United States Coast Guard and Alaska Department of Environmental Conservation) at a public meeting sponsored by the Cook Inlet Regional Citizens Advisory Council to discuss the DROT incident on April 7, 2009.²⁵ To date, none of the members of the Unified Command has answered the questions posed at the April 7, 2009, public meeting. Accordingly, the issues and questions presented previously have been amended to reflect additional information.

1. Economic Dislocations: Cook Inletkeeper recognizes the significant economic dislocations caused by suspending or shutting down operations in the Cook Inlet oil fields. Inletkeeper feels strongly that no worker should suffer the economic consequences of a layoff, and the state of Alaska should not suffer from reduced royalties and other payments, because Chevron made a business decision to assume the risk of continuing operations at a facility sited at the base of an active volcano. Chevron produced net profits of \$24 billion dollars last year, and in 2007, Chevron CEO David O’Reilly took home more than \$45 million in total compensation. Chevron is perfectly free to make the business decision to continue high risk operations at the Drift River Terminal, but when those risks materialize, it should not be Alaskans who suffer the consequences. The State of Alaska recently filed suit against BP for economic damages stemming from BP’s risk-taking on the North Slope, and Chevron needs to be held accountable to the workers and everyday Alaskans impacted by the suspension of operations at the Drift River Terminal. Questions: How much money did local, state and federal governments lose as a

²³ Federal Register Volume 74, Number 158 (Tuesday, August 18, 2009).

²⁴ See <http://shipbuildinghistory.com/today/shippingstatistics/OPA90.htm>

²⁵ See Bob Shavelson, Cook Inlet, “Statement & Questions to the Unified Command Regarding the Drift River Terminal Incident 2009 (Apr. 7, 2009).

result of the suspension of operations at the DROT? Will the state or federal governments pursue fines or other compensation as a result of this highly foreseeable incident? How many workers were laid off or furloughed as the result of the DROT incident? Did Chevron and/or CIPL continue to pay workers laid off by this incident? What will state and federal agencies do in the future to ensure similar economic dislocations do not happen?

2. Pre-Incident Information: As Mt. Redoubt awoke in late 2008 and early 2009, Cook Inletkeeper asked Chevron and the U.S. Guard how much oil remained in the Drift River Terminal Tanks, and additionally asked to review a copy of the facility's "Volcano Readiness Plan." Both requests were denied, citing the Homeland Security Act. Yet Alyeska announces tank volumes at the Valdez Marine Terminal on a daily basis. In the lead-up to the March 22 eruption, there was no indication any actionable plans existed to address a major spill that could wreck havoc on Cook Inlet fisheries and the families they support; nor any indication Chevron and the relevant state and federal agencies had considered the economic dislocations that would ensue should operations at the Drift River Terminal cease. Questions: Doesn't the Valdez Marine Terminal – which holds considerably more oil than the Drift River Terminal, and which plays a much more important role in Alaskan economics – pose a greater risk of terrorist attack? What provisions of federal law specifically protected Chevron from disclosing vital information prior to the current incident, and why does the U.S. Coast Guard apply federal law differently in Cook Inlet compared to Prince William Sound? What alleged terrorist risk could be worse than an erupting volcano? Why is the confidentiality of oil data owned by Chevron more important than fish and wildlife resources owned by all Alaskans?

3. Pre-Incident & Immediate Post-Incident Planning: In the relative vacuum of information that preceded the March 22 incident, and without access to the facility's Volcano Readiness Plan, it remains unclear what plans were in place to address a catastrophic release from the facility. We do know that the facility's spill prevention and response contingency plan ("C-Plan") did not address a worst case scenario, as required by state law, and in light of the concerns raised after the 1989-90 eruption, presumably some plans were in place to address a catastrophic spill. Yet those plans have yet to be made public. Furthermore, it took the relevant agencies and Chevron almost a week after the March 22 eruption just to activate the Unified Command structure, and longer still to effectuate the action steps needed to address the threats of a major oil spill. Questions: Why did the U.S. Coast Guard designate a Federal On-Scene Coordinator it knew would be deployed to another theater shortly after the Unified Command was activated? In light of the fact the Alaska Volcano Observatory had reported elevated activity at Mt. Redoubt in Fall 2008, why did it take the Unified Command so long to activate? Why haven't spill response plans – including the facility's C-Plan – been made available to the public on the Unified Command web site? Why didn't ADEC make the changes to the DROT's spill response plan available for public comment? Does ADEC consider all the changes made to the DROT's spill plan to be "routine" under state law, and if so, when did the legal threshold for routine plan amendments change? In the future, what changes will the relevant agencies request in the C-plan to make sure that this doesn't happen again?

4. Incident Spill Prevention & Response Priorities: From the outset of this incident, state and federal agencies and industry representatives consistently maintained that a "safe" level of oil was needed to ballast the two active tanks at the Drift River Terminal, ostensibly to keep the

tanks intact should flooding occur. This volume of “safe” oil appeared to fluctuate as agency and industry changed positions on an almost daily basis. Questions soon arose about why water could not be used to ballast the tanks, because water ballast is common industry practice for tank farms threatened by flooding. On April 1, the Unified Command issued “Unified Command Drift River Fact Sheet: Water Usage Options,” which laid out a laundry list of reasons why water could not be used to ballast the tanks. On April 3, Inletkeeper obtained an opinion from an engineer experienced in oil and gas issues, stating that water ballast could in fact be used to secure the Drift River Terminal tanks, and any issues regarding water ballast revolved largely around cost concerns, not technology or infrastructure limitations.²⁶ On April 4, a major eruption occurred at Mt. Redoubt, sending a lahar down the Drift River Valley and causing additional damage to the Drift River Terminal. On April 5, Chevron and the Cook Inlet Pipeline Company announced the decision to suspend operations at the Drift River Terminal, and proceeded to use water to ballast the tanks while offloading approximately 60% of the more than 6 million gallons of oil at the facility. When asked what had changed to allow water to now ballast the tanks, ADEC responded: “Now that *Cook Inlet Pipe Line* made the decision to shut down the facility, then that opens up some other options (emphasis added)”²⁷. On April 7, the Unified Command issued “Unified Command Drift River Fact Sheet No. 4: Water Usage Options, Updated” which refutes the previous Water Use Options Fact Sheet issued by the Unified Command, and which discusses how water can in fact be used to ballast the active Drift River Terminal tanks. This sequence of events clearly demonstrates that continued production was a priority over spill prevention and fisheries protection, and that the Unified Command shifted course only after Chevron decided - due to the ongoing threats from the volcanic eruption - to suspend operations. Questions: Why did the Unified Command Issue the second Water Use Options Fact Sheet on April 7? If spill prevention and fisheries protection were higher priorities than continued production, why didn’t the Unified Command use water to ballast the active Drift River Terminal tanks at the outset? Why has the Unified Command left over 2 million gallons of oil at the terminal when additional volcanic eruptions are expected?

5. Information Not Provided to the Public: Immediately after the March 22 eruption, pictures emerged showing significant flooding and mud and debris flows at the Drift River Terminal, including images showing over-topping of the tank farm’s protective dike system, loss of freeboard on the outside of the dike system, and mud and water accumulations and associated damage around various parts of the facility. Shortly after, the U.S. Coast Guard restricted the air space over the terminal, and since that time, detailed photos have been unavailable to the media and the public.²⁸ Instead, information has been carefully controlled by the Unified Command, and the public had few or no information sources to verify accurate on-the-ground conditions. For example, as discussed previously, the unified Command has not posted the Drift River Terminal’s C-Plan on its web site. Additionally, in light of significant questions regarding

²⁶ Letter from Richard B. Kuprewicz, President, Accufacts Inc., to Bob Shavelson, Cook Inletkeeper (Apr. 3, 2009) (available upon request).

²⁷ Marti Early, Alaska Department of Environmental Conservation (*quoted in* the Anchorage Daily News, Apr. 6, 2009)(available at: <http://www.adn.com/volcano/story/749408.html>)

²⁸ In response to concerns expressed by Inletkeeper regarding updated photos of the facility, the Unified Command posted several images from an April 4 flyover. But those images are from high altitude, making it impossible to understand any impacts from the April 4 eruption; similarly, the most recent photos do not show areas of the facility previously impacted by mud, water and debris flows.

mechanical spill response capacity in the conditions associated with a lahar-induced spill, the Unified Command has posted no information or plans regarding other response tools, such as the use of dispersants, or the use of in-situ burning (ISB). There have been legitimate questions raised regarding the effectiveness and relative toxicity of dispersants, and questions regarding air quality and air standards modeling have been raised for ISB. Accordingly, prior to, and now after, March 22, the public has been denied the basic information needed to help the Unified Command make open, transparent and informed decisions. Questions: On the issue of dispersants, what type of dispersants have been stockpiled, and what volumes of dispersants were on hand and proposed for possible usage? Is there a detailed plan to use dispersants and if so, why hasn't it been made public? How will dispersants be deployed? If a plane will be used, what if ash prevents it? What science has been relied upon to show dispersants would be effective in these types of situations? Would dispersants be deployed in ice conditions? In nearshore conditions? If there is not a detailed plan to use dispersants, how can dispersants remain part of any spill response scenario? On the issue of in-situ burning, why haven't regulators addressed the legitimate questions raised about air quality modeling and related issues?

6. Spill Prevention and Response Readiness: The various scenarios for a lahar-induced catastrophic release at the Drift River Terminal pose significant challenges to any realistic spill response plan, and we are aware of no technology that could effectively clean-up an oil spill in the chaotic aftermath of a significant flood consisting of oil, mud, debris, ice and water. While the facility's C-Plan states a response planning standard (RPS) of approximately 4 million gallons, once the March 22 eruption occurred, it should have become apparent even that RPS could not be met, because, among other reasons, the C-Plan does not contain a spill scenario involving a lahar and a catastrophic release. Under OPA 90, an onshore facility required to prepare a response plan may not handle, store, or transport oil unless the facility is operating in compliance with its C-Plan. As Chevron/CIPL's April 17 notice of non-readiness readily proves, the facility was out of compliance with its c-plan since March 22, when the facility was evacuated. Furthermore, statements made by Cook Inlet spill response personnel and the Unified Command as to the barge lightering capacity in Cook Inlet changed regularly; and at one point a U.S. Coast Guard representative even stated response tools could be deployed from California. In fact, during the 2006 grounding of the *Seabulk Pride* in Cook Inlet, spill response assets had to be diverted from Prince William Sound, because Cook Inlet lacked the barge capacity to contain 5 million gallons. Questions: Why didn't the relevant state and federal agencies suspend Drift River Terminal operations immediately after the March 22, when it became clear the facility could not meet its response planning standard, and even if it could, it could not address a worst case spill? Why didn't ADEC require CIPL to plan for a worst case spill as required by the state's own c-plan rules? Will state and/or federal agencies pursue fines or other penalties in light of Chevron's inability to meet the RPS at the facility after March 22? When was the last time a federal or state agency conducted drills of removal capability, without prior notice, under the facility's C-Plan? Why didn't the Unified Command publicly disclose concerns regarding oil in the pipelines connected to the DROT? Does the current response planning standard address a catastrophic release from tanks 1,2 & 3, along with associated pipelines? What assets are available in Cook Inlet to meet this standard? Why doesn't the now re-configured pipeline scheme at DROT require a public review of the facility's c-plan pursuant to state law?

7. Worker Safety Concerns: The Unified Command has been consistent in one respect; it has held worker safety to be the highest priority in this incident. We applaud the Unified Command in this regard and the workers who have stepped up to ensure no oil spills into Cook Inlet fisheries, and who are working to bring production back-online as soon as safely possible. Yet since the 1989-90 eruption and well before, we knew the inherent risks of operating an oil terminal at the base of an active volcano, and we knew those risks posed significant threats to workers at the facility. In fact, we are aware of no other oil facility in the world where workers are afforded a bunkered “safe haven” to protect them from the threats posed by volcanic eruptions. Furthermore, workers were routinely put in harms way at DROT during periods of heightened seismic activity. Questions: What plans were in place prior to the March 22 eruption to ensure worker safety during an eruption? What plans were in place to ensure worker safety during operations attempting to maintain the facility in an operational state immediately following the eruption? Chevron has forbidden workers at the facility from speaking to the media; have the Coast Guard and ADEC interviewed these employees and if not, why? If so, will transcripts be available to the public? What changes will be made to ensure worker safety in the future?

Cook Inletkeeper is a community-based nonprofit organization dedicated to protecting the Cook Inlet watershed and the life it sustained. www.inletkeeper.org. Cook Inletkeeper ©2009.