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4 Commissioner Larry Hartig
5 SPAR Director Larry Dietrick
6 Department of Environmental Conservation
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9 Juneau, AK 99811-1800

10 Served via E-mail to: commissioner@dec.state.ak.us and Larry.Dietrick@alaska.gov and via
11 facsimile to: (907) 465-5070

12
13 RE: Request for Informal Review of the 10/31/07 DEC approvals of the Prince William
14 Sound Oil Discharge Prevention and Contingency Plans

15
16 Dear Commissioner Hartig;

17 Would you please accept and grant this request for an Informal Review of the 10/31/07 DEC
18 approvals of the Prince William Sound Oil Discharge Prevention and Contingency Plans
19 pursuant to 18 AAC 15.185 et. seq.? I am proffering this request with the sincere hope that we
20 may come to a mutual understanding of the regulatory requirements and affected citizens' needs
21 for protection of the resources critical to their livelihoods and enjoyment of Alaska. The request
22 is brought to your personal attention due to the longstanding conflict with the SPAR Director
23 that is largely documented in the prior administrative appeal and litigation arising from the
24 illegitimate disappearance of three tugs in 2001 that were listed in, and required by the 1999
25 PWS Tanker C-plans. When I contacted Mr. Dietrick last week to discuss this process, he
26 indicated that he would recuse himself from the informal review process. I therefore request
27 your direct review or that of an impartial but expert, manager level subordinate such as PERP
28 Manager Leslie Pearson. Ms. Pearson's office proximity to my home in Anchorage would help
29 accommodate my disability in that I could readily share the additional information she would
30 need to reach an equitable decision. Although we have had widely differing opinions on some
31 aspects of spill response, Ms. Pearson and I have always been able to discuss issues in an
32 amicable and intelligent manner. The information required by 18 AAC 15.185(a) is provided as
33 follows:

34
35 (1) Tom Lakosh, P.O. Box 100648 Anchorage, AK 99510, Phone/fax (907) 563-7380

36 E-mail: lakosh@gci.net

37
38 (2) The 10/31/07 DEC approvals of the Prince William Sound Oil Discharge Prevention and
39 Contingency Plans for all Permittees

40
41 (3) I file this request on my own behalf as an affected person, but it is abundantly clear that all
42 natural resource users in the regions of operation where TAPS Tankers are permitted to operate

1 have had their right to reasonable concurrent use of natural resources as protected by Article
2 VIII Section 8 of the Alaska Constitution as set forth in statutory and regulatory mandates,
3 which must be implemented and enforced by DEC. Indeed, all Alaskan citizens are adversely
4 affected where DEC persists in a pattern of unfair executive investigations prohibited by Article
5 I Section 7 that has resulted in multiple arbitrary and capricious decisions regarding the plans'
6 compliance with the applicable approval criteria and requirements for plan contents.

7
8 (3)(A) I have been a citizen of Alaska for 24 years and have exercised, and intend to exercise
9 my reasonable concurrent uses of the natural resources in the potentially affected coastal areas
10 of Alaska. My protected uses include: subsistence hunting, fishing and gathering; commercial
11 fishing and recreation. These uses were adversely affected by the EVOS and the contested C-
12 plans are required by law to prevent a reoccurrence of the damages as documented in the report
13 of the Alaska Oil Spill Commission and other state and federal reports describing natural
14 resource damages proximately caused by the EVOS. Documentation of the damages I sustained
15 are contained in the case files of A89-140 CV and A92-321 CV as consolidated In re; Exxon
16 Valdez. This spill caused impairment of my commercial and/or subsistence harvesting of
17 salmon, halibut, black cod, ground fish, herring roe, kelp, beach peas, deer, bear, ducks, and all
18 manner of shellfish. An improperly regulated spill from TAPS Tanker operations has the
19 potential to cause long term damage to the species that I plan to harvest and the ecosystem that
20 supports them, thereby infringing upon my constitutional right to a sustained yield of these
21 resources and a reasonable concurrent use of Alaska's natural resources. These potential oil
22 spills can also impair my access to, and enjoyment of marine and coastal resources. The
23 approval of the C-plan has allowed the operation of an ultra-hazardous industry without the
24 protections of law mandated in AS 46.04 et. seq. with its associated regulations, with the
25 specific violations of regulations described with more detail in the contested terms and
26 conditions in 3(B) below. Each of these contested terms represents a substantial impairment of
27 the regulatory standard that would otherwise act to mitigate the adverse impacts to my uses of
28 naturally occurring species, lands and waters from Permittees' oil spills. The failure of DEC to
29 perform the mandated fair investigation and diligent application of approval criteria will allow
30 permittee to use substandard methods and equipment to prevent, contain, control and recover oil
31 spills, thereby allowing damage to my interests that would otherwise be abated in conformance
32 with law. TAPS Tankers' concurrent uses of Alaskan natural resources cannot be deemed
33 reasonable unless and until DEC: requires production of necessary information; fairly considers
34 the public comments proffered; conducts the mandated examination of spill prevention and
35 response technologies; properly assesses the ability of permittees to satisfy the applicable
36 approval criteria, and; requires permittees to adopt procedures and utilize equipment consistent
37 with regulations as set forth below. The direct adverse impacts are therefore to both my uses of
38 natural resources and to my right to a due process and fair consideration of my concerns
39 regarding application of regulations requiring full protection of my resource uses upon review of
40 the permits in consideration of approval.

41
42 (3)(B) Virtually all of the contested terms and conditions of the permits were set forth in the
43 three sets of comments that I submitted with attached evidence on 7/23/07, 9/21/07, and
44 10/15/07. The format of this section will follow the numbered issues as presented in my

1 10/15/07 comments and will address the related DEC Findings in that document published with
2 the approved permits. Many of the issues are inextricably intertwined and to avoid unnecessary
3 repetition of the alternatives, required to be provided in this section, I will provide a list of
4 equipment and procedures after the issues are listed that would minimally satisfy my concerns
5 but are likely far below and apart from what would actually be required by regulation if the
6 proper analyses were performed. Each issue describes within, that information and analyses
7 required for strict compliance with the applicable statutes and/or regulations.

8
9 1) Geographic Scope and addressed in DEC Findings as Issue # 2 Geographic Response Area:

10 There are several additional regulatory issues under contention that stem from the basic
11 initial issue of what areas must be addressed in the C-plans. My initial contention is that the
12 permittees must submit complete plans showing the ability to respond in conformance with
13 regulatory requirements throughout each of the regions of operation where the tankers sail as
14 defined in: 18 AAC 75.495; 18 AAC 75.990(156)(A); AS 46.06.030(r)(4), and; AS
15 46.04.210(a). Despite the fact that petitioners in the 1995 Tanker C-plan adjudicatory
16 hearing won this issue in summary judgment, DEC: refused to require permit applicants to
17 submit the required information for areas outside of Hinchinbrook Entrance, evaded the issue
18 in their Findings Document and actually denied that the permitted tankers approached state
19 waters and islands after leaving Hinchinbrook Entrance, when confronted on the issue after
20 issuance of the Findings. Instead of addressing the necessary collection of data for tanker
21 course tracks outside of the Entrance, the environmental data for these greater regions of
22 operation, the timely spill prevention and response in these areas and the appropriateness of
23 equipment inventories for these more severe conditions, DEC essentially only asserted that
24 permittees would be required to clean up spills migrating downstream from within PWS. The
25 failure to plan for spills originating outside of PWS but along the tanker course tracks and
26 within the regions of operations, which extend out to sea 200 nm from shore, is a
27 fundamental and fatal defect in the plans and the planning process. I therefore recount my
28 comments as submitted on 10/15/07 for a fair consideration of the issue: “The prior RFAIs
29 on this issue have not been fairly considered constituting unfair treatment and a willful
30 violation of due process where DEC had previously lost a summary judgment motion on this
31 very issue in the 1995 C-plan adjudication¹ that is subject to res judicata and directed verdict
32 in the instant case. Neither the Core Plan nor the vessel plans submitted show the required
33 information pertinent to prevent and respond to spills outside of the area of responsibility for
34 APSC but within the planning regions for C-plans promulgated/legislated in: 18 AAC
35 75.495; 18 AAC 75.990(156)(A); AS 46.06.030(r)(4), and; AS 46.04.210(a). These tankers
36 are not exempt from “innocent passage” exemptions as they are tankers carrying Alaskan oil
37 from Alaskan ports and must file C-plans for all waters regulated by Alaskan provisions of
38 law. All of the permit applications show tanker operation in these extended and regulated
39 areas within the greater PWS region and Polar Tankers and Tesoro show intent to
40 additionally operate in the Southeast Alaska and Cook Inlet² regions of operation,

¹ Shippers were also party to this adjudication and were directly provided my initial comments. Their willful omission of required information constitutes fraud by omission.

² Although Tesoro has filed a separate plan for Cook Inlet, (CI), that plan does not address conditions, prevention or response on the Outer Kenai Peninsula Coast, thus creating a large territorial gap in required spill prevention and response

1 respectively. All C-plans contain language that clearly demonstrate an acknowledgement of
2 their responsibility to respond in the Gulf of Alaska, (GOA), but none of the applicants
3 present readily available and reliable information on the environmental conditions in the
4 GOA nor specify the equipment appropriate and reliable for response in the GOA conditions,
5 compensating prevention measures during RMROL conditions, or what should be considered
6 “best” for equipment regulated by 18 AAC 75,445(k)(3). Only Tesoro provides its tanker
7 course track outside of the vessel traffic fairway and the indicated course track within the
8 Southbound fairway suggests that all other tankers would enter the SE AK region, with only
9 Polar Tankers admitting this prohibited³ tanker course. The most blatant example of the
10 deleterious effect upon response capability in GOA conditions admitted by multiple
11 applicants and contractually codified in the GOA Agreement is shown by the additional
12 conditions placed upon response in the GOA, limiting response to a 12 hour window of less
13 than 6-foot seas and 20 knot winds, where shippers otherwise claim an RMROL of 40 knot
14 winds and 10-foot seas without time limitations. If an RMROL of 40 knot winds and 10-foot
15 seas are minimally needed to comply with the RPS regulations, as shown in their response
16 scenarios, then the GOA Agreement is, in fact, collusion among shippers to violate the law.
17 There is no attempt to quantify how often these limiting conditions occur despite the fact that
18 a spill may occur⁴ within the state waters of islands or land prominences projecting well into
19 the GOA, (e.g. Seal Rocks, Wessel’s Reef, Middleton Island, etc). DEC’s repeated denial of
20 requests to require production of this required information shows an unlawful intent to
21 arbitrarily approve the C-plan without a proper application of approval criteria⁵ directly tied
22 to environmental conditions.

planning/capability in the GOA. Shipments of heavy fuel oil from the KPL dock West through the Aleutians have also been reported despite a total lack of planning for this region. SeaRiver has also noticed its intent to operate in this region by filing with the Coast Guard and being granted limited approval to operate in CI. A comprehensive review of all regions simultaneously is therefore needed to prevent such gaps.

³ Both state and federal law require an approved plan prior to transiting the SE AK region/COTP zone and none of these shippers have garnered such an approval despite a clear recognition that a geographic specific appendix and c-plan is needed.

⁴ Tankers take multiple routes out of PWS to different destinations that pass closely by GOA islands/reefs and tugs may not be able to prevent groundings, much less collisions, foundering, structural failure fire or other causes of catastrophic spills into state waters and otherwise in areas of federal waters that are regulated by the state due to the imminent threat/potential to pollute state waters and resources.

⁵ Multiple subsections of 18 AAC 75.445 require that DEC carefully consider the provided accounting of environmental conditions when considering the compliance of specific plan sections. Subsection 445(d)(5) explicitly requires examination of response strategies in terms of environmental conditions: “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”. Where applicants withhold, and DEC does not require all tanker course tracks, information on GOA conditions and detailed response strategies at places like Middleton Island despite the fact that there is a weather station on Middleton Island, any approval would necessarily be arbitrary at best and collusion to violate the law with an illegal subsidy to shippers at worst. Section 445(f) is even more explicit in its mandate to plan response strategies for the most demanding conditions within the operating limits of the equipment: “In designing a spill response, severe weather and environmental limitations that might be reasonably expected to occur during a discharge event must be identified. The plan must use realistic efficiency rates for the specified response methods to account for the reduction of control or removal rates under those severe weather or other environmental limitations that might reasonably be expected to occur. The department may require the plan holder to take specific temporary prevention or response measures until environmental conditions improve to reduce the risk or magnitude of an oil discharge during periods when planned mechanical spill response options are rendered ineffective by environmental limitations”. This mandate relates directly to Issue #10 RMROL that requires disclosure of the operating limitation of each type of equipment to be used in response and the lack of this individualized assessment

1 RFAI: Please require the applicants to show the typical tanker course tracks to all ports of
2 destination as they may indicate tanker operation within the regions of operation defined in
3 18 AAC 75.495. Please require the applicants to amend all sections of their plans to show
4 compliance with all regulations in each of their regions of operation, with information on
5 environmental conditions commensurate with the detail provided in the Core Plan,
6 particularly for areas: seaward of Hinchinbrook Entrance in the PWS region; in the SE
7 Alaska region; in the GOA side of the Cook Inlet region to supplement CISPRI plans, and; in
8 the Western Alaska region of operation. Each permit applicant must show that its spill
9 prevention and response equipment is designed for appropriate and reliable operation to meet
10 regulatory standards throughout the defined region(s) of operation commensurate with the
11 upper limits of operability of available technology.”
12

- 13 2) Prevention Escort System, intended purpose and as addressed in the Findings as Issue # 9
14 BAT for the Escort System. Four successive numbered issues in my comments address
15 escorts, but this first one grapples with the question of whether there is any proof that the
16 escorts could meet the performance standard in 18 AAC 75.027(e), in particular their ability
17 to timely prevent tanker collisions with other vessels. The Approval Criteria in 18 AAC
18 75.445(m) explicitly requires this proof in that it states: “The plan must demonstrate that the
19 applicant meets all applicable requirements of 18 AAC 75.005 -18 AAC 75.085 and 18 AAC
20 75.425(e)(2).” I looked for such proof in the C-plans, the accompanying documents or any
21 other documents that DEC might consider by submitting my request for such documentation

combined with the lack of information on environmental conditions precludes a comprehensive determination of whether the system as a whole is appropriate and reliable pursuant to section 445(k)(1) as well as which equipment should be upgraded to maintain effective response in adverse conditions. Other subsections are even more specific with regards to evaluation of critical response equipment components. Subsection 445(g)(3) states: “types and amounts of boom, boom connectors, and anchorage devices must be of the appropriate design for the particular oil product, type of environment, and environmental conditions experienced at the facility or operation;”. What are the GOA conditions must the boom be designed for? Subsection 445(g)(4) states: “vessels used to deploy and tow boom must be of a number, size, and power adequate to deploy the types and amounts of boom addressed in (3) of this subsection and must be capable of operating in the manner and at the speeds necessary for the effective use of boom;”. The size and power of the booming vessels is directly related to the size and length of the boom needed and the sea conditions in which it must operate. The C-plans admit that the largest vessels in the inventory are generally not restricted by sea conditions and use of these vessels or the use of outriggers on the Open Water Task Force, (OW TF), barges to tow boom could substantially raise the RMROL for GOA operations and it is material to assessment of compliance with this mandate to know with a high degree of certainty just how often these larger boom towing vessels would be needed. Subsection 445(g)(5) states: “the number and size of skimmers and pumps to be used must be appropriate and adequate for recovery of the response planning standard volume of the type of oil discharged within the response planning standard time frame for cleanup established under 18 AAC 75.430 -18 AAC 75.442...”. Here again the size and appropriateness of the skimmers are dependent upon evaluation of the GOA conditions they must operate in. Where the sea states and currents are greater and of longer duration than those reported within PWS many, if not all of the existing systems could be deemed undersized for the prevailing sea states and/or inappropriate for the high velocity currents of the AK Coastal Current, (ACC). Even if there is limited data immediately available regarding the velocity and boundaries of the ACC, applicants should have deployed, and should be immediately ordered to deploy, its spill tracking buoys to define these parameters while the ACC is still near its maximum fall velocity and volume. Permit applicants must show, and DEC must consider adverse conditions in the GOA that permittees may be reasonably expected to encounter during a response and DEC must fashion additional prevention measures, such as an improved Hinchinbrook tug design, when RMROL is exceeded in the GOA.

1 under the Public Documents Act but none was found or proffered. Although the DEC
2 Findings did acknowledge authority under the performance standard and did reference the
3 need to assess the ability "...to prevent or minimize the release of oil due to a grounding or
4 collision", the argument in support of its Findings were wholly unsupported with respect to
5 the ability to meet the performance standard. DEC instead first sought to relate performance
6 compliance to a BAT section comparing different escort systems, none of which showed any
7 definitive ability of any escort, or escort system, to timely prevent a collision or grounding of
8 any specified tanker under any specific conditions. DEC then tries to relate escort capability
9 to training provisions in the Prevention section of the Core Manual, but again there is no
10 proof in this document showing compliance with the performance requirement. DEC tries to
11 infer compliance by stating: "...drills and exercises in which the escort vessels demonstrate
12 their ability to control a laden tanker in the event of a steering or propulsion failure", but the
13 Plan contains no drill or exercise reports and none were proffered pursuant to my Public
14 Documents Act request. DEC then tries to assert proof of compliance by merely referencing
15 an incident in 2001 that did not appear in any part of applicants' submission or in any
16 proffered document stating: "This ability was proven in 2001 when there was a real-time
17 incident in which a tethered primary tug was able to prevent an accident by stopping a laden
18 tanker underway in Valdez Narrows before it collided with a fishing vessel's deployed net".
19 This bald assertion is wholly unsubstantiated, without any description of the tug, tanker,
20 currents, wind, waves or distance needed to stop, and is absurd on its face where the speed
21 limit is 6 knots in Valdez Narrows, the tug would be tethered and the net was stationary
22 whereas the closing speed between a tanker and cruise ship in the Central Sound could
23 exceed 37 knots and the primary tug would not be tethered. DEC's attempt to use this
24 undocumented and barely described incident to assert compliance under all conditions was
25 clearly "grasping at straws" in a desperate attempt to explain away the total lack of reliable
26 data in the C-plans upon which to assess compliance with the performance standard. I
27 therefore recount my comments as submitted on 10/15/07 for a fair consideration of the
28 issue: "The prior requested RFAs on this issue have been largely ignored without a valid
29 explanation constituting unfair treatment and a violation of due process where prior reviews
30 and analyses at least attempted to examine the suitability of different tug types for specific
31 escort roles. Escort analyses to date materially omit examination of the intended purpose of
32 the escorts to prevent or otherwise minimize the oil release caused by a collision, 33 CFR
33 168.01(a), and no evidence of compliance with the performance standards contained in 18
34 AAC 75.027(e) and/or 33 CFR 168.50 has been proffered with the instant C-plans. The
35 proper selection of the best escorts to prevent/minimize collisions, their preferred operating
36 procedures and analysis of necessary limits on tanker operations to allow the escorts to
37 perform their intended purpose required by 18 AAC 75.027(e) has thus been precluded by
38 the total lack of acknowledgement, much less a comprehensive analysis, of the intended
39 purpose and performance standards. Section 168.01(a) clearly states: "The escort vessels will
40 be immediately available to influence the tankers' speed and course in the event of a steering
41 or propulsion equipment failure, thereby reducing the possibility of groundings or
42 collisions". The USCG performance standard requires that tankers: "Must have the escort
43 vessels positioned relative to the tanker such that timely response to a propulsion or steering
44 failure can be effected" and that the tanker: "Must not exceed a speed beyond which the

1 escort vessels can reasonably be expected to safely bring the tanker under control within the
2 navigational limits of the waterway, taking into consideration ambient sea and weather
3 conditions, surrounding vessel traffic, hazards, and other factors that may reduce the
4 available sea room”. In short, the tankers may not go too fast for the escorts to safely bring
5 the tanker under control to prevent groundings **OR COLLISIONS**. The DEC performance
6 standard effectively adopts the USCG purpose and performance requirement where section
7 .027(e) states: “A tank vessel under escort by another vessel must, at all times, be operated in
8 a manner that permits the escort vessel to be available immediately to provide the intended
9 assistance to the tank vessel”. The “intended assistance” must necessarily include what Part
10 168 mandated for purpose and performance but nowhere in the vessel plans or Core Plan
11 Prevention and BAT sections do shippers even attempt to document that the escorts can
12 perform their intended purpose at the speeds and under the waterway, sea, wind, current and
13 traffic conditions that the tankers transit PWS. Moreover, where all parties understand that
14 the term “immediately available” minimally means, in its truest sense, that the primary escort
15 is tethered to the tanker, applicants and DEC must fully explain why tethering of the most
16 capable primary escort is not required throughout the PWS transit. Approval of these
17 sections would therefore be arbitrary where DEC has no available information in the C-plans
18 upon which it could render a sound decision of compliance with the tanker/escort
19 performance or BAT analysis regulations.
20

21 RFAI: Please require the applicants to amend their Prevention and BAT analysis sections to
22 show compliance with the intended purpose of escorts to prevent groundings and collisions.
23 Applicants must show all conflicting vessel traffic, potential vessel closing speeds, and
24 environmental conditions that may materially affect the ability of each possible escort
25 combination to avert groundings and collisions given the various possible escort assist
26 maneuvers. These evaluations must also consider all environmental conditions using the
27 latest available wind, wave, current and weather data as well as all waterway constraints. The
28 analysis must consider maintaining a tethered primary escort throughout PWS and all
29 constrains that may render continuous tethering unsafe.”
30

- 31 3) Prevention Escort System, operation of tankers within the limits of escort capability and as
32 addressed in the Findings as Issue # 9 BAT for the Escort System. This issue is an extension
33 of the prior performance standard issue in that is challenges the ability to meet the standard
34 given that prior parametric studies in possession of DEC had shown conditions where even
35 two of the best tugs could not bring a large tanker under control in the vicinity of Buoy #9
36 and the new escort procedures would only use one tug, albeit a more powerful tug, to prevent
37 the same powered grounding. As stated above, DEC made no attempt to seriously address
38 this criticism exposing the lack of data to support the ability to meet the performance
39 standards using the new procedures. I therefore recount my comments as submitted on
40 10/15/07 for a fair consideration of the issue: “The prior RFAI on this issue has been totally
41 ignored without explanation. The Disabled Tanker Towing Study clearly showed that the
42 larger tankers operating under worst case conditions in the Valdez Arm outbound traffic lane
43 could not be safely controlled by the escorts studied, even when two of the “best” escorts
44 studied were simultaneously used in the most effective maneuvers to steer the tanker from

1 groundings. Applicants now suggest that only the primary escort will attempt a steering
2 and/or braking maneuver with the secondary escort providing towing from the bow after the
3 tanker has been stopped. While I agree that the use of the secondary escort to push on the
4 tanker hull at speed and in high seas, as suggested in the DTTS, is essentially a high speed
5 tug and tanker collision and an unsafe maneuver, applicants must now show that the primary
6 escort alone can apply the forces deemed necessary to bring the tanker safely under control
7 using these new arrest procedures. Despite the numerous successful escort drills using this
8 single escort maneuver, these drills are not part of the documents under public review and, in
9 any event, have not been conducted under the worst case conditions as was previously
10 deemed necessary in a condition of approval to the 1999 C-plans. No attempt has been made
11 to simulate the effectiveness of the new arrest maneuvers or combined escort effectiveness
12 under worst case conditions at the most demanding locations. Where no drills or simulations
13 reflect these most demanding conditions, neither DEC or the public can determine whether
14 the current escorts and escort procedures are capable of safely bringing the tanker under
15 control to prevent groundings or collisions, as is their mandated performance standard under
16 federal and state regulations cited above. Moreover, no prior analysis has considered the
17 effect of cross currents and eddies on tanker momentum, (i.e. although stopped in the water,
18 a tanker can still be carried to shore by currents unless timely towed out of the cross
19 current/eddy). Cross currents and eddies that have since been discovered by CODAR, X-
20 Band Radar, current drifters and acoustic sensors that have not been reported in the C-plan.
21 DEC's own expert has testified that eddy currents develop downstream of land prominences
22 in high current areas, (referring to the affect of Kayak Island on the Alaska Coastal Current
23 or ACC), such as are likely to exist on either end of Valdez Narrows, at Buoy # 9, and at
24 Schooner Rock, Middle Point and Montague Point in Hinchinbrook Entrance. Examination
25 of the conditions at Buoy #9 is most necessary where the primary escort is permitted to
26 disconnect its tether but may be no further from shore than the areas where a tether is
27 deemed necessary and where a tanker may be additionally subject to cross currents.

28
29 RFAI: Please require the applicants to amend their plans to show compliance with the
30 mandate to operate tankers within the limits of their escorts by providing a comprehensive
31 parametric analysis of escort capability under worst case environmental conditions given the
32 stated tanker and escort operating procedures and taking into account any cross channel
33 currents or eddies that may affect tanker momentum toward shore. The applicants must show
34 that their escort analysis has incorporated new wind wave and current data accumulated
35 since the initial analysis was conducted in the DTTS more than 12 years ago and must show
36 that all proposed escort combinations and procedures will always result in bringing the
37 tanker safely under control given worst case grounding and collision scenarios.”

- 38
39 4) BAT Analysis and sufficiency of tug inventory, escorts and as addressed in the Findings as
40 Issue # 9 BAT for the Escort System. This issue is an additional expansion of the prior two
41 performance standard issues coupled with a demand for an individualized assessment of tugs
42 under the BAT standard. DEC again evaded the primary issue of whether the escorts that
43 comprised the system were each the best for the three specialized tasks previously identified
44 by DEC and instead argued that it was required to compare the PWS escort system to other

1 escort systems. DEC first provided the proper regulatory interpretation that would
2 necessarily require the individualized escort assessment by stating:

3 “Under the definition of "technology" cited above, escort vessels are clearly identified
4 as "equipment." In addition, "supplies, other resources and related practices" are also
5 defined as technology. The purpose of an escort vessel under 18 AAC 75.027(e) is to
6 “provide the intended assistance to the tank vessel.”

7 DEC then posits the non sequitur: “In order to provide that assistance, the escort system as a
8 whole, not just individual vessels, must be evaluated”. There is no logical connection
9 between the definition of “technology” or the performance standard and the leap to conclude
10 that there is a requirement to only assess the “system as a whole” without examination of
11 each tug to determine if it meets the BAT standard for its particular role in the system. The
12 Findings actually confirm the specialized roles of each escort type require an individualized
13 analysis by stating: “Because each escort vessel provides a different function within the
14 system, it is appropriate for the Department to evaluate BAT information for escort vessels as
15 they function within a system...” but again follows with the non sequitur “...rather than as
16 isolated components”. The premise supports a BAT analysis of specialized escort roles
17 within the system but then concludes with the exactly opposite proposition! Moreover, the
18 escort systems that permittees analyzed are, for the most part, used in relatively protected
19 waters and are supplemented by offshore salvage tugs of enormous power, some up to 220
20 tonnes bollard pull. These salvage tugs are designed to perform tanker rescue under
21 conditions analogous to our conditions in Hinchinbrook Entrance and the near GOA, which
22 are well within permittees’ region of operation and also contain state waters at locations such
23 as Middleton Island and Wessel’s Reef. The open ocean rescue function of these very large
24 and powerful salvage tugs would also be analogous to the RMROL prevention function that
25 the escorts necessarily perform within PWS due to the disabling effect that wind and waves
26 often have on even our most capable response systems. I therefore recount my comments as
27 submitted on 10/15/07 for a fair consideration of the issue: “The prior RFAIs requested on
28 this issue have not been fully addressed and the RFAI that DEC issued and the Shipper
29 response were clearly evasive and in contravention of law and established procedure.
30 Although DEC did require expansion of the escort analysis, DEC arbitrarily limited the
31 comparative analysis to specific escort systems instead of considering the ability all available
32 technologies to perform their intended purpose in their specialized individual roles as
33 primary, secondary or Hinchinbrook Entrance escorts. Applicants again suppressed tug
34 designs specifically prepared for PWS but concealed from public review. This limiting
35 procedure is directly contradictory to prior escort reviews that did, at least in a cursory
36 manner, consider custom tug designs for individual escort roles, (e.g. the use of ETTs as
37 escorts, the 8/01 Hinchinbrook Tug analysis and decision, the disqualification of ERVs as
38 primary escorts due to a lack of maneuverability, the decision to establish the Protector Class
39 tugs as interim primary escort BAT, the restriction of Sea Flyer tugs to secondary escort).
40 This long series of successive decisions clearly establish that DEC’s understands the
41 regulatory intent to require an analysis of tugs in three different escort roles that each
42 required different maneuvering and power characteristics that could most effectively bring

1 the tanker under control⁶. DEC's new, unsubstantiated interpretation of the BAT regulatory
2 requirement, that only compares limited escort systems instead of individual tugs for
3 individual roles, is contrary to the unambiguous statutory and regulatory language and
4 constitutes an unlawful regulatory amendment without public review. The submitted analysis
5 only compared the relative bollard pull of tugs and not the ability to bring the tanker under
6 control at transit speeds using dynamic towline force to steer the tanker as suggested by the
7 DTTS as the most effective tanker assist maneuver. The implication of this analysis is that
8 tugs would only need to assist the tanker with direct towing at a near-zero speed, (bollard pull
9 is measured at zero speed), contrary to the findings of the DTTS and the aforementioned
10 regulatory purpose cited above. This material misrepresentation/obfuscation is particularly
11 egregious given the unambiguous statements of Greg Jones of SERVS that the design
12 selection of the PRTs as secondary escort and the ETT as primary escort were meant to be
13 complimentary based on the superior attributes of each design to most effectively control the
14 tanker at slow speeds and at high speeds respectively. This admission necessarily establishes
15 at least three separate escort categories, primary and secondary escort and the Hinchinbrook
16 tug role, which must be independently comparatively analyzed due to their distinct roles in
17 assisting a disabled tanker. The escort category of Hinchinbrook Entrance tug, (HE tug), has
18 clearly been independently comparatively analyzed in the past because its function to
19 perform rescue towing in the more severe sea states in Hinchinbrook Entrance demanded still
20 higher seakeeping, stability, maneuverability and bollard pull capability above and beyond
21 that required for a secondary escort inside PWS. DEC's prior analysis of the Hinchinbrook
22 Tug has found that the Theriot Class was unqualified for even interim duty, requiring its
23 replacement with the Gulf Service and later replacement of the Gulf Service with the PRT.
24 Only one type of tug can garner the title of "best" for any of these three distinct escort
25 categories unless more than one type of tug can be demonstrated to perform with equivalent
26 capabilities in all critical functions of that specific escort role. There is no attempt to
27 comparatively analyze the relative suitability of different class tugs already in the SERVS
28 inventory for any specific escort duty as had been established in interim decisions that
29 required: replacement of ERVs with conventional tug as the primary escort, elimination of
30 ERVs as secondary escorts, replacement of conventional tugs as primary escorts with the
31 Protector and then ETTs, elimination of the Theriot class as HE tug and replacement with the
32 Gulf Service and then PRTs. Applicants must also anticipate the need for spare tugs to fulfill
33 each role given reasonably predictable tug outages for maintenance and repair and records of
34 tug deployments have shown that there are insufficient BAT tugs available to allow full time
35 deployment of a qualified Hinchinbrook tug. Applicants unlawfully suppressed tug designs in
36 their possession from the BAT analysis that would be far superior to the PRT, ETT or Theriot
37 class tugs for this specific purpose. Moreover, applicants failed to analyze tug technologies
38 that could be adapted for our unique conditions and regulations that do not exist anywhere
39 else in the world. This principle has been borne out by the necessity of development of the
40 ETT and PRT that adapted the VSP and ASD technologies respectively from much smaller

⁶ Although these prior analyses were not comprehensive of definitive as to compliance with performance standards, they at least established the practice of considering the relative capabilities of the limited selection of tugs proffered to perform the three specific escort roles, which in each case required the better tug to assume the more demanding role.

1 tugs of similar design and consideration of similar adaptation of newly developed hull,
2 propulsion, seakeeping, stabilization, navigation and critical towing equipment technologies
3 is clearly warranted at this juncture. Consideration of what constitutes BAT must necessarily
4 be partially premised upon the minimum tug capabilities needed to meet the performance
5 criteria discussed in comments above, but even if the ETT and PRT are found lacking, these
6 tugs could likely be upgraded by employing Roto-Tug, TractorPlus or azimuthing bow
7 thruster design modifications or even larger drives and or engines that could be installed
8 during scheduled maintenance outages.

9
10 RFAI: Please require the applicants to amend their plans to show compliance with the
11 applicable BAT regulations with respect to escorts. A contemporaneous comparative analysis
12 of adaptable tug technologies must be produced for each of the three distinct escort
13 categories, (primary, secondary and HE tug), but only after the performance requirements are
14 established for each tug duty. The competing primary tugs must be analyzed to demonstrate
15 the superlative design that can, by itself, most effectively, safely and timely arrest a disabled
16 tanker using steering and braking maneuvers unless applicants can show that both escorts can
17 safely bring the tanker under control while the tanker is operating at maximum allowable
18 speed in worst case sea conditions. The competing secondary tugs must be analyzed to
19 demonstrate the superlative design that can, by itself, most effectively, safely and timely
20 directly tow a disabled tanker unless applicants can show that both escorts can safely directly
21 tow a tanker at the same time. The competing HE tugs must be analyzed to demonstrate the
22 superlative design that can, by itself, most effectively, safely and timely directly tow a
23 disabled tanker in the severe sea states outside Hinchinbrook Entrance and within applicants'
24 regions of operation. The tug designs and adaptable technologies that must be considered
25 should minimally include pertinent design features and components of the Don Ina, Abeille
26 Bourbon, Bourbon Orca, Roto-Tug, TractorPlus, Crowley proposal for a 13,000+ hp ASD
27 tug, Foss proposal for a 12,000+ hp VSP tractor tug as previously supplied and requested to
28 be disclosed as material to the decision."

- 29
30 5) Escort System and SERVS Equipment List, sufficiency of escorts to serve maximum tanker
31 traffic given multiple mutually exclusive tug duties. This issue challenges the ability of
32 permittees to, with the eleven tug fleet described, simultaneously satisfy all of the tug needs
33 for the Prevention section, RPS response scenario and the VMT C-plan. There are no DEC
34 Findings that respond to this issue and I therefore recount my comments as submitted on
35 10/15/07 for a fair consideration of the issue: "The prior RFAIs requested on this issue have
36 not been fully addressed and the RFAI that DEC issued and the Shipper response were
37 clearly evasive and in contravention of law and established procedure. Although DEC did
38 require expansion of the escort analysis, DEC arbitrarily limited the comparative analysis to
39 specific escort systems instead of considering the ability all available technologies to
40 perform their intended purpose in their specialized individual roles as primary, secondary or
41 Hinchinbrook Entrance escorts. Applicants again suppressed tug designs specifically
42 prepared for PWS but concealed from public review. This limiting procedure is directly
43 contradictory to prior escort reviews that did, at least in a cursory manner, consider custom
44 tug designs for individual escort roles, (e.g. the use of ETTs as escorts, the 8/01

1 Hinchinbrook Tug analysis and decision, the disqualification of ERVs as primary escorts due
2 to a lack of maneuverability, the decision to establish the Protector Class tugs as interim
3 primary escort BAT, the restriction of Sea Flyer tugs to secondary escort). This long series of
4 successive decisions clearly establishes that DEC's understands the regulatory intent to
5 require an analysis of tugs in three different escort roles that each required different
6 maneuvering and power characteristics that could most effectively bring the tanker under
7 control⁷. DEC's new, unsubstantiated interpretation of the BAT regulatory requirement, that
8 only compares limited escort systems instead of individual tugs for individual roles, is
9 contrary to the unambiguous statutory and regulatory language and constitutes an unlawful
10 regulatory amendment without public review. The submitted analysis only compared the
11 relative bollard pull of tugs and not the ability to bring the tanker under control at transit
12 speeds using dynamic towline force to steer the tanker as suggested by the DTTS as the most
13 effective tanker assist maneuver. The implication of this analysis is that tugs would only
14 need to assist the tanker with direct towing at a near-zero speed, (bollard pull is measured at
15 zero speed), contrary to the findings of the DTTS and the aforementioned regulatory purpose
16 cited above. This material misrepresentation/obfuscation is particularly egregious given the
17 unambiguous statements of Greg Jones of SERVS that the design selection of the PRTs as
18 secondary escort and the ETT as primary escort were meant to be complimentary based on
19 the superior attributes of each design to most effectively control the tanker at slow speeds
20 and at high speeds respectively. This admission necessarily establishes at least three separate
21 escort categories, primary and secondary escort and the Hinchinbrook tug role, which must
22 be independently comparatively analyzed due to their distinct roles in assisting a disabled
23 tanker. The escort category of Hinchinbrook Entrance tug, (HE tug), has clearly been
24 independently comparatively analyzed in the past because its function to perform rescue
25 towing in the more severe sea states in Hinchinbrook Entrance demanded still higher
26 seakeeping, stability, maneuverability and bollard pull capability above and beyond that
27 required for a secondary escort inside PWS. DEC's prior analysis of the Hinchinbrook Tug
28 has found that the Theriot Class was unqualified for even interim duty, requiring its
29 replacement with the Gulf Service and later replacement of the Gulf Service with the PRT.
30 Only one type of tug can garner the title of "best" for any of these three distinct escort
31 categories unless more than one type of tug can be demonstrated to perform with equivalent
32 capabilities in all critical functions of that specific escort role. There is no attempt to
33 comparatively analyze the relative suitability of different class tugs already in the SERVS
34 inventory for any specific escort duty as had been established in interim decisions that
35 required: replacement of ERVs with conventional tug as the primary escort, elimination of
36 ERVs as secondary escorts, replacement of conventional tugs as primary escorts with the
37 Protector and then ETTs, elimination of the Theriot class as HE tug and replacement with the
38 Gulf Service and then PRTs. Applicants must also anticipate the need for spare tugs to fulfill
39 each role given reasonably predictable tug outages for maintenance and repair and records of
40 tug deployments have shown that there are insufficient BAT tugs available to allow full time

⁷ Although these prior analyses were not comprehensive or definitive as to compliance with performance standards, they at least established the practice of considering the relative capabilities of the limited selection of tugs proffered to perform the three specific escort roles, which in each case required the better tug to assume the more demanding role.

1 deployment of a qualified Hinchinbrook tug. Applicants unlawfully suppressed tug designs
2 in their possession from the BAT analysis that would be far superior to the PRT, ETT or
3 Theriot class tugs for this specific purpose. Moreover, applicants failed to analyze tug
4 technologies that could be adapted for our unique conditions and regulations that do not exist
5 anywhere else in the world. This principle has been borne out by the necessity of
6 development of the ETT and PRT that adapted the VSP and ASD technologies respectively
7 from much smaller tugs of similar design and consideration of similar adaptation of newly
8 developed hull, propulsion, seakeeping, stabilization, navigation and critical towing
9 equipment technologies is clearly warranted at this juncture. Consideration of what
10 constitutes BAT must necessarily be partially premised upon the minimum tug capabilities
11 needed to meet the performance criteria discussed in comments above, but even if the ETT
12 and PRT are found lacking, these tugs could likely be upgraded by employing Roto-Tug,
13 TractorPlus or azimuthing bow thruster design modifications or even larger drives and or
14 engines that could be installed during scheduled maintenance outages.

15
16 RFAI: Please require the applicants to amend their plans to show compliance with the
17 applicable BAT regulations with respect to escorts. A contemporaneous comparative
18 analysis of adaptable tug technologies must be produced for each of the three distinct escort
19 categories, (primary, secondary and HE tug), but only after the performance requirements are
20 established for each tug duty. The competing primary tugs must be analyzed to demonstrate
21 the superlative design that can, by itself, most effectively, safely and timely arrest a disabled
22 tanker using steering and braking maneuvers unless applicants can show that both escorts
23 can safely bring the tanker under control while the tanker is operating at maximum allowable
24 speed in worst case sea conditions. The competing secondary tugs must be analyzed to
25 demonstrate the superlative design that can, by itself, most effectively, safely and timely
26 directly tow a disabled tanker unless applicants can show that both escorts can safely directly
27 tow a tanker at the same time. The competing HE tugs must be analyzed to demonstrate the
28 superlative design that can, by itself, most effectively, safely and timely directly tow a
29 disabled tanker in the severe sea states outside Hinchinbrook Entrance and within applicants'
30 regions of operation. The tug designs and adaptable technologies that must be considered
31 should minimally include pertinent design features and components of the Don Inda, Abeille
32 Bourbon, Bourbon Orca, Roto-Tug, TractorPlus, Crowley proposal for a 13,000+ hp ASD
33 tug, Foss proposal for a 12,000+ hp VSP tractor tug as previously supplied and requested to
34 be disclosed as material to the decision.”

- 35
36 6) BAT Analysis and equipment listing for stopping the spill at its source and preventing its
37 further spreading. There are no DEC Findings on this issue and I therefore recount my
38 comments as submitted on 10/15/07, with one minor correction, for a fair consideration of
39 the issue: “Although DEC did attempt to obtain additional information on this issue, the
40 subsequent submission by applicants was largely unresponsive. Applicants materially
41 omitted consideration of several technologies that are widely accepted in the salvage industry
42 that are specifically designed to stop oil leakage and prevent the spreading of an oil spill.
43 Shippers deliberately evaded answering DEC’s RFAI requiring a description of use of boom
44 to prevent the spreading of the spill from the discharge cite and made no mention of the use

1 of hull patches and the salvage equipment, software and trained personnel needed to
2 accomplish a salvage assessment and hull repair. The “comparative analysis” is merely a
3 bald statement that the methods applicants propose are the best without even a cursory
4 attempt to show that any individual technology will stem the flow from the tanker, other than
5 a spill from deck piping, or spread of oil on the water better than any other technology.
6 [Applicants] suggest that lightering or cargo transfer will stop the oil outflow but fail to
7 comparatively analyze the effectiveness of any of the pumping equipment necessary for
8 these operations, particularly the pumping of oil from a submerged tanker. Indeed, there is
9 no attempt to show the ability to perform standard salvage operations either in terms of a
10 comparative BAT analysis or in the listing of equipment dedicated to source control and spill
11 containment. The lightering of a structurally damaged tanker also necessitates a full salvage
12 analysis that typically includes use of a program similar to Hecsalv, which is not even
13 mentioned as a critical precursor to lightering. Applicants fail to even address the standard
14 use by salvors of hull patches to limit oil outflow or water ingress, which would also
15 necessarily include the use of divers or minimally an ROV to apply hull patches below the
16 water line. An essential function of ship salvage is to prevent a chronic spill from a sunken
17 vessel and applicants make no attempt to show if, how and with what vessel and equipment
18 they will undertake these salvage measures. Some vessel plans do reference a “portable deep
19 well pump” used for cargo transfer during a power failure or when the installed cargo pumps
20 are ineffective but provide no specifications or comparative analysis of the pump and power
21 pack. All of the vessel plans reference using Marine Pollution Control but do not list their
22 equipment, provide an RMROL analysis or provide a comparative BAT analysis of this
23 equipment, in spite of the fact that I have provided a list of salvage equipment aboard the
24 Don Inda. This is particularly pertinent where the term of this plan is expected to span the
25 implementation of new federal salvage requirements that include emergency towing, heavy
26 lift salvage and subsurface lightering capability. These plans must show full compliance
27 throughout their approved term. Although the plan mentions booming of tankers at berth to
28 limit the spread of oil, there is no attempt to comparatively analyze the effectiveness of
29 various types of boom and their tactical deployment to maximize containment, nor is there
30 any mention of containment booming away from the VMT. The abhorrent lack of specific
31 analyses indicates that applicants are either wholly unqualified to perform this assessment or
32 are fraudulently omitting technologies known to qualify for a comparative analysis.
33 Applicants and DEC have been provided a list of applicable salvage technologies
34 incorporated into the Don Inda salvage tug and are also aware of additional salvage resources
35 not listed in the C-plans and only timely available in the lower 48 states. The suppression of
36 these alternatives in the source control analysis constitutes a deliberate material omission.

37
38 RFAI: Please require the applicants to amend their plans to show compliance with source
39 control quality standards and a discrete listing of all source control/containment and salvage
40 vessels/equipment, their location and RMROL characteristics. These discretely listed
41 vessels/equipment must be comparatively analyzed with the state of the art salvage
42 equipment/vessels available anywhere worldwide using all criteria promulgated in 18 AAC
43 75.445(k)(3). Noticeably absent from nearly all BAT analyses are a full listing of
44 vessel/equipment specifications, performance capabilities and their actual cost.”

1
2 7) BAT Analysis, leak detection and spill tracking and as partially addressed in the Findings as
3 Issue # 3 Operations in Darkness. The DEC Findings mischaracterize this issue and fails to
4 apply the multiple regulatory requirements, particularly the Approval Criteria that requires
5 application of the BAT assessment under 18 AAC 75.445(k)(3), which refers back to
6 .425(e)(4)(A)(iii) “for a tank vessel contingency plan: measures to assure prompt detection
7 of an oil discharge as required by 18 AAC 75.027(d)”, .425(e)(1)(F)(iv) “procedures and
8 methods for real-time surveillance and tracking of the discharged oil on open water and
9 forecasting of its expected points of shoreline contact” and, .425(e)(2)(E) “discharge
10 detection - a description of the existing and proposed means of discharge detection, including
11 surveillance schedules, leak detection, observation wells, monitoring systems, and spill-
12 detection instrumentation; if electronic or mechanical instrumentation is employed, detailed
13 specifications, including threshold detection, sensitivities, and limitations of equipment must
14 be provided”. The Findings do not address spill detection at all and applicants refuse to
15 implement the electronic detection devices required by .027(d), thus the real-time
16 surveillance equipment must perform both tasks. The listing of the spill detection and
17 surveillance equipment first and third cited regulations make them clearly subject to the
18 higher BAT standard under .445(k)(3). Indeed, the later Prevention regulations combine
19 these functions and explicitly require detailed specifications that are not present in the C-
20 plans. The critical element of the spill tracking requirement is to provide “real-time
21 surveillance...of the discharged oil”. “Surveillance” necessarily means close and continuous
22 observation of the discharged oil and while the few tracking buoys available do provide real
23 time data useful for computer trajectory forecasting, the do not supply the close observation
24 of all of the oil required by the regulation nor do they transmit that data to the onsite
25 responders. While a closer examination of the FLIR capabilities may show the minimum
26 conformance with the requirement: the details are unavailable; the equipment is in Fairbanks;
27 is only transported on a VFR aircraft and so is unavailable for timely spill detection or during
28 IFR conditions, and; this equipment is by no means BAT for the task where the information I
29 provided on German and Swedish spill detection and tracking aircraft show demonstrably
30 greater capability. I therefore recount my comments as submitted on 10/15/07 for a fair
31 consideration of the issue: “Although DEC did attempt to obtain additional information on
32 this issue, the subsequent submission by applicants was largely unresponsive. There is only a
33 minimalized listing of the IR sensor without any specific characterization of its capabilities
34 and limitations. Applicants claim that IR sensors must be intrinsically safe but if that is so,
35 they must show that the IR sensor in use meets this minimal performance criteria and must
36 state that no other intrinsically safe sensor is available, (a highly unlikely circumstance
37 where firefighters regularly use IR sensors). Moreover, this intrinsically safe equipment
38 requirement alleged by applicant must also extend to all equipment used in spill response and
39 must be listed in the section addressing intrinsically safe tools to prevent a fire potential.
40 The absence of any remote sensors other than closed circuit cameras at the VMT and the one
41 IR sensor, (e.g., IR/UV sensors, multi-spectrum sensors, laser/lidar fluorosensor, microwave
42 radiometers, X-Band radar and their respective interpolative software), is a clear indication
43 that applicants are deliberately and fraudulently limiting their analyses to avoid any possible
44 costs associated with incorporation of these technologies given that they regularly transit

1 European waters that are served by surveillance aircraft with multiple remote sensors that
2 use refines interpolative software, (see attached exhibits), and DEC has previously requested
3 analysis of other remote sensors for this purpose. There is likewise no attempt to address
4 actual spill tracking other than visual methods and drift buoys. My personal commercial
5 fishing experience is that lights are insufficient to identify known targets low on the water at
6 night from even short distances and even when the location of the target is recorded on a
7 GPS. Virtually all commercial fishermen that must find buoys at night use a combination of
8 GPS, radar targets, lighted buoys and/or lights, and often still have to hunt for the buoys for a
9 considerable time. To assume that applicants can consistently find and quantify black oil on
10 black water at night only with lights is simply an absurd proposition. Although trajectory
11 prediction is helpful in dispatch of response resources, the actual distribution of the spill can
12 be dramatically different from parametric trajectory analyses and drift buoys signals given
13 inconsistent local currents and winds. Spill detection and recovery must necessarily rely on
14 contemporaneous identification and quantification of oil on the water that is then transmitted
15 via a broadband connection to the command and major skimming vessels to comply with
16 regulatory mandates in sections 445(d)(3) and 445(k)(3). The disingenuous excuse proffered
17 by applicants, that there is no effective technology, clearly does not meet the regulatory
18 requirement to identify and utilize the best technology available. Where applicants
19 acknowledge that UV detection is available on aerial platforms, they must fully analyze all
20 available alternatives pursuant to regulatory criteria and not simply dismiss the analysis
21 premised upon the expectation that such aerial platforms and sensor technology are beyond
22 consideration. Applicants may not arbitrarily withhold a comprehensive comparative
23 analysis until applicants unilaterally determine that there is a totally effective detection and
24 tracking technology. The requirement is for DEC to require the use of the best technology
25 after fully comparing options, and applicants' arbitrary elimination of alternatives prior to a
26 comprehensive analysis suggests that applicants have no intention of complying with the
27 analytical or quality standards set for this category of equipment. The C-plans must
28 additionally show an immediately available appropriate aircraft and crew dedicated to this
29 task where an aircraft of opportunity would require potentially complicated installation of the
30 required sensors rendering these services unavailable for immediate response to a
31 nighttime/low visibility spill. If the spill cannot be timely located and quantitatively defined,
32 the recovery TFs cannot be credited with the presumed recovery rates.

33
34 RFAI: Please require the applicants to amend their plans to show compliance with quality
35 standards required for leak detection and spill tracking. Applicants must comprehensively
36 comparatively analyze all potential methods of leak detection and spill tracking technologies
37 that must minimally include consideration of the remote sensing systems, computer software
38 to define spill boundaries and spill thickness, and the aircraft referenced above and described
39 in attachments hereto. This discretely listed equipment and alternatives must be
40 comparatively analyzed using all criteria promulgated in 18 AAC 75.445(k)(3). An essential
41 component of spill tracking that must also be comparatively analyzed is the communication
42 of the images/data collected by properly equipped surveillance aircraft to all command
43 vessels and tugs/Valdez Star in the OW TFs. This capability, to transmit data via broadband

1 ship to shore, aircraft to ship and ship to ship, must also be analyzed under the separate BAT
2 communications requirement.

- 3
- 4 8) Response Planning Standard, prevention credits. The DEC Findings did not address this
5 issue and so I resubmit my 10/15/07 comments for a fair review: “The prior RFAI on this
6 issue has been largely ignored and the issue is resubmitted for reconsideration. Applicants
7 presume that they will be granted an 11% prevention credit where that credit may not be
8 granted due to a lack of BAT escorts available for all escort categories all of the time and the
9 lack of manning for the OSRVs commensurate with USCG standards. Shippers may not
10 claim that they deserve credit for “Emergency Response Vessels” where all of the vessels
11 used are over 500 tons gross weight and those vessels are not manned to the to the level of
12 tank vessels as required by the USCG in its vessel Marine Safety Manual: “It is expected that
13 many OSRVs will be converted Offshore Supply Vessels (OSVs). OSVs manning scales are
14 not considered appropriate for this new class of vessels. OSRVs will require a 24-hour day
15 capability when engaged in spill response. OSRVs are technically tankers, as defined by 46
16 U.S.C. 2101(38), and therefore are subject to the workhour limitations imposed by 46 U.S.C.
17 8104(n). Existing automated OSVs being converted to OSRVs shall be reevaluated for a
18 determination of appropriate manning levels... Oil Spill Recovery Vessels Of More Than
19 500 Gross Tons. These vessels should be manned similarly to a tank vessel (see section
20 21.E.1)... E. Mechanically-Propelled Cargo/Tank Vessels Of 100 And More GT. 1. General.
21 Tank vessel manning standards are required by 46 U.S.C. 9102 to take into account a number
22 of factors relating to the duties, qualifications, and training of officers and crew... 2. Sample
23 Scales. a. Ocean And Coastwise. 1-Master, 1-Chief Engineer, *1-Chief Mate, * 1-1st
24 Assistant Engineer, *1-2nd Mate, * 1-2nd Assistant Engineer, *1-3rd Mate, *1-3rd Assistant
25 Engineer, *6-Able Seamen, *3-Firemen/Watertenders, *3-Ordinary Seamen, *3-Oilers, *1-
26 Radio Officer, *3-Tankermen, * -Certificated Lifeboatmen”. The six to ten man crews on
27 escorts or sentinels are clearly well below the required tanker manning levels and the
28 required qualifications of each crewmember is not listed. Shippers are essentially proposing
29 the absurd notion that DEC should give them an exemption from Alaskan law while
30 violating directly related federal law. The PWS RCAC recorded and calculated that a Theriot
31 class tug was assigned to HE tug duty 47% of the time in 2006 where this tug had been
32 previously disqualified for this duty. APSC has additionally made a presentation to RCAC
33 explaining that ETTs or PRTs were not available for all tanker escorts. This issue is
34 particularly pertinent where SERVS has admitted that the ETT and PRT were designed to
35 operate in a complimentary manner providing primary and secondary escort respectively and
36 maintaining this combination for all laden tankers would be more difficult than allowing for
37 use of the PRT as primary escort or the ETT or a conventional tug as a secondary escort.
38 Further analysis requested above may well show that a more capable tug than the PRT or
39 ETT could/should be assigned to primary, secondary or the HE tug duty as well.

40

41 RFAI: Please require the applicants to amend their plans to show compliance with the full
42 RPS requirements without any credits for emergency response vessels or escorts as the
43 granting of those credits must necessarily be contingent upon satisfaction of USCG manning

1 requirements for OSRVs and the specific criteria for escort qualification is still under review
2 and arguably susceptible to failure.”

- 3
- 4 9) Response Planning Standard, sufficiency of vessels, skimmers and boom and as addressed in
5 Findings as Issue # 7, Issue # 11 and in the unnumbered encounter rates. This issue touches
6 upon multiple regulations and elements of the C-plans described above in # 1) and below in
7 (#s 10), 11) and 16). The primary thrust of this issue, as presented in my comments, is that the
8 amount of boom shown as used in each response task force, particularly the Open Water
9 Task Forces, cannot encounter enough oil to allow the skimmers to meet the recovery rates
10 predicted in the Anvil Study. The Anvil study simply did not provide the calculations
11 required by 18 AAC 75.445(n): “The response planning standard required by 18 AAC
12 75.425(e)(5) must provide a mathematical calculation of the applicable response planning
13 standards set out in 18 AAC 75.430 – 18 AAC 75.440 and 18 AAC 75.422, and include a
14 detailed calculation and justification of any reductions to the response planning standard.”
15 Merely showing that the skimmers can pump at a given rate does not demonstrate that the
16 equipment could actually recover the RPS volume within the necessary timelines and my
17 calculations showing the deficiency in OW TF encounter rates were not directly disputed. I
18 do not contest the DEC finding that there is a lot of boom in the inventory, but the mere
19 accounting of boom length in the C-plan or Findings Issue #11 does not sufficiently
20 demonstrate that the boom will be deployed with skimmers in a manner that would encounter
21 and recover the RPS volume, particularly in high current and/or high sea conditions. The
22 SERVS Technical Manual that shows the amount of boom with each skimmer task force
23 must be used with the worst case oil spreading rates to determine if the oil could actually be
24 encountered, but permittees and DEC deliberately excluded such an analysis from the C-
25 plan and all plan approvals. The Findings description of the different wave conditions
26 requiring different boom only serves to reinforce the point that much, if not all, of the boom
27 is likely unsuitable for the GOA, North Pacific, Bering Sea or Cook Inlet conditions. The
28 lack of environmental data for these regions of operation, specific RMROL information on
29 each type of boom and a deficient BAT Conference Report all serve to preclude a competent
30 analysis of the capability of permittees’ ability to meet the RPS with their current boom
31 inventory. Since the DEC Findings are not on point and do not dispute the proffered
32 encounter rate calculations I resubmit my 10/15/07 comments for a fair review: “The prior
33 RFAI on this issue was not addressed and is resubmitted for reconsideration. The C-plans do
34 not show any calculations establishing the ability of the vessels, skimmers and/or boom to
35 meet the RPS as discussed above. Applicants cannot rely on the prior Anvil Study or other
36 such recovery calculations where those calculations have never considered encounter rates
37 when determining compliance with the cited regulations. Regulations require an examination
38 of the sufficiency and suitability of vessels, skimmers and boom, necessitating an encounter
39 rate analysis to determine if the skimming task forces as configured in the SERVS Technical
40 Manual could indeed encounter and recover enough oil to meet the 300,000 bbl and
41 maximum discharge RPS. No analysis of encounter rates has been done to date, much less
42 for the worst case spreading scenario in the high current ACC that has been totally ignored
43 throughout the successive C-plans. This is clearly not merely an oversight where the SERVS
44 Technical Manual clearly shows how to calculate spill concentrations and encounter rates but

1 does not do so for the spill scenarios in the Core Plan. Oil spill expert Al Alan recently
2 provided a presentation to the ARRT explaining that crude spills will, within a few hours of
3 being released, spread to an average thickness of about 0.1 mm. The attached NOAA
4 discussion of material spill parameters clearly indicates that encounter rates must be
5 considered and supports the Alan analysis and conclusions, particularly where hot TAPS oil
6 is spilled into the high ACC currents that would rapidly spread the spill into very thin layers
7 and/or very low average concentrations⁸. There must be an analysis to show that there are
8 enough boom, skimmers and vessels of appropriate quality that are timely deployed to
9 encounter and deliver to skimmers the RPS volume spill dispersed to an average thickness of
10 approximately 0.1 mm. This is an enormous area⁹ that the listed skimmers operating at a
11 maximum velocity of 1 knot simply cannot cover within 72 hours given the listed encounter
12 widths of the task forces. The currents in Cook Inlet, for those tankers that also operate in
13 this region, would cause even greater spreading of oil and could be exacerbated by the
14 inability to use boom in broken ice conditions and these conditions have never been assessed
15 in these C-plans. The lack of an encounter rate analysis is further compounded by DEC's
16 failure to comply with regulations requiring it to comparatively analyze all RPS equipment
17 to select the more efficient/effective technologies and designate those operations/geographic
18 areas where the more effective technologies should be utilized. John Kotula has previously
19 stated that the use of multiple cascade booms with Transrec Task Forces were eliminated
20 because they were impractical to maneuver, so there's a limit to the amount of boom that
21 could be added to improve encounter rates but there has been no commensurate increase in
22 Task Forces to compensate for the reduced encounter rates, and there has been no upgrade of
23 Open Water Task Force skimmers to otherwise increase encounter rates through increasing
24 the maximum advancing rate of the skimming systems. Where DEC/applicants presume that
25 addition collection of oil apart from those boom/skimmer configurations described in the
26 Technical Manual, applicants must specifically describe the additional appropriate vessels
27 and boom used and an appropriate procedure for transferring the oil to skimmers that
28 minimizes the loss of oil. The effect of these procedures on the ability of advancing
29 skimmers to maintain their advancing speed must also be analyzed, (e.g. if a skimmer must

⁸ Even if the oil maintains sufficient cohesion to retain layers thicker than 0.1 mm, the high current will break the slick into discrete patches that could easily lower the average oil concentration below the 0.1 mm continuous spill coverage over the vast majority of the total area impacted by the spill. High winds would additionally disperse the spill into windrows and the recovery TFs could not go any faster than the maximum effective speed of their boom and skimmers in order to retain/recover oil already collected in the boom despite potentially considerable distances between oil patches/windrows.

⁹ Assumptions for a rough oil dispersion/encounter rate analysis: A 300,000 bbl spill quickly reaches and average thickness of 0.1 mm in the 3 knot ACC during RMROL weather conditions. Conversion factors used are: a nm=1853.2 m; a nm²=3,434,350 m²; a m³ of oil=6.29 bbl; a nm² of spill area @ 0.1 mm thickness=343.4 m³ of oil or 2,160.2 bbl/nm²; a 300,000 bbl of oil spread to an average thickness of 0.1 mm covers an area of 138.88 nm²

A TransRec TF has a 1,000 ft. encounter width, as per SERVS Technical Manual, and given a generous maximum velocity of 1 knot can skim and area of 0.164 nm²/hr. Five TR TFs can therefore skim over an area of 0.822 nm²/hr that contains 1775.7 bbl of oil at an average thickness of 0.1 mm. Over the predicted 58 hours of active oil recovery the five TF TFs could, assuming an unattainable 100% recovery of all oil encountered, recover a maximum of 102,989.7 bbl of oil. Even using these ridiculously conservative assumptions, the five TR TFs could only encounter about 40 % of the oil that Shippers' scenarios assume is recovered by the TR TFs to meet the 72 hr 300,000 bbl RPS, leaving about 150,000 bbl on the water to impact downstream resources and communities.

1 stop or slow to accept oil from other independent collection booms, its own encounter rate
2 must be commensurately lowered).

3
4 RFAI: Please require the applicants to amend their plans to show compliance with the full set
5 of RPS requirements that must necessarily include an encounter rate analysis under worst
6 case spill spreading conditions in each region of operation that may be affected by a spill
7 from a TAPS tanker. The Anvil Study has been proven inaccurate and failed to consider the
8 amount of boom and/or the advancing speed of the skimmers needed to scientifically assess
9 the ability to meet the applicable regulations. An analysis of the amount and type of boom,
10 skimmers and vessels needed to meet the RPS must also be performed for the recognized
11 more demanding conditions in the GOA and high current areas. Without submission of this
12 information any decision on compliance would necessarily be arbitrary. DEC must
13 furthermore comparatively analyze all available spill response equipment in order to produce
14 the mandated recommendations for operations/geographic areas where the more
15 efficient/effective equipment should be used within the affected regions of operation.”

16
17 10)RMROL, specific task force and equipment limitations, geographic specific constraints and
18 as addressed in Findings as Issue # 7. There are two essential intertwined elements to this
19 issue: the failure of the C-plan to show the limitations of “each item of oil recovery
20 equipment” listed as required by 18 AAC 75.425(e)(3)(F)(iii), and; the failure of DEC to
21 comparatively analyze all response equipment based on these limitations to definitively
22 determine which equipment is most appropriate and reliable for each operation and
23 geographic specific area as required by 18 AAC 75.447. Rather than respond in terms
24 required by the cited regulations, DEC instead listed another regulation and obfuscated the
25 issue. Moreover, DEC’s Findings admitted that it was pursuing an unlawful
26 “phased”/deferred and non-public decision-making process to correct the deficiency that has
27 been a heated “bone of contention” for 12 years. I therefore resubmit my 10/15/07 comments
28 for a fair public review pending a reopened public comment period during an extension of
29 the old permit: “Although applicants generally discuss the broad environmental limitations to
30 response within PWS, they fail to attach such limitations to any specific equipment or task
31 forces described in the SERV S Technical Manual as mandated by section 425(e)(3)(F)(iii).
32 Without this comprehensive association of limitations to specific equipment/task forces it is
33 nearly impossible to assess the veracity of the response scenarios provided, to propose
34 specific upgrades for specific inappropriate equipment and alternative compliance measures
35 when RMROL is eventually exceeded. This type of equipment specific analysis was clearly
36 mandated as an essential component of the BAT Conference Report that has not been
37 provided in the 27 years that BAT statute has had the force and effect of law. Applicants also
38 fail to use the latest available data on environmental conditions both within PWS and
39 particularly in the remaining areas unaddressed in the greater region(s) of operation. Without
40 any specific guidelines on just how often RMROL may be exceeded and still comply with
41 RPS requirements, application of the RPS requirement is strictly arbitrary. There are
42 apparently no limitations on exceeding RMROL and this lack of standards effectively
43 renders the RPS regulation meaningless as it implies that applicants may merely show an
44 ability to operate within its operational limits a small fraction of the time and still

1 theoretically comply with the RPS regulation, (see PWS RCAC Response Gap Report for
2 major deficiencies within PWS). This is particularly disturbing where advanced technologies
3 could allow RPS compliance under a considerably greater range of adverse conditions, and
4 therefore for a much greater period of time, but DEC failed to perform its mandated duties
5 pursuant to 18 AAC 75.447. DEC simply cannot provide an exemption from RPS
6 compliance for circumstances that can be remedied with addition of more or more effective
7 equipment. A prime example of this predicament is applicants' acknowledgement that the
8 OceanBuster technology could provide response in more severe seas and in higher currents
9 than the present OW TFs but refused to incorporate this technology despite their purchase of
10 at least two units. Why should applicants be given an effective waiver of strict RPS
11 compliance during RMROL conditions where they could easily eliminate a substantial need
12 for a waiver by incorporating OceanBuster technology? The unwillingness of DEC to
13 prepare a comprehensive analysis of relative response equipment effectiveness in adverse
14 conditions suggests that DEC has intended all along to conduct an arbitrary analysis of
15 RMROL and RPS compliance. Indeed, where it has been established that environmental
16 conditions in the region of operation exceed the RMROL conditions of response equipment,
17 applicants are strictly out of compliance with RPS standards because the statutory RPS
18 standards do not allow for partial compliance. While RMROL regulations do show an
19 allowable substitution of prevention measures under problematic response conditions, this is
20 not consistent with the statutory language and is as arbitrary and ill-defined as to render the
21 statutory intent of RPS standards meaningless.

22
23 RFAI: Please require the applicants to amend their plans to show compliance with the
24 RMROL requirement and to show equipment and tactics to meet the RPS requirement to the
25 extent that is technologically feasible. The RMROL section should individually assess the
26 limitations of each type of response equipment as used in the task forces described in the
27 SERVS Technical Manual. Applicants must disclose the latest/best available environmental
28 data, particularly outside of PWS proper but within the tankers' region(s) of operation. DEC
29 must also prepare and submit for consideration an equivalent analysis of response
30 technologies with additional recommendations as to specific geographic locations where the
31 most effective or efficient equipment should be utilized pursuant to its obligations under
32 applicable BAT regulations. If DEC contends that any exemption from meeting the RPS is
33 allowable, DEC must establish a maximum limit on what percentage of the time non-
34 compliance is acceptable in a published and publically reviewed guideline that also addresses
35 which circumstances are an allowable exemption from meeting RPS standards, and what
36 additional prevention measures are an acceptable alternative to strict RPS compliance.”

37
38 11) Scenarios, most demanding conditions/spill trajectories and as somewhat addressed in
39 Findings Issues #s 2 and 5. This issue directly relates to the Geographic Scope, RMROL, and
40 RPS issues presented above and Sensitive Area issue below. Both the PWS RCAC and I
41 presented strong arguments to the effect that the RPS Scenario 809 in the C-plan was
42 unrealistic, did not stress the logistics capability and did not demonstrate the ability to
43 intercept and recover oil migrating over long distances outside of PWS. The Findings only
44 generally addressed the permittees' ability to mobilize response resources from downstream

1 communities but in no way addressed our concern that the scenario actually be required to
2 show the logistics of deploying the necessary resources from PWS and from downstream
3 communities into the GOA. DEC's responses were clearly designed to evade: compliance
4 with the requirement: "...to provide additional response strategies to account for variations
5 in receiving environments and seasonal conditions", and; "design[ing] a spill response, [for]
6 severe weather and environmental limitations that might be reasonably expected to occur
7 during a discharge event". Neither the C-plan nor the Findings addressed the questions of
8 designing an RPS scenario to: meet the RPS under the highly restrictive GOA Agreement;
9 address the fact that there was insufficient environmental data to properly analyze response
10 in the GOA; address the fact that the response equipment designed for PWS was not
11 appropriate for the more severe known GOA conditions established the GOA Agreement and
12 by expert opinion provided on the Alaska Coastal Current velocity; address the fact that the
13 increased travel distances that would result from the rapid spreading of oil caused by the 3+
14 knot Fall ACC would severely exacerbate logistical problems and substantially lower
15 recovery rates even in calm seas. I therefore resubmit my 10/15/07 comments and reference
16 RCAC's and my prior comments for a fair review: "This issue is submitted for
17 reconsideration again. Applicants fail to assess the most demanding scenarios for spill
18 response and are essentially "cherry picking" conditions and spill locations to insure an
19 illegitimate compliance with the RPS requirements using unrealistic and incomplete
20 scenarios. This issue directly relates to the RMROL and RPS issues presented above as any
21 determination of RPS and RMROL measures must necessarily be derived from the feasibility
22 of response under the most demanding conditions that are reviewable when incorporated into
23 scenarios pursuant to sections 425(e)(3)(F) and 445(f). The worst case response scenario
24 should be constructed to stress response assets to the limits of equipment/task force
25 capability in the analysis to best reflect the ability of the applicant to effectively respond in
26 conditions frequently experienced during tanker transits and often exceeded. The most
27 demanding scenarios must be constructed for every region of operation transited by each
28 tanker because the in-region RPS equipment is directly tied to that region of operation by
29 regulation and must be evaluated for that region. Out of region equipment must also be
30 analyzed for reliability and appropriateness for the region in which it is intended to be
31 deployed. The scenarios and other C-plan text proffer mutually exclusive claims that the OW
32 TFs will both stay in the thick oil at the spill source and otherwise follow the oil wherever it
33 goes. This is impossible given that the 3+ knot Fall ACC can transport the leading edge of
34 the spill over 216 nm from the spill source in less than 72 hours. Under these high current
35 conditions, even the first OW TF on scene may have to skim for 45 hours at one knot just to
36 reach the leading edge of the spill, much less contain this broadly distributed, thinned-out
37 slick to encounter enough oil to meet is portion of RPS contribution represented in the
38 scenarios. If the expected large instantaneous release of oil due to hydrostatic equalization
39 associated with a 300,000 is assumed, the OW TFs that are dedicated to the spill site must
40 simply ignore the substantial portion of the slick that was instantaneously released and has
41 moved a great distance from the source by the time the TFs arrive. This necessarily means
42 that the full 300,00 bbl can never be recovered and downstream
43 communities/resources/sensitive areas are unprotected. In fact, the only way that these
44 scenarios would allow recovery of 300,000 bbl of oil in high current conditions is if the spill

1 is several times larger than 300,000 bbl and the OW TFs allow oil to be entrained under their
2 booms while maintaining skimming operations at the spill source where the oil is thickest.
3 This is blatant subversion of the intent of the law requiring the effective containment, control
4 and recovery of all oil spilled to prevent adverse impact to sensitive areas and the reasonable
5 concurrent uses of Alaskan resources guaranteed by our constitution. This circumstance
6 would be particularly aggravated in the GOA where the use of fishing vessels for OW TF
7 booming and nearshore recovery is further restricted beyond scenario assumptions by the
8 GOA Agreement. The scenarios must minimally reflect a realistic distribution of oil at
9 RMROL wind, wave and visibility conditions in the 3+ knot ACC and an effective RPS
10 response for a spill originating in the Alaskan state waters at Seal Rocks, Wessel's Reef
11 and/or Middleton Island. Commensurate response capability must be shown in additional
12 scenarios for the appropriate tanker RPS within every region of operation that each tanker
13 transits.”
14

15 12)Protection of Environmentally Sensitive Areas, incorporation into scenarios, development of
16 additional GRSs and as addressed by Findings in Issue # 8. This issue concerns two primary
17 elements; incorporation of sensitive area protection into a realistic RPS scenario, and;
18 develop more GRSs so that any future scenarios will be more realistic and the areas be
19 timely protected. Both the PWS RCAC and I both expressed concern that the RPS scenario
20 should show deployment of GRSs and that more GRSs are developed. The Findings are
21 internally contradictory in that DEC found that there were thousands of important places in
22 PWS alone but only 57 GRSs were completed. It then concluded there were enough GRSs
23 and equipment to protect all sensitive areas without being able to check against the thousands
24 of missing GRSs that would most likely show deficiencies in both the timeliness of
25 deployment and equipment quantities. DEC then appeared to construct a bright line between
26 formulating more GRSs and testing the ones in existence. DEC misconstrued our concern to
27 fully develop scenarios that included sensitive area protection and otherwise constructed a
28 false barrier to new GRSs with no supporting evidence for its position. I therefore resubmit
29 my 10/15/07 comments and refer to the RCAC and my prior comments on this issue to
30 obtain a fair review: “Despite the proximity of the spill in the provided scenario to the
31 critically important herring spawning grounds on Northern Montague Island, the scenario
32 fails to show that response resources that can be timely/effectively deployed to exclude oil
33 from these areas before oil reaches them. Every scenario provided must minimally show that
34 the geographic response strategies for the potentially impacted sensitive areas can be timely
35 deployed along the projected spill trajectory. Many of the GRSs that have been produced
36 have questionable ability to effectively exclude a large spill from those areas given the seas
37 states, wind and current that would be expected in any scenario that reached RMROL limits.
38 The scenarios must reflect the intent and capability to effectively exclude oil from sensitive
39 areas in the spill trajectory under all conditions set forth in the scenario so that the
40 public/DEC can assess applicants’ ability to both exclude oil and meet the RPS, which have
41 independent compliance criteria but must be concurrently implemented during a spill. An
42 additional 10 to 15 new GRSs should be developed each year to insure timely protection of
43 resources and for incorporation into subsequent spill scenarios.
44

1 RFAI: Please require the applicants to amend their plans to incorporate GRS/oil exclusion
2 plans for sensitive areas in their RPS scenarios. Please require the applicants to amend their
3 plans to show their intent to develop at least 10 new GRSs per year that can effectively and
4 timely exclude oil from sensitive areas.

5
6 13) This issue was an inadvertent copy of the one above. It is therefore replaced with # 8 from
7 my first set of comments on 7/23/07 that garnered no response from DEC and is resubmitted
8 for a fair review: "Response Planning Standard, prevention credits: Applicants presume that
9 they will be granted an 11% prevention credit where that credit may not be granted due to a
10 lack of BAT escorts available for all escort categories all of the time. The PWS RCAC
11 recorded and calculated that a Theriot class tug was assigned to HE tug duty 47% of the time
12 in 2006 where this tug had been previously disqualified for this duty. APSC has additionally
13 made a presentation to RCAC explaining that ETTs or PRTs were not available for all tanker
14 escorts. This issue is particularly pertinent where SERVS has admitted that the ETT and PRT
15 were designed to operate in a complimentary manner providing primary and secondary
16 escort respectively and maintaining this combination for all laden tankers would be more
17 difficult than allowing for use of the PRT as primary escort or the ETT or a conventional tug
18 as a secondary escort. Further analysis requested above may well show that a more capable
19 tug than the PRT or ETT could/should be assigned to primary, secondary or the HE tug duty
20 as well.

21
22 RFAI: Please require the applicants to amend their plans to show compliance with the full
23 RPS requirements without any credits as the granting of those credits is contingent upon
24 satisfaction of specific criteria that is still under review and arguably susceptible to failure.

25
26 14) BAT Analysis, towlines. The DEC Findings do not address these concerns and my 10/15/07
27 comments are therefore resubmitted for a fair review: "This issue is submitted for
28 reconsideration again. Applicants inappropriately equate the static standards for the PWS
29 tow package with the periodically-improving "best" standard applied to towline systems on
30 board the tugs that must be reviewed and determined every five years. If DEC concurs with
31 applicants' position that the static standard applies to either type of towline, DEC has the
32 obligation to show that it has periodically reviewed and determined the best towline
33 components that are otherwise represented by the static standard. Applicants materially omit
34 towline component specifications for the tugs despite detailed, but incomplete, accountings
35 and descriptions for their tankers, thereby precluding a comparative assessment of tug
36 towline systems. While applicants may be convinced that their towline systems constitute
37 BAT, they cannot withhold the exact specifications and simply baldly assert they are the best
38 available. These detailed specifications and a complete comparative analysis must be
39 provided so that the public and DEC can independently assess whether full compliance has
40 been achieved. This issue is particularly pertinent where it has been otherwise disclosed that
41 SERVS tugs do not always use surge gear, shackles and pennants that were deemed
42 necessary to maintain towline, chock and bollard integrity. Each tanker and tug must show
43 the working load and breaking strength of critical load bearing fixtures on the tanker and
44 tugs to assess the appropriateness of the associated towline components. Where the required

1 detailed specifications are provided there are glaring inconsistencies that certain components
2 are woefully insufficient to carry the load from other in-line components and similar
3 components on other vessels are of lesser quality and/or strength and therefore cannot be
4 considered BAT when compared to the strengths/quality of the limited selection among the
5 different vessels, much less when compared to components commercially available. Some
6 prime examples of these conundrums are:

7 The tugs and tankers show the use of a wide range of main towlines constructed of
8 HMPE ranging from a diameter of 2.2” to 3.75” and not all tugs/tankers have HMPE lines on
9 board. Not all lines are rated for their maximum load or have any descriptor of the quality of
10 construction or minimal acceptable state of repair. The lines with load ratings wildly vary
11 between 204 and 255 tons and worn and/or spliced lines could be considerably weaker. One
12 could categorically state that tugs and/or tankers without the highest rated and new HMPE
13 lines of the best construction and wear protection were disqualified as BAT but other weaker
14 load bearing components could defeat the whole system and the wire towlines might be
15 needed for the specific function of the tug or location that the line is deployed from on the
16 tanker. Moreover, there is no accounting of the forces the tug must generate through the line
17 in order to perform its intended purpose as argued above and the 3.75” diameter line may
18 have insufficient breaking strength, wear tolerance and reserve dynamic loading tolerance.
19 Much larger HMPE lines are available and the reserve dynamic loading tolerance and critical
20 load reserve suggested by the Naval Rigging Manual would disqualify all but the
21 largest/strongest HMPE towlines made, (at least 4.72” diameter Steelite Superline at 839
22 tonnes), given the ability of the ETTs to generate a dynamic towline force well over 255 tons
23 of force at the 12 knot maximum tanker speed.

24 Multiple tugs and tankers also have wire rope on board that also have broad ranges in
25 strength and some vessels have no wire rope at all. One could argue that tugs or tankers
26 without the 2.5” wire rope are disqualified as BAT but the same constraints in evaluation of
27 HMPE lines apply.

28 Tesoro vessels show strong points, chain and towlines rated at over 200 tons but the
29 joining shackle is rated at 57 tons. Although shackles are typically rated by working load
30 instead of breaking strength, the rating system is not made clear for all components and the
31 shackle would represent an unacceptable weak link even if an appropriate working load to
32 breaking strength factor were applied. Moreover, in this instance, it is fairly clear that the
33 component strengths vary so widely that irreplaceable components might fail first under
34 strain causing a serious safety threat where there should otherwise be a weaker pennant
35 designed to safely fail among the other equally rated components. The parted pennant would
36 allow the other essential components to remain intact, allowing easy retrieval of the towline
37 by the tug with the pennant most easily replaced and reattached to the tanker’s chain/chaffing
38 gear.

39 Some tugs and tankers show the availability of surge gear that is not adequately described
40 in any instance and no procedures for its use is provided despite the fact that it is widely
41 known that the surge gear is not normally used when tethering to the tanker. Even if all of
42 the surge gear was completely described and the required complete component system
43 performance and BAT analysis provided, without any procedures for its use, it might as well
44 be left on shore.

1
2 RFAI: Please require the applicants to amend their plans to show compliance with the BAT
3 towline standard. The exact specifications of all towline components in each tug towline and
4 tanker tow package system must be provided as the towline system is only as strong as its
5 weakest link. Each tanker and tug must show the working load and breaking strength of
6 critical load bearing fixtures/components in-line between the tanker and tug. The towline
7 components and available alternatives must thereafter be contemporaneously comparatively
8 analyzed for each tug and tanker in the fleet and such analyses must minimally comport with
9 the performance requirement that is intrinsically tied to the tug performance requirements
10 argued above. Applicants must specify the exact conditions under which any of the towline
11 components would or would not be utilized on an escort or during a disabled tanker rescue.
12 DEC must show that it has conducted a comparative analysis of towline systems within the
13 last five years to establish the “best” towline system and that it has amended its static towline
14 standard commensurate with the conclusive findings in its analysis.”
15

16 15) Lists for scenario resources. DEC’s Finding in Issue #5 partially addresses this matter and is
17 not dismissed outright as there is a better listing of personnel but it is still insufficient
18 because it is not comprehensive and does not provide sufficient distinctions to know if the
19 personnel complement is for one shift or the whole day. The equipment lists are similarly
20 incomplete and these lists must be comprehensive to allow comparison to the SERVS
21 Technical Manual listings to make a determination of RPS compliance. Two prime examples
22 of these deficiencies are Tables 1-13 and 1-14. The first table doesn’t list the GrahamRec
23 Skimmers, provide a sufficient description of the different skimmer types or the 72 hour
24 totals for the different skimmer types. The personnel list doesn’t list all of the task forces and
25 doesn’t show multiple shifts, and if it does, there is a clear deficiency of specialized/trained
26 personnel. I therefore resubmit my 10/15/07 comments and refer to the RCAC and my prior
27 comments on this issue to obtain a fair review: “The C-plans do not have a single set of
28 comprehensible lists for available equipment, personnel and logistical support equipment
29 needed to effectuate each of the required spill scenarios as described and requested above.
30 Although the amended lists submitted are considerably better, they are still not internally
31 consistent are incomplete and certainly did not consider all of the necessary parameters
32 brought forth in my comments and RFAs.
33

34 RFAI: This issue is submitted for reconsideration again. Please require applicants to provide
35 a single set of lists of equipment, personnel and logistical support resources in with each
36 scenario to comport with the amended scenarios as requested above. Each list should be
37 divided into subsections that reflect compliance with discrete regulatory
38 requirements/approval criteria, (i.e. an equipment list should show subsections of
39 escorts/sentinels, VMT tugs, oil storage, RPS equipment, source control, spill detection and
40 tracking, communications, sensitive area protection, etc.).
41

42 16) Failure of DEC to comply with 18 AAC 75.447. The DEC Findings do not address these
43 concerns and my 10/15/07 comments are therefore resubmitted for a fair review: " DEC has
44 argued/testified in multiple Alaskan courts that it would prepare a BAT Conference Report

1 that it would use in C-plan reviews to assess and advance the capability of equipment used
2 by planholders for equipment regulated by 18 AAC 75.445(k)(1). DEC has consistently
3 failed to conduct the required comprehensive analyses over the 27 years the BAT statute has
4 been in effect and the 10 years the section 447 regulation has been in effect. DEC effectively
5 ignored pleas from citizens to provide a comprehensive analysis and subsequently produced
6 a very limited report that contained no recommendations for geographic areas or operations
7 where the newly discovered technologies should be used. DEC has not even produced the
8 report for review and application to the instant C-plan reviews. Moreover, where DEC has
9 rendered a decision that established the increased effectiveness and efficiency of using more
10 maneuverable and powerful tugs for the TR TF barges, (decision to replace ERVs with
11 PRTs), it failed to consistently apply these findings to all TR TFs. Given that the central goal
12 was to increase barge maneuverability and power, DEC must now make specific findings on
13 which technologies could achieve or surpass the advances offered by the PRTs for the barges
14 that remain unattended by advanced technology tugs. I request that DEC consider use of
15 advanced technology tugs for barge maneuvering where they are otherwise necessary to
16 complete a BAT escort complement as argued above, and to otherwise require the
17 installation of appropriate stern thrusters on the barges to increase their maneuverability and
18 power when used with a conventional tug as its mate. This latter option may well prove
19 superior to the strict use of advanced tugs due to the fact that even advanced tugs must revert
20 to towing barges on a long stern towline when wave action precludes the safe maneuvering
21 with the barge on the hip/beam, thus losing much of the maneuvering advantage gained by
22 the tugs' advanced propulsion systems. Indeed, the SERVS Technical Manual shows the
23 barges being towed behind the tugs in contravention of the enhanced maneuvering principle
24 previously established and that should only be used when tug and barge interactions become
25 unsafe in high seas. The use of a remotely controlled barge maneuvering thruster even with
26 the advanced tugs may be necessary to provide the necessary maneuverability in common
27 GOA conditions that also require an upgrade of the skimming systems to high current
28 skimmers that can also safely deployed and operate in high seas, (e.g. Integrated
29 OceanBuster Systems, Oil Sea Harvester, Force 7 Rope Mops and AP OSRV). Only the AP
30 OSRV or the Lamor Oil and Ice Separator systems could also operate in the ice choked
31 waters within 25 miles of the Columbia Glacier and only the AP OSRV design could switch
32 to using Zero Velocity Rope Mop Skimmers should the vessel be tasked to chase widely
33 dispersed oil in a high current spill trajectory that contained little or no ice. DEC must now
34 reconsider all citizens' comments previously submitted for the BAT Conference Scoping
35 process and those comments are adopted and incorporated herein by reference as the
36 minimal review parameters for determining which "Tier I" technologies must be evaluated
37 and are legitimately the subject of the instant C-plan reviews. The findings of these analyses
38 must be submitted for public review at least 10 days prior to closing the public review period
39 pursuant to section 455(f) and (h). DEC's failure to timely provide that report detailing the
40 required information within the cognizable scope of the mandated investigation and with
41 specific recommendations with respect to applicable geographic regions and operations in
42 conformance with applicable statutes, regulations and as represented by DEC in Alaskan
43 courts of law would constitute unfair treatment and a violation of my constitutional rights to
44 due process and equal protection under the law. A prime example of DEC's bad faith in

1 these investigations is painfully obvious where they stated their intent to examine high
2 current booms but when presented with copious information on the OceanBuster booming
3 systems by NOFI at the BAT Conference, DEC refused to consider the improvements in
4 effectiveness and efficiency of these systems in higher sea states that accompany high ACC
5 currents in the GOA. DEC has clearly manipulated the scope of its analyses in bad faith and
6 to such a degree as to unlawfully deny potentially affected citizens clearly substantial
7 benefits from advancements in response technologies. DEC has one last chance to perform its
8 mandated comprehensive technology assessment duties prior to closure of the instant public
9 review.”

10
11 17)RPS calculations and as tangentially addressed in Findings Issue #5 Personnel Verification.

12 Although Table 1-14 purports to list specialized barge personnel for some of the task forces,
13 it is well known that these personnel, and particularly the certified/specialized personnel are
14 neither on the barges full time nor on the tugs that would mobilize the barges. This issue
15 becomes critical where credit for barge recovery is not warranted due to a lack of
16 immediately available qualified personnel. Because DEC did not directly address the timely
17 availability of the very specific manning requirements for OSRBs as set forth for OSRVs in
18 Issue # 8 above, I resubmit my 10/15/07 comments for a fair review: “The use of OSRVs and
19 OSRBs to recover, store and transfer oil may not accrue credit to the proffered calculations
20 of RPS and storage capacity requirements unless and until the permit applicants can show
21 that the barges will be timely manned with sufficient numbers of personnel as required for
22 such vessels in the USCG Marine Safety Manual. The blatant attempt to receive undue credit
23 for their unlawfully manned OSRVs over 500 gross tons requires DEC to solicit all material
24 information regarding the qualifications and quantity of the crews dedicated to the OSRVs
25 and OSRBs.

26
27 RFAI: Please require applicants to provide a single set of lists of OSRV and OSRB
28 personnel with their qualifications to work in their assigned positions for each scenario.”

29
30 (3)(B) ALTERNATIVES: These alternatives are designed to address the minimally acceptable
31 spill prevention and response obligations for the known tanker traffic of one or more permittees
32 through the PWS, Cook Inlet, Kodiak, Aleutian and Southeast Alaska regions of operation.
33 Notwithstanding DEC’s cited obligations to produce or require production of material
34 information, conduct the required analyses and apply the panoply of approval criteria to the C-
35 plans at issue, I would accept the following enhancements of equipment, personnel and
36 procedures in lieu of the afore stated, and in virtually all cases, much more substantial
37 requirements and requests:

- 38
39 1) Require the timely construction and deployment of a BAT Hinchinbrook Entrance tug
40 substantially similar to that proposed in the submitted by Glosten proposal and otherwise
41 represented by my SXT 121 TractorPlus concept tug. The tug must have a state of the art
42 hull inspection, diagnosis and salvage/repair capability. A PRT is the only acceptable tug
43 for temporary replacement if the HE tug was out of service or on escort elsewhere in
44 PWS.

- 1 2) Require the timely modification and deployment of the existing lightering barge into a
2 state of the art lightering barge with stand-off lightering, subsurface lightering and heavy
3 lift capability for stationing at a centrally located anchorage in PWS. There must be at
4 least 6 pumps and hydraulic power equivalent to the TK-200 with power packs. This
5 vessel must also carry all necessary source control equipment. Appropriate hose reels
6 must be provided for all pumps.
- 7 3) Require the timely acquisition or dedicated contracting, outfitting and deployment of two
8 appropriate instrument rated spill surveillance aircraft, (one if a C-130 or better, long
9 duration, high capacity aircraft is used). The craft must be able to employ the most
10 effective multi-sensor spill detection and quantification capability. One of these aircraft
11 must be stationed within 150 miles of Valdez and be available on call 24/7, except while
12 under repair. Diligent efforts for temporary replacement must be employed if it is
13 anticipated to be out of service for more than one week.
- 14 4) Require the timely modification and deployment of 3 of the TransRec barges in PWS,
15 with each capable of automatically deploying and effectively operating two OceanBuster
16 Integrated Skimmer and boom systems without the assistance of boom towing vessels.
17 Each OceanBuster must have a pumping capacity >1,800 bbl/hr. Two of these OB barges
18 must have a wirelessly controlled stern thruster >1,000 KW installed.
- 19 5) Require the timely modification and deployment of a ship shaped oil barge/vessel
20 >100,000 bbl capacity into an AP OSRV to automatically deploy and effectively operate
21 at 4+ knots using two inclined plane skimming systems or 6 ZRV rope mop skimmers,
22 with each optional system providing a total pumping capacity > 3,600 bbl/hr to be
23 maintained at the closest available anchorage to Columbia Glacier as a replacement for
24 an existing TR barge.
- 25 6) Require the timely modification and deployment of a ship shaped oil barge/vessel
26 >60,000 bbl capacity into an AP OSRV to automatically deploy and effectively operate at
27 5+ knots using 4 ZRV rope mop skimmers providing a total pumping capacity > 2,000
28 bbl/hr to be maintained in Resurrection Bay. This vessel must also carry all necessary
29 source control equipment.
- 30 7) Require the timely modification and deployment of a ship shaped oil barge/vessel
31 >60,000 bbl capacity into an AP OSRV to each automatically deploy and effectively
32 operate at 4+ knots using two inclined plane skimming systems or 6 ZRV rope mop
33 skimmers, with each optional system providing a total pumping capacity > 2,000 bbl/hr
34 to be maintained as a replacement for the B-141 in CI.
- 35 8) Require the timely modification and deployment of a lightering barge with >40,000 bbl
36 into a state of the art lightering barge with stand-off lightering and subsurface lightering
37 for stationing in CI. There must be at least 4 pumps and hydraulic power equivalent to the
38 TK-200 with power packs. This vessel must also carry all necessary source control
39 equipment. Appropriate hose reels must be provided for all pumps. An appropriate FIFI
40 Class I tug must be timely available for rapid barge deployment.
- 41 9) Requirements of F for Kodiak
- 42 10) Requirements of A for Unimak Pass
- 43 11) Requirements of B for Unimak Pass
- 44 12) Requirements of E for Unimak Pass

- 1 13)Requirements of G for Adak
2 14)Requirements of H for Adak
3 15)Requirements of G for Shemya
4 16)DEC must require all of the vessels regulated herein to circumnavigate the SE AK region
5 of operation/COTP zone unless they acquire A, B and D above for SE AK.
6 17)DEC must diligently pursue the safest possible traffic scheme with the USCG for the
7 GOA to minimize ship collisions with laden tankers and to prevent discharged oil from
8 entering PWS on the Alaska Coastal Current.
9 18)DEC must diligently pursue an equitable sharing of costs, for acquisition and operation
10 these spill prevention and response assets, by all public and private entities that may be
11 liable for such costs pursuant to applicable statutes, regulations and equitable principles.
12 19)All tugs specified herein and otherwise used as escorts or rescue tugs in Alaska must
13 have all necessary towline components, (steel and synthetic main tow lines, shackles and
14 nylon surge gear), and backup towline systems that can safely sustain 550 tons of
15 dynamic towline force and at least 8 chafe-resistant towline pennants of varied strength
16 ratings from 125 to 525 tons. An appropriate selection of messengers with lighted buoys
17 and line-throwing guns must be on all such tugs.
18 20)The shore-side half of the inbound and outbound vessel traffic lanes in Valdez Arm shall
19 be closed to tanker traffic and laden tankers shall reduce their maximum speed to 1 knot
20 below the established maximums when sailing in the open half of the Valdez Arm Vessel
21 Traffic Lanes.
22 21)All laden tankers shall stay tethered to a VSP tractor tug between the VMT and Seal
23 Rocks. If the sea states require the discontinuance of the tether in the interests of safety
24 more than two times, the sea states that represented that safety concern shall represent an
25 upper limit to tanker transit.
26 22)All laden tankers shall maintain a PRT or VSP tractor tug as a secondary escort between
27 the VMT and Seal Rocks.
28 23)Tanker traffic shall be scheduled in such a manner as to allow an ABS classed
29 firefighting vessel of FIFI I, or better, in the Port of Valdez. Permittees must have this
30 vessel at the VMT, or in close escort of the tanker, in ready firefighting mode whenever
31 there is a tanker within ½ nm of the terminal.


32 All of the above conditions are subject to negotiated modification should the material facts
33 indicate better solutions to the stated problems.
34

35 (3)(C) Documents pertinent to the Informal Review would necessarily include the entire
36 administrative record that is solely in the possession of DEC. The review of the entire record is
37 required where I claim that the necessary information is not in the record and reference to
38 documents made in DEC Findings were not provided even subsequent to my Public Documents
39 Act request in my 10/15/07 comments:

40 “DEC has voiced its intent to consider documents beyond those provided for public
41 review in its permit approval process and I my prior request that all documents that are
42 material to the approval decision be specified and publically available for review has
43 been ignored. Consideration of additional documents by DEC, other than those publically
44 available with the C-plans at regional repositories would likewise constitute unfair

1 treatment and trial by surprise should these secret/unavailable documents appear in the
2 certified administrative record. DEC should additionally require applicants to remove
3 superfluous sections of their vessel plans and resubmit them where it would be, and has
4 been, an undue burden to review and copy these superfluous sections that do not address
5 the applicants' compliance with the applicable regulations. I again request all material
6 information be made available for inspection and copying pursuant to the Public
7 Documents Act and that such information be made available with sufficient time for
8 review prior to the end of the public comment period, which would require, at this point
9 in time, a comment period extension and conditional extension of the existing permit."

10 Some of the information referenced in the DEC Findings may well only be a matter of memory
11 of the Findings author, who did not sign or otherwise disclose his/her identity. Further testimony
12 on these Findings is clearly warranted. While I do have, and would be willing to supply
13 electronic copies of the documentary evidence I sent with my comments, these should be in
14 DEC's possession already. I have electronic copies of the earlier versions of the Core Plan and
15 SERVS Technical Manual but these would not constitute a complete or final record on review. I
16 have voluminous additional electronic documents relevant to argument of the issues and
17 regarding the suggested alternatives that I hope to use as a supplement to the administrative
18 record and will supply them on a Compact Disk, as requested or necessary and permitted, to the
19 person that is ultimately designated to conduct the Informal Review. Sending them via email at
20 this juncture will likely cause their rejection by one or another email server due to their size and
21 otherwise just clog your email inboxes. These are very complex issues that would likely require
22 more time to resolve than the week or two allotted by section 185(c), but their amicable
23 resolution would surely be in everyone's best interest and I am willing to wave the 15-day
24 deadline set for the conclusion of the proceedings. I would also not object to the concurrent
25 participation of permittees and other stakeholders in the informal review process.

26
27 Sincerely; 
28 Tom Lakosh
29