

**Appendix 1: APPLICATION AND BURN PLAN
In Situ Burning Guidelines for Alaska**

PART 4

How do you plan to collect burned oil residue?

How do you plan to store and dispose of burned oil residue?

For inland burns, how do you plan to address post- burn erosion if applicable?

Describe plan for eliminating risk (if any) of accidental (secondary) fires (e.g., structures/buildings and/or vegetation).

Will the burn affect visibility at downwind airports within 20 miles?

Signatures

Signature of Applicant

Printed name of Applicant

Date and Time Submitted to Federal and State On-Scene Coordinators

Prepared by: _____ ICS Position: _____

Phone: _____

Appendix 2: FOSC/SOSC Review Checklist In Situ Burning Guidelines for Alaska

<p>Note: If an <i>in situ</i> burn is being considered, immediately notify the EPA ARRT representative (unless EPA is the FOSC), the DOI and DOC ARRT representatives, and the USCG Strike Team to provide advance notice of this possibility.</p>		
<p>STEP 1: Review of the completed Application to Burn Plan</p>		
Is burning an appropriate response option, when considering mechanical containment and recovery and/or dispersant use?	yes	no
<p>STEP 2: Determine feasibility of burning</p>		
Will the oil become 2 to 3 mm thick?	yes	no
Is the oil relatively fresh (less than 2 or 3 days of exposure)?	yes	no
Does the oil contain less than 25 percent water?	yes	no
Is visibility sufficient to see oil and vessels towing boom, and suitable for aerial overflight for burn observation?	yes	no
If burning may involve darkness or poor visibility, can the burn be completed safely and well away from any populated areas or other sensitive resources?	yes	no
Is wind less than 20 knots?	yes	no
Are currents less than 0.75 knots relative to the boom?	yes	no
Are waves less than 3 feet in choppy, wind-driven seas or less than 5 to 6 feet in large swells?	yes	no
Does the responsible party have a site safety plan for this incident that specifically addresses the proposed burning operations?	yes	no
Will response workers be briefed on this plan before burning starts?	yes	no
Are personnel trained and equipped with safety gear?	yes	no
Is a communications system available and working to communicate with and between aircraft, vessels, and control base?	yes	no
Are operational and environmental conditions feasible for burning?	yes	no
Can the fire be extinguished and are the procedures for addressing this contingency adequate?	yes	no
Will the burn meet the operational criteria for:		
the next 24 hours?	yes	no
the next 48 hours?	yes	no
<p>STEP 3: Determine whether burn may be conducted at a safe distance from populated areas.</p>		
<p>Burning Near Unpopulated Areas:</p> <p>To help determine whether an area that could be affected by an in situ burn smoke plume is unpopulated, the Unified Command will consult with land managers and (to the extent practical) land owners of the area to help determine whether there may be individuals using the area for activities including, but not limited to, fishing, hunting, berry picking, boating, backpacking, or conducting research. The Unified Command may require further verification by aerial reconnaissance or some similar means.</p>		
Will the smoke plume pass into populated areas?	yes	no
<p>If no, proceed to Step 4. If yes, consider the following conditions of authorization.</p>		

**APPENDIX 2: FOSC/SOSC REVIEW CHECKLIST
In Situ Burning Guidelines for Alaska**

Burning in Flat Terrain Near Populated Areas:

Is the burn in an area near or adjacent to populated areas? yes no

Are local government, land managers, land owners, and/or state emergency service personnel involved in planning for, and if necessary assisting with, public notifications? yes no

On water more than 3 miles from shore, the Green Zone safe distance is 1 mile from populated areas. On land or on water less than 3 miles from shore, the green zone safe distance is 3 miles from populated areas. Burning at a green zone safe distance from populated areas is acceptable. Proceed to Step 4.

The Yellow Zone distance is from 1 to 3 miles downwind of a burn, and within 45 degrees of the smoke plume, when the burn is on land or on water within 3 miles of shore. If the potentially-impacted population can be sheltered in place or evacuated during the burn, proceed to Step 4. If potentially-impacted populated areas cannot be protected, do not authorize burning at this time.

The Red Zone distance is within 1 mile of any burn. Burns within 1 mile of populated areas may be authorized if the potentially-impacted population can be sheltered in place or evacuated during the burn, and if best professional judgment supports the expectation of PM_{2.5} less than 65 micrograms per cubic meter 1-hour average in populated areas. If these conditions can be met, proceed to Step 4. If these conditions cannot be met, do not authorize burning at this time.

Burning when the Safe Distance Is Not Predicted:

The Unified Command determines whether flat terrain exists through the use of topographic maps and on-scene weather information, and input, as appropriate, from the National Weather Service and the Alaska Interagency Coordination Center.

According to best professional judgment, will PM_{2.5} concentrations remain below 65 micrograms per cubic meter 1-hour average in populated areas? yes no

If yes, proceed to Step 4. If no, do not authorize burning at this time.

Notifications and Warnings:

Is it possible to implement Level 1 general notification in the Green Zone? yes no

Is it possible to implement a Level 2 alert notification in the Yellow Zone? yes no

Is it possible to implement a Level 3 warning notification, which includes in-place sheltering? yes no

Is it possible to implement a Level 4 emergency notification, which includes temporary evacuation? yes no

**APPENDIX 2: FOSC/SOSC REVIEW CHECKLIST
In Situ Burning Guidelines for Alaska**

STEP 4: Determine whether environmental and other considerations will be adequately addressed.			
Have potentially-affected natural resources and historic properties been identified and adequately addressed?	yes	no	
If no, document rationale in decision memo.			
Have potentially-affected other considerations (e.g., structures/buildings) been identified and adequately addressed?	yes	no	
If no, document rationale in decision memo.			
STEP 5: Review of consultations and requests for authorization.			
NCP Authorization of Use			
Concurrence Required:			
EPA (FOSC or EPA ARRT representative)	yes	no	conditional
State (SOSC in Unified Command)	yes	no	conditional
Consultation as per the NCP (If other than yes, document how addressed)			
DOI ARRT Representative	yes	no	conditional
DOC ARRT Representative	yes	no	conditional
Other Consultations with Representatives of Potentially Affected Stakeholders:			
Other State and/or Federal natural resource trustees	yes	no	conditional
• Federally-recognized tribes	yes	no	conditional
• Federal, State, and/or local safety and public health agencies	yes	no	conditional
• Land Owners:			
➤ Local (e.g. borough, municipal governments)	yes	no	conditional
➤ Private Land owners (e.g. Native corporations)	yes	no	conditional
• Others (e.g., Regional Citizens Advisory Councils, Port Authorities, Area safety/security committees, law enforcement, etc.)	yes	no	conditional
• For a burn that may affect threatened and/or endangered species and/or their critical habitat, DOI-Fish and Wildlife Service* and/or National Marine Fisheries Service ESA Specialists*	yes	no	conditional
• For a burn that may affect historic properties, the FOSC's Historic Properties Specialist.	yes	no	conditional
• For a burn proposed in conjunction with an Outer Continental Shelf Facility, the DOI-MMS Regional Supervisor for Field Operations*	yes	no	conditional

**APPENDIX 2: FOSC/SOSC REVIEW CHECKLIST
In Situ Burning Guidelines for Alaska**

STEP 6. Make decision on whether to authorize burn.

Authorization and Conditions:

The on-scene coordinators' decision based on review (check one):

- Do not conduct in situ burning.
- In situ burning may be conducted in limited or selected areas (see attached chart).
- In situ burning may be conducted over the limited period of ____ day(s).
- In situ burning may be conducted as requested in the application.
- Other, as specified: _____

Conditions:

1. The burn operations team will visually monitor the smoke plume in accordance with the monitoring plan.
2. The burn operations team will collect the burn residue in accordance with the burn plan.
3. Public notification/warning to people in populated areas who may be in proximity to any of the three safe distance zones in accordance with the notification.
4. Other incident-specific conditions of authorization (e.g., air monitoring in accordance with the SMART protocols) for a burn with the potential to impact populated areas: _____

Signature of Federal On-Scene Coordinator

Printed Name of Federal On-Scene Coordinator

Date and Time

Signature of State On-Scene Coordinator

Printed Name of State On-Scene Coordinator

Date and Time

Prepared By: _____ ICS Position: _____ Phone: _____

Appendix 1: Application and Burn Plan

In Situ Burning Guidelines for Alaska

Incident Name: <u>F/V Cook Inlet oil spill</u> Incident Location: <u>Kennedy Entrance, Cook Inlet-Perl Rock on south side of Perl island</u> Incident Date: <u>4/15/05</u> Incident Time: <u>0830</u> Title of Applicant: <u>Incident Commander</u> Affiliation: <u>RP - Tesoro Alaska Company</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Date Prepared</td> <td colspan="2" style="text-align: center;">Operational Period</td> </tr> <tr> <td colspan="2" style="text-align: center;">4/19/05</td> <td style="text-align: center;">Date</td> <td style="text-align: center;">Time</td> </tr> <tr> <td style="text-align: center;">Time Prepared</td> <td style="text-align: center;">Start:</td> <td style="text-align: center;">4/20/05</td> <td style="text-align: center;">0930</td> </tr> <tr> <td style="text-align: center;">1300</td> <td style="text-align: center;">End:</td> <td style="text-align: center;">4/20/05</td> <td style="text-align: center;">1400</td> </tr> </table> Address: <u>54741 Tesoro Rd, Kenai, AK 99611</u> Phone: <u>907-776-3569</u> Fax: <u>907-776-3812</u>	Date Prepared		Operational Period		4/19/05		Date	Time	Time Prepared	Start:	4/20/05	0930	1300	End:	4/20/05	1400
Date Prepared		Operational Period															
4/19/05		Date	Time														
Time Prepared	Start:	4/20/05	0930														
1300	End:	4/20/05	1400														

PART 1

Potential Burn Location Perl Rock, Cook Inlet
 Site Description South side of Perl Island, Kennedy Entrance
 Latitude 59 06'N
 Longitude 151 41'W

Type of Incident (check one):
 Grounding
 Transfer Operations
 Explosion
 Collision
 Blowout
 Other _____

Product Released (check one):
 North Slope Crude
 Cook Inlet Crude
 Residual/Bunker Oil
 Diesel #2
 JP4
 Other _____

Estimated Volume of Released Product:
 _____ gallons, or
380,000 BBL

Estimated Volume of Product That May Potentially be Released:
 _____ gallons, or
380,000 BBL

Release Status (check one):
 Continuous
 Intermittent
 One time only, now stopped

If Continuous or Intermittent, estimated Rate of Release:
 _____ gallons, or
3958/hour BBL

Estimated Surface Area Covered (square miles)
 At Time of Application 20 square miles

If inland, identify/describe:

- Vegetative cover at burn site (e.g., wetlands, grasslands, shrublands, forest, tundra, non-vegetated)
- Fire danger rating at and near the burn site (see Appendix 6)
- Whether burn is on permafrost
- Any ignitable vegetation near the burn
- Any structures/buildings near the burn

Why is mechanical recovery alone **inadequate** for spill response? rate of release is extreme; predicted weather is calm and damp

Consider the spill size, forecasted weather and trajectories, amount of available equipment, time to deploy, and time to recover.

Will you use mechanical recovery in conjunction with in situ burning? yes no

Have you evaluated dispersants? yes no

Will you use dispersants in conjunction with in situ burning? yes no

Why is in situ burning preferred? weather conditions conducive to burning but not for dispersants.

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Proposed Burn Date and Time 4/20/05 0930

Describe how you intend to carry out the burn.

2 boats will contain oil in separate boom 2 miles apart from each other. Oil will be ignited with a propane burner from the surface.

Check one:

Ignition is away from source after containment and movement of the oil to safe location (i.e., controlled burn).

Ignition of uncontained slick(s) is at a safe distance from the source.

Ignition is at or near source without controls.

How will you ignite the oil? _____

From water surface with propane burner

Enter the volume of oil you expect to burn:

Fire No.	Oil Volume (BBL__ or Gal__)	Fire Duration (Hrs__ or Min__)
1	95000 bbl	3 hours
2	95000 bbl	3 hours
3		
4		
5		
Attach a list for more fires.		
Total Vol.:	190,000	

How many simultaneous burns are planned?

2

What distance will separate simultaneous burns?

2 miles

Are you planning sequential or repeat (not simultaneous) burns?

yes no

Estimated area of oil in uncontrolled burn (square feet) 0

Describe your ability and procedures to extinguish the burn if necessary or directed to do so.

Oil fire can easily be extinguished by releasing one end of boom, or towing boom faster.

PART 3

✓ **Attach a chart with a distance scale.** Show estimated spill trajectory and landfalls, with time. Show the location and distance of your proposed burns relative to the following features:

1. Source:

Location Perl Rock

Distance from Burn (miles) 1.5 miles

2. Ignitable slicks:

Location NE of source

Distance from Burn (miles) 0-3 miles

3. Nearest Land (burns on water) or Non-Flat Terrain (burns on land):

Location Perl Island

Distance from burn (miles) 1-3 miles

Nearby Populated Areas (i.e., one or more non-spill-related people present):

Location English Bay

Distance from Burn (miles) 5

Location Port Graham

Distance from Burn (miles) 6

Location Seldovia

Distance from Burn (miles) 10

For Inland Burns consider

- Ignitable vegetation
- Structures/buildings
- Areas with Fire Danger Rating of extreme, very high, or high
- Nearest airport
- Alaska Class I Area (see Appendix 4)

4. Attach a drawing showing your mechanical recovery and in situ burning equipment configurations.

5. For burns potentially impacting populated areas, provide an air monitoring plan in accordance with the SMART protocols.

6. Identify whether any Class 1 Areas (Appendix 4) will be impacted.

**Appendix 1: APPLICATION AND BURN PLAN
In Situ Burning Guidelines for Alaska**

PART 4

How do you plan to collect burned oil residue?

Directly following the burn, residue will be collected with fine mesh net towed behind boats.

How do you plan to store and dispose of burned oil residue?

Collect residue will be stored in holding tanks and transported to nearest oil disposal company.

For inland burns, how do you plan to address post- burn erosion if applicable?

Describe plan for eliminating risk (if any) of accidental (secondary) fires (e.g., structures/buildings and/or vegetation).

Risk will be minimal, due to emulsification, separation of contained oil from uncontained and supervision.

Will the burn affect visibility at downwind airports within 20 miles?

Little to none; wind direction will prevent it.

Signatures

Signature of Applicant

John Kwietniak

Printed name of Applicant

4/19/05 1500

Date and Time Submitted to Federal and State On-Scene Coordinators

Prepared by: _____ ICS Position: _____

Phone: _____

Appendix 2: FOSC/SOSC Review Checklist In Situ Burning Guidelines for Alaska

<p>Note: If an <i>in situ</i> burn is being considered, immediately notify the EPA ARRT representative (unless EPA is the FOSC), the DOI and DOC ARRT representatives, and the USCG Strike Team to provide advance notice of this possibility.</p>		
<p>STEP 1: Review of the completed Application to Burn Plan</p>		
Is burning an appropriate response option, when considering mechanical containment and recovery and/or dispersant use?	✓ yes	no
<p>STEP 2: Determine feasibility of burning</p>		
Will the oil become 2 to 3 mm thick?	✓ yes	no
Is the oil relatively fresh (less than 2 or 3 days of exposure)?	✓ yes	no
Does the oil contain less than 25 percent water?	✓ yes	no
Is visibility sufficient to see oil and vessels towing boom, and suitable for aerial overflight for burn observation?	yes	✓ no
If burning may involve darkness or poor visibility, can the burn be completed safely and well away from any populated areas or other sensitive resources?	✓ yes	no
Is wind less than 20 knots?	✓ yes	no
Are currents less than 0.75 knots relative to the boom?	✓ yes	no
Are waves less than 3 feet in choppy, wind-driven seas or less than 5 to 6 feet in large swells?	✓ yes	no
Does the responsible party have a site safety plan for this incident that specifically addresses the proposed burning operations?	✓ yes	no
Will response workers be briefed on this plan before burning starts?	✓ yes	no
Are personnel trained and equipped with safety gear?	✓ yes	no
Is a communications system available and working to communicate with and between aircraft, vessels, and control base?	✓ yes	no
Are operational and environmental conditions feasible for burning?	✓ yes	no
Can the fire be extinguished and are the procedures for addressing this contingency adequate?	✓ yes	no
Will the burn meet the operational criteria for:		
the next 24 hours?	✓ yes	no
the next 48 hours?	✓ yes	no
<p>STEP 3: Determine whether burn may be conducted at a safe distance from populated areas.</p>		
<p>Burning Near Unpopulated Areas:</p> <p>To help determine whether an area that could be affected by an in situ burn smoke plume is unpopulated, the Unified Command will consult with land managers and (to the extent practical) land owners of the area to help determine whether there may be individuals using the area for activities including, but not limited to, fishing, hunting, berry picking, boating, backpacking, or conducting research. The Unified Command may require further verification by aerial reconnaissance or some similar means.</p>		
Will the smoke plume pass into populated areas?	yes	✓ no
<p>If no, proceed to Step 4. If yes, consider the following conditions of authorization.</p>		

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In Situ Burning Guidelines for Alaska**

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The Yellow Zone distance is from 1 to 3 miles downwind of a burn, and within 45 degrees of the smoke plume, when the burn is on land or on water within 3 miles of shore. If the potentially-impacted population can be sheltered in place or evacuated during the burn, proceed to Step 4. If potentially-impacted populated areas cannot be protected, do not authorize burning at this time.

The Red Zone distance is within 1 mile of any burn. Burns within 1 mile of populated areas may be authorized if the potentially-impacted population can be sheltered in place or evacuated during the burn, and if best professional judgment supports the expectation of PM_{2.5} less than 65 micrograms per cubic meter 1-hour average in populated areas. If these conditions can be met, proceed to Step 4. If these conditions cannot be met, do not authorize burning at this time.

Burning when the Safe Distance Is Not Predicted:

The Unified Command determines whether flat terrain exists through the use of topographic maps and on-scene weather information, and input, as appropriate, from the National Weather Service and the Alaska Interagency Coordination Center.

According to best professional judgment, will PM_{2.5} concentrations remain below 65 micrograms per cubic meter 1-hour average in populated areas? yes no

If yes, proceed to Step 4. If no, do not authorize burning at this time.

Notifications and Warnings:

Is it possible to implement Level 1 general notification in the Green Zone? yes no

Is it possible to implement a Level 2 alert notification in the Yellow Zone? yes no

Is it possible to implement a Level 3 warning notification, which includes in-place sheltering? yes no

Is it possible to implement a Level 4 emergency notification, which includes temporary evacuation? yes no

**APPENDIX 2: FOSC/SOSC REVIEW CHECKLIST
In Situ Burning Guidelines for Alaska**

STEP 4: Determine whether environmental and other considerations will be adequately addressed.			
Have potentially-affected natural resources and historic properties been identified and adequately addressed?	yes ✓	no	
If no, document rationale in decision memo.			
Have potentially-affected other considerations (e.g., structures/buildings) been identified and adequately addressed?	yes ✓	no	
If no, document rationale in decision memo.			
STEP 5: Review of consultations and requests for authorization.			
NCP Authorization of Use			
Concurrence Required:			
EPA (FOSC or EPA ARRT representative)	yes	no	conditional
State (SOSC in Unified Command)	yes	no	conditional
Consultation as per the NCP (If other than yes, document how addressed)			
DOI ARRT Representative	yes	no	conditional
DOC ARRT Representative	yes	no	conditional
Other Consultations with Representatives of Potentially Affected Stakeholders:			
Other State and/or Federal natural resource trustees	yes	no	conditional
• Federally-recognized tribes	yes	no	conditional
• Federal, State, and/or local safety and public health agencies	yes	no	conditional
• Land Owners:			
➢ Local (e.g. borough, municipal governments)	yes	no	conditional
➢ Private Land owners (e.g. Native corporations)	yes	no	conditional
• Others (e.g., Regional Citizens Advisory Councils, Port Authorities, Area safety/security committees, law enforcement, etc.)	yes	no	conditional
• For a burn that may affect threatened and/or endangered species and/or their critical habitat, DOI-Fish and Wildlife Service* and/or National Marine Fisheries Service ESA Specialists*	yes	no	conditional
• For a burn that may affect historic properties, the FOSC's Historic Properties Specialist.	yes	no	conditional ✓
• For a burn proposed in conjunction with an Outer Continental Shelf Facility, the DOI-MMS Regional Supervisor for Field Operations*	yes	no ✓	conditional

**APPENDIX 2: FOSC/SOSC REVIEW CHECKLIST
In Situ Burning Guidelines for Alaska**

STEP 6. Make decision on whether to authorize burn.

Authorization and Conditions:

The on-scene coordinators' decision based on review (check one):

Do not conduct in situ burning.

In situ burning may be conducted in limited or selected areas (see attached chart).

In situ burning may be conducted over the limited period of ____ day(s).

In situ burning may be conducted as requested in the application.

Other, as specified: _____

Conditions:

1. The burn operations team will visually monitor the smoke plume in accordance with the monitoring plan.
2. The burn operations team will collect the burn residue in accordance with the burn plan.
3. Public notification/warning to people in populated areas who may be in proximity to any of the three safe distance zones in accordance with the notification.
4. Other incident-specific conditions of authorization (e.g., air monitoring in accordance with the SMART protocols) for a burn with the potential to impact populated areas: _____

Signature of Federal On-Scene Coordinator	Mark DeVries	4/20/05 1000
	Printed Name of Federal On-Scene Coordinator	Date and Time

Signature of State On-Scene Coordinator	Gary Folley	4/20/05 0930
	Printed Name of State On-Scene Coordinator	Date and Time

Prepared By: Jane Reece ICS Position: RP permitter Phone: 776-3241

More Information on this Form

When do you need this form?

This form should be filled out before any in-situ burning activities take place.

Who fills out this form?

A permitter with the responsible party.

Who signs this form?

Incident Commander, Federal On-scene Coordinator, State On-scene Coordinator.

Where does this form get delivered?

The form should be delivered to the State On-scene Coordinator. In addition, the State of Alaska has conditions of approval that need to be met. See attached letter.

555 Cordova Street, 2nd Floor
Anchorage, AK 99501
PHONE: (907) 269-7557
FAX: (907) 269-7648
<http://www.state.ak.us/dec/home.htm>

**PREVENTION EMERGENCY RESPONSE PROGRAM
CENTRAL ALASKA RESPONSE TEAM**

September 17, 2008

RE: Conditions of Approval for In Situ Burning

Dear _____:

The Department of Environmental Conservation has received an application for in situ burning for use on the 'name of incident'. Department approval for the use of in situ burning as described by the 'date of application' application is subject to the following conditions:

- 1) This approval is for date. Continued in situ burn operations shall be subject to daily review and approval by the SOSC. This permit maybe terminated by the SOSC at any time.
- 2) The in situ burn operation shall not inhibit or impact mechanical recovery operations.
- 3) RP or applicant shall submit and implement a plan to collect residual or unburned oil following the completion of the in situ burn.
- 4) The applicant shall submit an in situ burning site safety plan to provide for the safety of personnel. This plan shall be consistent with the safe distance guidance contained within the In Situ Burning Guidelines (current version).
- 5) The applicant shall maintain public notification and warnings for the duration of the in situ burning operation as appropriate in accordance with the In Situ Burning Guidelines (current version).
- 6) The applicant shall perform visual monitoring to ensure the operation and smoke plume is conducted as projected and will not impact either human populations or the mechanical operations. The applicant shall ensure that the monitoring team includes a representative from the State of Alaska to monitor the burn.
- 7) In situ burn efficacy observations and visual monitoring reports should include the amount of oil burned, the location of the burn, the time and duration of burn, the boom condition, wind direction and plume characteristics. These reports shall be submitted to the Department on a daily basis, no later than 12:00 noon the day

following the burn, for consideration in approval for continued burning operations. If you have any questions please contact me at 907-262-5210 (x234).

Sincerely,

Gary Folley
State on Scene Coordinator

Cc: Capt. Mark Hamilton, USCG
Matt Carr, EPA
Betty Schorr, IPPP/Marine Vessel