OCEANIA REGIONAL RESPONSE TEAM, REGION IX

LETTER OF AGREEMENT BETWEEN

U.S. COAST GUARD (USCG)

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

U.S. DEPARTMENT OF COMMERCE (DOC)

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

DEPARTMENT OF THE INTERIOR (DOI)

AND

OCEANIA REGION IX

CONCERNING THE USE OF IN-SITU BURNING AS A RESPONSE METHOD TO OIL POLLUTION

ORRT IX APPROVED April 6th, 2010

PURPOSE

The Oceania Regional Response Team (ORRT) recognizes that mechanical recovery*, in-situ* burning and chemical dispersants are the three primary means of dealing with oil discharges into the waters of the United States. While mechanical removal is the preferred method, the ORRT recognizes that *in-situ* burning is a viable option in conjunction with, or in lieu of mechanical or other types of recovery. The purpose of this appendix is to provide amplifying information to the Oceania Regional Contingency Plan during the use of *in-situ* burning for oil discharges on the waters within Oceania Region IX. This appendix provides guidelines to the FOSC to use *in-situ* burning in a timely manner to: (1) prevent or substantially reduce a hazard to human life; (2) minimize the adverse environmental impact of the spilled oil, and (3) reduce or eliminate the economic or aesthetic losses of recreational areas.

This agreement for expedited approval is necessary due to the time constraints under which burning is a viable option. In developing this expedited approval agreement, the environmental impacts associated with an on water oil burn have been evaluated in relationship to other mechanical and chemical alternatives, as discussed in Tab I. It is the view of the signatories that the overall environmental benefits of *in-situ* burning out weigh the relative environmental costs, except in those circumstances noted in this appendix. ORRT involvement is required in every case for which *in-situ* burn is necessary.

AUTHORITY

Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) provides that the Federal On-Scene Coordinator (FOSC) with the concurrence of the EPA representative to the Oceania Regional Response Team (ORRT) and the Territories with jurisdiction over the navigable waters polluted by the oil discharge, and in consultation with the DOC and DOI natural resource trustees (when practicable), may authorize the use of *in-situ* burning of oil spills.
The Commandant of the U. S. Coast Guard has predesignated the USCG Captains of the Port under his jurisdiction as On-Scene Coordinators for oil spills, and has delegated authority and responsibility for compliance with Section 311 of the Federal Water Pollution Control Act (FWPCA), as amended, to them.

SCOPE

The signatories to the Oceania Regional Contingency Plan concur that the physical removal of discharged or spilled oil from the water surface is the traditional method of control. Furthermore, it is recognized that the most effective response to an oil spill may include a combination of mechanical recovery, *in-situ* burning, and dispersant use. As such, this appendix sets guidelines and protocols under which *in-situ* burning may be used by the USCG OSC on or in waters off the coast of US Territories, which are also within the boundaries of Oceania Region IX. The State of Hawaii Area Contingency Plan currently has a separate LOA in place regarding the use of *in-situ* burn.

PROTOCOLS

As attested to by the signatures on the Oceania Regional Contingency Plan we agree with the USCG that the predesignated USCG OSC has expedited approval to use *in-situ* burning of oil discharges, as defined in the NCP, in accordance with the following guidelines.

GUIDELINES

1. As per the NCP, 40 C.F.R. Part 300.120, the authority to *in-situ* burning of oil discharges in accordance with this Agreement is vested in the predesignated USCG OSC. The predesignated FOSC within the State of Hawaii is the Captain of the Port, Honolulu. This authority may not be delegated. The FOSC for Honolulu also has jurisdictional authority over American Samoa. The predesignated FOSC within the territories of Guam and CNMI is the Captain of the Port, Guam.
2. The OSC may authorize the use of *in-situ* burning without obtaining the concurrence of the EPA representative or the State representative to the ORRT, when in the OSC's

judgment human life is threatened or when all of the following three conditions are met:

a. *In-situ* burning is a viable option for oil removal; and
b. Winds are blowing offshore; or if winds are variable or blowing on-shore, DOH advises that the potential plume caused by the burn will not expose human populations to more than 150 ug/m3 of particulate less than 10 microns in diameter averaged over a one hour period as determined by the OSC; and
c. The plume or heat from the burn will not result in greater impact to sensitive wildlife resources than would the spilled oil.

3. Mechanical recovery equipment shall be mobilized on scene, when feasible, as a backup capability should *in-situ* burning prove partially or totally ineffective and to collect residue and dispose of in an appropriate land-based facility.
4. Monitors from the USCG and State will be on scene to observe the burn. If practical, but so as not to create an unnecessary delay, monitors from the DOI- Fish and Wildlife Service and DOC-NOAA may participate as part of the monitoring team. The monitoring team will record their observations. Any member of the monitoring team may make recommendations to the Unified Command regarding whether to continue or terminate the burn if conditions in paragraph 2 above are observed no longer to exist.

DOCUMENTATION MONITORING AND EVALUATION

Whenever the OSC decides to conduct an *in-situ* burn, the *In-situ* Burning Plan in Tab I & II, the *In-situ* Burning Monitoring Plan in Tab III and, the results of the joint evaluation described in paragraph 3 below shall be completed and submitted to the ORRT in the form of an *In-situ* Burn Evaluation Report as soon as possible following the burn.

1. DOCUMENTATION. The OSC will ensure that all applicable parts of the *In-situ* Burning Checklist contained in Tabs I & II are completed.
2. MONITORING. Monitoring will be conducted in accordance with the *In-situ* Burn Monitoring Plan (Tab III). As part of the monitoring plan, samples shall be taken prior to the burn and residue samples taken following the burn. In addition, the State DOH, the DOC-NOAA and the DOI may conduct Natural Resource Damage Assessment (NRDA) monitoring of the *in-situ* burn in general accordance with the *In-situ* Burn Monitoring Plan attached as Tab III. Such monitoring shall be conducted in consultation and coordination with the Unified Command, so as not to interfere with, or unnecessarily delay burn operations.
3. EVALUATION. The OSC shall designate an evaluation team, including an OSC representative, DOH, DOC-NOAA and DOI to conduct full evaluation of all in-situ burning applications to be included in the In-situ Burning Evaluation Report following an incident. The report should comment on general effectiveness of burn(s), supported by visual records (videos, photos) and personal observation by knowledgeable parties. Data should include estimates of product burned, percent unburned, analysis of oil residue, and information on environmental effects in Oceania Region IX waters.

TAB 1: APPLICATION AND BURN PLAN

PART 1:

APPLICANT INFORMATION:	
DATE PREPARED (MONTH/DAY/YEAR)**:**	
TIME PREPARED (24 HOUR CLOCK)**:**	
NAME OF APPLICANT:	
TELEPHONE #:	
NAME OF ALTERNATIVE CONTACT:	
TELEPHONE #:	
COMPANY NAME:	
ADDRESS - **STREET:**	
CITY:	
STATE, ZIP CODE:	
SPILL INFORMATION:	
INITIAL DATE OF SPILL (MONTH/DAY/YEAR)**:**	
INITIAL TIME OF SPILL (24 HOUR CLOCK)**:**	
LOCATION OF SPILL (DISTANCE OFF-SHORE, RIVER MILE, ETC)**:**	**LAT** (N)**:_____LON** (W)**:_____**
TERRESTRIAL SPILL LOCATION (IDENTIFY AND DESCRIBE):	
SOURCE OF SPILL (E.G. PIPELINE, VESSEL)**:**	
CIRCUMSTANCES (FIRE, COLLISION, GROUNDING, ETC):	
TYPE OF RELEASE:	**[INSTANTANEOUS ( ) OR CONTINUOUS FLOW ( )]**
RATE OF FLOW IF CONTINUOUS (ESTIMATE):	
AMOUNT SPILLED [GAL OR BBLS (42 GLA/BBL)]**:**	
ADDITIONAL VOLUME AT RISK OF BEING SPILLED [GAL OR BBLS (42 GLA/BBL)]:	
SURFACE AREA COVERED (EST. SQ. MILES):	

DECISION CHECKLIST:	
WHY IS MECHANICAL RECOVERY ALONE NOT ADEQUATE FOR SPILL RESPONSE?	_____ _____ _____
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?	_____ _____

PART 2:

DID SOURCE BURN?	**YES ( ) NO ( )**
IS THE SOURCE STILL BURNING?	**YES ( ) NO ( )**
IS THE PRODUCT EASILY EMULSIFIED?	**YES ( ) NO ( )**
IS THE PRODUCT ALREADY EMULSIFIED?	**[ ] NO** **[ ] LIGHT EMULSION (0-20%)** **[ ] MODERATE EMULSION (21-50%)** **[ ] HEAVY EMULSION (> 50%)** **[ ] UNKNOWN**
ESTIMATED PERCENT OIL NATURALLY DISPERSED AND EVAPORATED WITHIN FIRST 24 HOURS:	
ON-SCENE WEATHER: *(NOTE: IF NOT AVAILABLE CONTACT SSC FOR WEATHER)*	
WIND - DIRECTION (FROM)**:**	
WIND SPEED (KNOTS)**:**	
SURFACE CURRENT – DIRECTION (TOWARD)**:**	
SPEED (KNOTS)**:**	
CURRENT SPEED RELATIVE TO THE CONTAINMENT BOOM (KNOTS)**:**	(NOTE: CURRENT SPEED RELATIVE TO THE FIRE CONTAINMENT BOOM SHOULD BE .75 KNOTS OR LESS TO MINIMIZE ENTRAINMENT)

VISIBILITY (NAUTICAL MILES):	
CEILING (FEET):	
SEA STATE (WAVE HEIGHT IN FEET) [CIRCLE ONE]:	**CALM** (GLASSY- 0') **CALM** (RIPPLED→1/3') **SMOOTH** (WAVELETS→1.5') **SLIGHT** (→ 4') **MODERATE** (→ 8') **ROUGH**(→ 13') **VERY ROUGH** (→ 20') **HIGH** (→ 30') **VERY HIGH** (→ 45') **PHENOMENAL** (OVER 45 FEET)
12 HOUR FORECAST:	
24 HOUR FORECAST:	
DOES YOUR SITE SAFETY PLAN COVER THIS IN-SITU BURN PLAN?	**YES ( ) NO ( )**
WILL RESPONSE WORKERS BE BRIEFED ON THE SITE SAFETY PLAN BEFORE BURNING?	**YES ( ) NO ( )**
ARE THE RESPONDERS TRAINED AND EQUIPPED WITH SAFETY GEAR?	**YES ( ) NO ( )**
☐ **ATTACH AN ICS 204 FORM, OR SIMILAR DOCUMENT - ON IT LIST THE EQUIPMENT YOU WILL USE.**	
PROPOSED BURN DATE (MONTH/DAY/YEAR):	
PROPOSED BURN TIME (24 HOUR CLOCK):	
BURN INFORMATION:	
DESCRIBE HOW YOU INTEND TO CARRY OUT THE BURN:	
CHECK ONE:	**[ ] IGNITION IS AWAY FROM SOURCE AFTER CONTAINMENT AND MOVEMENT OF THE OIL TO SAFE LOCATION (IE CONTROLLED BURN).** **[ ] IGNITION OF UNCONTAINED SLICK(S) IS AT A SAFE DISTANCE FROM THE SOURCE.** **[ ] IGNITION IS A OR NEAR SOURCE WITHOUT CONTROLS.**
HOW WILL YOU IGNITE THE OIL?	

ENTER THE VOLUME OF OIL YOU EXPECT TO BURN:		
FIRE NO.	OIL VOLUME (BBL_ OR GAL_)	FIRE DURATION (HRS_ OR MIN_)
1		
2		
3		
4		
5		
☐ ATTACH A LIST FOR MORE FIRES		
TOTAL VOL:		

HOW MANY SIMULTANEOUS BURNS ARE PLANNED?	
WHAT DISTANCE WILL SEPARATE SIMULTANEOUS BURNS?	
ARE YOU PLANNING SEQUENTIAL OR REPEAT (NOT SIMULTANEOUS) BURNS?	YES ( ) NO ( )
ESTIMATED ARE OF OIL IN UNCONTROLLED BURN (FT^2):	

DESCRIBE YOUR ABILITY AND PROCEDURES TO EXTINGUISH THE BURN IF NECESSARY OR DIRECTED TO DO SO:

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:	
DISTANCE FROM BURN (MILES):	
2. IGNITABLE SLICKS – LOCATION:	
DISTANCE FROM BURN (MILES):	
3. NEAREST LAND (BURNS ON WATER) OR NON-FLAT TERRAIN (BURNS ON LAND) – LOCATION:	
DISTANCE FROM BURN (MILES):	

4. NEARBY POPULATED AREAS (ONE OR MORE NON-SPILL-RELATED PEOPLE PRESENT) – A. LOCATION:	
DISTANCE FROM BURN (MILES):	
B. LOCATION:	
DISTANCE FROM BURN (MILES):	
C. LOCATION:	
DISTANCE FROM BURN (MILES):	
D. LOCATION:	
DISTANCE FROM BURN (MILES):	
☐ **ATTACH A DRAWING SHOWING YOUR MECHANICAL RECOVERY AND IN-SITU BURNING EQUIPMENT CONFIGURATIONS.**	
☐ **FOR BURNS POTENTIALLY IMPACTING POPULATED AREAS, PROVIDE AN AIR MONITORING PLAN IN ACCORDANCE WITH THE SMART PROTOCOLS.**	

PART 4:

POST BURN:

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 PLANS FOR ELIMINATING RISK (IF ANY) OF ACCIDENTAL (SECONDARY) FIRES (STRUCTURES/VEGETATION):

WILL THE BURN AFFECT VISIBILITY AT DOWNWIND AIRPORTS WITHIN 20 MILES?

SIGNATURES:	
SIGNATURE OF APPLICANT:	
SIGNATURE OF APPLICANT:	
DATE AND TIME SUBMITTED TO FEDERAL AND STATE ON-SCENE COORDINATORS:	

PREPARED BY: _____ **ICS POSITION: _____**

PHONE: _____

TAB 2: FOSC/SOSC REVIEW CHECKLIST

IN-SITU BURNING GUIDELINES FOR OCEANIA REGION IX

(NOTE: IF AN *IN-SITU* BURN IS BEING CONSIDERED, IMMEDIATELY NOTIFY THE EPA ORRT REPRESENTATIVE (UNLESS EPA IS THE FOSC), THE DOI AND DOC ORRT REPRESENTATIVES, AND THE USCG STRIKE TEAM TO PROVIDE ADVANCE NOTICE OF THIS POSSIBILITY)

STEP 1: REVIEW OF THE COMPLETED APPLICATION TO BURN PLAN.		
IS BURNING AN APPROPRIATE RESPONSE OPTION, WHEN CONSIDERING MECHANICAL CONTAINMENT AND RECOVERY AND/OR DISPERSANT USE?	YES	NO
STEP 2: DETERMINE FEASIBILITY OF BURNING.		
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 THE CONTINGENCY ADEQUATE?	YES	NO
WILL THE BURN MEET THE OPERATIONAL CRITERIA FOR: THE NEXT 24 HOURS?	YES	NO
THE NEXT 48 HOURS?	YES	NO

Step 3: Determine whether burn may be conducted at a safe distance from populated areas.

Burning near unpopulated areas:

To help determine whether an area that could be affected by an in-situ 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.

Will the smoke plume pass into populated areas? If **no**, proceed to **step 4**. If yes, consider the following conditions of authorization.	**Yes**	**No**
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 invloved 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 populations 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.

According to best professional judgment, will $PM_{2.5}$ concentrations remain below 65 micrograms per cubic meter 1-hour average in populated areas? If yes, proceed to Step 4. If no, do not authorize burning at this time.	**Yes**	**No**
Notifications and Warnings:		
Is it possible to implement level 1 general notification in the Green Zone?	**Yes**	**No**
Is it possible to implement level 2 alert in the Yellow Zone?	**Yes**	**No**
Is it possible to implement level 3 warning, which includes in-place sheltering?	**Yes**	**No**
Is it possible to implement level 4 emergency notification, which includes temporary evacuation?	**Yes**	**No**

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? IF NO, DOCUMENT RATIONALE IN DECISION MEMO.	**YES**	**NO**
HAVE POTENTIALLY AFFECTED OTHER CONSIDERATIONS (STRUCTURES/BUILDINGS) BEEN IDENTIFIED AND ADEQUATELY ADDRESSED? IF NO, DOCUMENT RATIONALE IN DECISION MEMO.	**YES**	**NO**

STEP 5: REVIEW OF CONSULTATIONS AND REQUESTS FOR AUTHORIZATION.			
NCP AUTHORIZATION OF USE **CONCURRENCE REQUIRED:**			
EPA (FOSC OR EPA ORRT 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 ORRT REPRESENTATIVE	**YES**	**NO**	**CONDITIONAL**
DOC ORRT 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** (IE BOROUGH, MUNICIPAL GOVERNMENTS) **PRIVATE LAND OWNERS** (IE NATIVE CORPORATIONS)	**YES** **YES**	**NO** **NO**	**CONDITIONAL** **CONDITIONAL**
OTHERS (IE 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**

STEP 6: MAKE A DECISION ON WHETHER OR NOT 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 CHAT). ☐ 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 (IE AIR MONITORING IN ACCORDANCE WITH THE SMART PROTOCOLS) FOR BURN WITH THE POTENTIAL TO IMPACT POPULATED AREAS:

_____

_____

SIGNATURES:

SIGNATURE OF APPLICANT:	
SIGNATURE OF APPLICANT:	
DATE AND TIME SUBMITTED TO FEDERAL AND STATE ON-SCENE COORDINATORS:	

PREPARED BY: _____ ICS POSITION: _____

PHONE: _____

TAB 3: IN-SITU BURNING MONITORING PLAN

THE PRIMARY OPERATIONAL PURPOSE IN MONITORING IN-SITU BURNING OF SPILLED OIL IS TO DETERMINE IF BURNING REQUIREMENTS AND OBJECTIVES ARE MET. SINCE THE CURRENT BODY OF KNOWLEDGE ABOUT BURNING IS SMALL, EACH OPERATIONAL USE PROVIDES AN OPPORTUNITY TO GATHER DATA. THE ORRT WILL BE ABLE TO USE THIS DATA TO REFINE FUTURE IN-SITU BURN DECISIONS. OPERATIONAL MONITORING THAT OCCURS DURING AND AFTER EACH SPILL RESPONSE USING IN-SITU BURNING WILL BE ANALYZED FOR LESSONS LEARNED. THESE LESSONS WILL BE INCORPORATED INTO THE IN-SITU PLAN SUBMITTED TO THE FOSC.

IT IS INTENDED THAT THIS MONITORING PAN FORM SHOULD BE COMPLETED AFTER EVERY IN-SITU BURN EPISODE. THERE IS A FORM FOR THE BURN SUPERVISOR AND ANOTHER FORM FOR THE CASUALLY TRAINED OBSERVERS. THE ACCUMULATED DATA IS NOT TO BE SUBMITTED TOGETHER WITH THE TAB I – IN-SITU BURN PLAN TO FORM THE POST BURN OPERATIONS REPORT.

BURN SUPERVISOR REPORT FORM	
NAME OF BURN SUPERVISOR:	
ORGANIZATION:	
NAME OF BURN EPISODE (IE BURN 1, BURN 2):	
DATE PREPARED (MONTH/DAY/YEAR)**:**	
TIME PREPARED (24 HOUR CLOCK)**:**	
HAS A SAMPLE OF THE OIL TO BE BURNED BEEN COLLECTED?	**YES ( ) NO ( )**
METHOD OF IGNITION:	
TIME - AT START OF THE BURN (24 HOUR CLOCK)**:**	
AT END OF THE BURN (24 HOUR CLOCK)**:**	
WIND DURING BURN – DIRECTION (FROM)**:**	
SPEED (KNOTS)**:**	
WAS SMOKE PLUME TRAJECTORY SATISFACTORY TO AVOID CONCENTRATED AREAS OF HUMAN OR WILDLIFE POPULATIONS?	**YES ( ) NO ( )**
DESCRIBE THE SMOKE PLUME:	
OBSERVATION OF EFFECTIVENESS OF THE BURN:	
OBSERVATION OF EFFECTIVENESS OF RESIDUAL MATERIAL COLLECTION:	

OBSERVERS MONITORING REPORT	
NAME OF BURN OBSERVER:	
ORGANIZATION:	
NAME OF BURN EPISODE (IE BURN 1, BURN 2):	
DATE PREPARED (MONTH/DAY/YEAR)**:**	
TIME PREPARED (24 HOUR CLOCK)**:**	

WAS SMOKE PLUME TRAJECTORY SATISFACTORY TO AVOID CONCENTRATED AREAS OF HUMAN OR WILDLIFE POPULATIONS?	**YES ( ) NO ( )**

COMMENTS:

GENERAL OBSERVATIONS:

TAB 4: BURN SITE SAFETY AND HEALTH PLAN

SAFETY OBJECTIVES

1. OPERATE IN COORDINATION WITH THE COMBINED ON WATER BRANCH ACTIVITIES. COORDINATE BURNING ACTIVITIES WITH OTHER OFFSHORE/NEARSHORE RESPONSE OPERATIONS.
2. PERFORM ON-WATER IN-SITU BURNING OPERATIONS IN ACCORDANCE WITH THE IN-SITU BURNING PLAN.
3. ON-WATER BURN FLOTILLA IT TO AVOID THE SMOKE PLUME DURING IN-SITU BURNING OPERATIONS.

SITE CONTROL

SITE CONTROL DESCRIPTION:

THE MAIN WORK DECK OF THE VESSELS IS THE EXCLUSION ZONE DURING ACTIVE BURN OPERATIONS. THE OTHER SECTIONS AND DECKS OF THE VESSEL ARE SUPPORT AREAS.

SITE WORKERS:

SITE WORKERS MUST BE TRAINED AND OUTFITTED ACCORDING TO OSHA STANDARDS.

SPECIAL IN-SITU BURNING CONSIDERATIONS:

THE OBJECTIVE IS TO AVOID THE SMOKE BY PRODUCTS OF IN-SITU BURNING.

KEEP VESSELS AND PERSONNEL UP WIND OF THIS SMOKE PLUME AS A BASIC PRECAUTION. THIS IS ALSO THE BASIC PRECAUTION REQUIRED FOR EMITTED GASES.

WHERE SMOKE CANNOT BE AVOIDED, RESPIRATORS MUST BE WORN.

STUDIES SHOW THAT THE DANGER FROM GASES EMITTED DURING IN-SITU BURNING REMAIN SIGNIFICANTLY BELOW EXPOSURE LIMITS. SUCH EMISSIONS CAN INCLUDE SULFUR DIOXIDE, NITROGEN DIOXIDE, CARBON DIOXIDE, AND PARTICULATES.

PERSONAL PROTECTIVE EQUIPMENT:

DURING ACTIVE IN-SITU BURNING OPERATIONS APR'S SUITABLE FOR BOTH ORGANIC VAPORS AND PARTICULATES SHALL BE WORN BY ALL PERSONS ON VESSELS IN CLOSE PROXIMITY TO THE SMOKE (IE BOOM TOWING VESSELS).

☒ OUTER GLOVES	☒ HARD HAT	☒ AIR PURIFYING RESP.
☐ INNER GLOVES	☒ SUN HAT	☐ SUPPLIED AIR RESP.
☒ 2/3 BODY COVER	☒ SUN TAN LOTION	☐ TAPED GLOVE GAUNTLET
☐ FULL BODY COVER	☒ RUBBER BOOTS	☒ USCG PFO
☐ FACE SHIELD	☒ TAPED LEG JOINTS	☐ SAFETY GLASSES

DATE PREPARED (MONTH/DAY/YEAR):	
TIME PREPARED (24 HOUR CLOCK):	
NAME OF APPLICANT:	
TELEPHONE #:	
NAME OF ALTERNATIVE CONTACT:	
TELEPHONE #:	
COMPANY NAME:	

Site Security

The captain of the vessel is responsible for vessel security, on water burn zone security, will be imposed and controlled by the U.S. Coast Guard.

Site Map

☐ Attach site map.

Field Site Characterization Checklist

Date (month/day/year):	
Time (24 hour clock):	
Location (distance off-shore, river mile, etc):	**LAT** (N):_____**LON** (W):_____
Type of petroleum involved:	

Site Characterization and Monitoring

Exposure Potential:

Depending on the spill Exposure potentials including: Benzene, Hydrogen Sulfide, lower explosive limit (LEL), zone control will be established prior to entering contaminated area. No entry into an excessive Benzene, Hydrogen Sulfide, or LEL environment is allowed.
All APR/SAR regulations shall apply. Workers who might possibly be required to wear respirators must have 40 hour HAZWOPER training plus 3 days field experience and be in a respirator program.

Required Monitoring:

After site characterization, benzene, hydrogen sulfide, and LEL will be measured once per hour unless:

1. Any measurement reflects a reasonable possibility that an PEL will be reached, and this time, continuous monitoring will take place.
2. The site safety officer and on scene commander decide that monitoring intervals should be altered based on their judgment from prior readings and continuous job site assessment.

Site Characterization and Monitoring Equipment

All brands f safety detection equipment may be acceptable for detection of LEL, hydrogen Sulfide, Oxygen, benzene, and particulates as long as they are calibrated and operated in accordance with manufacturer's instructions and tests are performed by a trained operator.

Required Characterization and Testing Matrix with Exposure Limits:

		LEL	PEL/TLV	STEL	IDLH	1	2	3	4	5
Oxygen	>19.5% <21.5%	---	---	---	---					
Benzene	TBX	1.2%	1ppm	5 ppm	500 ppm					
Hydrogen Sulfide	H_2S	4%	10 ppm	15 ppm	100 ppm					
Explosive Vapors	LEL	<10%	---	---	---					
Particulates	5 mg/M^3	---	---	---	---					

Times and Locations of readings:

1ST Time:	Latitude:	Longitude:
2ND Time:	Latitude:	Longitude:
3RD Time:	Latitude:	Longitude:
4TH Time:	Latitude:	Longitude:
5TH TIme:	Latitude:	Longitude:

Emergency Procedures

Emergency Fire Procedure:

A fire emergency shall include any Non-Controlled burning within the burn operations area.

1. Any measurement reflects a reasonable possibility that an PEL will be reached, and this time, continuous monitoring will take place:
   A. Take charge of the situation.
   B. Notify Burn Group supervisor of the emergency.
   C. Notify fire department and safety boat of type of assistance needed.

2. The burn group supervisor will ensure that the fire is extinguished prior to restarting burn operations.

Emergency Termination of Burn:

In the event that the fundamental safety conditions change or an emergency situation arises after ignition of the burn. The following methods may be used to terminate the burn:

1. Releasing the tow line from on of the tow vessels while the other tow vessel moves ahead at several knots.
2. Move both vessels ahead at several knots forcing the oil beneath the boom and removing from the combustion zone.

The OSC has overall burn termination authority. Any designated safety supervisor may request the burn be terminated.

EMERGENCY MEDICAL PROCEDURES:

WHEN A PERSON IS INJURED, A PERSON CURRENT IN FIRST AID OR OTHER QUALIFIED PERSONNEL MUST:

1. TAKE CHARGE OF THE SITUATION.
2. REMOVE TO SAFETY AND PROVIDE NECESSARY DECONTAMINATION.
3. ADMINISTER FIRST AID.
4. NOTIFY THE BURN SITE SAFETY OFFICER AS SOON AS POSSIBLE.
5. ARRANGE FOR ADDITIONAL MEDICAL ASSISTANCE AS NECESSARY.
6. IF A SERIOUS INJURY OR LIFE THREATENING CONDITION EXISTS, NOTIFY THE USCG OPERATIONS CENTER AT 1-800-552-6458.
7. IF A PERSON EXHIBITS AND SYMPTOMS OF CHEMICAL EXPOSURE THEY MUST BE PROVIDED MEDICAL EXAMINATION. (SEE MSDS)

STANDARD PROCEDURES FOR REPORTING EMERGENCIES:

WHEN CALLING FOR ASSISTANCE IN AN EMERGENCY, PROVIDE THE FOLLOWING INFORMATION:

- ☐ YOUR NAME
- ☐ LOCATION
- ☐ TELEPHONE NUMBER AT YOUR LOCATION
- ☐ TYPE OF EXPOSURE OR INJURY
- ☐ NAME OF PERSON(S) EXPOSED OR INJURED
- ☐ ACTIONS ALREADY TAKEN

EMERGENCY RESPONSE RESOURCES:

AMBULANCE:

IN AN OFFSHORE EMERGENCY, EITHER A LOCAL WATER TAXI COMPANY OR THE U.S. COAST GUARD SEARCH AND RESCUE CENTER WILL PROVIDE TRANSPORTATION TO THE NEAREST AMBULANCE/MEDICAL FACILITY. DUE TO THE TRANSIENT NATURE OF THIS OPERATION, THE SITE SAFETY OFFICER WILL CONTINUOUSLY RESEARCH AND LOCATE THE NEAREST AMBULANCE SERVICE BASED ON PRESENT LOCATION.

FIRE DEPARTMENT:

DEPENDING ON THE SIRE LOCATION DIALING 911 MAY SUFFICE FOR FIRE DEPARTMENT CONTACT. IF THE EMERGENCY IS OUTSIDE OF THIS AREA, CALL THE U.S. COAST GUARD (1-800-552-6458)

HOSPITAL/EMERGENCY MEDICAL:

SINCE ON-WATER OIL SPILL OPERATIONS ARE TRANSIENT, THE SITE SAFETY OFFICER WILL CONTINUOUSLY RESEARCH AND LOCATE THE NEAREST HOSPITAL/EMERGENCY MEDICAL FACILITIES BASED ON PRESENT LOCATION.

EMERGENCY PHONE NUMBERS:

POLICE DEPARTMENT	911	USCG SEARCH AND RESCUE	(800) 552-6458
NATIONAL SPILL RESPONSE 24 HOUR HOTLINE	(800) 424-8802	CHEMTREC (24 HOUR)	(800) 424-9300
FIRE DEPARTMENT	911	OSHA	(808) 541-2685

THERMAL STRESS REDUCTION PROGRAM

OPERATIONAL REQUIREMENTS:

1. TO REDUCE THE EFFECTS OF HEAT STRESS, 2/3 SLICKER BOTTOMS ARE A STANDARD PPE REQUIREMENT, UPPER TORSO EXPOSURE IS MINIMAL DURING NORMAL OPERATIONS. DURING OVERHEAD OPERATIONS WITH DRIPPING OIL OR WHEN SPLASHING OCCURS, FULL PPE COVER WILL BE WORN.
2. TO FURTHER REDUCE THE POSSIBILITIES OF HEAT STRESS, SUN SHADE HATS WILL BE WORN DURING OUTDOOR OPERATIONS.
3. ABOVE 85˚F, OR IF WORKERS ARE EXHIBITING SYMPTOMS OF HEAT STRESS, EITHER COOLING VESTS OR TIME LIMITATIONS WILL BE IMPLEMENTED TO REDUCE HEAT STRESS.
4. USE OF SHADE, PLENTY OF WATER, SUNGLASSES, AND SUNSCREEN IS CRITICAL TO REDUCING HEAT STRESS.

HAZARD REDUCTION PROCEDURES

1. PRIOR TO THE VESSEL DISPATCHING FROM THE PIER THE SHIP'S CAPTAIN (OR DESIGNEE) WILL GIVE ALL ON-BOARD PERSONNEL A PRE-DEPARTURE SAFETY BRIEFING CONCERNING GENERAL VESSEL SAFETY.
2. PRIOR TO ANY OPERATIONS ON EACH SHIFT A SAFETY BRIEF WILL BE HELD ABOUT THE SPECIFIC DANGERS.
3. PRIOR TO BEGINNING ANY ONSITE IN-SITU BURNING WORK, THE BURN SITE SAFETY OFFICER DESIGNEE WILL GIVE A SITE AND JOB SPECIFIC SAFETY BRIEFING TO ALL WORKERS ON-BOARD THE VESSEL. THE WEARING OF HARD HATS IS MANDATED ON THE VESSEL'S WORK DECK DURING LIFTING OPERATIONS.
4. HAZWOPER COLORS WILL BE USED FOR ALL HARD HATS: **GREEN HAT** = 24-48 HOURS TRAINING COMPLETED, **YELLOW HAT** = 4-23 HOURS TRAINING COMPLETED. **WHITE HAT** = NO HAZWOPER TRAINING OR NOT CURRENT WITH APPLICABLE REFRESHERS.

DECON

REFER TO ACP SITE SAFETY PLAN

PLAN APPROVALS

SIGNATURES:

RESPONSIBLE PARTY:	**SIGNATURE**	**DATE**
UNITED STATES COAST GUARD REPRESENTATIVE:	**SIGNATURE**	**DATE**
OCEANIA REGIONAL RESPONSE TEAM REPRESENTATIVE:	**SIGNATURE**	**DATE**

PREPARED BY: _____ **ICS POSITION: _____**

PHONE: _____

TAB 5: EXAMPLE OF THE "APPLICATION AND BURN PLAN"

PART 1:

APPLICANT INFORMATION:	
DATE PREPARED (MONTH/DAY/YEAR):	3/19/06
TIME PREPARED (24 HOUR CLOCK):	**1300**
NAME OF APPLICANT:	JOSEPH GREYDON, INCIDENT COMMANDER
TELEPHONE #:	**907-776-3889 FAX: 907-776-6582**
NAME OF ALTERNATIVE CONTACT:	
TELEPHONE #:	
COMPANY NAME:	**RP- TESORO ALASKA COMPANY**
ADDRESS - STREET:	**54741 TESORO RD.**
CITY:	**KENAI**
STATE, ZIP CODE:	**AK 99611**
SPILL INFORMATION:	
INITIAL DATE OF SPILL (MONTH/DAY/YEAR):	**3/1506**
INITIAL TIME OF SPILL (24 HOUR CLOCK):	0830
LOCATION OF SPILL (DISTANCE OFF-SHORE, RIVER MILE, ETC):	**KENNEDY ENTRANCE, COOK INLET-PERL ROCK AN SOUTH SIDE OF PERL ISLAND** **LAT** (N):_____**LON** (W):_____
TERRESTRIAL SPILL LOCATION (IDENTIFY AND DESCRIBE):	
SOURCE OF SPILL (E.G. PIPELINE, VESSEL):	**VESSEL**
CIRCUMSTANCES (FIRE, COLLISION, GROUNDING, ETC):	**GROUNDING**
TYPE OF RELEASE:	**[INSTANTANEOUS ( ) OR CONTINUOUS FLOW (X)]**
RATE OF FLOW IF CONTINUOUS (ESTIMATE):	**3,958 BBL/HOUR**
AMOUNT SPILLED [GAL OR BBLS (42 GLA/BBL)]:	**380,000 BBL**
ADDITIONAL VOLUME AT RISK OF BEING SPILLED [GAL OR BBLS (42 GLA/BBL)]:	**380,000 BBL**
SURFACE AREA COVERED (EST. SQ. MILES):	**20 SQUARE MILES**

TAB 5: EXAMPLE OF THE "APPLICATION AND BURN PLAN"

DECISION CHECKLIST:	
WHY IS MECHANICAL RECOVERY ALONE NOT ADEQUATE FOR SPILL RESPONSE?	RATE OF RELEASE IS EXTREME; PREDICTED WEATHER IS CALM AND DAMP
WILL YOU USE MECHANICAL RECOVERY IN CONJUNCTION WITH IN-SITU BURNING?	**YES (X)** **NO ( )**
HAVE YOU EVALUATED DISPERSANTS?	**YES ( )** **NO (X)**
WILL YOU USE DISPERSANTS IN CONJUNCTION WITH IN-SITU BURNING?	**YES ( )** **NO (X)**
WHY IS IN-SITU BURNING PREFERRED?	WEATHER CONDITIONS CONDUCIVE TO BURNING BUT NOT FOR DISPERSANTS

PART 2:

DID SOURCE BURN?	**YES ( )** **NO (X)**
IS THE SOURCE STILL BURNING?	**YES ( )** **NO (X)**
IS THE PRODUCT EASILY EMULSIFIED?	**YES (X)** **NO ( )**
IS THE PRODUCT ALREADY EMULSIFIED?	**[ ] NO** **[ ] LIGHT EMULSION (0-20%)** **[X] MODERATE EMULSION (21-50%)** **[ ] HEAVY EMULSION (> 50%)** **[ ] UNKNOWN**
ESTIMATED PERCENT OIL NATURALLY DISPERSED AND EVAPORATED WITHIN FIRST 24 HOURS:	**20%**
ON-SCENE WEATHER: *(NOTE: IF NOT AVAILABLE CONTACT SSC FOR WEATHER)*	
WIND - DIRECTION (FROM):	NE
WIND SPEED (KNOTS):	5
SURFACE CURRENT – DIRECTION (TOWARD):	**SW**
SPEED (KNOTS):	**2**
CURRENT SPEED RELATIVE TO THE CONTAINMENT BOOM (KNOTS):	(NOTE: CURRENT SPEED RELATIVE TO THE FIRE CONTAINMENT BOOM SHOULD BE .75 KNOTS OR LESS TO MINIMIZE ENTRAINMENT) **1**

TAB 5: EXAMPLE OF THE "APPLICATION AND BURN PLAN"

VISIBILITY (NAUTICAL MILES):	
CEILING (FEET):	**3**
SEA STATE (WAVE HEIGHT IN FEET) [CIRCLE ONE]:	**CALM** (GLASSY- 0') **CALM** (RIPPLED→1/3') **SMOOTH** (WAVELETS→1.5') **SLIGHT** (→ 4') **MODERATE** (→ 8') **ROUGH**(→ 13') **VERY ROUGH** (→ 20') **HIGH** (→ 30') **VERY HIGH** (→ 45') **PHENOMENAL** (OVER 45 FEET)
12 HOUR FORECAST:	OVERCAST, 5 KNOT WINDS
24 HOUR FORECAST:	OVERCAST, 5 KNOT WINDS
DOES YOUR SITE SAFETY PLAN COVER THIS IN-SITU BURN PLAN?	**YES (X)** **NO ( )**
WILL RESPONSE WORKERS BE BRIEFED ON THE SITE SAFETY PLAN BEFORE BURNING?	**YES (X)** **NO ( )**
ARE THE RESPONDERS TRAINED AND EQUIPPED WITH SAFETY GEAR?	**YES (X)** **NO ( )**
☐ **ATTACH AN ICS 204 FORM, OR SIMILAR DOCUMENT - ON IT LIST THE EQUIPMENT YOU WILL USE.**	
PROPOSED BURN DATE (MONTH/DAY/YEAR):	3/20/06
PROPOSED BURN TIME (24 HOUR CLOCK):	0930
BURN INFORMATION:	
DESCRIBE HOW YOU INTEND TO CARRY OUT THE BURN: 2 BOATS WILL CONTAIN OIL IN SEPARATE BOOMS 2 MILES APART FROM EACH OTHER. OIL WILL BE IGNITED WITH A PROPANE BURNER FROM THE SURFACE.	
CHECK ONE:	**[X] IGNITION IS AWAY FROM SOURCE AFTER CONTAINMENT AND MOVEMENT OF THE OIL TO SAFE LOCATION (IE CONTROLLED BURN).** **[ ] IGNITION OF UNCONTAINED SLICK(S) IS AT A SAFE DISTANCE FROM THE SOURCE.** **[ ] IGNITION IS A OR NEAR SOURCE WITHOUT CONTROLS.**
HOW WILL YOU IGNITE THE OIL?	**FROM WATER SURFACE WITH PROPANE BURNER.**

TAB 5: EXAMPLE OF THE "APPLICATION AND BURN PLAN"

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 (X)**
ESTIMATED ARE OF OIL IN UNCONTROLLED BURN (FT^2):	**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 THE 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:**

5. SOURCE – LOCATION:	**PERL ROCK**
DISTANCE FROM BURN (MILES)**:**	**1.5 MILES**
6. IGNITABLE SLICKS – LOCATION:	**NE OF SOURCE**
DISTANCE FROM BURN (MILES)**:**	**0-3 MILES**
7. NEAREST LAND (BURNS ON WATER) **OR NON-FLAT TERRAIN** (BURNS ON LAND) **– LOCATION:**	**PERL ISLAND**
DISTANCE FROM BURN (MILES)**:**	**1-3 MILES**

TAB 5: EXAMPLE OF THE "APPLICATION AND BURN PLAN"

8. NEARBY POPULATED AREAS (ONE OR MORE NON-SPILL-RELATED PEOPLE PRESENT) – E. LOCATION:	**ENGLISH BAY**
DISTANCE FROM BURN (MILES):	**5**
F. LOCATION:	**PORT GRAHAM**
DISTANCE FROM BURN (MILES):	**6**
G. LOCATION:	**SELDOVIA**
DISTANCE FROM BURN (MILES):	**10**
H. LOCATION:	
DISTANCE FROM BURN (MILES):	
☐ **ATTACH A DRAWING SHOWING YOUR MECHANICAL RECOVERY AND IN-SITU BURNING EQUIPMENT CONFIGURATIONS.**	
☐ **FOR BURNS POTENTIALLY IMPACTING POPULATED AREAS, PROVIDE AN AIR MONITORING PLAN IN ACCORDANCE WITH THE SMART PROTOCOLS.**	

PART 4:

POST BURN:

HOW DO YOU PLAN TO COLLECT BURNED OIL RESIDUE?

DIRECTLY FOLLOWING THE BURN, RESIDUE WILL BE COLLECTED WITH FINE MESH NET TOWED BEHIND THE 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 PLANS FOR ELIMINATING RISK (IF ANY) OF ACCIDENTAL (SECONDARY) FIRES (STRUCTURES/VEGETATION):

RISK WILL BE MINIMAL, DUE TO EMULSION, 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.

TAB 5: EXAMPLE OF THE "APPLICATION AND BURN PLAN"

SIGNATURES:	
SIGNATURE OF APPLICANT:	
SIGNATURE OF APPLICANT:	JOSEPH GREYDON
DATE AND TIME SUBMITTED TO FEDERAL AND STATE ON-SCENE COORDINATORS:	3/19/06
PREPARED BY: _____ ICS POSITION: _____ PHONE: _____	

TAB 6: EXAMPLE OF "FOSC/SOSC REVIEW CHECKLIST"

(NOTE: IF AN *IN-SITU* BURN IS BEING CONSIDERED, IMMEDIATELY NOTIFY THE EPA ORRT REPRESENTATIVE (UNLESS EPA IS THE FOSC), THE DOI AND DOC ORRT REPRESENTATIVES, AND THE USCG STRIKE TEAM TO PROVIDE ADVANCE NOTICE OF THIS POSSIBILITY)

STEP 1: REVIEW OF THE COMPLETED APPLICATION TO BURN PLAN.		
IS BURNING AN APPROPRIATE RESPONSE OPTION, WHEN CONSIDERING MECHANICAL CONTAINMENT AND RECOVERY AND/OR DISPERSANT USE?	(YES)	NO
STEP 2: DETERMINE FEASIBILITY OF BURNING.		
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 THE CONTINGENCY ADEQUATE?	(YES)	NO
WILL THE BURN MEET THE OPERATIONAL CRITERIA FOR: THE NEXT 24 HOURS? THE NEXT 48 HOURS?	(YES) (YES)	NO NO

STEP 3: DETERMINE WHETHER BURN MAY BE CONDUCTED AT A SAFE DISTANCE FROM POPULATED AREAS.

BURNING NEAR UNPOPULATED AREAS:

TO HELP DETERMINE WHETHER AN AREA THAT COULD BE AFFECTED BY AN IN-SITU 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.

WILL THE SMOKE PLUME PASS INTO POPULATED AREAS? IF **NO**, PROCEED TO **STEP 4**. IF YES, CONSIDER THE FOLLOWING CONDITIONS OF AUTHORIZATION.	YES	(NO)
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 INVLOVED 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 POPULATIONS 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.

ACCORDING TO BEST PROFESSIONAL JUDGMENT, WILL $PM_{2.5}$ CONCENTRATIONS REMAIN BELOW 65 MICROGRAMS PER CUBIC METER 1-HOUR AVERAGE IN POPULATED AREAS? IF YES, PROCEED TO STEP 4. IF NO, DO NOT AUTHORIZE BURNING AT THIS TIME.	(YES)	NO
NOTIFICATIONS AND WARNINGS:		
IS IT POSSIBLE TO IMPLEMENT LEVEL 1 GENERAL NOTIFICATION IN THE GREEN ZONE?	(YES)	NO
IS IT POSSIBLE TO IMPLEMENT LEVEL 2 ALERT IN THE YELLOW ZONE?	(YES)	NO
IS IT POSSIBLE TO IMPLEMENT LEVEL 3 WARNING, WHICH INCLUDES IN-PLACE SHELTERING?	(YES)	NO
IS IT POSSIBLE TO IMPLEMENT LEVEL 4 EMERGENCY NOTIFICATION, WHICH INCLUDES TEMPORARY EVACUATION?	(YES)	NO

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? IF NO, DOCUMENT RATIONALE IN DECISION MEMO.	(YES)	NO
HAVE POTENTIALLY AFFECTED OTHER CONSIDERATIONS (STRUCTURES/BUILDINGS) BEEN IDENTIFIED AND ADEQUATELY ADDRESSED? IF NO, DOCUMENT RATIONALE IN DECISION MEMO.	(YES)	NO

STEP 5: REVIEW OF CONSULTATIONS AND REQUESTS FOR AUTHORIZATION.			
NCP AUTHORIZATION OF USE **CONCURRENCE REQUIRED:**			
EPA (FOSC OR EPA ORRT 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 ORRT REPRESENTATIVE	(YES)	NO	CONDITIONAL
DOC ORRT 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** (IE BOROUGH, MUNICIPAL GOVERNMENTS) **PRIVATE LAND OWNERS** (IE NATIVE CORPORATIONS)	YES YES	NO NO	(CONDITIONAL) (CONDITIONAL)
OTHERS (IE 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

STEP 6: MAKE A DECISION ON WHETHER OR NOT 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 CHAT). ☐ 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:

5. THE BURN OPERATIONS TEAM WILL VISUALLY MONITOR THE SMOKE PLUME IN ACCORDANCE WITH THE MONITORING PLAN.
6. THE BURN OPERATIONS TEAM WILL COLLECT THE BURN RESIDUE IN ACCORDANCE WITH THE BURN PLAN.
7. 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.
8. OTHER INCIDENT-SPECIFIC CONDITIONS OF AUTHORIZATION (IE AIR MONITORING IN ACCORDANCE WITH THE SMART PROTOCOLS) FOR BURN WITH THE POTENTIAL TO IMPACT POPULATED AREAS:

_____

_____

SIGNATURES:

SIGNATURE OF APPLICANT:	
SIGNATURE OF APPLICANT:	
DATE AND TIME SUBMITTED TO FEDERAL AND STATE ON-SCENE COORDINATORS:	

PREPARED BY: _____ ICS POSITION: _____

PHONE: _____