

February 21, 2014

DRAFT This tactic map is a working draft being used to develop a Geographic Response Strategy at this location. The tactics represented here have not been approved by the Subarea Committee and should not be considered final. If you have questions or comments please contact us by email at contact@nukaresearch.com.

NUKA Research & Planning Group, LLC.

## NW Arctic Subarea Geographic Response Strategies

| ID                             | Location and Description  | Response Strategy   | Implementation  | Response Resources   | Staging Area                    | Site Access   | Resources Protected<br>(months)   | Special Considerations  |
|--------------------------------|---|---|---|--|---------------------------------|---|---|---|
| N-24-01<br>EX<br>N-24-02<br>PR | Tasaychek Lagoon         Lat. 67° 03.77'N         Lon. 163°18.55'W         Tasaychek Lagoon         Lat. 67° 36.45 N         Lon. 164°06.60 W | Exclusion         Exclude oil from entering the         Cape Tasaychek Lagoon.         The barrier beach in front of the         lagoon seasonally breaches and         may be open in different location.         If the lagoon entrance is not         breeched deploy N-24-03 only.         Aerial survey prior to         deployment.         Passive Recovery         The lagoon in closed to direct         ocean access. If storms threaten to         breach the barrier beach, deploy         passive recovery across the         channel of the stream in         Tasaychek Lagoon. | Deploy anchors and boom with skiffs (class 6).         Place 400 ft. of protected-water boom in a chevron pattern in front of the entrance to the lagoon. If the sea state does not allow this deployment, move to inside the entrance until the boom is able to hold.         Tend throughout the tide.         Place and anchor snare line or sorbent boom across the channels of streams in Ipiavik Lagoon.         Replace as necessary to maximize the recovery. | Deployment         Equipment         400 ft. protected-water boom         3 ea. anchor systems         4 ea. anchor stakes         Vessels         1 ea. class 3         1 ea. class 6         1 ea. helicopter (if needed for N-24-02)         Personnel/Shift         5 ea. vessel crew         Tending         Vessels         1 ea. class 6         1 ea. class 6         1 ea. class 5         Personnel/Shift         5 ea. vessel crew         Deployment         Equipment         300 ft. snare line or sorbent boom         1 ea. anchor systems         4 ea. anchor stakes         Vessels/Personnel/Shift | Vessel Platform Vessel platform | Via marine<br>waters<br>Chart 16005<br>Via marine<br>waters or<br>helicopter<br>Chart 16005 | (months)Fish- herring spawning,<br>dolly varden char, rainbow<br>smelt, saffron cod, white<br>fishBirds- waterfowl<br>concentration, shorebird<br>concentration, seabird<br>nestingMarine mammals- polar<br>bears, sealsHabitat- tundra cliffs,<br>gravel beaches, low lying<br>tundraHuman Use: SubsistenceSame as N-24-01 | Vessel master should have local<br>knowledge.<br>Survey: not yet<br>Tested: not yet<br>Vessel master should have local<br>knowledge.<br>A population of bears may be present<br>in the area. A bear guard is required<br>during shore operations. |
| N-24-03                        | Tasaychek Lagoon         Nearshore waters in the general area of:         Lat. 67° 35.22'N         Lon. 164°08.37'W                           | The lagoon may not be accessible<br>with skiffs. Helicopter deploy<br>when not accessible.<br>Free-oil Recovery<br>Maximize free-oil recovery in the<br>offshore & nearshore<br>environment of Tasaychek<br>Lagoon depending on spill<br>location and trajectory.   | Deploy free-oil recovery strike teams<br>upwind and up current of Tasaychek<br>Lagoon.<br>Use aerial surveillance to locate<br>incoming slicks.   | Same as N-24-01<br><b>Tending</b><br><b>Vessels/Personnel/Shift</b><br>Same as N-24-01<br>Deploy multiple free-oil recovery strike<br>teams as required to maximize interception<br>of oil before it impacts sensitive areas.  | Kotzebue                        | Via marine<br>waters<br>Chart 16005   | Same as N-24-01   | Vessel master should have local<br>knowledge.<br>Use extreme caution, shoal waters.   |