# Plan Example: (WAC 173-182-324) Planning standard for spills of oils that, depending on their chemical properties, environmental factors (weathering), and method of discharge, may submerge or sink

# Purpose and Use of these Instructions

This sample plan language is intended to assist plan holders with meeting the requirements of WAC 173-182-324. This sample plan can be used in two ways:

1. As an outline to compare and update your existing plan.
2. As a template to develop a new plan to send to the state.

## How to Use this Document

Your plan does not need to match this sample to be approved. However, your plan must contain the necessary details and narrative which describes your capability in meeting the planning standard this sample was created for.

Your plan is a tool that should be useful to you. The suggested terminology in this boilerplate may differ from your company specific terminology. When you encounter language not typically used by your company, please substitute it with the terms you use. We are not trying to prescribe terminology in the template/boilerplate. We encourage the use of forms, tables, diagrams and checklists in your plan. In addition, pages and sections need to be replaceable when updates occur.

## Color key for highlighted text

|  |
| --- |
| **Non-highlighted text:** The intent of non-highlighted text is to provide you with general language suggestions for your response plan. It is presented as an example of the type of information that should be included in your response plan. You can use this text as written, or make changes to the text so that it accurately describes your response capabilities and response posture. |
| **Yellow highlighted text:** Provide us your company-specific information. Where you see yellow highlights you will need to replace the text with language specific to your company. |
| **Green highlighted text:** Green highlights are used to note instructions and areas where Ecology is explaining what you need to put in your plan. This text should be deleted before you finalize your document. |

## How to meet the NFO rule requirements

The first step in meeting the non-floating oil requirement is to assess the types of oils listed in your plan and [identify which oils have the potential to sink or submerge](https://www.oilspills101.wa.gov/defining-potentially-non-floating-oils/). This can be due to the products density being close to, or greater than, the density of a receiving water body, either initially or as a result of weathering. This would include:

* Crude oils
* Heavy fuel oils
* Vacuum gas oil
* Used and waste oils
* Asphalt and asphalt products
* Decant oil

If non-floating oils are identified in your plan, the plan should describe how an initial assessment would be conducted to determine the likelihood of the spilled product ceasing to float during that particular incident. The plan must also meet the equipment standards described in the rule, and include a description of the process for detecting, delineating, and recovering non-floating oils in the areas that may be impacted (you may cite the NWACP in meeting this part of the requirements).

## When Ready to Send Ecology Your Plan:

* Remember to delete color coded text and highlights.
* Delete the instructional pages.
* Check footnotes in the document and ensure accuracy of the date and version of the plan you are submitting.
* Number your pages – your plan must have page numbers in it and they should match the page/section numbers of the rest of your plan.
* Check the table of contents carefully to ensure all pages are correctly identified.
* Complete the cross-reference table and make sure the referenced sections agree with the information location in your plan.
* Insert page breaks so that when printed you can organize the plan in a binder, separated into tabbed sections. This will also make page replacement easier when the plan is updated.
* Send us a hard copy and an electronic version. The electronic version can be sent via email to your company’s Oil Spill Preparedness Planner at Ecology. Send the hard copy to:

Ecology Spill Prevention, Preparedness & Response

PO Box 47600

Olympia, WA 98504-7600

**This ends the instruction pages. The next page is the start of the sample plan.**

# Spills of Oil that, Depending on the Chemical Properties, Environmental Factors (Weathering), and Methods of Discharge, may Submerge or Sink (WAC 173-182- 324)

Company Name handles several products, which, based on their physical and chemical properties, and/or the properties of the water bodies they may spill into, have the potential to sink or submerge. Refer to Table 1 for Company Name’s complete product list with potential non-floating oils identified.

## Table 1: Product List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Product Name** | **Density**  (kg/m3) | **Specific Gravity** | **API** | **Group #** | **Sulfur** |
| Gasoline | 700 – 800 | 0.7 – 0.8 | 70.6 – 45.4 | I | avg. 10 ppm |
| *(synonyms: RUL, subgrade, unlead)* | | | | | |
| Jet Fuel | 775 – 840 | 0.77 – 0.84 | 52.3 – 36.9 | I | Not avail. |
| *(synonyms: JetA1, avgas)* | | | | | |
| Diesel | 720 – 880 | 0.82 – 0.88 | 41.1 – 29.3 | II | < 15 ppm |
| *(synonyms:, LSDF, ULSD)* | | | | | |
| Lube Oils**\*** | 846 | 0.85 | 35 | III | Not avail. |
| Crude Oils**\*** | 700 – 950 | 0.7 – 0.98 | 70.6 – 17.5 | I/II/III/IV | 0 – 0.1% |
| *(synonyms: Bakken, Black Wax Crude, Canadian Oil Sands)* | | | | | |
| Bunker Oils**\*** | 880 – 1010 | 0.88 – 1.01 | 29.3 – 8.6 | IV/V | 0 – 4.5% |
| *(synonyms: IFO380, hsvgo, , cbfs, hco) HSFO* | | | | | |

**\* Products with the potential to become non-floating oils per WAC 173-182-030(31).**

## Contracted Resources for NFO Spills

Company Name has a service agreement with PRC, an approved Primary Response Contractors (PRC) with the state of Washington and the U.S. Coast Guard. PRC has the necessary personnel and equipment (see contractor’s PRC application and WRRL as appropriate) capable of responding to an oil spill within the time frames outlined in Table 2 to meet this regulatory requirement of WAC 173-182-324(2). PRC will aggressively respond to floating oil, will, and will prepare for detection, delineation, and recovery of non-floating oil if necessary.

## NFO Assessment

There are many important ways that a floating oil spill response differs from an NFO spill response, including the personnel, equipment, and tactics that will be used to respond to the spill. Because of these differences, it is important to determine early on whether a spilled product has the potential to sink or submerge.

Within the first hour of a spill, Company Name personnel will conduct an initial assessment of the characteristics of the spilled product, and the characteristics of the waterbody it spilled into (using Attachment A of section 9412.A2 in the NWACP). If available at the time, we will consult with available response partners including our PRC, the environmental unit, NOAA SSC, and other company resources to determine if there is a potential for the oil to sink or submerge. If the potential exists, we will begin to mobilize the equipment and personnel necessary to respond. If we do not immediately observe a potential to sink or submerge, we commit to reevaluating the potential as the response evolves.

## Table 2: Timetable for NFO Response Resources

|  |  |
| --- | --- |
| **Time** | **Capability** |
| 1 hour | **Assessment:** Company Name will initiate an assessment and consultation with PRC regarding the potential for the spilled oil to submerge or sink. We may use environmental factors (i.e., density of the receiving water, the chemical properties of the oil released, or other indicators) to begin a non-floating oil (NFO) assessment to identify the need for personnel and equipment mobilization if it will be needed during the cleanup effort. |
| 6-12 hours | **Detection and Delineation:** Should the assessment and consultation determine that the oil may become an NFO, the following PRC resources and personnel to detect and delineate the spilled oil could have arrived on scene: side scan sonar, multibeam sonar, laser fluorosensors, induced polarization system, divers, remotely operated vehicles, and/or other methods to locate the oil on the bottom or suspended in the water column. Additionally, containment boom, sorbent boom, silt curtains, or other methods for containing the oil that may remain floating on the surface, or to reduce spreading on the bottom, could have arrived. |
| 12-24 hours | **Sampling:** PRC resources and personnel necessary to assess the impact of the spilled oil on the environment could have arrived. Types of resources that may be used for this purpose include sampling equipment.  **Recovery:** Additionally, dredges, submersible pumps, sorbents, agitators, or other equipment necessary to recover oil from the bottom and shoreline could have arrived. |

## Tools for an NFO response

The Pacific Northwest response community has developed response resources and tools to support spills from NFOs. Available resources/tools that Company Name and our PRCs may reference in the event of a spill include:

* [NWACP Section 9412](https://www.rrt10nwac.com/Files/NWACP/2020/Section%209412%20v21.pdf)– Non-floating Oils Response Tools
* [Geographic Response Plans](https://www.oilspills101.wa.gov/northwest-area-contingency-plan/geographic-response-plans-grps/list-of-geographic-response-plans/) (GRP) sections including the Non-floating Oils Response Options and Considerations Tool and the updated Resources at Risk information which details resources in the water column and seafloor at risk from NFO releases
* Additional response resources are located in the Sector Puget Sound Area Contingency Plan
* [uSCAT Technical Reference Manual](http://www.uscat.ca/)
* Sunken Oil Detection and Recovery, American Petroleum Institute Technical Reports (1154-1, and 1154-2)

Company Name and our PRC will follow the above resource guidelines for detecting, delineating, and recovering non-floating oils, as applicable.