

**WAC 173-182-321 Covered vessel planning standards for aerial surveillance.** Covered vessels operating or transiting the lower Columbia River, Grays Harbor, Strait of Juan de Fuca, Puget Sound, or Washington coast, shall document the following aerial surveillance capability through the plan:

(1) Access to a helicopter or fixed wing, under contract or other approved means, that is appropriately located and could have arrived with a trained aerial oil spill spotter (spotter) to those planning standard areas plan holders operate or transit within six hours of spill notification. The contracted asset must have the following capability:

(a) Be capable of supporting oil spill containment and removal operations by providing oil spotting capability for at least ten hours per day during the initial seventy-two hours of an oil discharge.

(b) Have a trained spotter on board the aerial asset capable of acquiring, interpreting, recording and communicating oil location and other information to the command post or field operations at regular intervals. The spotter must be equipped with a high definition photographic or video capability and be able to collect and disseminate the following data about the environmental and operational picture including the location of the oil, environmental impacts, and spill resources on-scene:

(i) Latitude and longitude of the location, impacts, or spill resources;

(ii) Azimuth and altitude that the picture was taken;

(iii) Bearing that the picture was taken;

(iv) Estimated extent of oiling; and

(v) Time and date.

(2) Plans must also include logistical sources of additional resources not under contract that may be utilized as additional spotting resources to maximize the effectiveness of enhanced skimming, or as resources to identify the extent of oil to inform shoreline clean-up and assessment teams and shoreline clean-up activities.

(3) In order to provide best achievable technology for aerial oil surveillance, vessel plan holders must also provide for access to a helicopter or fixed wing asset, under contract or other approved means, with the capability to provide a strategic picture of the overall spill; assist in location of slicks when they are not visible by persons operating at, or near, the water's surface or at night; extend the hours of clean-up operations to include darkness and poor visibility; and identify oceanographic and geographic features toward which oil may migrate.

(a) The aerial asset must be appropriately located and could have arrived with trained aerial observers to those planning standard areas plan holders operate or transit within twelve hours of spill notification.

(b) The aerial asset must be equipped with a suite of equipment that could support the capabilities described in this subsection. At least two remote sensing systems must be included in the suite and one of them must be a high definition mounted infrared (IR) camera designed to support aerial operations from aerial platforms. If the IR camera is not mounted, then plan holders must demonstrate how the handheld system will be effective from an aerial platform. Plan holders must submit for approval the systems included in the suite. For the IR camera, the following capability descriptions must be included in the submission:

(i) IR camera with sensors capable in the thermal or mid-IR range;

(ii) A sensor which provides high resolution for airborne imaging;

(iii) Continuous optical zoom capability appropriate for use from an aerial platform;

(iv) Tested minimum thermal resolution and/or the tested minimum resolvable temperature difference; and

(v) Plan holders must submit for review and approval the systems included in the suite. Plan holders may submit for review and approval alternative testing data. This alternative proposal will be subject to a thirty-day public review and comment period which includes, but is not limited to, interested local and tribal governments and other stakeholders.

(c) The trained oil spill aerial observer on board could begin gathering the following from the scene of the spill once on-site:

(i) Graphically displaying processed multispectral data (at a minimum displaying the IR and optical windows), photographic images and other information onto electronic marine charts creating high contrast composite images;

(ii) Ability to reference a map image to a geographic location;

(iii) Location extent and relative thickness information for a reported oil sheen or slick;

(iv) Transmitting processed images and other information to the unified command primary command post;

(v) Archiving all processed data and images; and

(vi) Integrating spill images and other information with spill management software.

(4) Plan holders must have access to personnel trained in aerial surveillance and as spotters to direct skimmers into the thickest oil to enhance on-water recovery and to support the activities described above. The names of individuals with this training, their home base and training levels must either be listed in the plan or made available to ecology upon request. At a minimum, personnel must be trained in aerial observation at the level set forth in federal regulations currently located at 33 C.F.R. 155.1050 (1)(2)(iii). A copy of this regulation is available through ecology upon request.

[Statutory Authority: RCW 88.46.0601, 88.46.060, 88.46.120, 88.46.068, 90.56.2101, 90.56.210, 90.56.240, 90.56.569, 90.56.050, and 90.56.005. WSR 20-01-165 (Order 18-10), § 173-182-321, filed 12/18/19, effective 1/18/20. Statutory Authority: Chapters 88.46, 90.48, 90.56 RCW, and 2011 c 122. WSR 13-01-054 (Order 11-06), § 173-182-321, filed 12/14/12, effective 1/14/13.]