

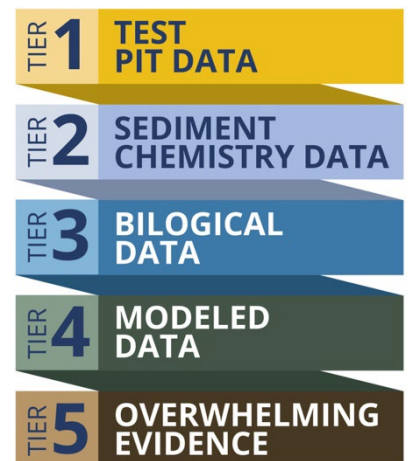


Listing Methodology Development Process

The listing methodology development process for lingering oil started with a literature review of recent data on the impacts from the Exxon Valdez Oil Spill (EVOS)¹. This literature review included peer-reviewed scientific literature as well as interviews with cleanup managers, regulators, and scientists. It progressed to researching how other coastal and northern states and countries address lingering oil in regard to water quality. DEC considered multiple options for methodology, weighing input from toxicologists, risk assessors, modelers, cartographers, and other experts, ultimately selecting a preferred data (tiered) approach with defined data types. The draft methodology was peer reviewed.

Tiered Approach

A tiered approach clearly defines which data are adequate for decision making and which data are preferred. It also remains flexible to allow for overwhelming evidence when the preferred data are not available.



TEST PITS are dug during the initial response to see how much oil has penetrated deeper sediment. These data have potential to show trends if more are dug over time. There must be at least 10 test pits in each area being assessed.

SEDIMENT CHEMISTRY DATA examines the most toxic chemicals in oil, polycyclic aromatic hydrocarbons, and compares results to levels protective of human health and aquatic life. There must be at least 10 samples in each area.

BIOLOGICAL DATA evaluates impacts to wildlife by looking at tissue chemistry data, whether sediment is toxic to organisms, whether populations of organisms are low compared to a reference area, or if an organism's diet uptakes pollutants. The data must be compared to a clean, unimpacted reference site and at least two types of biological data are needed.

COMPUTER MODEL DATA predicts a probability of oiling for a given shoreline location and must predict probability of oiling for at least 50% of the shoreline in each area. The model must be calibrated with and validated to real world results.

OVERWHELMING EVIDENCE allows for multiple lines of evidence when only partial or inconclusive data is available for other tiers but as a whole, they may indicate if the area meets water quality standards.

How to Provide Comment?

Comments can be submitted by email to terri.lomax@alaska.gov; by mail to Terri Lomax, 555 Cordova St., Anchorage, AK 99501. The full contents of all submitted comments are considered public records. The comments must be received by May 23, 2025.

¹ https://dec.alaska.gov/media/yg2kd0up/lingering-oil-literature-review_corrected-final-march-2024.pdf

