

BP Cherry Point Refinery – NPDES Permit No. WA0022900

Phillips 66 Ferndale Refinery – NPDES Permit No. WA0002984

Intalco Aluminum Corporation – NPDES Permit No. WA0002950

Supplemental Fact Sheet

November 4, 2015

Whole effluent toxicity (WET) testing is a form of biological monitoring to determine if a wastewater discharge will have toxic effects on organisms that are similar to or the same as those in the receiving water. WET testing is used because it is not possible to develop water quality standards for all of the toxic pollutants possibly found in wastewater discharges. WET testing is also the only method available for assessing the toxic interaction of pollutants.

In 2012, three environmental organizations appealed language in the wastewater discharge permit for the BP Cherry Point Refinery. The language allowed the refinery to remain in compliance with the permit after failing a whole effluent toxicity test, as long as BP took certain subsequent measures. The permit required BP to conduct additional testing to confirm the presence of toxicity and if present, submit a plan to identify the cause of the toxicity and proposed measures to reduce or eliminate it.

The environmental organizations also appealed the wastewater discharge permits for the Phillips 66 Ferndale Refinery and the Intalco Aluminum Corporation.

In July 2015, the Court of Appeals ruled that a single failed WET test, not deemed anomalous by the Department of Ecology, is a violation of the permit. The Court's ruling is narrow and applies only to compliance testing in permits for which there is an acute or chronic WET limit.

The Department of Ecology (Ecology) has revised the BP, Phillips 66, and Intalco permits in response to the Court's ruling. These revisions are discussed in more detail below.

PROPOSED PERMIT CHANGES

BP Cherry Point Refinery

BP has an acute WET limit at Outfall 001 but not a chronic limit. Permit Conditions S7.B. and S7.D. were revised to incorporate new language to reflect the Court's decision.

Phillips 66 Ferndale Refinery

Phillips has a chronic WET limit at Outfall 001. Their NPDES permit does not currently include an acute WET limit. However, it does require an acute effluent characterization at Outfall 001. Effluent characterization is used to determine whether a reasonable potential exists to require a WET limit. Depending upon the results of this testing, Phillips may be assigned an acute WET limit at Outfall 001. Permit Conditions S7.C, S7.E, S8.B, and S8.D. were revised to incorporate new language to reflect the Court's decision.

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Intalco Aluminum Corporation

The Intalco NPDES permit does not currently include acute or chronic WET limits. However, it does require an acute effluent characterization at Outfall 001 and a chronic effluent characterization at Outfalls 001 and 002. Effluent characterization is used to determine whether a reasonable potential exists to require a WET limit. Depending upon the results of this testing, Intalco may be assigned one or more WET limits. Permit Conditions S15.C, S15.E, S16.C and S16.E. were revised to incorporate new language to reflect the Court's decision.

PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to modify the NPDES permits for BP, Phillips 66, and Intalco. The Department will publish a Public Notice of Draft Modification on November 4, 2015 in the Ferndale Record to inform the public that the draft modified permits and fact sheet are available for review.

Interested persons are invited to submit written comments regarding the proposed changes to these permits. The draft modified permits and supplemental fact sheet are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the Ecology offices listed below.

Department of Ecology
Industrial Section
300 Desmond Drive
Lacey, WA 98503
(360) 407-6916

Written comments on the BP and Phillips 66 permits should be mailed to:

Liem Nguyen
Department of Ecology
Industrial Section
P. O. Box 47600
Olympia, WA 98605-7600
liem.nguyen@ecy.wa.gov

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Written comments on the Intalco permit should be mailed to:

Judy Schwieters
Department of Ecology
Industrial Section
P. O. Box 47600
Olympia, WA 98605-7600
judith.schwieters@ecy.wa.gov

Comments should reference specific text followed by the requested change or concern when possible. **Ecology will only consider comments that pertain to the proposed permit changes.**

Ecology will consider all comments received within thirty (30) days from the date of public notice of the draft permits indicated above, in formulating a final determination to modify the permits. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in these permits.

Further information on the proposed changes to the BP and Phillips 66 permits may be obtained from the Department by telephone at (360) 407-6955 or by writing to the address listed above.

Further information on the proposed changes to the Intalco permit may be obtained from the Department by telephone at (360) 407-6942 or by writing to the address listed above.

**WASHINGTON STATE DEPARTMENT OF ECOLOGY
RESPONSE TO PUBLIC COMMENTS**

**BP Cherry Point Refinery
4519 Grandview Road
Blaine, Washington 98230**

**NPDES Permit No. WA0022900
February 29, 2016**

Ecology published notice of an opportunity to comment on the proposed modification to NPDES Permit No. WA 0022900 in the Ferndale Record-Journal on November 4, 2015. Ecology revised Permit Condition S7. to reflect the Court's decision. In the notice, Ecology invited public review of the proposed permit changes and provided a 30-day public comment period. The deadline for submittal of written comments was December 7, 2015. Ecology received written comments from two entities and one individual.

Comments were received from:

1. Merle Jefferson, Lummi Natural Resources
2. Steve Mrazek, BP Cherry Point Refinery
3. Carol O'Hearn, Anacortes resident

We included all of the comments received in this document. Comments appear in regular text, followed by Ecology's response in italicized text. Ecology will send a copy of this response to comments to each individual who provided comments and those people attending the public meeting/hearing.

Comment from Merle Jefferson, Lummi Natural Resources (1.)

1. The Lummi Natural Resources Department supports the recent Court of Appeals ruling that a failure of a single "Whole Effluent Toxicity" (WET) test constitutes a permit violation, requiring an investigation of toxicity. According to your comment notice, this applies if the test is not determined to be anomalous (unreliable results due to testing problem).

In areas adjacent to these NPDES wastewater discharges, we believe maintaining a high level of near shore marine water quality is essential. These locations are important spawning beds for Pacific Herring whose eggs must incubate in these waters for several weeks prior to hatching. Larval forms of other forage fish like surf smelt and sand lance (important prey items for juvenile salmon), manila clams, and crabs are other important marine resources found along these shorelines which require a high standard for water quality in order to survive.

In addition, bio-concentration of toxins may lead to increased disease, impacts on growth and reproductive impairment. Chronic or acute toxic events at these industries can be transported via contaminated zooplankton prey, larval fish, and juvenile or adult fish advection/migration to a much larger regional area. This expands the impact on other predator species which include halibut, other predatory fish, sea birds, marine mammals and human.

Initiating an investigation to determine the source of toxicity following a WET test failure is an appropriate response and should be a high priority. If the source of toxicity can be found, it may be possible to correct a problem and improve operations so as to minimize future occurrences.

Comments noted.

Comments from Steve Mrazek, BP Cherry Point Refinery (2.)

2. The proposed amendments would not change the language in Condition S7 that addresses anomalous test results. Condition S7 still provides, consistent with WAC 173-205-070(5)(c), that a test result determined by Ecology to be anomalous will not trigger the obligation to conduct additional testing. The proposed amendments would, however, revise the description of what constitutes a permit violation. In light of the other edits Ecology proposes to Condition S7, it would be valuable for the condition itself to specify that anomalous test results shall not be used to determine compliance with a WET limit. We recommend adding that statement to the "Anomalous test results" paragraph in Condition S7.

Anomalous test results: Anomalous test results shall not be used for the compliance determination required by this condition. If a toxicity test conducted under subsection C indicates noncompliance with the acute toxicity limit.

The addition of this statement would not change the rules for WET testing. WAC 173-205-070(5)(c) states plainly that anomalous test results should not be used for compliance determinations, and the permit is consistent with this principle. The edit suggested above would only clarify the effect of an anomalous test, a useful clarification in light of the other edits proposed by Ecology.

Ecology revised the language in Condition S7. as follows:

Anomalous test results: *If a toxicity test conducted under Section D indicates noncompliance with the acute toxicity limit and the Permittee believes that the test result is anomalous, the Permittee may notify Ecology that the compliance test result may be*

anomalous. The Permittee may take one additional sample for toxicity testing and wait for notification from Ecology before completing the additional testing. The Permittee must submit the notification with the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

If Ecology determines that the test result was not anomalous, the Permittee must complete all of the additional monitoring required in this section. Or,

If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee must complete all of the additional monitoring required in this section. Or,

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result for the purpose of determining compliance with the acute toxicity limit.

Comments from Carol O’Hearn, Anacortes Resident (3-6.)

3. Please consider this letter my formal request to become a party of record for any further actions in relation to this issue.

Your name has been added to the interested party list that Ecology notifies for any actions related to the BP NPDES permit.

4. I am in favor of the Court of Appeals ruling which decided that failure of a single Whole Effluent Toxicity (WET) test is a permit violation, if Ecology finds the test is not anomalous. It seems only common sense that a single WET test failure should, indeed, be considered a violation of the National Pollutant Discharge Elimination System. This requires the refinery to investigate the toxicity. A failed WET test confirms that the effluent is lethal to fish species. It is necessary for this zero tolerance stance because fish and wildlife have zero tolerance.

Comments noted

5. It has previously been established by Washington state officials that BP Cherry Point oil refinery in Blaine has the dubious distinction of being the second highest polluter in the state. Further Cherry Point refinery is the largest in the state, capable of processing 230,000bbl/day. And it has been allowed to legally discharge tons of pollutants annually into the Cherry Point Aquatic Reserve. It has been able to legally discharge both wastewater and stormwater to the Strait of Georgia and stormwater to Terrell Creek that flows to Lummi

Bay. Because of the ebb and flow of tides that wastewater does not stay in Lummi Bay. It spreads to Fidalgo Bay, Padilla Bay, the Salish Sea and beyond.

Meanwhile, the Phillips 66 oil refinery located in Ferndale has been allowed to legally discharge wastewater to the Strait of Georgia and stormwater to a tributary that also leads to Lummi Bay. Again what happens in Lummi Bay and the Strait of Georgia does not stay in Lummi Bay and the strait. The strait and Lummi Bay has gotten a double whammy from these two; a triple whammy when you count the wastewater from Intalco aluminum smelter in Ferndale, which also discharges wastewater into the Strait of Georgia.

This is "legal" pollution is unacceptable and defies simple logic. I ask that any investigations and subsequent permit violations of each of these refineries be made a matter of public record and released to the media since these are now enforceable violations.

BP's violation and enforcement records can be viewed in Ecology's Water Quality Permitting and Reporting Information System (PARIS). PARIS can be accessed by the public via the following link:

<https://fortress.wa.gov/ecy/wqreports/public/f?p=110:1:6393075762758570>

Ecology is working on a new version of PARIS that will include failed WET tests, the results of subsequent investigations, and any actions taken by Ecology.

6. A recent article in The Seattle Times on Nov. 15, 2015 cited a new analysis of the inland waters of Washington and British Columbia published this fall. It puts the region's total number of varied fish species at 253, including 37 species never before documented in the Salish Sea. The Salish Sea covers 6,500 square miles and includes Puget Sound, the Strait of Juan de Fuca and the Strait of Georgia. It can reach depths of close to half a mile in places.

The Cherry Point Aquatic Reserve is sensitive habitat for Pacific herring, an essential food source for birds, mammals and larger fish. The Cherry Point herring population is identified as crucial for recovering Chinook salmon and Southern Resident Orca Whales. The herring population has declined by 90 percent since 1973. Coincidentally, the oil refinery began operation in 1971.

Closer to home, in Padilla Bay just south of Lummi Bay, there are 8,000 acres of eelgrass beds, salt marshes, tidal flats and upland fields. Padilla Bay is an important ecological area and is a treasured source of salmon, shellfish, Pacific herring, crabs and other wildlife.

Adjacent to Padilla Bay is Fidalgo Bay, also south of Lummi Bay. The heron colony on Fidalgo Island is one of the largest on the West Coast and the neighboring wet lands are foraging grounds for over 300 nests. There are numerous bald eagle nests. Eagles, plus herons, as well as other waterfowl use the bays to fish for food.

In conclusion, I am deeply concerned about the potential for accidents, oil spills and other devastating impacts that would negatively affect Anacortes, Skagit County, Whatcom County and the Salish Sea. The Department of Ecology is delegated by the EPA to implement the federal Clean Water Act and must also comply with federal rules to maintain the integrity of public waters. It stands to reason that a single WET test failure is a violation of water quality standard and, therefore, of the permit. It's time to protect the people and the environment. Do not let industrial polluters off the hook for Clean Water Act violations to accommodate polluters' economic interests. I am not willing to be collateral damage for the economic benefit of BP or Phillips 66. Are you willing to be collateral damage?

Comments noted.