



Oregon DEQ and the Northwest Pulp and Paper Association Move to Radically Weaken Oregon's Water Clarity Standard

Issue Overview: On October 19, 2005 DEQ released a proposed revision to Oregon's water clarity (i.e., turbidity) pollution standard that would radically weaken controls on water pollution that degrades water clarity in the State. The description below details how the key provisions of this precedent-setting rule would fundamentally change Oregon's existing water clarity standard and pose a direct threat to fish, wildlife, the aesthetics of Oregon's rivers and streams, and other beneficial uses. The most striking part of the rule is that for large rivers like the Columbia and Willamette, the proposed standard would eliminate all protections for water clarity within a 300-foot mixing zone that DEQ has for the first time ever built right into a water pollution standard.



Currently illegal discharges like this would be legal under the newly proposed rules.

Photo by NEDC.

How Oregon's Biggest Polluters Actually Paid DEQ to Develop the New Standard: In 2002, the Northwest Pulp and Paper Association (NWPPA), which represents many of Oregon's largest polluters, complained to DEQ that Oregon's water clarity standard was too strict. Shortly thereafter the NWPPA initiated a contract with DEQ under which DEQ agreed to develop a new water clarity standard if NWPPA would pay for the DEQ staff time to prepare and adopt the new standard.

Under Oregon's Receipts Act Authority the organization representing Oregon's largest group of polluters agreed to pay DEQ up to \$120,000 for DEQ staff time. While the contract did not on paper require that DEQ weaken the water clarity standard, it did note that "The water quality criteria for turbidity are of particular interest, not only to pulp and paper mills, but to other dischargers. DEQ acknowledges that the turbidity criteria should be revised." Along with private meetings with DEQ, that was good enough to convince NWPPA to agree to give DEQ \$120,000. But NWPPA also included a clause that allowed them to cancel the contract at any time. As a result, should DEQ start to take the water clarity standard in a direction NWPPA did not like, NWPPA had all the power it needed to stop the process altogether.

Specific Effect of the Proposed Standard: Oregon's current water clarity standard requires that, "No more than a ten percent cumulative increase in natural stream turbidities may be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity..." OAR 340-041-0036. Under this standard, pollution in a stream with a natural stream turbidity of 1 NTU (a clear stream) could not cause the turbidity to increase over 1.1 NTU.

Although the new standard has many loopholes, two provisions of the proposed standard make clear the magnitude to which DEQ is planning to weaken Oregon's water clarity standard. The first would, for the first time in Oregon's history, build a mixing zone right into the water clarity pollution standard itself. Additionally,

even at the outside of this mixing zone, which DEQ calls the “point of compliance” DEQ has radically weakened the “no more than a 10% increase” rule required under the current standard.

First and most importantly, the new standard eliminates altogether the need to comply with a water clarity standard at the point where a given source of pollution actually enters a given stream. Instead, the proposed rules at 340-041-0038(3) would only require compliance with the new standard at a “point of compliance” that ranges from 50 to 300 feet downstream of where pollution actually enters the river depending on the size of the stream. For a river like the Columbia or Willamette, the proposed rule would allow the discharge of pollution at any turbidity level within this 300-foot downstream mixing zone. The proposed rule ignores the reality that removing all limits on water clarity within these downstream mixing zones will have significant and adverse effects on species, such as salmon, that depend on clear water.

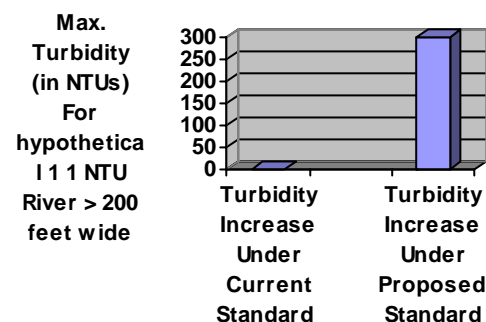
In the second major change to the standard, DEQ plans to abandon the “no more than 10% in turbidity” standard and instead allow a 5 NTU maximum increase and a 3 NTU monthly average for any stream with a natural background turbidity over 33 NTU or less. 340-041-0038(2)(a),(b). NTU’s are the unit of measurement used to record water clarity.

Since even DEQ’s technical basis for the proposed standards admits that fish feeding and growth rates can be adversely affected by NTU levels lower than 10 NTU, allowing increases of 5 or even 3 NTU could certainly degrade conditions in waters that already have turbidity levels above 5 to the point where trout and other fish are being adversely affected by decreased water clarity. Technical Basis for Revising Turbidity Criteria, Tom Rosetta, Water Quality Division, Oregon DEQ, (Feb. 2004 DRAFT).

The difference in the reduction of water clarity that would be allowed under the new standard compared to the current standard is telling. DEQ’s new rule uses 1 NTU as an assumed natural background turbidity level for streams when data is not available and so we use that to demonstrate the effect of a hypothetical discharge into a 1 NTU river that is over 200 feet in width. Proposed rule OAR 340-041-0002(7).

Under the current standard, someone would only be able to cause an increase in the turbidity level in a 1 NTU stream by 0.1 NTU to a 1.1 NTU level. Absent some provision for a mixing zone, the discharge would have to meet this 1.1 NTU standard at the location where the pollution enters the stream.

Under the proposed standard, a discharger would be able to cause a 5 NTU maximum increase in turbidity 300 feet downstream from the point of discharge. Even ignoring the massive 300-foot mixing zone where no water clarity limits would apply, the new standard would allow a 500% increase in the background turbidity level compared to the 10% increase currently allowed (i.e., a change from 1 NTU to 6 NTU). However, when the 300-foot mixing zone is considered, the effect is radically greater, but would be dependent on the rate of dilution in the receiving stream. Assuming a dilution ratio of even 50:1, which is extremely conservative for a 300 foot downstream distance, the proposed standard would allow the maximum discharge of water pollution with a turbidity level on the order of 300 NTU. This is approximately a 300 fold or 30,000% increase over what is allowed under the current standard.



Comments on the proposed standard can be emailed to DEQ at rosetta.tom@deq.state.or.us . For more information please contact Mark Riskedahl, NEDC’s Executive Director at (503) 750-5533 or msr@nedc.org.