



Working with more than 90 community wastewater treatment agencies to protect Oregon's water

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1 Feb 2010

**Chris Gannon**  
**Oregon DEQ**  
**811 SW Sixth Avenue**  
**Portland, OR 97204**

*Re: Trigger Level Comments*

*SB 737*

*Filed electronically to [triggerlevelrule@deq.state.or.us](mailto:triggerlevelrule@deq.state.or.us)*

Dear Chris:

The Oregon Association of Clean Water Agencies (ACWA) is a private, not-for-profit association of Oregon's wastewater treatment and stormwater management agencies and associated professionals. Our 120 statewide members are focused on protecting and enhancing Oregon's water quality. About 90% of the Oregon treatment plants affected by SB 737 are ACWA members. The DEQ proposed trigger level rules apply directly to our members.

### **Summary**

To summarize our comments, we recommend:

- **Use Term P3 Goal Value**

We suggest that the DEQ rename the "trigger levels" to a moniker more descriptive of the intended use of these levels. We suggest the term "**P3 Goal Values**" be used in place of 'trigger levels' and will use that term throughout our comments.

- **Adopt Inventory Of P3 Compounds – Use P3 Goal Values As Guidance**

Overall, the P3 Goal Values rules are overly complex, and are likely have unintended consequences for DEQ.

Many of ACWA's concerns can be addressed by returning to the language of SB 737 and implementing the law as originally contemplated. Most importantly, SB 737 does not require the Environmental Quality Commission (EQC) to adopt numeric trigger levels at all. The bill states that EQC may determine by rule which persistent pollutants "*should*

Charlie Logue, Chair

Ron Bittler, Vice Chair

Peter Ruffier, Secretary/Treasurer

*be included in permittee's plans for reducing permittees' discharges...*". SB 737, § 4(1)(a)(B). This does not require EQC to set any numeric level above which the P3 compounds will be addressed in reduction plans; instead, it only instructs EQC to develop a list of compounds that permittees must include in their plans. Moreover, nothing in the Clean Water Act or Oregon's regulations requires the EQC to adopt such numeric limits as part of this program.

We propose a more simple approach consistent with the direction of the Oregon Legislature by having the EQC adopt the **INVENTORY** of Priority Persistent Pollutants (P3) likely found in Oregon municipal wastewater effluent, excluding Legacy/Tier II pollutants. The P3 Goal Values would be retained by the Department in guidance where they can be updated and revised as improved scientific information is available.

- **Use Reasonable Assumptions**

We disagree with the assumptions the DEQ used in setting the P3 Goal Values, including the assumption that two liters per day of wastewater effluent will be consumed, along with the adjustment factor applied to ecosystem values predicted by ECOSAR. It is important to note that the assumptions used by DEQ in selecting and modifying the P3 Goal Values did not have consensus recommendations from the Peer Review Panel.

- **Remove Legacy/Tier II P3 Pollutants from P3 Goal Values**

We also recommend that Legacy/Tier II P3 pollutants be removed from the P3 Goal Values. DEQ has concluded that broad scale toxic reduction efforts will not significantly reduce these pollutants<sup>1</sup>.

### **Promulgation of P3 Goal Values**

We recommend that the Environmental Quality Commission (EQC) adopt an inventory of the listed Priority Persistent Pollutants (P3) that are likely to be found in Oregon municipal wastewater effluent.

Returning to the plain language of SB 737 and adopting a list of persistent pollutants – rather than numeric limits – will carry out the purpose of the law as originally envisioned: pollutant reduction through broad-based plans implemented on a municipal level. SB 737, §4(2).

The numeric levels as currently proposed are based on emerging information and science, much of it not specific to conditions in Oregon. Including such numbers in a rule, regardless of limiting language in SB 737 or the proposed rule itself, may not prevent the levels from morphing into *de facto* water quality standards at a future date. Having such numbers on the books will open DEQ to litigation if they are not included in permits, or potentially even administrative action to force DEQ to formally adopt the values as water quality standards. We recommend that DEQ avoid this proverbial slippery slope by revising the proposed rule as a list rather than numeric levels.

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<sup>1</sup> Oregon DEQ, SB 737: Development of a Priority Persistent Pollutant (P3) List for Oregon, June, 2009, pp 23,24

Using the “list” approach will not undermine the purpose of SB 737 and instead will strengthen its original intent. As ACWA has explained, permittees are not in a position to develop reduction plans on a compound-by-compound basis. There is insufficient technical information available to do this. Instead, the reduction plans will follow SB 737’s direction to include broad measures such as collection programs, education, and recycling, among many other items, to address persistent pollutants as a whole. SB 737 §4(2). This purpose can easily be accomplished by presenting the new, emerging persistent pollutants (e.g., those without an MCL) in list form while the scientific studies provide additional information.

ACWA notes that SB 737 still contains a requirement for permittees to describe the contents of their discharge using water quality data. SB 737 §4(2)(a). This effort can easily take place without adopting the numeric levels currently included in the proposed rule. If the purpose of this rulemaking is, as we assert, to reduce toxic effects in the environment, measuring the rate of change in toxics coming from municipal sources is the point, not the comparison against a potentially arbitrary trigger.

By listing the P3 parameters likely to be found in municipal effluent in the rule, and using the P3 Goal Values in guidance, the P3 Goal Values they can be updated and revised by the DEQ with additional scientific information

Additionally, the proposed approach carries the risk of not allowing DEQ to be smarter tomorrow as the science evolves. Setting trigger levels in administrative rules at this time using the meager, not site-specific data currently available could prevent future, better decisions because of legal concerns regarding backsliding and antidegradation. This could result in spending valuable dollars to meet a meaningless target rather than using that money to achieve greater environmental benefit elsewhere.

Measuring emerging contaminants is an emerging science. Even the DEQ laboratory is wrestling with the proper method detection and analytical techniques necessary to quantify low levels of the emerging contaminants such as pharmaceuticals and personal care products that are included on the Priority Persistent Pollutant inventory. For many of these chemicals, there are no EPA *Standard Methods for the Examination of Water and Wastewater* for analysis of these chemicals.

### **Trigger Level Rule**

In the Trigger Level Rule, we recommend the term P3 Goal Values be substituted throughout for ~~trigger level~~.

We recommend deleting Table A in its entirety. DEQ should insert a list of the P3 pollutants that would be expected to be found in Oregon municipal wastewater effluent for EQC adoption.

The detailed P3 Goal Values should be developed by DEQ into an Internal Management Directive.

- **Revise Discussion of Water Quality Standards – Section (c)**

We appreciate the Department’s inclusion in the rule of the SB 737 language related to the P3 inventory not being treated as a water quality standard. We want to emphasize

that ACWA strongly recommends that the P3 Goal Values be removed from the text of the rule. However, should the DEQ recommend that the P3 Goal Values be incorporated into the text of the rule, revisions are needed.

We recommend that the proposed OAR 340-045-0100 (c) be revised to read:

(c) “P3 Goal Values Trigger levels are not standards of quality and purity for the waters of this state for the purposes of ORS 468B [~~448~~] or the Clean Water Act [~~Section 313~~]. P3 Goal Values A trigger level may not be applied, used, or otherwise construed as a numeric or narrative water quality standard in Oregon. P3 Goal Values are not a reference measure or other evidence of toxicity in applying OAR 340-041-0033 or OAR 340-41-0007 and shall not be considered or included as discharge limits in the development of a municipal NPDES or WPCF permit. These P3 Goal Values are set as part of the requirements of SB 737 and shall be used only for determination of municipal pollution prevention plans under that process.”

- **Sampling and Analysis Plan Approval – Section (d)**

Proposed subsection (d) would require the DEQ to review and approve the written sampling plans for each of the 52 permittees subject to SB 737. The Oregon Legislature has put SB 737 on a very tight time schedule. Given the time constraints that DEQ and municipalities must meet under SB 737, DEQ review and approval of individual sampling plans is not time efficient.

As the Department knows, ACWA has been working with the DEQ Laboratory and Water Quality staff since June of 2009 to work collaboratively to conduct the required effluent monitoring. ACWA members and DEQ have reached an agreement in principle with the DEQ Laboratory to conduct the required effluent monitoring on a fee-for-service basis. The Oregon municipal laboratory managers and Oregon DEQ laboratory managers have met routinely to review the P3 list and reach consensus on appropriate analytical methods and detection levels. At DEQ’s request, ACWA laboratory experts are preparing a Quality Assurance Project Plan and Sampling and Analysis Plan that will guide the effluent monitoring. We look forward to continued collaboration with DEQ to ensure the effluent sampling is conducted with the highest precision and accuracy.

We recommended that proposed OAR 340-045-0100(d) be revised to read:

*(d) ~~Subject to written approval by the Department, Each permittee shall will-measure the concentration of priority persistent pollutants in their effluent in a single low flow period [see OAR 340- 41-0002(32)] grab sample. The permittee shall compare the results of this these measurement to the guidance P3 Goal Values trigger levels, determine whether or not any persistent pollutants exceeds its P3 Goal Value trigger level, and document this determination in a report to the Department.~~*

- **Department Review of Determination – Section (e)**

The Department cannot remove a permittee’s right to appeal a final agency action.

We recommend Section (e) be revised to read:

(e) The Department will review this report and either approve or reject the determination that a persistent priority pollutant has or has not exceeded its ~~trigger level~~ the guidance P3 Goal Value. If the Department rejects the reported determination, the department will issue its own determination and that determination ~~will be binding on the permittee~~. shall constitute a final order under ORS 183.480.

• **Written Persistent Pollutant Reduction Plan – Section (f)**

As proposed, Section (f) is inconsistent with SB 737. We recommend it be deleted in its entirety and the below language, directly consistent with the statute, be used:

- (f) By July 1, 2011, each permittee shall submit to the Department of Environmental Quality a plan for reducing the permittees discharge of persistent pollutants listed by DEQ as Priority Persistent Pollutants in concentrations exceeding the guidance P3 Goal Values for which DEQ has determined there are reasonable and feasible municipal effluent reduction strategies.

The phrase *“for which DEQ has determined there are reasonable and feasible municipal effluent reduction strategies”* is important to ensure municipal Pollution Prevention Plans are targeted on the pollutants where municipal action can be effective in reducing toxic pollutants. Some parameters are not amenable to pollution prevention plans at the municipal level. For example, what might a municipal effluent pollution prevention program entail for concentrations of cholesterol in effluent?

**Trigger Level Assumptions**

ACWA does not agree with the assumptions used in setting the P3 Goal Values. It is important to highlight that there was no consensus among the members of the Peer Review Group<sup>2</sup> on the assumptions used in the P3 Goal Value selection and calculations.

The ‘trigger levels’ were calculated assuming that an adult drinks two liters of wastewater effluent per day and that a child drinks one liter of wastewater per day. These are not reasonable assumptions and the trigger levels must be recalculated using scientifically reasonable assumptions. We recommend that the use of the standard incidental recreational ingestion rate is more reasonable.

Also, ecological risk factors were adjusted inappropriately. In "Table 1. Proposed Trigger Levels for Priority Persistent Pollutants" provided to ACWA in January 2010, DEQ provides notes as to which portion of the trigger level hierarchy was used for a given P3L chemical. Roughly 20% of the trigger levels (23/118) were selected based on "[M1] USEPA ECOSAR" chronic values (ChVs). For most of these 23 chemicals, DEQ also applied a "MCL adjustment factor" of 0.05 as described in footnote 19 of the November 2, 2009 final trigger level selection report. According

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<sup>2</sup> See Oregon DEQ, SB 737 Trigger Level Selection Process – Comments from the Public and Peer Review Panel, DEQ Working Draft For Discussion Only, October, 2009

to footnote 19, a comparison of MCLs with ECOSAR ChVs--for P3L chemicals that had both values available--suggested that ECOSAR values were, on average, less conservative than the corresponding MCL, and so should be adjusted downward to reflect a similar level of sensitivity, leading to a 95% reduction in the resulting value calculated.

ACWA disagrees with use of this MCL adjustment factor, and recommends that ECOSAR-based ChVs should be used without further modification. First of all, no other ecologically-based trigger level used any kind of adjustment factor to make them more "similar" to MCLs, so it is inconsistent to add a MCL adjustment factor only for the ecologically-based ECOSAR values. Furthermore, using an average adjustment factor that was derived from other chemicals has a high level of uncertainty that, in effect, compounds the already high level of uncertainty in using a modeled ECOSAR values. By the very fact that no empirical data exist for these chemicals, additional uncertainties would make these values even more difficult to defend in a regulatory context.

### **Trigger Level Inventory**

We recommend that all Legacy/Tier II chemicals be removed from the P3 Goal Value inventory. Municipal pollution prevention plans will not be effective in reducing concentrations of these pollutants through pollution prevention - - the focus of SB 737.

According to DEQ's report Senate Bill 737: Development of a Priority Persistent Pollutant (P3) List for Oregon (June, 2009), DEQ determined that for Tier 2- Legacy Persistent Pollutants that "*broad scale toxic reduction efforts will not significantly reduce either of these classes of pollutant*"<sup>3</sup>. The report continues that globally-sourced pollutants reach Oregon from overseas sources, and that legacy pollutants have local, national and some international reduction efforts that have been in place for some time.

We also recommend removing Bis(tributyltin)Oxide (TBTO, hexabutyldistannozane) (CASRN 56-35-9) since DEQ has concluded that this chemical is not likely to be found in municipal wastewater effluent, along with Mercury (Inorganic – CASRN 7439-97-6). The final DEQ SB 737 P3 listed adopted by DEQ in October of 2009 includes methyl mercury (CASRN 22967-92-6). It does not include Mercury (inorganic) (CASRN 7439-97-6). The Department cannot issue a trigger level or P3 Goal Value for a chemical not included on the DEQ P3 inventory as finalized.

We appreciate the opportunity to provide the Department comments on the proposed P3 Value Goal rule. Please let me know if you have any questions regarding our comments or if additional details would be useful.

Very truly yours,

Janet A. Gillaspie  
Executive Director

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<sup>3</sup> Oregon DEQ, SB 737: Development of a Priority Persistent Pollutant (P3) List for Oregon, June, 2009, pp 23,24

cc: Dick Pedersen, DEQ Director  
Neil Mullane, DEQ Water Quality Administrator  
Daniel Eisenbeis, League of Oregon Cities  
Mark Landauer, Special Districts Association of Oregon  
ACWA Board of Directors  
ACWA SB 737 Affected Members  
ACWA SB 737 Task Force