TOXICITY PROGRAM REVIEW
STAKEHOLDER'S GROUP MEETING #6
February 4, 2002

PRESENT: DanKusnierz, Bill Zarolinski, Nick Bennett, Darold Wooley, Tim Andrews, Joe Payne, Bill Ball, Steve Silva, Jennie Bridge, Bill Alsop, Clarissa Trasko, Barry Mower, Gregg Wood, Dennis Merrill

1. To begin the meeting, there was quick review of where we are in the overall process. Hopefully, today's meeting will get through most of the remaining technical part of the rules. After that is done, DEP will take all the comments and discussions, review them internally and produce revised versions of the rule. In the process, an effort will be made to consider how various parts will be implemented and the systems, procedures and resources that may be needed. The group would like to get some feedback on how this implementation planning goes. Looking ahead, it was noted that we should make sure the standards in chapter 584 are protective of subsistence fish consumption.

2. At the next meeting, the group would like to get a report on the status of DEP's work on the biocriteria and sediment evaluation issues. Currently, the biocriteria rule is undergoing internal review and stakeholder group is being formed. It is expected that meetings will be held in March and April. There is not much to report on sediment data.

3. Follow-up for issues from the previous meeting.
   DEP has not yet gone over the question related to section C.3 about the need for permit limits in response to isolated instances of RP or exceedences. One consideration for this, as well as other issues, is to include some place holder language so that the all parties and the Board of Environmental Protection can see the language / concepts in question and better understand the debate at hand.
   DEP is still working on reopener language for inclusion in permits to allow for adjustment of testing schedules or removal of limits if a facility has not had any further problems with a pollutant that caused inclusion of permit requirements.

4. The subgroup looking at statistical methods for evaluation of WET data did discuss the use of the hypothesis or ICp methods. Several of the work group favored use of the ICp method. The confidence interval that would be used is still under discussion. To help work this out, existing test data can be reviewed. The commercial laboratories have good records and may be able to help out in this area. The intent here is to change the way in which test results are evaluated, not to change the test procedure itself. In response to a question, it was pointed out that the hypothesis method can flag very small changes in test results as being statistically different; this may be more of an artifact of the procedure than actual differences in the effluent toxicity. The situation is particularly true with sea urchins. Since the EPA methods manuals cited already allow the use of ICp, there may not be a need to include specific language in the rule. The ICp method will also permit interpretation of test results at levels between the effluent dilutions used in the WET test.

5. To continue the discussions of allocation models from the January meeting, DEP presented a revised spreadsheet. This was similar to the model from the last meeting, in several respects. The allocation method was changed from prorating by flow to prorating by past discharge quantities. The past quantity was calculated by using the facility's average effluent concentration during the past 5 years and the facility's permitted flow. The other significant change involved how to handle unused load allocations. Previously, allocation by flow alone would result in some facilities receiving more allocation than needed. That excess allocation would be held by the facility. Under the current proposal, any unneeded allocation would be held in reserve by the State. If future demands for new allocations arise, the State could use some of the extra in its "bank", allocating it using the principles of the anti-degradation policy in the law. As before, the model would be updated at regular intervals so facilities would know in advance of permit renewals what the allocation will be upon renewal. Models for both copper and lead were presented. DEP will e-mail electronic copies of the spreadsheets to all stakeholders for their review and comment. Discussion of some of the issues in development of this model included:
   - How to handle less than values in calculating average discharge concentrations. For the model DEP used one-half of the reported detection limit. Through discussion by the group, the better way would be to used one-half of DEP's established reporting limit to make the averaging process more consistent.
   - Reasonable potential calculations based on the allocation model might be too stringent. Consideration might be given for some sort of adjustment factor, say by reducing the assumed background concentration in RP calculations.
   - The model does not include a component for non-point source pollutants. A set-aside or reserve percentage could be added similar to the background or as a "point source" used to represent NPS. The NPS contribution may be more of an issue for some pollutants than for others.
   - The model must protect for estuaries. Sometimes the water quality criteria for a pollutant in marine water may be lower than for fresh waters. In these cases, the total load from fresh to marine water should be reduced accordingly. Lead is a particular concern since it is in high levels in shellfish, although it is not clear if this is due to past or current practices.

6. In discussing the model more generally, the amount of reserve allocation in the State's "bank" was an important issue. Some felt that allocating most of the allowable load to existing discharge sources would be appropriate. Others were concerned that the model does not do enough to improve the waters by reducing the discharge of pollutants over time. That is the long-term goal of the Clean Water Act. The amount in the "bank" should be reviewed periodically to make sure goals are appropriate. EPA noted that other states often hold 10% to 20 % of an allocation in reserve. Some have done water effects ratio studies to adjust water quality criteria. After much discussion, DEP suggested that the amount of allocation in a "bank" for future allocation could be as a sliding amount to be determined by pollutant for each watershed. The ground rules for this might include a minimum reserve, say 10%, but the maximum amount that could be allocated to existing facilities would not exceed twice the calculated existing load. The actual numbers would vary, but the concept is to allow existing discharges to have some consideration for normal growth and the variance in the data used to determine their past average effluent

concentrations. The concept seemed to be satisfactory with most of the group. However, some have problems with the idea of allowing more pollutants to be discharged.

7. DEP suggested that the model be used as a framework for discussion of background pollutant concentrations and site-specific adjustments, such as hardness. These are covered in sections D.4 and 5 for the draft rule. If a model is to be used, it will be important to understand how these factors are applied on a regional or watershed basis. One approach may be to use them in segments of river systems or by tributary to a larger river. This might involve sub-models, the output of one being used as an input to the next. For section D.4.a on hardness, it was recommended that the last sentence be deleted. The preceding sentence could be modified to consider all characteristics on a segment basis. The term "significant" used in this area should be further clarified. There is some confusion whether non-point sources include natural conditions or is focused only on man-made activities.

8. In discussion of section D.3 on background concentrations, there were questions about how the assumed default level of the 10% of the water quality criteria was determined. DEP explained that it has done some metals testing using clean methods at unimpacted sites. Much of the data for several metals came back at non-detect for the reporting limit used. Where detectable concentrations were found, the typical value was in the 10% range. The 10% is in recognition of the fact that for many pollutants there are actual concentrations present in the background, even if not detectable. Alternately, where monitoring data are available, those results can be used. Where non-detect results are obtained, the results could be taken at half the reporting limit. In general, the group felt that if DEP is to set background level, the data and evaluations should be subject to public review and comment prior to values being finalized.

9. For section E, members of the group will check the EPA reference manuals cited by DEP to verify they are correct. It was suggested that the rule address combining fish weights in WET tests for analysis purposes. Also, the rule should include a reference for the use of the ICp method. (DEP will review the EPA methods to see if they adequately include ICp or if specific language is needed.)

10. The group also discussed the proposed new chapter 584 that covers water quality criteria. The only area discussed in detail was the language regarding the use of alternate standards to protect subsistence fishing uses in certain waters. In these cases, distinct populations or classes of users eat more fish that the normal population. EPA has published guidance on assumed fish consumption rates. The Bureau of Health is the primary agency involved in making determinations on consumption standards and public health protection. DEP will consult with the Bureau of Health on the existing language in the rule (taken directly from the existing chapter 530.5) to see if changes are appropriate to clarify the intent or process in this area.

11. With the conclusion of the review of all the portions of the proposed rules, the next step is for DEP to consider all the comments and discussions and make revisions in the existing draft. As part of that process it will do an internal critique of the entire package,

looking for possible conflicts and implementation problems. The next meeting will be a wrap-up review of the revised rules.