| **Implementation**  **Tool or Approach** | **Description** | **Environmentally**  **Meaningful** | **Cost Effective** | **State/Federal Authority** | **Comments** |
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| Water quality-based effluent limit (WQBEL) | A numeric effluent concentration limit included in an NPDES permit when the source has the reasonable potential to exceed a water quality criterion | Prevents the discharge of a pollutant at levels that may impair beneficial uses. In some cases the contribution from the point source is so small relative to other contributions that removal of the point source load will not provide a significant or meaningful benefit to beneficial uses. | Per federal regulations, WQBELs are calculated to meet water quality standards without regard to cost. Where facilities would need to add expensive treatment to meet WQBELs, the consequence may be expensive removal of a small pollutant load by an NPDES source, without consideration of whether reducing the same or greater loads from other sources could be more cost-effective. | Existing, no proposed changes | The CWA regulates point sources through the NPDES permit program, but does not place enforceable requirements on nonpoint sources to meet WQS. Nonpoint sources may be given load allocations in a TMDL. |
| Intake credit | This tool allows a source to pass through pollutants contained in their intake water to their effluent without treatment as long as the facility does not increase either the mass or concentration of the pollutant at the point of discharge. | This provision does not result in an environmental benefit or impact. | This provision is cost effective for the point source because it allows them to forgo the cost of removing pollutants that they did not contribute. | DEQ will propose a new rule authorizing intake credits. | DEQ expects there will be very few permittees that will qualify to use this provision. |
| Reasonable Potential Analysis clarifications | The procedures DEQ uses to determine reasonable potential and calculate water quality based effluent limits are largely directed by EPA’s Technical Support Document for Water Quality Based Toxics Control (TSD). The guidance for addressing data below quantification levels has been completed and published. However, DEQ could clarify in our revised RPA IMD how the permit writers will apply the best professional judgment in the evaluation of effluent and ambient data to determine valid data points versus “anomalies.”  This would include Qualitative checks for data “anomalies” such as:   * Use of correct reporting units * Laboratory errors * Sampling errors * Upset conditions in treatment unit * Elevated detection limits/reporting levels * Quantitative checks for “Outliers” | To the extent that such clarifications focus enhanced pollution controls where there is truly the potential for a source to cause or contribute to a beneficial use impact, rather than very infrequent and short term criteria exceedances, anomalies or data errors, it will lead to more environmentally meaningful implementation of the water quality permitting program.  Technically facilities are only allow one exceedance every five years (based on 95% exceedance frequency). Anything greater than 5 years is infrequent. Anything less than 5 years indicates insufficient treatment capacity. | To the extent that such clarifications avoid expenditures to control very infrequent events to respond to errors, they will contribute to the cost effective implementation of pollution controls. Clarification of policies and procedures also assists with timely and cost effective administration and implementation of the permitting program and process itself, for both DEQ and permittees. | As long as the RPA procedures are consistent with federal regulations and guidance | More discussion is needed to determine the specific issues whether the revised IMD that DEQ questions are not answered  Scope is the real issue here. For example is this issue about discrete issues such as bad lab data or broad operational considerations such as calling 2 year storm events or illicit sources “statistical anonolies”. |
| Compliance schedule | A schedule of actions included in an NPDES permit leading to compliance with water quality-based permit limits or other requirements | A facility may need time to install technology improvements or implement pollution reduction programs before they can achieve their permit limits based on WQS. This tool requires that milestones toward achieving compliance be met. | The compliance schedule allows an existing source time to complete planning, financing and construction of improvements over the specified timeframe. | Existing implementation of provision voluntarily on hold pending litigation settlement.  If needed, DEQ will propose a provision to allow compliance schedules for human health criteria prior to resolution of litigation. | This is a tool DEQ, other states and EPA have used for many years. DEQ is currently developing guidance to improve our process.  The human health provision is being considered because the litigation is related to endangered species rather than human health concerns. |
| Variances | A variance is a temporary exemption from meeting certain otherwise applicable water quality standards and must be justified based on one of 6 reasons specified in federal and state WQS regulations. | A variance may establish alternative limits, and may, where appropriate, include terms and conditions that will result in progress toward meeting the WQS. Terms and conditions could include capital improvements, public education and take-back programs, trading or offsets, etc. | A variance provides a permitted source relief where attainment of the standard is cost-prohibitive or cannot be attained due to other specified factors, and provides a mechanism by which other more cost-effective reductions can be implemented. | Existing. DEQ will propose revisions intended to clarify and streamline the process to obtain a variance. | Substantial and widespread economic and social impact is one reason a variance may be granted. Other reasons include high, naturally occurring pollutant loads and human-caused conditions or sources of pollution that cannot be remedied or would cause more environmental damage to correct than leave in place. EPA must approve variances.  Underlying WQS remain in effect for the water body and for all other CWA purposes (e.g. other permittees, 303(d) listing and TMDL development). |
| Background concentration allowance | This tool would allow non-contact cooling water systems that do not add, but only concentrate, pollutants in their intake water, to pass through those pollutants without additional treatment, under certain circumstances, if the effect on the ambient water body concentration is not significant. Otherwise, where ambient river concentrations are above the criteria, sources would be required to meet the criteria at the ‘end-of-pipe.’ | No specific environmental benefit. The resultant discharge concentration of the pollutant(s) does not significantly affect the receiving water body ambient concentration(s). | The intake concentration allowance could provide specified permitted sources relief where attainment of the standard in the effluent of that source would be costly but would not provide meaningful environmental benefit. | DEQ will propose adoption by rule and submit to EPA for approval. EPA would likely characterize the provision as a multiple discharger variance. | Individual facilities could be covered by this provision as part of the permitting process. While EPA would need to approve the provision, individual approvals from EPA would not be needed for each facility covered under the provision. Facilities would need to provide information demonstrating that they meet the requirements for receiving coverage that are described in the provision. |
| De minimis concentration | Allow facilities to be in compliance with their WQBELs based on meeting method quantification levels. | No specific environmental benefit. Would address concern that facilities not be held accountable for pollutants they cannot detect or quantify. | DEQ and EPA’s current policies on the application of criteria below quantitation limits address these issues. Continued implementation will result in determinations of compliance based on quantification limits, where applicable. | No authorizing rule language is needed; DEQ’s current QL policy is consistent with state and federal law and EPA guidance. | DEQ has a policy in our Reasonable Potential Analysis IMD regarding measurable limits (quantitation limits) and the application of criteria lower than that in permits. |
| De minimis increase allowance | New WQS provisions to allow a “de minimis” increase in toxic pollutant load above ambient WQ conditions from a single point source, which is small enough that it is not expected to significantly affect human health risk. | Could result in more environmentally meaningful implementation of the standards by focusing efforts on discharges that are likely to have a real or significant human impact or risk. | This provision would focus toxics reduction and control efforts where they are most likely to have a significant human health effect, resulting in an overall increase in cost effectiveness. | Would require new WQS rule provision and approval by EPA (see comment). | EPA would be unable to approve such a provision without a demonstration that the provision is protective of designated uses. EPA does not currently see a path forward for being able to demonstrate that such a provision meets this requirement. This is particularly true if such a provision were applied to human health criteria for non-carcinogens, given that these criteria are derived using a threshold approach which does not incorporate the use of risk levels. |
| Trading with upstream sources to meet WQBEL | Allows a permittee to reduce loading from an upstream source of the same pollutant in order to create the assimilative capacity they need to meet water quality standards. | Provides more options for reducing toxic pollutants from multiple sources. | Allows a permittee to achieve toxics reductions more cost effectively if there are other sources nearby that can be reduced at less expense. | No authorizing rule language is needed; this is possible under existing regulations. | May be limited applications—requires an upstream source discharging the same pollutant of concern. If time is needed to implement or the outcomes are uncertain, a compliance schedule or variance may need to be used in conjunction. |
| Offsets in lieu of meeting WQBEL | Would allow a permittee to reduce loading of the same pollutant from another point or nonpoint source within the watershed/subbasin if this will result in greater overall pollutant reduction. The source may exceed water quality standards immediately downstream of their discharge. | Environmental benefit would be realized at the watershed/ subbasin scale by reducing the overall pollutant loading. However, local environmental impacts could result from increased pollutant concentrations near the point of discharge. | Allows sources to find more cost-effective means to reduce pollutant loading. | Under current federal regulations, DEQ can not allow a source to exceed standards unless the source is granted a variance. | May have limited applicability outside a handful of commonly found pollutants. For discharges occurring under a variance, DEQ agrees that offsets this could have both environmental and cost benefits. We will continue to work to make the administrative process to allow offsets under a variance as efficient as possible. |
| Source reduction | Reducing pollutants generated or entering a treatment facility by finding ways to reduce them before they become waste; e.g., recycling, reduced use or substitution of raw materials. For municipalities it could include education or collection programs or enhanced pre-treatment by dischargers to the POTW. | Reducing toxics at the source can provide multiple environmental and safety benefits. | Source reduction is often found to be more cost effective than waste treatment. | No authorizing rule language is needed; this is possible and currently occurs under existing regulations. |  |
| Benchmark approach | Use best available practices and controls as a means of achieving progress toward WQS in lieu of including WQBELs in permits. | May be a means to focus resources where there is greatest potential to achieve pollutant reductions and environmental benefit. | In some cases, this could be a more cost effective approach for NPDES sources and for DEQ, if the only other alternative is to obtain a variance in situations where meeting WQBELs is not technologically or economically feasible. | Federal regulations do not allow this approach. | This same result can occur through a variance process (see above). |
| Use attainability analysis | A process to set appropriate use goals for the water body. Demonstrate that a use is not attainable for one of 6 reasons; replace that use with the use determined to be attainable. | Getting the uses/goals for the water body right can be the first step in making real environmental progress. | By setting appropriate and attainable use goals, resources will be allocated where they are more likely to accomplish the desired environmental results. | Existing, no new rule language is needed. | This is a revision to the standards for a water body rather than a tool applied to a specific permittee and would affect all CWA programs implementing WQS on that water body. |
| Site specific criterion | A process to set appropriate criteria for the water body. Demonstrate that a water body-specific or basin-specific criterion is protective of the designated use. | Getting the criteria right can be the first step in making real environmental progress through regulatory and non-regulatory programs. | By setting appropriate criteria, resources will be allocated where they are more likely to accomplish the desired environmental success. | Existing, no new rule language is needed. | This is a revision to the standards for a water body rather than a standards tool applied to a specific permittee and would affect all CWA programs implementing WQS on that water body. |