

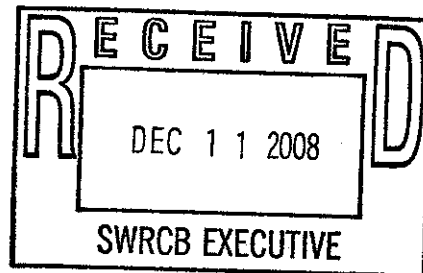
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Re: Submission of Written Comments
Periodic Review of SWRCB Resolution No. 68-16

To the State Board:

Thank you for your periodic review of the "Statement of Policy with Respect to Maintaining High Quality of Waters in California" (SWRCB Resolution 68-16, the Anti-degradation policy), and for the opportunity to offer the written comments transmitted herewith. The commitment of the agency to environmental protection and to the health and benefit of the people of the State is important and appreciated, as is the invitation of the agency for public evaluative process participation.

Commenters have been invited to address the following questions:

1. Should the State's Anti-degradation Policy be revised as it applies to groundwater?
2. If so, why should it be revised, and how should it be revised?

Resolution 68-16 was adopted to provide a regulatory foundation for the protection of water resources in a manner "consistent with maximum benefit to the people of the State." Taken in isolation, Resolution 68-16 is clearly well intentioned, with little indication of construction flaws that could yield outcomes in opposition to its intended purpose. An examination of the resolution in a historic context, however, enables a more comprehensive critique of the benefits - and the costs - brought by 68-16.

Resolution 68-16 was drafted 40 years ago. In the period since, other water-quality policy measures have been adopted - measures that in effect create lenses that focus aspects of 68-16 in a manner counter to its original objective.

Resolution 88-63, the "Adoption of Policy Entitled Sources of Drinking Water", is one such more recent resolution. In concept, 88-63 is another well-intentioned policy statement geared towards the protection of water resources. In practice, it is the foundation, in instances where spills or releases of hazardous substances have impaired the quality of water resources, for California agency policy requiring the restoration of the resource to pre-release conditions - at all financial and environmental cost.

A careful reading of 88-63 reveals a policy that can be interpreted broadly. An examination of implementing agency practice, however, shows a pattern of rigid and uniform application. With few exceptions, a water resource fouled by a release of a foreign substance is to be returned to its original condition, irrespective of the harm that occurs in the process. Groundwater, in essence, trumps all – its quality is more important than air quality, it is acceptable to create greenhouse gasses if their generation is in association with a groundwater restoration project, it's acceptable to drive particulate-releasing dump trucks through residential neighborhoods if they're carrying soil excavated during groundwater cleanup.

In combination, 88-63 – a resolution that establishes with few exceptions groundwater in California as a resource for human consumption, and 68-16, which resolves that any change in water quality will not unreasonably affect present and anticipated beneficial use – work at cross-purposes to their intent. **Their present combined interpretation is not "consistent with maximum benefit to the people of the State."**

So long as we pretend that all water everywhere is a potential drinking water resource we justify extreme and inefficient approaches to groundwater impairment cases. It's often akin to prescribing an amputation to a patient with a bruise. If the patient has gangrene that threatens to spread and kill its host, amputation is by all means reasonable and necessary. But if the mark isn't gangrenous, if the mark will fade and heal on its own and all that's required for a cure is time - to cut off the patient's arm would be foolish and wasteful.

The same goes for so many groundwater cleanup projects. Well-intentioned regulators force complying parties to administer extreme and aggressive restorative measures, or to attend to a demonstrably benign problem for an extended period of time, even in circumstances where groundwater resources will never be used for drinking water.

The technical record shows that many, if not most, of these restorative undertakings conclude with:

1. Some measure of contamination still in the ground, and
2. The residual contamination posing a risk that is not substantially less than would be posed by a concentration orders of magnitude greater, and
3. The finding that natural forces are the only forces that can restore the resource to its original condition, and
4. That the measures taken to address the contamination, measures that might be appropriate if the resource were actually used for consumption (but aren't because it isn't and never will be), have actually left a more substantial environmental footprint than the condition the action attempted to cure.

How many thousands of truckloads of soil have been driven great distances to landfills in an attempt to restore a site to a "background" condition? How many hundreds of thousands of cubic feet of natural gas have been burned in oxidizers attempting to remove soil vapor to a level protective of a resource that will never be consumed? How many hopper-cars of coal have been burned to generate the electricity required by pumps and air strippers attempting to remove that last recalcitrant molecule of hydrocarbon from the groundwater?

On aggregate – has the action required by the combination of 68-16 and 88-63 brought good – or harm?

Upon reflection, it is probably accurate to say that the combination of resolutions served us well in the past, when contamination cases were numerous, often threatening, with potential impacts that were not thoroughly understood. The combination of resolutions serves us less well today. In fact, an honest evaluation of the effect suggests that their combination frequently brings more harm than benefit.

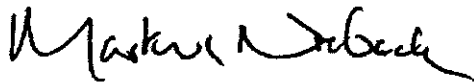
Our environmental resources are important – all of them. Our human resources are also important (and a required component of environmental protection). To take a realistic view of human impact and its consequences – to recognize that we often cannot completely remove a mark we've made on the environment and that, if we attempt to apply ourselves to a circumstance we cannot remedy we can often do more harm than good – allows the application of sound and pragmatic policy. Such sound policy enables a better focus on spill prevention (something we can control), and liberates our human and fiscal resources for application to unattended and important environmental threats. Wouldn't the \$200,000 spent at a gas station lowering levels of dissolved gasoline from 500 ppb to 100 ppb possibly be better invested in the abandoned un-investigated gas station across the street? Might the financial and human resource be better invested in attending to the myriad dry cleaners going deliberately ignored across the state?

The protection of one resource at the expense of another was not the intention of the authors of 68-16. It is imperative at this juncture, therefore, to review 68-16 and 88-63 as they are applied together.

The review should take into account all we've learned, and recognize truthfully that human effort alone cannot in many cases restore groundwater resources to a pristine condition, and that often our attempts to do so come at substantial and unbalanced cost to human health and the environment. This review should take a broad measure of action-related consequences, particularly given the mandate of AB 32. Through this thoughtful and thorough policy review we can correct a significant and damaging flaw in the regulatory policy foundation.

In conclusion, the periodic review of policy is important. Here, a review of 68-16 finds that this particular resolution is by itself appropriate – but its application by agencies in combination with 88-63 is not.

Most sincerely,



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Principal