



21 December 2010

Ms Angela Schroeter
Senior Engineering Geologist
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA. 93401-7906
USA

Dear Ms Schroeter

Further to the release of the draft order R3-2011-0006, we believe that there are some key opportunities that arise to strengthen the flexibility of farmers and stakeholders to deliver the environmental outcomes sought by the waiver without significant compromise to the agricultural production system that it seeks to address.

Critically, in this regard, there appears to be no clear method to move between tiers, thus appearing to pre-empt certain decision rights for farmers around their operations. Of most concern is the Tier 3 status for all diazinon and chlorpyrifos use in production systems which appears to heavily impose on the operator that chooses to use these pesticides without consideration to the available options to mitigate the environmental impact or take account of the environmental and economic consequences of switching away from this class of insecticide.

While enzyme technologies, such as LandGuard™, are still in late (field trial) development, the current approach appears to remove the possibility that this, or indeed any, mitigating technology could emerge that could deliver the desired levels of pesticide of 25 ppt chlorpyrifos (and the associated environmental benefits sought). We would therefore request that the emerging or alternative approaches be contemplated in the waiver structure so that farmers can make operational choices from both economic and environmental stand points.

It is our current view that LandGuard™ can deliver the outcome sought for between \$1500 - \$3000 per crop (depending on a range of factors - including but not limited to volume of water, ability to hold the water, soil type, offsite movement of soil) and that this is a genuine choice for farmers who wish to use OP insecticides (for various operational reasons) when compared to other proposed mitigation strategies (such as tail water retention, vegetative ditches or indeed switching to alternative (likely synthetic pyrethroid) insecticides. Some published studies are available on the performance of enzyme based approaches, for example, "Controlling Offsite Movement of Agricultural Chemical Residues - Alfalfa", Draft, Prichard et al, 2010 <http://cesanjoaquin.ucdavis.edu/files/82948.pdf> and "Pesticide and toxicity reduction using vegetated treatment systems and Landguard OP-A. Data Summary and Final Report", Central Coast Regional Water Quality Control Board San Luis Obispo, CA., Anderson BS et al, 2008.

Further, in respect of the switching options, it is noteworthy that other classes of pesticides are not specifically addressed in the proposed waiver - specifically synthetic pyrethroids. We anticipate that, even with our proposed changes being accepted, there will be certain circumstances that may induce farmers to switch from OP to SP insecticides as it appears that there is no limit set for SP as there is for OP insecticides. This would likely result in unintended consequences as while OP utilization may drop, the SP increase will result in other eco-tox outcomes that do not appear to be contemplated or regulated in the draft waiver. We would suggest that this "loop hole" requires some attention in the final waiver.

With the introduction of alternative remediation approaches that meet the required standard, it is our view that farmers should then be able to migrate to less onerous tiers of the waiver with demonstrated compliance in their operations. This is important as, notwithstanding whatever economic incentives exist to continue to use OP, there are the additional incentives for the operator in reduce compliance complexity and incentives for the Water Board in the demonstration of genuine environmental reforms being implemented at lower governance cost to the state.

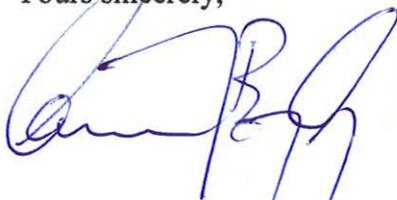
In summary, our key recommendations in response to the draft waiver are:

- 1) Alternative technologies, such as the Landguard enzyme technology, are contemplated and allowed for use on farm given that the proposed alternative technology complies with all relevant federal and state laws around their registration and use and that the proposed approach has demonstrated efficacy to achieve the desired water quality.
- 2) There is flexibility to move between Tiers. Specifically, if a grower can demonstrate that he is not causing toxicity or exceeding water quality standards in his/her tail water that is entering waters of the state AND using chlorpyrifos or diazinon, they can move freely and appropriately from Tier 3 to Tier 2 (or Tier 2 to Tier 1).

Finally, we do see great merit in the alternative proposal that has been placed before you from Kari Fisher at CFBB. We do however believe that irrespective of the final form of the waiver, that achieving the desired environmental outcomes will require a mix of approaches from technology to practices and that ongoing monitoring is necessary but insufficient to effect the outcomes that are sought. As such, we believe that clearly articulated consequences for breach of the waiver are necessary to generate profound and lasting environmental changes to the production system.

Thank you for the opportunity to provide comments on the proposed waiver and we look forward with great anticipation to matters being settled in the near future and working constructively with the Water Board, growers and stakeholders to deliver the environmental outcomes that this waiver seeks.

Yours sincerely,



Cameron Begley
General Manager - Business Development and Commercialisation
Nominee CEO - BioRemCo Pty Ltd