CropLife AUSTRALIA

SUBMISSION TO SENATE STANDING COMMITTEE ON ENVIRONMENT AND COMMUNICATIONS REFERENCES COMMITTEE

THE ADEQUACY OF THE AUSTRALIAN AND QUEENSLAND GOVERNMENTS' EFFORTS TO STOP THE RAPID DECLINE OF THE GREAT BARRIER REEF

2 JUNE 2014

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Representing the Plant Science Industry

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Committee Secretary
Senate Standing Committee on Environment and Communications References Committee
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Committee Secretary

On behalf of CropLife Australia, I provide the attached submission to the Senate Standing Committee on Environment and Communications References Committee in respect to the inquiry into *the adequacy of the Australian and Queensland Governments' efforts to stop the rapid decline of the Great Barrier Reef*.

CropLife looks forward to assisting the Senate Standing Committee with this important Inquiry. Please do not hesitate to contact CropLife's Policy Manager – Agchem Regulation and Stewardship, Mr Alastair James, should you require any additional information in regard to any aspect of this submission.

Yours sincerely

(SIGNED)

Matthew Cossey
Chief Executive Officer

INTRODUCTION

CropLife Australia (CropLife) is the peak industry organisation representing the agricultural chemical and biotechnology (plant science) sector in Australia. CropLife represents the innovators, developers, manufacturers and formulators of chemical crop protection products and agricultural biotechnologies. The plant science industry provides products that enable farmers to protect crops, and for land and environment managers to protect Australia's native flora and fauna against pests, weeds and diseases that are key to the nation's agricultural productivity, sustainability, biodiversity and food security. The plant science industry is worth more than $17.6 billion a year to the Australian economy and directly employs thousands of people across the country.

CropLife and its members are committed to the stewardship of their products throughout their lifecycle and to ensuring that human health, environment and trade issues associated with agricultural chemical use in Australia are responsibly and sustainably managed. Our member companies are global leaders in their full lifecycle approach to industry stewardship and contribute more than $13 million a year on stewardship activities to ensure the safe and effective use of their products. CropLife ensures the responsible use of these products through its mandatory industry code of conduct and has set a benchmark for industry stewardship through programs such as ***drum****MUSTER*, ChemClear® and Agsafe Accreditation and Training. Our stewardship activities demonstrate our industry's commitment to ethical and responsible practices from discovery and development of crop protection products through to their use, and the final disposal of container waste and unwanted chemicals.

The plant science industry's crop protection products include herbicides, insecticides and fungicides that are critical to maintaining and improving Australia's agricultural productivity and meeting the global food security challenges of the coming decades. Each of these products is rigorously assessed by the Australian Pesticides and Veterinary Medicines Authority to ensure they present no unacceptable risk to users, consumers and the environment.

In 1995, it took the assessment of 52,500 compounds to develop one new effective crop protection chemical active. It now requires the assessment of more than 140,000 compounds and expenditure of more than $250 million (US) over a 10 year period to bring just one new successful crop protection product to the market. Much of this research is focussed on developing sophisticated, softer products that allow farmers to grow crops in an environmentally sustainable manner. Without access to these tools, farmers may potentially lose as much as 50 per cent of their annual crop production to pests, weeds and diseases.

The Great Barrier Reef (GBR) is a spectacular, fragile and important World Heritage Area that delivers over $6 billion annually to the Australian economy. The reef itself is protected by one of the world's largest marine parks. Like any natural resource, there are many potential risks to the health of the reef. One of these risks is that water entering the GBR marine park may contain agricultural inputs that might cause nominal harm to the sensitive reef ecosystem. Along much of the Queensland coast adjacent to the marine park are some of Australia's most important agricultural areas with grazing, horticulture and sugar farming all occurring in water catchments that ultimately drain into the GBR waters. Pesticides that are inappropriately applied, as well as some that are properly applied may, in some circumstances, find their way into streams and rivers and ultimately end up in the GBR where they might present a risk to the health of the reef. However, just because some traces of pesticides are found in waterways does not mean that harm is being caused.

CropLife Australia is committed to protecting the reef from any potential impact that pesticides might have. However, with evidence from scientific research and monitoring indicating that pesticides pose no threat to the reef, it is essential that scarce resources are focussed on activities that will address key risks and help preserve the reef for the future.

WATER QUALITY GUIDELINES

The Great Barrier Reef Marine Park Authority (GBRMPA) has produced a set of water quality guidelines that identify 'trigger values' or concentrations at which contaminants, if present in reef waters may begin to have an impact on the GBR. The enormous ecological, economic and cultural value of the Great Barrier Reef (GBR) means that these values are set at very low levels (most often seeking to protect 99 per cent of exposed species) to maximise the level of protection afforded to the reef and give the earliest indication of potential problems in the reef.

The GBRMPA water quality guidelines trigger values for pesticides in reef waters give a broad indication of the levels at which pesticides might begin to cause problems if the guideline levels are exceeded. The GBRMPA's monitoring results are compared to the guidelines to estimate the likelihood that pesticide concentrations are damaging the reef.

It is important to note that these guidelines are not a threshold below which concentrations are "safe", or that concentrations above are considered "dangerous". Instead, the guidelines provide GBR managers with a tool to assist in determining levels of risk that allow them to identify areas of priority when assessing a possible threat to the reef from pesticides. The best available evidence indicates that concentrations below the trigger value identified in the guidelines do not present a risk to the reef.

Importantly, the reverse is not true: chemical concentrations above the trigger value are not likely to cause problems to the reef. Rather, they indicate that current practices may be increasing the risk of harm and need to be investigated. This further investigation would then determine whether the detection above the guideline level presents a short or medium term threat to the reef that requires mitigation. Management actions can then be tailored to the magnitude of the problem. The same risk management approach is used in many other areas of health and environmental regulation in Australia. Similar approaches are used to assess potentially contaminated sites throughout Australia, and to assess Australian drinking water quality.

Many commentators make two fundamental errors when considering detections of agricultural chemicals. They incorrectly assume that any detected level of agricultural chemical proves it is causing damage, and secondly, they incorrectly assume that any detection above guideline levels causes damage. In both instances, the evidence linking the concentration and the damage being caused is missing. This additional link is critical to ensure that resources are not wasted on expensive regulatory measures that impose heavily on industries and communities targeted, but have no tangible benefit to the GBR. The guidelines are useful tools, and are a handy reference point to place the level of risk from agricultural chemicals into context, but should not be used as conclusive evidence of damage to the reef in the absence of further investigation.

MONITORING AND REPORTING

The GBRMPA undertakes water quality monitoring to determine the level of contaminants that enter the reef from rivers. Of these contaminants, pesticides are but one of a range of potential risks to the health of the reef. The GBRMPA monitors indicators of reef health including: nutrient levels, sediment levels, turbidity, sea temperatures and sea grass cover. All are indicators of water quality, and all interact in complex and subtle ways with the marine environment.

The latest GBR pesticide monitoring report released in 2012 reported no GBRMP guidelines were exceeded[1]. While pesticides are present in GBR inshore waters, the best currently available evidence indicates that even the highest levels detected at inshore reef sites are significantly below the levels that would be required to have any impact upon the reef. Given that such low concentrations of pesticides are detected and detections are well below the GBRMP trigger values, it remains difficult to see how further minor reductions in pesticide concentrations that are already below the level that is likely to have any effect could increase the health and resilience of corals.

[1] http://elibrary.gbrmpa.gov.au/jspui/handle/11017/2805

The Reef Water Quality Protection Plan (Reef Plan) is a joint commitment of the Australian and Queensland Governments, which has set ambitious targets for improved water quality and land management practices. The Reef Plan is underpinned by pollutant reduction targets measured against the 2009 baseline that includes a 50 per cent reduction in the annual average pesticide load by 2013[2]. The reduction by 15 per cent reported in the Reef Plan 2011 report card[3] is a commendable outcome and shows that best management practices adopted by growers within the GBR catchment are having a positive result.

The Queensland Government publishes Scientific Consensus Statements that purport to highlight the current status of GBR health. However, objectivity is required as many of the claims made in these Statements are not supported by existing science or existing monitoring results. Indeed, the latest monitoring reports, when compared to the guidelines demonstrate that the levels of pesticides detected are unlikely to have any discernable impact on the reef.

Many reports wrongly assume that the detection of a contaminant means that it is damaging the reef. This misunderstanding, which is repeated in the Scientific Consensus Statement, ignores the fact that the next step following detection of a pesticide concentration is to determine whether that concentration presents a risk of environmental harm. One way of investigating this is by comparing the detected concentration to the guideline levels.

EXISTING REGULATION

Crop protection products must be used sparingly, carefully and responsibly. Crop protection product companies spend significant amounts of time, money and effort on establishing specific, safe and effective instructions for the proper use of their products and produce labels accordingly. The responsible use of crop protection products must be supported by a regulatory scheme that maximises the benefits associated with their responsible use and minimises the risk to human health and the environment.

In Australia, the Australian Pesticides and Veterinary Medicines Authority (APVMA) is the globally respected, scientifically and technically sound regulator of agricultural chemicals. The APVMA and the other agencies involved in the registration process i.e. Department of Environment and the Department of Health's Office of Chemical Safety, conduct rigorous risk assessments on all agricultural chemical products. The APVMA's Chemical Review Program also reconsiders the registration of agricultural chemicals in the marketplace if potential risks to human health or environmental safety are identified. These regulatory processes ensure that when used in accordance with label directions, agricultural chemical products present no unacceptable risk to users, consumers or the environment.

INDUSTRY BENCHMARKING

Australian and Queensland Government investments in reef management since 2009 have resulted in significant improvements in land management practices. This has included voluntary benchmarking systems across agricultural industries assisting farmers identify and implement practices that reduce agricultural run-off and improve long term productivity and sustainability of their farming enterprises. CropLife commends this initiative and recommends its ongoing funding to ensure land management practices continue to improve.

[2] http://www.reefplan.qld.gov.au/measuring-success/paddock-to-reef/assets/2010-2011-gbr-catchment-loads-report.pdf
[3] http://www.reefplan.qld.gov.au/measuring-success/report-cards/assets/report-card-2011.pdf

SCIENCE-BASED EVIDENCE

While the risk from such low concentrations of pesticides is very low, some reports have assumed that just because pesticides are able to be detected in the GBR, that they must be causing harm. This is not the case. It has been suggested by environmental activists that governments should aim to have no detectable levels of pesticides in the GBR. This could only be achieved by banning all pesticide use along GBR catchments, which would have devastating impacts for rural economies and Australia's ability to produce food for itself and the world for potentially no benefit to the GBR.

Clearly industries, pesticide registrants and pesticide users are obliged to continue to develop technologies, formulations and practices that reduce levels of pesticides that are washed off farms. However, completely banning these pesticides may result in unintended consequences, including:

- Reducing options for managing invasive species and weeds in natural environments;
- Reducing pest management options for farmers, potentially resulting in more resistant pests;
- Increasing the cost of food, especially for produce grown in GBR catchments;
- Potentially leading to the introduction of other chemicals that pose a greater risk to the GBR; and
- Requiring the adoption of land management processes (such as additional ploughing and greater use of fertilisers) that increase the risk to the GBR from sediments and nutrients.

Zero levels of pesticides in the GBR cannot be achieved while agricultural activity continues in GBR catchments. As a consequence, governments need to balance the risk from pesticide use with the benefits accorded to the entire community from pesticide use.

Pesticides are used by farmers because they provide a safe, effective and efficient way to protect crops from pests, weeds and diseases. These products can be, and are used in ways that cause no harm to the GBR. Ensuring that best practices are employed when pesticides are applied ensures that any risk to the GBR is kept as low as possible.

Furthermore, efforts to reduce pesticide concentrations to below detectable levels are unlikely to be successful in light of constantly improving detection technologies. These efforts may not be cost effective and may not result in better GBR health due to the negligible impacts that these chemicals currently have. Governments, farmers, land managers and pesticide suppliers need to work together to develop cost effective tools, products and procedures that will continue to reduce the risk to the GBR from pesticides. Simplistic measures that ignore the intrinsic agricultural and environmental benefits that result from the responsible use of agricultural chemicals should be avoided.

CONCLUSION

CropLife is committed to protecting the rich biodiversity of the GBR, and ensuring Australian farmers have adequate crop protection tools to control pests, weeds and diseases. These are not contradictory outcomes, as farmers can and do use chemicals responsibly. The responsible use of chemicals ensures that any undesirable impacts (including any impacts on the GBR) are avoided.

It is clear that pesticide monitoring reports do not support the contention that agricultural chemicals are damaging the GBR and as such, measures that are not practical, not cost effective, have the potential to seriously harm key Queensland industries, and for which there is unlikely to be any measurable improvement in the health of the reef should be avoided.

This does not mean that registrants, farmers and the Government should reduce seeking to improve water quality in the GBR but rather, that action needs to be targeted, practical and effective. CropLife, along with key farming organisations will continue to work with the Queensland Government to develop workable solutions that will ensure that pesticides continue to have no impact on the GBR into the future.

CropLife trusts that this submission will assist the Senate Standing Committee on Environment and Communications References Committee in respect to the adequacy of the Australian and Queensland Governments' efforts to stop the rapid decline of the Great Barrier Reef.