

Our ref: 2013/06295/06297/06298/06300

20 August 2013

Mr Adam Presnell  
ATP Environmental  
PO Box 775  
COOLUM BEACH QLD 4573

Dear Mr Presnell

I refer to your complaint against various agencies regarding the use by the Sunshine Coast Regional Council (SCRC) of a chemical herbicide mixture referred to as Gloricide.

I refer also to my letter of 12 June 2013 in which I set out the background to this matter, advised what issues and material I intended to consider and invited you to make a submission to this Office specifically setting out why the response of any of the relevant agencies is wrong.

This Office has no record of you having made a submission. I have proceeded according to the issues identified.

In this letter, in relation to issue 1, I will provide you with an update. For issues 2 to 4, I will discuss the material identified in my letter of 12 June 2013.

### **Issues**

- 1. Complaint against the Department of Agriculture, Fisheries and Forestry (DAFF), specifically Biosecurity Queensland (BQ), for failure to take action against the SCRC in respect of the unauthorised use of Gloricide.**

Following my letter of 12 June, 2013, this Office has obtained from DAFF a copy of the investigation report and other relevant material.

I am currently in the process of reviewing the information received from DAFF and will contact you again once my consideration of this issue is complete.

- 2. Complaint against the Department of Environment and Heritage Protection (DEHP), formerly the Department of Environment and Resource Management (DERM), for failure to take action against SCRC for causing environmental harm in its use of Gloricide.**

#### **(a) Material considered**

You were advised of the outcome of DEHP's consideration of your complaint in a letter dated 29 October 2012 which also enclosed a copy of a report from the Department of Science, Information Technology, Innovation and the Arts (DSITIA) dated October 2012.

In considering this issue, I have taken into account:

- DEHP's letter to you of 29 October 2012
- DSITIA's report dated October 2012.

**(b) Action taken by DEHP**

Under s.319(1) of the *Environmental Protection Act 1994* (EP Act) a person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm. This is known as the general environmental duty.

You alleged that there was widespread death of coastal flora in the Sunshine Coast region (particularly Peregrine Beach) resulting from the spraying of Gloricide by SCRC. DEHP, in conjunction with DSITIA, carried out an investigation in relation to your allegations of environmental harm and responded to you in a letter dated 29 October 2012.

The investigation included:

- a review of information supplied by SCRC including contractor report logs for the use of herbicides
- multiple site inspections
- tree tissue sampling of dead trees and soil sampling in the areas of concern
- consideration of research regarding relevant chemicals and the effect of those chemicals on a variety of flora in the areas of concern.

At the conclusion of the investigation, a report was prepared by officers of DSITIA including its principal scientist and a botanist with expertise in vegetation and flora of South East Queensland.

The report noted as follows:

- *Gloriosa superba* (glory lily) is a weed that is known to form dense understorey infestations in dune systems along the eastern coast of Australia, displacing native species and decreasing biodiversity. It is known to be fatal to humans if consumed and is extremely difficult to control as it reproduces by division of underground tubers, or from seeds which may lie dormant for 6-9 months.
- The mixture of 2,4 D, metsulfuron-methyl and the surfactant BS1000, known as Gloricide, is used by SCRC to control infestations of glory lily in dunal environments.
- Both 2,4 D and metsulfuron-methyl have the potential to cause environmental harm, particularly if contractors have not applied them in accordance with correct procedures.
- It is likely that overspray of herbicide or root uptake of herbicide from the soil was the cause of some tree deaths, however, as there were no detectable levels of any herbicide in the samples of tree tissue tested, this hypothesis could not be confirmed.
- The tree deaths did not constitute significant environmental harm. Although some native vegetation loss has occurred, the benefits to the ecosystem by removal of the weeds means that overall there is a net environmental benefit.
- The apparent deaths of trees associated with overspray raises the question of appropriate herbicide usage and practices in and around wetlands and whether conditions were suitable for herbicide application at the time of application. Quality assurance mechanisms should be enforced to ensure council contractor's use of herbicides is appropriate for these dunal environments, particularly around wetlands.

DEHP advised you in its letter of 29 October 2012 that it had forwarded the DSITIA report to SCRC and recommended that SCRC ensure controls are in place to minimise the impact of herbicides to wetlands and waterways. DEHP requested that SCRC review its existing quality assurance mechanisms to ensure this is achieved.

**(c) My comments**

The investigation undertaken by DEHP in conjunction with DSITIA and the report prepared were comprehensive. Site inspections were undertaken and tree and soil samples were taken and analysed. Research in relation to the use of various chemicals and the effect of the chemicals on the variety of flora in the area of concern was considered. Appropriately qualified officers of DSITIA carefully considered all factors and weighed these factors in reaching a conclusion that environmental harm, in terms of s.319 of the EP Act, had not been caused by SCRC's weed management program.

Having regard to the findings set out in the report, there is insufficient evidence to support action by DEHP against the SCRC for breaching its general environmental duty. It was, however, appropriate for DEHP to refer DSITIA's report to SCRC to conduct a review of its quality assurance mechanisms to ensure that controls are in place to minimise the impact of herbicides to wetlands and waterways.

Having regard to my above comments, I consider that the action taken by DEHP in investigating your complaint and in deciding not to take action against SCRC was reasonable.

**3. Complaint against Queensland Health (QH) for failure to take action against SCRC to stop it causing significant health problems, including death, through its use of Gloricide.**

**(a) Material considered**

You raised issues with the use of Gloricide with the Minister for Health in your email of 11 April 2012 and were advised of QH's response to your concerns in a letter with the reference MI 180589.

In considering this issue, I have taken into account:

- your email to the Minister for Health of 11 April 2011
- letter to you from QH with the reference MI 180589.

**(b) Response by QH**

In your email of 11 April 2012 to the Minister for Health, you complained that the SCRC is forcing contractors to make Gloricide without a lawful permit and that Gloricide and its components cause cancer. You requested 'a Long Term Health Study and information as to what I and others have been exposed to' be undertaken by QH.

QH responded in a letter with the reference MI 180589 by advising:

The Australian Pesticides & Veterinary Medicines Authority (APVMA) is responsible for assessment, registration and approval of pesticide products. The APVMA is also responsible for the review of chemicals with regard to their safety and effectiveness, consequently your concerns regarding a chemical/s possible impact on human health and request for an investigative study, should be raised directly with the APVMA, as Queensland Health has no jurisdiction in these matters.

The letter went on to say that BQ, as the holder of APVMA Permit 11463, is responsible for any issues regarding the use of products under this permit, including by SCRC, and therefore any further enquiries should be directed to BQ.

**(c) My comments**

In its letter to you, QH explained the role of the APVMA and BQ in relation to the issues you had raised about the safety of Gloricide and its use by SCRC. Having particular regard to the jurisdiction and role of the APVMA, which includes reviewing the safety of chemicals, I consider that QH's decision not to undertake the long term health study requested by you was reasonable.

Further, I do not consider that there is any basis upon which QH could take action against SCRC in relation to its use of Gloricide.

**4. Complaint against the Department of Justice and Attorney General (DJAG), specifically Workplace Health and Safety Queensland (WH&SQ), for:**

- (i) failure to take action against SCRC to stop it causing significant health problems, including death, through its use of Gloricide**
- (ii) failure to take action against SCRC for not implementing appropriate workplace health and safety requirements for its contractors in relation to the use of Gloricide.**

**(a) Material considered**

At this Office's request, WH&SQ undertook an investigation of your concerns and prepared a report titled 'Report directed by the Office of the Queensland Ombudsman, Investigation of some concerns made in a series of correspondence by Mr Adam Presnell of ATP Environmental in relation to the use of a product "Gloricide" by the Sunshine Coast Regional Council'.

In your email of 23 May 2013 you complained that the Ombudsman did not tell WH&SQ to look at whether Gloricide is legal to use and referred to the results when the various chemicals are mixed. Your email also referred to comments in the report about contractors being responsible for workplace health and safety rather than council and advised that it is not an issue for you because you will not let your employees use Gloricide. You advised that it is an issue for other contractors who do allow their employees to use it.

In considering this issue, I have taken into account:

- the report prepared by WH&SQ
- the comments in your email of 23 May 2013 as set out above.

**(b) Action taken by WH&SQ**

Under the *Workplace Health and Safety Act 1995* and the subsequent *Work Health and Safety Act 2011*, WH&SQ has a statutory obligation to investigate or intervene where a death, injury or other safety breach occurs at a workplace.

The report prepared by WH&SQ is very detailed and responds to issues raised by you in various submissions contained in 21 documents, letters and emails totalling around 78 pages. The report lists 23 people having been contacted, consulted or having provided information in relation to the investigation and notes that additional technical information was obtained from a further five sources.

The report does not address in detail any issues in respect of which WH&SQ does not have jurisdiction, including environmental issues and issues relating to the registration of chemicals, and permits and labels of agricultural chemicals.

In relation to the issue of WH&SQ's failure to take action against SCRC to stop it causing significant health problems, including death, through its use of Gloricide, the report states:

WHSQ cannot comment in detail on the repeated claims of impending and large scale morbidity and mortality in the general community as the result of application of two relatively commonly used herbicides. For the occupational use of 2,4 dichlorophenoxyacetic acid (2,4 D) and metsulfuron-methyl, there is insufficient evidence to identify that either of these herbicides poses any significant work-related health risk if used in accordance with manufacturers' instructions, and in compliance with those relevant obligations of work health and safety legislation.

Claims and concerns related to possible carcinogenic, mutagenic and genotoxic properties have not been able to be substantiated and there are no legislative related reasons to discontinue the correct use of these chemicals in herbicide formulations.

....

Long term epidemiological testing of populations using the constituent herbicides is outside the remit of WH&SQ. However, Queensland Health has reported no increase in mortality or morbidity in the Sunshine Coast region of the State which would possibly be linked to the use of the constituent herbicides.

In relation to the issue of WH&SQ's failure to take action against SCRC for not implementing appropriate workplace health and safety requirements for its contractors in relation to the use of Gloricide, the report states:

Contractors and sub-contractors were specifically excluded as "workers" under the Workplace Health and Safety Act 1995, so contractors had the obligation for their own health and safety and for that of those workers in their employment. The conditions of contract between the SCRC and its contractors (eg SCRC example Contracts 197400 and Z330200) indicate clearly that contractors were the principal persons responsible for their own health and safety, and for those working for them, including the provision of all appropriate personal protective equipment and its maintenance.

..... There was legislatively no shared responsibility for health and safety with the SCRC under the WHS Act 1995.

... because of changes to the health and safety law on 1 January 2012, the definition of a worker in s.7 of the WHS Act 2011 now includes a contractor or subcontractor. This means that more than one person can share the same health and safety responsibility for a worker. Section 46 of the WHS Act 2011 on the need for consultation between duty holders will need to be complied with. Consequently, organisations such as regional councils may share the duties of care for the health and safety of contractors and subcontractors. Contracts entered into post 2011 will no longer be able to have the contractor wholly responsible for all the health and safety obligations.

...It is recommended, subject to any risk management determination, that consistent use of personal protective equipment at all times, in accordance with that indicated by the appropriate MSDS (now SDS), be used to ensure that workers are not subject to exposure by chemicals used in herbicide spray applications.

The report does note that public re-entry to an area which has recently been sprayed will pose some subsequent, though small, risk if adequate precautions against premature

entry are not observed and that this issue has been raised as a concern in relation to council activities elsewhere in Queensland. The report goes on to say:

While the responsibility for warning signage may still be within the purview of the contractor to provide, it is recommended that a person in control of a business or undertaking such as a regional council must ensure that the contractor provides and uses such signage. In relation to the problem of patrons re-entering recently sprayed parks and other places, it is recommended that organisations provide signage or other advice to ensure a recently sprayed area is not entered until a suitable withholding period has been observed prior to re-entry.

Relevant to the comments in your email of 23 May 2013 that this Office did not tell WH&SQ to look at whether Gloricide is legal to use and your references to the results when the various chemicals are mixed, the report states:

Mixing of the two herbicides, 2,4 D and metsulfuron-methyl (together with a polysiloxane wetting agent) to make a product known as "Gloricide" for the purpose of eradication of Glory lily and asparagus fern did not contravene the Workplace Health and Safety Regulation 2008, or workplace health and safety law, and does not contravene the present Work Health and Safety Regulation 2011 (WHS Regulation).

.....

Testing was undertaken by Queensland Health's Forensic and Scientific Services Laboratory of the mixing of 2,4 D and metsulfuron-methyl at their working strength concentrations for the product "Gloricide" for any resultant major unforeseen by-products. This testing established that two by-products were found in a sensitive gas chromatography/mass spectrometry test. These, the laboratory notes, may be high temperature artefacts produced as a result of the testing procedure as no new compounds could be seen in a high performance liquid chromatography examination of the mixture. Concern that the mixing of the component chemicals creates a major new risk through the creation of new unidentified chemicals cannot be confirmed.

### **(c) My comments**

#### *Health issues*

In relation to the issue of WH&SQ's failure to take action against SCRC to stop it causing significant health problems, including death, through its use of Gloricide, the report noted that claims regarding carcinogenic, mutagenic and genotoxic properties have not been able to be substantiated and that QH has reported no increase in mortality or morbidity in the Sunshine Coast region of the State which would possibly be linked to the use of the constituent herbicides. WH&SQ further noted that it does not have the resources nor the responsibility to undertake extensive testing in relation to the health effects of Gloricide.

Having regard to this, I do not consider that there is a reasonable basis upon which WH&SQ could take action against SCRC in relation to significant health problems, including death, through its use of Gloricide, as such consequences have not been able to be established. Unless further information comes to light which would support your claims in relation to the health effects of the use of Gloricide, I do not consider that further action is required by WH&SQ in relation to this issue.

#### *Work health and safety requirements*

I will now consider the issue of WH&SQ's failure to take action against SCRC for not implementing appropriate workplace health and safety requirements for its contractors in relation to the use of Gloricide.

The report focused on the legislative situation when your company was a contractor with the SCRC and concluded that under the legislation, as it was at the time, ATP Environmental was solely responsible for meeting health and safety obligations by providing personal protective equipment for its workers. SCRC did not share in that responsibility.

Your email of 23 May 2013 referred to these comments in the report and advised that it is not an issue for you because you did not let your employees use Gloricide. You advised that it is an issue for other contractors who do allow their employees to use it.

I understand from your comments that the focus in the report on the actions of ATP Environmental in terms of protecting its workers was not entirely on point. The situation remains, however, that until changes to the health and safety laws on 1 January 2012, SCRC did not have a responsibility under workplace health and safety legislation in relation to contractors. I therefore do not consider that WH&SQ has any further responsibilities in terms of considering the actions of SCRC in relation to workplace health and safety of contractors prior to 1 January 2012.

WH&SQ could consider the actions of contractors, other than ATP Environmental, engaged by SCRC prior to 1 January 2012 to determine whether workplace health and safety requirements were met, however, I am not aware of there being information to hand regarding the specific contractors who did not comply, and the time that has passed would make it difficult to establish breaches. There is therefore no strong basis for further investigation.

Due to legislative changes on 1 January 2012, contracts entered into after this time will no longer be able to have the contractor wholly responsible for all the health and safety obligations. Therefore, from 1 January 2012, SCRC does have some responsibilities to its contractors in relation to health and safety and the provision of personal protective equipment. It is not apparent from the report the extent to which this issue was considered by WH&SQ.

For this reason, I have referred the matter back to WH&SQ and requested that it consider whether SCRC has been meeting its obligations under the *Work Health and Safety Act 2011* in relation to the use of Gloricide by its contractors.

#### *Other issues*

In relation to the comment in the report that public re-entry to an area which has recently been sprayed will pose some subsequent, though small, risk if adequate precautions against premature entry are not observed, I will seek confirmation from WH&SQ that it has passed this comment onto the SCRC and that the recommended action is being taken.

In your email of 23 May 2013 you complained that this Office did not tell WH&SQ to look at whether Gloricide is legal to use. The report did consider the legality of the use of Gloricide and concluded that it 'did not contravene the Workplace Health and Safety Regulation 2008, or workplace health and safety law, and does not contravene the present Work Health and Safety Regulation 2011'. Having regard to the analysis contained in the report, I am satisfied that WH&SQ adequately considered this issue in relation to the workplace health and safety legislation administered by it. It is not the role of WH&SQ to consider legal issues outside of its legislative authority.

I note your concerns that, when 2,4 D and metsulfuron-methyl are mixed with town water (containing chlorine), by-products are created, including Agent Orange. Your email of 23 May 2013 referred to the testing conducted on behalf of WH&SQ and questioned the

methodology of the testing, most particularly whether town water was used or whether a purer form of water was used for the testing. I understand the point you are making is that when contractors are mixing the chemicals to make Gloricide, town water would be used. The effect of your argument is that if a purer form of water was used in the testing, this would not accurately simulate what is created when Gloricide is made by contractors, thereby rendering the test results of limited value.

The methodology of the basic testing undertaken by the Investigative Chemistry Section of the Queensland Health Forensic and Scientific Services laboratory was described in paragraphs 9.44 to 9.48 of the report. It is not clear what type of water was used in the test.

The report also noted that two compounds additional to those existing in the original herbicides appeared in the herbicide mixture, being 2,4-D methyl ester and 2-(2-(2-oxo-3-oxazolidinyl)ethyl)-1,2-benzisothiazolin-3-one. It is unclear to me from the report whether these compounds are dangerous to humans.

I have sought advice from WH&SQ regarding the type of water used in the test and whether the two additional compounds pose a risk to human health and safety.

### **Conclusion**

Issue 1: I will contact you again once my consideration of this issue is complete.

Issues 2 and 3: Having reviewed the actions of DEHP and QH generally, I conclude that they have taken appropriate and reasonable action in response to your complaints. I therefore do not intend to take any further action in relation to the issues you have raised regarding DEHP and QH.

Issue 4: As advised above, I have raised certain matters with WH&SQ. I have requested that it report back directly to this Office. Upon receipt of WH&SQ's response, I will consider the adequacy of its actions and take any necessary further action. I do not intend to contact you again regarding this issue.

Yours faithfully

Craig Allen  
Assistant Ombudsman  
Investigation and Resolution Unit