

**TO:** JANE SHAVERIEN, STOP AERIAL SPRAYING (SAS)

**FROM:** CHEN PALMER & PARTNERS, BARRISTERS & SOLICITORS, PUBLIC LAW SPECIALISTS

**DATE:** 24 DECEMBER 2002

**SUBJECT:** PAINTED APPLE MOTH

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Dear Jane

**PAINTED APPLE MOTH**

1. You have asked for an urgent opinion on the possibility of securing an order in the nature of an injunction to stop the spraying of a large portion of the West of Auckland under a programme run by the Ministry of Agriculture and Forestry. The programme appears to be aimed at eliminating the painted apple moth. Thus far the programme has not succeeded and the area for spraying has widened. The background to the decision is usefully discussed in a recent case study by the Auditor-General "Response to the Incursion of the Painted Apple Moth".
2. The formal opinion is incomplete due to the short timeframe available to do the necessary work. I have studied a large range of documents that you have supplied. Some were obtained under the Official Information Act from the New Zealand Government and there is also a range of other technical and related work concerning the issue.
3. The purpose of this letter is to provide you with some preliminary advice on how I see the issues at this stage.
4. The powers provided to the Executive Government under Part VI of the Biosecurity Act 1993 are broad and sweeping. It is these powers under which the decisions of the Government have been taken. So far the emergency powers that are granted by that Act have not been used.
5. The spraying that has been going on would, in normal circumstances, require consents under the Resource Management Act since the spraying the programme appears to be in breach of the District Council's Plan. But operation of the Resource Management Act has been superseded by decisions taken under section 7A of the Biosecurity Act. This, in itself, is an extreme measure – to remove the ordinary protections provided by law.
6. Extensive material has been supplied to me showing that many individuals feel that they have suffered adverse health effects from exposure to the spray. These effects have caused strong feelings of opposition to develop to the spraying. MAF acknowledges that some adverse health effects do flow from the spraying for some people, but appears to take the view they are likely to be minor. The issue was canvassed in the Cabinet Papers and a report was prepared in March

2002 entitled *Health Risk Assessment of the 2002 Aerial Spray Eradication Programme for the Painted Apple Moth in Some Western Suburbs of Auckland – A Report to the Ministry of Agriculture and Forestry*, Public Health Service, Auckland District Health Board. This apparently followed on an earlier report done in September 1997 concerning steps to eliminate another moth in the eastern suburbs of Auckland.

7. The primary active biological component of the spray is *Bacillus thuringiensis kurstaki* known as “Btk”. Although related to the *Bacillus anthracis*, the report says there is no risk that Btk will behave like anthrax.
8. The inert chemical components of Foray 48B, which is the name of the spray, have not been disclosed, although the authors of the Health Risk Assessment had access to them. The chemicals are registered for use in cosmetics, pharmaceuticals and foods. The report found that their level was acceptable. The report states:
 

However, if directly exposed to the spray or substantial spray deposits, some people may complain of minor skin, eye and upper respiratory tract irritation or aggravation of existing asthma or allergies.
9. The Report said there was no evidence that the spray caused thyroid dysfunction or abnormalities, but the Report did provide advice for minimising exposure to the hazards described, especially as applied to schools, food hygiene, gardening, drinking water, pool maintenance cleaning, and specific population groups.
10. As a result of the Report, it appears that a programme was put together by MAF that allows for the evacuation of people from the spray zones at the time of spraying. MAF pays for them to have medical examinations and pays for their accommodation out of the zone. So it is clearly recognised that there are health effects from the application of the spray.
11. Since it began, the area subjected to spraying has extended considerably and now covers up to 12,000 hectares in which between 165,000 and 200,000 people reside. Ministerial answers to questions admit that five percent of the population exposed to the spray are likely to suffer adverse consequences.
12. The Health Report also made clear that there were some adverse health effects from exposure to the painted apple moth itself.
13. While the study that was done for the New Zealand Government sets out a framework for risk analysis, there are some serious questions that have been raised about the methodology of the Report. In particular, there is a question as to whether the respiratory consequences of the chemicals in the spray were analysed, as opposed to the consequences if they are ingested.
14. As far as the evidence available to me shows, the health issues have not been addressed at Governmental level again since the March 2002 Report. Yet the area for spraying and the numbers of people exposed have increased greatly.
15. Evidence collected from the spray area by people who live there and made available to me shows a pattern of health effects, especially respiratory, when the spray is used. These effects include:

- burning throats and eyes;
  - conjunctivitis;
  - breathing difficulties;
  - asthma;
  - mucous in the lungs;
  - sinusitis;
  - bleeding noses;
  - severe headaches;
  - flu symptoms;
  - extreme tiredness;
  - unusual and serious skin rashes, one of which is documented by photographs;
  - itching and burning;
  - stomach problems and pains;
  - diarrhoea;
  - premature birth and miscarriages.
16. A substantial number of case histories and details of adverse effects have been supplied. They raise serious issues that need to be investigated.
  17. Proof of causation is always difficult in such cases. It may be necessary in a number of cases to secure expert epidemiological evidence concerning the consequences of exposure to the spray and relating that to the condition presented by the person who was exposed to the spray.
  18. The precise ingredients of the spray have not been disclosed, but kept secret for commercial reasons. The Minister's decision in that regard is subject to a complaint to the Ombudsmen that has yet to be concluded.
  19. There are strong reasons in the public interest that favour disclosure of the ingredients of the spray, not only so 200,000 people can know what it is they are being exposed to, but also so that independent assessments of the health risks can be made. A strong argument can be made that the public interest in disclosure here outweighs the commercial protection. It would also be possible to structure an arrangement so that disclosure could be limited to medical experts and other advisers who may be involved in advising those adversely affected, thus not compromising commercial confidentiality values.

20. In my opinion, there exists a strong case on the available evidence of adverse effects that should persuade the Government to look again at the human health consequences to which its decisions are exposing increasing numbers of people.
21. It seems quite unreasonable to keep secret the ingredients of a spray to which something of the order of two hundred thousand people are being exposed regularly on the grounds of commercial confidentiality. It means there is no transparency and that claims made by the authorities as to the health effects cannot be checked by independent reference to the medical literature. It seems odd that the public health consequences are being managed by MAF and not the Ministry of Health.
22. I have looked at the Canadian case that involves circumstances very similar to this one. It was an appeal under section 15 of the Pesticide Control Act of British Columbia to the Environmental Appeal Board in 1998. That decision involved in part aerial spraying of Foray 48B over a proposed heavily populated area. The Board said this:

Taking into consideration the risks and intended benefit of the spray programme authorised by the Permit, the Panel finds that aerial spraying of Foray 48B over the proposed, heavily populated areas is unreasonable in this case. The Panel finds that aerial spraying will create an unacceptable risk of health problems amongst the residents of these densely populated areas. In particular, the Panel agrees with the appellants that there is a risk to the health of children, people of all ages who have allergies, asthma, and other respiratory ailments, people with immuno-deficiencies, chemical hypersensitivities, and the elderly. It poses an unreasonable adverse effect to the environment (non-target species).
23. It was agreed in the case that detection and eradication of the gypsy moth was an important goal, but there were other methods than aerial spraying that could reasonably be employed. Given the individual cases, detailed elements of which have been placed before me, it is appropriate that the Government should look again at the health risks involved here.
24. There are a number of legal reasons for the above conclusion. I have reached the opinion that there is capacity for this issue to be taken to a court, and there is a reasonable chance that the case may prevail.
25. The first reason resides in the Health Act 1956 that gives general powers and duties of local authorities in respect of public health. Strict duties are imposed on local authorities to protect public health in their districts. Aerial spraying in the circumstances that are being carried out in the Waitakere area must be to the satisfaction of the local District Council. If not satisfied, they can act under section 23(c) of the Health Act. District Councils are empowered to act “If satisfied that any nuisance, or any condition likely to be injurious to health or offensive, exists in the district, to cause all proper steps to be taken to secure the abatement of the nuisance or the removal of the condition.”
26. It is certainly arguable that aerial spraying is an undertaking that is likely to be injurious to health. Indeed, there appears to be ample evidence of that, and it is admitted on the Government’s side. It is clear that the Health Act applies to nuisance created by the Government or a Government employee, and there are other provisions in the Health Act that would assist the Council to prevent a recurrence of the event – namely section 33 of the Health Act.

27. It is important to note that use of the powers under Part VI of the Biosecurity Act do not override the provisions in the Health Act. Actions taken under Part VI of the Biosecurity Act, including aerial spraying, must therefore comply with the Health Act.
28. The Biosecurity Act expressly states it is only if the emergency powers of the Biosecurity Act are triggered that that Act takes priority over the Health Act. The Crown will argue that section 138 of the Health Act means that Act will have no application to actions done under the Biosecurity Act, but the better view is that the provision cannot prevail over a later express legislative intention.
29. I note that proceedings in respect of nuisances under the Health Act shall be heard and determined by a District Court presided over by a District Court Judge.
30. The New Zealand Bill of Rights Act 1990 contains provisions which may be of assistance in this situation. Section 9 provides that “everyone has the right not to be subjected to ... disproportionately severe treatment ...”. Section 10 goes on to say:

Every person has the right not to be subjected to medical or scientific experimentation without that person's consent.
31. This provision has its origins in the International Covenant on Civil and Political Rights which New Zealand has ratified, and upon which the New Zealand Bill of Rights Act 1990 is based.
32. In the circumstances of this case, it may well be demonstrated after further research that what is being done here amounts to “scientific experimentation” without the consent of the people who are subject to it. In the Human Rights Committee of the United Nations there have been references to fluoridation in respect of this provision. The Human Rights Committee considers cases under the Covenant where a nation State can be shown to be in breach of its obligations and all domestic remedies have been exhausted.
33. The deployment of the chemical over a large area and population is an extraordinary one. It is doubtful that a larger programme with this chemical has been ever engaged in. The growing number of health problems that people on the ground are experiencing, and which are being documented, certainly gives rise to serious and reasonably based concerns, in my opinion. The fact that the Government will not make available the chemical content of the spray so that independent assessments can be carried out on what the risks may be, would certainly assist in relation to the arguments that can be raised in a court in relation to the Bill of Rights.
34. People who are subject to these sprayings are being subjected to ongoing low doses of a range of chemicals. Science cannot say there is no harm to human health in this.
35. The toxicological assessment of pesticides involves so few actual facts and such a degree of uncertainty and assumption that there is good cause to question the processes by which the judgments were arrived at in this case. A large number of discretionary judgments occur in any risk assessment process. Toxicological

risk assessment seems to be incapable of accurately predicting the effects of pesticides on humans. And there are several scientific studies available that need to be looked at further in order to bolster that conclusion.

36. The judgment that has been reached by Ministers is that the risks to human health do not outweigh the national interest in keeping the painted apple moth out of New Zealand is a judgment that cannot currently be challenged, since the ingredients in the spray cannot be subject to independent analysis as the ingredients are not disclosed.
37. It is possible that the Chief Technical Officer's use of section 114A of the Biosecurity Act could be attacked. The provision requires public notice to be given of the article or substance to be applied.
38. Presumably that provision is in the interests of transparency so that people can know and examine what the substance is. But the chemical composition of the substance has not been disclosed, only part of it. It can be argued this is not a sufficient compliance with the statutory provision.
39. In all the circumstances it does appear to me that legal remedies with a reasonable prospect of success are available. They will, especially if the Health Act is used, need the support of the District Council.
40. The remedies with a better chance of success would have the impact of causing the relevant authorities to reconsider the decision to allow the spraying. It may be possible to ask the Court for an order to require the authorities to review the health effects of the programme on humans. If the evidence as to adverse health effects turns out to be powerful, Stop Aerial Spraying may be able to force a reconsideration of the continuation of the spraying.
41. My conclusion on the work that I have done so far is that the health effects are sufficiently serious to warrant getting together as much evidence relating to the health consequences as can be assembled in preparation for legal proceedings. Once we have done this, we will be in a position to assess what action is the most appropriate and most likely to secure your goals.

Yours sincerely

**Geoffrey Palmer**  
Partner