

Stakeholder Feedback Sought for Forest Stewardship Council® (FSC®) Derogation for the Continued Use of Specific Herbicides. and Pesticides in FSC® Certified Plantations in NZ

This letter is on behalf of FSC' certified forestry companies and seeks your support for the continued responsible use of chemical plant and animal pest control treatments for forestry, in respect of our Forest Stewardship Council® (FSC') certification commitments. A following paragraph describes what the FSC' is and its goal.

As part of our voluntary commitment to upholding the vision of socially, economically and environmentally responsible forest management under the Forest Stewardship Council® (FSC®), the NZ plantation forest companies listed below are required to meet FSC Principles and Criteria.

Blakely Pacific Ltd (BPL)
City Forests Ltd (CFL)
Craigpine Timber Limited (CP)
Ernslaw One Ltd (North & South Island) (EI)
Hancock Forest Management Ltd (HEM)
Hikurangi Forest Farms Ltd (HFF)
Juken New Zealand Ltd (JNZ)
Nelson Forests Limited (NFL)
Ngai Tahu Forest Estates Ltd (NTFE)
NZ Forest Managers Ltd (NZFM)
Pan Pac Forest Products Ltd (PP)
PF Olsen Ltd (PFO)
Rayonier Matariki Forest (RMF)
Southland Plantation Forest Company of New Zealand (SPFC)
Summit Forests New Zealand Ltd (SFNZ)
Timberlands Ltd (TL)
Wenita Forest Products Ltd (WFP)

FSC® periodically revises the list of herbicide and pesticide chemicals that it considers to be highly hazardous. In this latest review some chemicals previously considered highly hazardous have been removed and others have been added. Examples include the addition of picloram (used widely in NZ and goes by many trade names including Tricloram Brushkiller, Tordon Brushkiller, Radiate) and copper oxychloride (used also to control fungal outbreaks in vegetables, berries, fruit) and the removal of hexazinone and terbuthylazine used to control various weed species such as gorse and broom).

In order to use a highly hazardous herbicide or pesticide, FSC® certified companies need to apply for a derogation. A FSC® derogation comprises of an exemption only where their requirements are met. For Sodium monofluoroacetate (1080) and Sodium Cyanide, there are derogations currently in place, however these need to be renewed to allow their continued responsible use. FSC® granted derogations are for five years.

This year we will be applying for derogations for new chemicals and the renewal of existing derogations. All the chemicals being applied for are commonly used in NZ across many of the primary industries and all are registered for use in New Zealand by the Environmental Protection Authority (EPA). They must be used according to NZ Code of Practice for Agrichemical Management (NZS8409:2004; ERMA 2004). This is a legal requirement.

Your Views Are Important To the Derogation Application Process

As part of the derogation application process, Pan Pac is seeking **feedback** from interested stakeholders. Consultation is an important part of the process and we are contacting you as a stakeholder to seek support for the continued use of these chemicals, or to inform us of any specific concerns you have about their use.

A single joint letter has been sent out for several reasons. No one likes unnecessary duplication. You will receive a single letter rather than from a dozen companies. Also we are trying to streamline things for you by also having a single letter for all chemicals rather than one per chemical or one for herbicides and another for pesticides. I recognise that a single letter is more complicated because it covers many chemicals that you may not have a consistent view over.

What is FSC®?

Founded in 1993, FSC® is an independent, international non-profit organisation which has sought to harness the power of choice amongst environmentally concerned consumers by establishing a credible, internationally recognised trademark that is associated with products derived from forests certified as 'well managed'. FSC® is supported and promoted internationally by WWF, Greenpeace, Friends of the Earth, and many other prominent environmental non-governmental organisations. FSC® promotes environmentally appropriate, socially beneficial, and economically viable management of the world's forests. Just over one million hectares of plantations in NZ are certified.

As part of the certification process, our forest operations are assessed against criteria. Some of the most challenging criteria are around the use of chemicals because FSC® policies in general seek to reduce or eliminate the use of chemical pesticides. In NZ, where plant and animal pests are hardy, prolific, ecologically destructive and normally "foreign" to New Zealand's landscapes, all certified plantation companies have needed to apply to FSC® for authority to use some specific chemicals that technically have a higher risk potential according to FSC® categorisations. Derogations come with requirements, principally in the form of obligations to demonstrate continued efforts to reduce, replace or eliminate the use of the chemicals.

The Chemicals and Who Are Applying

Chemical	New, reapplication or Renewal	Company Seeking Derogation
Alpha-cypermethrin	New	JNZ
Carbaryl	New	HFM, NFL, RMF, NTFE, PFO
Cholecalciferol	New	E1, PFO, PP, RMF, NZFM, TL, BPL, NTFE
Copper based products including cuprous oxide	New	All
Picloram	New	All
Pindone	New	TL, PFO, HNZ, NZFM, RMF, BPL, NTFE
1080	Renewal	BPL, CF, NZFM, PP, NTFE, E1, WFP, HFM, NFL
Sodium cyanide	Renewal	BPL, CF, JNZ, NZFM, PP, RMF, NTFE, E1, WFP, HFM

The Derogations

In an ideal world forest companies would do nothing before or after a tree was planted. That would be cheap and easy or if we had to do something, that it could be done manually without chemicals.

However, the lack of available labour or its unsuitability (can't manually apply over a tree canopy), the high labour cost, the narrow time window to effectively control plant or animal pests, and the need to manually remove pests multiple times means chemical methods are essential. Unfortunately like most agricultural crops, herbicides and pesticides are often needed to improve survival and growth.

Derogation Renewal for 1080 and Sodium Cyanide Pesticides

1080 and sodium cyanide are used in our forests to reduce the risk and spread of bovine tuberculosis (Tb) and for the protection of native flora and fauna. Sodium cyanide is applied by hand. Although ground-baiting and trapping are good for more accessible forest areas, aerial application of 1080 remains an essential tool for covering the large areas of typically difficult terrain in our forests.

Aerial application of 1080 is extensively used by TBfree New Zealand for the control of possum numbers, and TBfree New Zealand has statutory powers under the Biosecurity Act 1993 to carry out possum control on private land, irrespective of whether the land owner agrees to it. Much of the TBfree's pest management programme involves the aerial application of 1080. Many FSC® certified companies have TBfree applications within their estates.

New Fungicide Derogation Request for Copper based products – Cuprous Oxide

Copper based products, of which the most widely used is cuprous oxide, are used to control Dothistroma needle blight caused by the fungi Dothistroma septosporum. Dothistroma primarily affects stands of radiata pine between 2 and 16 years of age, and causes needle browning, reduced tree growth, and in the cases of severe infection left untreated, can result in tree mortality.

The annual levels of infection and area affected are heavily influenced by temperature and moisture conditions over the time of spore germination and dispersal which is generally between October and February. Wet, warm weather over this period leads to subsequent higher infection levels. Only a small amount of copper is required to reduce the infection. The recommended application rate is 0.86kg/ha metallic copper equivalent per hectare, made up with crop oil and water to 5 litres of working solution applied per hectare. The crop oil (mineral oil) improves penetration, wetting and sticking of the copper. Cuprous oxide is applied aurally by either fixed wing or helicopter.

Without a successful derogation in a bad year up to 200,000 hectares of plantation forest would go untreated.



The same trees before and after application of cuprous oxide

New Herbicide Derogation Request for Picloram

Picloram is used in conjunction with triclopyr (Grazon) and/or clopyralid (Cloram) to release the tree crop from competing weeds in the first few years after planting, and to a lesser extent in conjunction with glyphosate and metsulfuron as part of a pre-plant spray. It can be sprayed over the top of young pine trees without killing them. Without a successful Picloram derogation the tree seedlings will be at far greater risk of being smothered by weeds. It is normally used once or occasionally twice. Once the plantation is established, there is no further need to use Picloram. A slight residual effect for a season ensures that young seedlings can usually rapidly outgrow the weeds, taking control of the site and eliminating the need for further repeat treatments. Picloram is normally applied by aerial spraying.

New Pesticide Derogation Requests for Alpha-cypermethrin, Carbaryl, Cholecalciferol, Pindone

These pesticides have narrow or specific applications in forestry. Derogations are also only being sought by a forest companies where the problem is significant enough to need additional controls.

Wasps are a major health and safety concern in some parts of NZ e.g. Marlborough and Canterbury, so careful use of insecticides like carbaryl would significantly reduce dangers around forest operations. There would also be an ecological benefit. Alpha-cypermethrin would be useful in the control of Eucalyptus tortoise beetle (Paropsis), which can strip the trees. Where rabbits are an increasing problem Pindone would be a useful tool for their control. Rabbits become a significant pest when they are in large numbers in the first year after establishment. In specific situations Pindone is used for possum control. Cholecalciferol (vitamin D3) is also an additional tool to control animal pests. Cholecalciferol is a new addition of the Highly Hazardous List and until the publication of the revised Highly Hazardous list was a product that was a newer addition to the pest control toolbox.

What have we done since the last chemical derogation was approved?

We feel we have done a lot. FSC® companies are working collaboratively in research rather than piecemeal. The NZ FSC® Cluster Group helps us work better together and collectively the research programme is \$80,000/year. We've developed and are sponsoring an ongoing research programme aimed at finding ways to reduce, replace, or eliminate chemical use. We have been in partnership in SFF grants and SCION undertakes the research.

However, it is challenging identifying potential new chemical treatments and then getting new chemicals registered for use in New Zealand. Also it is challenging when FSC® revises the Highly Hazardous list so that chemicals come in and out of it. It has been recognised by FSC® that because the forest industry is a low consumer of chemicals relative to other land uses, it doesn't create the market volumes necessary to generate the research into totally new active ingredients for registration. Therefore any solutions to eliminate these Highly Hazardous chemicals will take a considerable period. In the meantime the forestry companies are all working hard to reduce the overall amount of chemicals used in our forests, and they are only applied under strict controls. However, until suitable alternatives are found we still require their use.

The NZ FSC® certified plantation would like to send letters of support with our application to FSC®. Or, if you have any queries regarding the use of any of these chemicals, or on FSC® and the process of derogation, please contact me. I can get a member to assist you. Otherwise we would greatly appreciate a reply in support of our application by **Friday 21st August**.

Sincerely

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