

Disposal of trees and plants infected with specific plant diseases

Purpose

The purpose of this document is to provide guidance to SEPA staff and those involved in the management of trees and plants infected with the following specified plant diseases, *Phytophthora ramorum* and *Phytophthora kernoviae*, and *Chalara fraxinea*.

Background

Phytophthora ramorum (*P. ramorum*) and ***Phytophthora kernoviae*** (*P. kernoviae*) are serious fungus-like pathogens that cause damage to a wide range of trees and plants in Europe and the United States of America (USA). In the United Kingdom (UK), it has been found on ornamental plants, in managed gardens, forests, semi-natural woodland areas and on heath land.

Further guidance on *Phytophthora ramorum* and *Phytophthora kernoviae* can be found on the Forestry Commission website¹.

Chalara dieback of ash is a disease of ash trees (*Fraxinus* species) caused by an asexual fungal organism called ***Chalara fraxinea*** (*C. fraxinea*) and its sexual stage, ***Hymenoscyphus pseudoalbidus*** (*H. pseudoalbidus*). Causing leaf loss and crown dieback in affected trees, and on some occasion tree death, the *C. fraxinea* fungus has damaged ash tree populations across continental Europe since 1992. Chalara dieback of ash has been identified throughout the UK.

Chalara dieback of ash is particularly destructive of young ash plants, killing them within one growing season of symptoms becoming visible. Older trees can survive initial attacks, but tend to succumb eventually after several seasons of infection.

Further guidance and updates on which areas are infected can be found on the Forestry Commission Website².

Roles and Responsibilities

The Forestry Commission Scotland (FCS) has responsibility for policy and legislative controls relating to forest trees and timber. An inspector from FCS can issue a notice under 32 of the Plant Health (Scotland) Order 2005 asking the landowner or operator in charge of the site to:

- destroy relevant tree pest and to prevent the spread of any such tree pest;
- destroy or treat any other relevant material which is carrying or is infected with, or which may be carrying or infected with, a relevant tree pest;
- destroy any relevant material not carrying, or infected with, a relevant tree pest in respect of which there is, in the opinion of the inspector, an imminent danger of such a tree pest spreading or being spread.

¹ <http://www.forestry.gov.uk/pramorom>

² <http://www.forestry.gov.uk/chalara>

The Scottish Environment Protection Agency (SEPA) regulates the waste related treatment of infected trees or plant material and disposal of any associated waste material.

Disposal of Infected Trees and Plants

Disposal options will vary depending on the nature and location of any infected vegetation. For all land owners and operators (except private householders) the following options are recommended, in decreasing order of preference:

- burning in-situ;
- composting in-situ;
- incineration or off site landfill;
- composting or other off site biological treatment.

Burning in-situ is by far the most preferable option.

Burning in-situ

The burning of waste consisting of infected trees and plant material may be carried out without a waste management licence (WML) if it qualifies as an exempt activity under the Waste Management Licensing (Scotland) Regulations 2011. The details of the exemption are given in Paragraph 30 to Schedule 1 of the Regulations.

Further details on the Paragraph 30 exemption and registration requirements can be found on SEPA's website³.

The exemption applies if waste is burnt on land in the open provided either it is produced on certain types of land, e.g. a park or sports ground, or a notice has been issued under article 32 of the Plant Health (Scotland) Order 2005 requiring that it be burnt. In either case, no more than 10 tonnes of waste may be burned in a 24 hour period.

Please note that this exemption from licensing would only apply where the burning does not endanger human health or present a risk to air (for example, the release of a high amount of particulate matter in an area with recognised poor air quality). It must not cause nuisance through odour or adversely affect the countryside or places of special interest.

Composting in-situ

There is no clear scientific evidence currently available on the viability of composting as a treatment method.

There is still a degree of uncertainty as to whether the temperature increase during the composting process, and the presence of decomposition fungi (which will decompose leaf material), is sufficient to prevent re-growth of the fungi.

Given this uncertainty, it is advised that wherever possible, burning under a paragraph 30 exemption is the favoured option for on site management. However where composting is carried out it is strongly recommended that subsequent spreading should be kept to, on or near the infected source, and that the composted material should not be passed on to third parties who might transport it considerable distances for spreading elsewhere thus risking the spread of the disease.

Any leaves which are not destroyed or otherwise processed (e.g. through composting) should not be used for mulching or use on allotments where there is a likelihood of spreading the infection.

³ http://www.sepa.org.uk/waste/waste_regulation/application_forms/exempt-activities.aspx
SEPA Guidance | WST-G-037 | version 1 | issued March 2013

Some composting processes can be exempt from the requirement to hold a WML or a Pollution Prevention and Control (PPC) permit, depending on the quantities of waste and type of processes involved.

Further guidance on composting can be found on SEPA's website⁴.

Incineration or off site landfill

Where it is not possible to deal with infected material from affected areas on site, the waste should be securely contained, either by bagging or by placing it in enclosed containers. It is recommended that it should be transported the minimum distance possible for incineration or landfill at a suitable permitted facility.

Composting or other off site biological treatment

Off site composting and other biological treatment remains a less preferred option because of some uncertainty over the destruction of the fungus. Where the compost is to be used locally, this would mitigate against any possible residual risk.

It should be noted that gully pot contents and dedicated street sweepings, as normally collected, will contain some leaf litter. Where there is a risk of this material being infected, these wastes should not be taken to biological treatment facilities which produce quality compost for agricultural use.

Advice for householders

The main means by which the diseases can spread into new areas is by movement of infected material (plants and leaves). Clearing the leaves and burning or burying them where they fall, i.e. in-situ (householder garden), is a more effective way of dealing with the leaves, as this prevents spread and reduces the likelihood of the fungus surviving.

Burning is the preferred option, where allowed under legislation on smoke control areas and subject to the potential risk of smoke nuisance; however, if burning is not possible householders are advised to leave infected leaves where they fall and avoid any unnecessary movement of infected material.

Infected leaves may be composted, however, any compost produced should be used on the premises and not removed elsewhere, for example to an allotment.

Only in the exceptional cases, where none of these options is possible, are householders advised to dispose of infected leaves by putting them out in their residual waste for collection by the local authority. Householders are not advised to put infected material in the green waste collection.

Bio-security

Good bio-security practice refers to a way of working that minimises the risk of contamination, the spread of animal and plant pests, and diseases.

In cases where site visits are required to areas where tree diseases are known to be present, advice should be taken from FCS as to bio-security precautions. FCS have published bio-security guidance specifically for forestry situations which can be found on their website⁵.

⁴ http://www.sepa.org.uk/waste/waste_regulation/composting.aspx

⁵ <http://www.forestry.gov.uk/forestry/INFD-8GYJ69>

Limitations

This guidance applies only in Scotland. The terms of this statement may be subject to periodical review and be changed or withdrawn in light of:

- technological developments;
- regulatory or legislative changes;
- future government guidance;
- experience of its use.

We reserve our right to depart from the position outlined in this statement and to take appropriate action to avoid any risk of pollution or harm to human health or the environment.

To discuss any aspect of this guidance further please contact your local SEPA office, details available on our website, www.sepa.org.uk.