The disposal of Ash tree leaves affected by *Chalara fraxinea*

1. This note addresses the options for the disposal of ash tree leaves and saplings affected by *Chalara fraxinea* and supports the wider Control Strategy and bio-security measures to prevent or slow down the spread of the disease. In many circumstances there may be no need to remove infected leaves at all. The advice seeks as far as possible to accommodate existing waste management practices thereby minimising any disruption to local authority operations in particular. Existing advice in respect of infected mature ash trees is that they should be left in place. The advice is directed towards householders, landowners and local authorities and applies only when someone intends to or it becomes necessary to move with infected leaves as waste. The advice follows consultation with the Environment Agency, the Food and Environment Research Agency (Fera), the Forestry Commission and others. Any requirements in statutory plant health notices take precedence over this general advice.

2. The disease is caused by a fungus in the ash tree leaves that can be spread by airborne pathways or by physical movement through human agents. Where a decision is made that leaves or saplings affected by the disease require disposal, the preferred options for dealing with waste arising is based on the overarching consideration to reduce the rate of spread of the infection to other areas by prioritising in situ disposal options that will destroy the spores and are available on or near an infected area.

3. It is acknowledged that there are evidence gaps around the survival of the fungus under certain conditions such as the thermal death point of *Chalara* and the potential efficacy of composting as a means of effective treatment. Defra will continue to work to gain a better understanding of the disease which may lead to further developments in disposal advice.

4. There are no officially designated infected areas at present and it is likely that further infected sites will be detected in addition to those identified on the Forestry Commission's published map. Therefore, local authorities and others may wish to follow this advice, irrespective of whether they are in an area which has had a confirmed finding. The basic principle is that the less distance that leaves are transported and the smaller the volumes being transported, the less likelihood there is of the disease being spread.

INFECTED AREAS

5. Accordingly and depending on the nature and location of any inflected vegetation the following options are suggested, in decreasing order of preference;

(a) Burning in situ on the ground or in mobile incinerators brought to site (where these are used because they offer a practical solution to deal with a high volume of leaves)
(b) Burial in the ground (option for householders only)
(c) Composting in situ*
(d) Incineration or landfill off-site
(e) Composting or other biological treatment off-site

6. There is no clear scientific evidence currently available on the effect of composting on *Chalara* spores. The temperature increase during the composting (including AD and treatments at MBT) process and the presence of decomposition fungi, which will decompose leaf material rendering it unsuitable to sustain *Chalara* may lead to its destruction. However, given the uncertainty it is advised that wherever possible any resulting compost is spread on or near the infected source and not passed on to third parties where it may be transported considerable distances for spreading elsewhere for agricultural or ecological benefit. Any leaves that 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.

7. Burning is the preferred option where allowed under legislation on smoke control areas and subject to the potential risk of smoke nuisance. The best way to do this is for householders, farmers and landowners to be considerate by advising their nearest neighbours before lighting a bonfire, so that they can be prepared for any minor inconveniences that may arise.

8. For local authorities and commercial landowners such as farmers, burial in land would constitute a landfill operation and would require an environmental permit that fulfilled the requirements of the Landfill Directive. For this reason local burial is not a viable option. However, individuals acting in their own private capacity are not subject to the environmental permitting requirements so householders may bury affected leaves within the curtilage of their premises if they wish.

9. Moving infected ash leaves for purposes other than destruction, should be avoided where possible. Where it is not possible to deal with leaves from affected areas in situ the waste should be securely contained either by bagging or placing in enclosed containers and transporting the minimum distance possible for incineration (including energy recovery) or non-hazardous landfill at existing permitted facilities. 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.

10. It should be noted that although gully emptyings and dedicated street sweepings, as normally collected, will contain some leaf litter, these wastes should not be taken to biological treatment facilities that produce quality compost for agricultural use, irrespective of whether the sweepings may be affected by the *Chalara* fungus. This is due to contamination of road sweepings and is outlined in existing Environment Agency guidance available at http://www.environment-agency.gov.uk/business/topics/waste/144082.aspx.

11. As with any waste, its movement should be accompanied by a written description of the waste that will enable others to comply with the Duty of Care under s.34 of the Environmental Protection Act 1990 and the waste only be transported to a facility that is authorised to receive it. Where a consignment of waste comes from a source and is highly likely to contain waste infected with *Chalara* that fact should be recorded on any waste transfer note so as to assist others handling or processing the waste.

12. The Environment Agency has also published a regulatory position statement that is available at https://brand.environment-agency.gov.uk/mb/Bfxfls

NON - INFECTED AREAS

13. The spread of *Chalara* is not evenly distributed around the country. Where there is no suspicion that trees or leaves are infected with *Chalara* and there is no need to remove the leaves, they can be left where they fall. Where leaves need to be removed e.g as part of normal maintenance existing waste management arrangements may continue to be used. Local authorities in particular should be vigilant of the incidence of *Chalara* in their areas and if in any doubt take a precautionary approach in respect of green waste they collect. Again gully emptyings and street sweepings, as normally collected, should not be taken to composting facilities that produce quality compost. A number of local authorities are considering whether to take part in composting trials involving leaf litter collected from dedicated street sweeping rounds in rural areas. These should be able to go ahead in non-infected areas using dedicated collection rounds to collect leaf litter.

QUESTIONS AND ANSWERS

Q1. How do I tell if I have trees affected by *Chalara fraxinea*

There is a pictorial guide available on the Forestry Commission website at http://www.forestry.gov.uk/pdf/Symptoms_guide_Chalara_dieback_of_ash_2012.pdf/$FILE/Symptoms_guide_Chalara_dieback_of_ash_2012.pdf

Q.2 How do I know if I am in an infected area

A map showing locations with confirmed cases of *Chalara* is available at www.forestry.gov.uk/chalara. There are no officially designated infected areas but certain areas are showing clusters of outbreaks, such as East Anglia and Kent where infection is higher than in areas where isolated findings have been detected.

Q.3 What can the public do to help slow down the spread of *Chalara*?

If you see it, report it to the *Chalara* helpline, details are below. People walking in woodlands and forests should ensure they stick to footpaths, and always clean their boots before and after walks to remove any mud, leaves and debris. Bike tyres should be cleaned to minimise spread of disease.

Gardeners should not collect dead leaf litter from elsewhere or use as compost; spores can be transmitted via infected dead leaves and this could infect new areas. The Forestry Commission has published biosecurity advice at http://www.forestry.gov.uk/website/forestry.nsf/byunique/infd-8zjmq4

This outlines sensible precautions which should be followed in a range of situations, including areas where *Chalara* has not been confirmed

Q4. I am a householder with affected leaves from a confirmed infected tree, or in an area where *Chalara fraxinea* has been confirmed. What do I do?

Individual householders may leave infected leaves where they fall. However, if they do decide to do clear them they should ideally burn or bury affected leaves in their gardens or they may compost the leaves. If this is not possible householders are advised to put infected leaves out in their residual waste for collection by the local authority in preference to green waste collection. Where composted any resultant compost should be used on the premises and not removed elsewhere e.g to an allotment. Care should be taken to avoid causing a potential nuisance from burning, for example by thinking about your neighbours and the prevailing weather conditions.

Q5. What should local authorities and other landowners do with their own affected leaves?

Local authorities and some landowners e.g farmers may generate larger quantities of affected leaves. There may be no need to remove leaves from where they fall. Where it is necessary to clear leaves landowners may burn or compost affected material in situ in accordance with appropriate environmental controls. The local authority or landowner will need to check with the Environment Agency as to the suitability of the location and comply with appropriate environmental controls e.g registering an exemption from the need for an environmental permit (see Q11 and background). Burial cannot be carried out by an organisation such as a local authority or business without an environmental permit and for this reason in situ landfill is not a viable option.

If they cannot manage the disposal of leaves in situ they should transport leaves in bags or containers to a nearby authorised incinerator, landfill or (less preferred) biological treatment plant including composting providing the compost produced will also be used nearby.

Gully emptyings and street sweepings, as normally collected, will contain some leaf litter, but these wastes should not be taken to biological treatment facilities that produce quality compost for agricultural use, irrespective of whether the sweepings may be affected by the *Chalara* fungus. Mechanical biological treatment plants authorised to handle that type of waste may be able to take gully emptyings and street sweepings (again, less preferred option if these contain infected leaf litter).

Q6. What should local authorities do with green waste collected from the public?

Local authorities should advise householders not to put out green waste suspected of being affected by *Chalara*, but to deal with it within the curtilage of their own premises, wherever possible. Where it is suspected collected green waste is affected, local authorities may choose to continue sending this for composting nearby, although this is a less preferred option if the compost is known to be intended for use at distant locations. Local authorities are encouraged to discuss this with their contractors. Local authorities should prioritise incineration with energy recovery or landfill at an existing permitted site, where these are available nearby.

Where there is a high degree of confidence that the green waste collected will not be affected by *Chalara* or is to be transported and processed for use locally, local authorities should continue with their existing arrangements but remain vigilant as to the spread of the disease.

Q7. What if infected ash trees have to be felled for safety or other reasons?

Current advice is not to cut down affected mature trees. Where this has to be done the wood should be disposed of in situ, by burning, or composting in situ where this is feasible and allowed Where this is not possible, because of public safety or other reasons, alternative methods could be considered, such as chipping followed by safe disposal (e.g. burning, composting in situ). Leaves should ideally be burned in situ. The disposal of any infected young plants should be in accordance with any statutory Plant Health Notice issued, including disposal in non-hazardous landfill or in approved incinerators where specified. In the case of agricultural waste only there is an exemption (D4) from the need for a permit for wood waste deposited in piles of up to 250 tonnes, where a Plant Health Notice requires it to be felled.

Q8. Can *Chalara* exist in the dead leaves for long?

The fungus that causes *Chalara* can survive frost or leaf degradation for up to a year but it is unable to fruit if it's buried under the soil and the heat generated by composting may well kill it, although this is uncertain. Evidence on this is still emerging so a precautionary approach is recommended.

Q9. Do local authorities and other organisations need an environmental permit or an exemption from an environmental permit to burn affected leaf litter?

Any organisation or business carrying out the recovery or disposal of waste may only do so with the benefit of an environmental permit or having registered a relevant

exemption from the need for a permit. Local authorities, farmers and others should take advice from the Environment Agency.

There is an exemption from the need for an environmental permit for burning waste in the open (known as D7), provided that the total quantity of waste burned over any period of 24 hours does not exceed 10 tonnes at the site. There are other exemptions for the burning of waste as a fuel in a small appliance (U4) and burning waste in a incinerator with a capacity of less than 50kg an hour).

Q.10 Do local authorities and other organisations need an environmental permit or an exemption from an environmental permit to compost affected leaf litter

Larger composting operations need an environmental permit. There is an exemption from the need for an environmental permit for the aerobic composting and associated prior treatment (known as T23) where the quantity of waste stored or treated does not exceed 80 tonnes at any time; where the operation takes place at the place where the waste is produced; or 60 tonnes if the treated waste is to be removed elsewhere. Permitting controls do not apply to individuals acting in their own private capacity.

Q11. Do local authorities, farmers and business need a permit or to register an exemption from an environmental permit to bury affected leaf litter?

Waste burial is a landfill operation. Local authorities, farmers and other businesses require an environmental permit to bury waste. An environmental permit for the burial of waste will be subject to the controls of the Landfill Directive. Landfill is therefore unlikely to be a viable option for infected ash tree waste.

There is an exemption from permitting for the deposit of agricultural waste in piles of up to 250 tonnes where trees are required to be felled under a Plant Health Notice.

<u>Background</u>

- The spores are dormant between autumn and spring; there is ongoing work is to understand the current spread of *Chalara* and survival over winter. The scientific expert group concluded on 7 November that it spreads either from spores on the leaves travelling on the wind, which only occurs over the summer, or through importing infected trees / seeds, which has been stopped by the movement ban introduced on 29 October.

- The disposal of affected ash leaves may be subject to permitting requirements through the Environmental Permitting (England and Wales) Regulations 2010. The Environment Agency is the main competent authority responsible for issuing environmental permits and registering exemptions in England and Wales.

- Burning of dead leaf litter from ash trees affected by *Chalara* is also subject to statutory nuisance regulations, e.g in respect of smoke. Be considerate of your neighbours before lighting a bonfire, and advise your nearest neighbours so that they can be prepared for any inconveniences that may arise. If you have any queries regarding statutory nuisance regulations, contact your local authority.

Helpline information

In England and Wales
Chalara helpline: 08459 33 55 77 (open 8am - 6pm every day) plant.health@forestry.gsi.gov.uk

In Scotland
Forestry Commission Scotland: 0131 314 6156 (9am - 5pm weekdays + out of hours messaging system)
fcscotlandenquiries@forestry.gsi.gov.uk

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