



LICENCE to process bark affected by *Phytophthora ramorum*

THE PLANT HEALTH (FORESTRY) ORDER 2005 (as amended)

The Plant Health (Forestry) (*Phytophthora ramorum*) Management Zone) (Scotland) Order 2014

**PLEASE USE BLOCK CAPITALS**

**(TICK)**

1. Applicant's Name:

Agent

Owner

2. Company (if any):

3. Applicant's Address:

4. Applicant's Tel Number:

5. Applicant's Email:

6. I apply for authority to handle and process *Phytophthora* affected bark.

7. TERMS AND CONDITIONS

I confirm that:

( a ) An area of hardstanding has been designated within the premises for stacking *Phytophthora* affected bark and all residue and plant debris shall be swept up from this area and kept segregated and disposed of as set out below, and;

( b ) an area of hardstanding has been designated within the premises for sweeping down vehicles after unloading, and all residue and plant debris shall be swept up from this area and kept segregated as disposed of as set out below, and;

( c ) that no vehicles delivering *Phytophthora* affected bark to the premises shall be allowed to leave the premises until they have been swept clean, and ;

( d ) all *Phytophthora* affected bark derived from *Phytophthora* affected wood shall be subjected to open windrow heat treatment using specialised windrow turning machinery as outlined in the attached protocol which has been agreed by the Forestry Commission's Cross Border Plant Health Service, FC England and Natural Resources Wales. The protocol has not been agreed by FC Scotland but it may be in the future.



( f ) I understand that the premises may be visited by an authorised Plant Health Inspector at any reasonable time for the purpose of ensuring that these conditions are being complied with. I understand that records of all deliveries of Phytophthora affected bark and records of all consignments of plant debris and sawmill co-product and residue derived from Phytophthora affected wood shall be made available to the inspector on request.

(g) Bark, wood co-products piles/stacks and log stacks in yards must NOT be in direct contact with live growing plants eg overhanging trees species or rhododendrons and heathland species susceptible to *Phytophthora ramorum*

(h) Larch material with bark from P.ramorum affected sites must not be exported to other EU Member States or Northern Ireland in accordance with Article 2 of the EU Emergency Decision (Commission Decision 2002/757/EC).

8. I have designated the following person to be responsible for ensuring compliance with these conditions at this processing site and to be the nominated contact point for Plant Health Inspectors.

9. Name:

10. Position:

11. Address of Processing site:  
(one application/site)

12. Contact Tel No(s):

13. Email:

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14. Applicant's Signature

Signature:

Date:

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**Processing Licence Approved:**

15. Name of Inspector:

16. Signature:

Date:

17. Processing Licence Number:



## 18. ADDITIONAL TERMS AND CONDITIONS:

In addition to the terms and conditions stated at sections 7 (b) and (h) material processed in accordance with this licence cannot be moved to locations in Scotland.

## 19. NOTES:

Copies of the Plant Health (Forestry) Order 2005 can be viewed at:

<http://www.opsi.gov.uk/si/si2005/20052517.htm>

## 20. DEFINITIONS:

For the purposes of this licence the following terms are defined:

**"Phytophthora affected wood"** shall mean any tree species originating in sites known to be infected with *Phytophthora ramorum* and from which the movement of wood has been restricted by the Forestry Commission.

**"Co-product, residue and plant debris"** shall be any material, organic or otherwise, that arises as a consequence of keeping, handling and processing the Phytophthora affected wood. It does not include the square sawn timber recovered, which has no restriction placed on its further movement.

**" Management Zone (Scotland)"** – details of the management zone can be viewed at - <http://scotland.forestry.gov.uk/supporting/forest-industries/tree-health/phytophthora-ramorum/management-zone-restrictions> . Processing and Movement licences are only required when Phytophthora ramorum affected larch wood, co-products (inc. isolated bark material), residues and plant debris are moved out of the Management (Scotland) Zone to FC licensed premises elsewhere in GB.

## 21. PLEASE COMPLETE, SIGN AND RETURN THIS FORM TO:

Plant Health Admin  
Forestry Commission  
Silvan House  
231 Corstorphine Road  
Edinburgh  
EH12 7AT

## 22. QUERIES

Please contact Plant Health Admin in the first instance on

Email: [plant.health@forestry.gsi.gov.uk](mailto:plant.health@forestry.gsi.gov.uk)

or Tel: 0300-067-5129



V:4 Revised April 2015

## **P. RAMORUM POTENTIALLY INFECTED LARCH BARK HEAT TREATMENT FOR LOW RISK DOMESTIC USE IN ENGLAND & WALES**

### **PROTOCOL**

### **OPEN WINDROW HEAT TREATMENT- USING SPECIALISED WINDROW TURNING MACHINERY**

#### **Introduction**

A treatment protocol is required to provide full traceability of diseased bark from incoming source to outgoing sale to ensure Biosecurity and system credibility.

Treatment process to be carried out on an approved site suitably prepared and equipped with the necessary machinery to carry out the treatment process.

Describe the approved method of treatment, processing, monitoring and records.

Provide agreed standards for the treatment process with clearly defined methods of mechanical handling.

Provide agreed minimum temperature and time standards.

A system of recording daily temperatures with details of monitoring equipment used

Records of assessment for each batch result

Records of each batch process in terms of pass or fail.

Calibration records of monitoring equipment

Use of approved laboratory service for external testing

Agreed frequency for external testing of treated bark to check process

Sales records of treated bark

Declaration of passing the agreed standard for heat treatment

Agreed final protocol to be approved by the Forestry Commission Plant Health Service and included in the operating company's ISO Quality Management System

#### **1. SITE PREPARATION.**

**1.1** Weighbridge to record incoming and outgoing loads

**1.2** A dedicated clearly defined area away from other products or materials.

**1.3** Hard impermeable level base, suitable for heavy machinery to operate on.

**1.4** Free draining, to a secure water catchment point close to the delivery area.

**1.5** Slope of the site should ensure that water drainage flows are away from the treated material back towards the contaminated material catchment point to ensure no risk of cross contamination.

**1.6** Layout of the site should allow a flow of incoming material through the treatment process to storage of treated material prior to despatch avoiding the risk of any cross contamination

**1.7** Signage for each batch number with start date

#### **2. INTAKE RECORDS**

To include

Date. Ticket Number. Suppliers details. Forest region. Vehicle registration Number. Weight.

Phytophthora Movement Licence Schedule

Bio security of delivery vehicle – sweep out and spray with approved chemical.

#### **3. BATCH FORMATION**

**3.1** Tip fresh loads of contaminated bark into the dedicated intake area ready for shredding

Ideally the material should be as fresh as possible or of a similar age. The treatment site should liaise with the supplying sawmill to ensure that the bark being processed comes from similar aged timber



**3.2** Deliveries should be arranged for a sufficient tonnage in order to minimise the time required for a windrow to be formed.

**3.3** As soon as sufficient tonnage is available to form a viable windrow add water if necessary to achieve moisture content of 55-60%, shred the material and form into a windrow ready for monitoring to start. (Water may be used from the catchment point to add moisture before the treatment begins)

**3.4** Windrows should be formed evenly with a triangular profile and of a consistent height and width to allow the use of a straddle windrow turner.

**3.5** Windrows should not exceed the capacity width or height of the windrow turner

## 4. BATCH FORMATION AND MONITORING RECORD

To include

**4.1** A specific Batch Record Number

**4.2** Load Delivery Ticket numbers forming the batch

**4.3** Total tonnage/m<sup>3</sup> in the batch

**4.4** Dates of shredding, formation and monitoring of windrow. Shredding and formation of the windrow should be carried out as one continuous process. Delays between shredding and formation will cause uneven temperature build up.

**4.5** Dimensions of windrow to determine the number of temperature monitoring points.

**4.6** A minimum of 1 core temperature monitoring point per 10m windrow length.

**4.7** Daily temperature records – manual temperatures

**4.8** Daily temperature records – USB data loggers programmed with the start date and time.

**4.9** Dates and times of windrow turning.

**4.10** Windrows should be turned as soon as the core temperature measured using manual probes exceeds the agreed temperature for the agreed timescale.

**4.11** The standard has been set at 56°C for 30 continuous minutes as recorded at the core temperature monitoring points throughout the complete windrow during the treatment period of 7 to 14 days

## 5. BATCH MANAGEMENT

**5.1** Following the windrow formation the windrow temperatures should be manually monitored daily using Hanna or similar 1 metre temperature probes and when the temperature reaches or exceeds 56°C for a minimum of 30 minutes along the complete length of the windrow at all monitoring points the windrow should be turned using a special straddle windrow turner. Komptech Topturn X60 or similar.

**5.2** The windrow must achieve 3 consecutive periods of heating to a minimum 56°C for 30 continuous minutes along the complete length at all core monitoring points. This is achieved by the sequence – Formation – **HEAT 1.** to 56°C - Turn 1 – **HEAT 2.** to 56°C - Turn 2 – **HEAT 3.** to 56°C IN EACH PERIOD FOR 30 CONSECUTIVE MINUTES.

The process of mechanical turning will ensure that the row is thoroughly mixed to ensure full treatment.

**5.3** Prior to turning the windrow both ends should be removed with a front end loading shovel and added back into the main body of the windrow.

**5.4** Windrows should be maintained in a tidy manner, any overspill at the ends of the row from the turning process should be returned to the row maintaining an even height and width.

## 6. BATCH ASSESSMENT

**6.1** This record can be combined with the Batch Monitoring record

**6.2** Assess the Batch after seven days in terms of temperatures meeting the agreed standards for time temperature and number of heating periods.

**6.3** RECORD PASS or FAIL



**6.4** If a PASS then the windrow could be classed as suitable for further processing prior to resale

**6.5** If a partial FAIL continue to monitor and turn for a further seven days.

**6.6** If a PASS at the end of 14 days then the windrow could be classed as suitable for further processing for resale

**6.7** Download the USB data loggers at the end of the treatment to confirm the manual temperature records. Include this data with each batch record.

**6.8** If still a FAIL after the 14 day period then the complete batch should be sent for incineration using a Phytophthora Ramorum Movement Licence to an approved incineration facility

## 7. **INDEPENDENT EQUIPMENT CALIBRATION CHECKS**

**7.1** Temperature monitoring probes and data loggers should be tested annually by the manufacturers for accuracy. Records to be maintained of each calibration check.

**7.2** In house calibration checks can be carried out during the year using thermometers or by comparing the temperatures of two or more units in the same environment.

**7.3** Manufacturers annual calibration certificates should be retained with other records for reference.

## 8. **INDEPENDENT BATCH TESTING**

Forestry Commission Plant Health should determine a suitable testing regime for the treated bark to show that the heat treatment process is working effectively.

## 9. **SALES.**

**9.1** Sales of treated materials are restricted to supply within England & Wales

**9.2** Treated materials are only for low risk end uses like play bark, landscaping and amateur garden use. Treated products should not be used in high risk situations e.g. landscaping around *P. ramorum* host species

**9.3** A certificate of conformity to the heat treatment process will accompany each delivery and include details of approved uses, as above. (See 10)

**9.4** It will not be permitted to supply fines from potentially infected bark into the horticultural market

**9.5** Bark fines resulting from the process will be destroyed by incineration at a facility licenced to receive *Phytophthora Ramorum* infected material

**9.5** A record must be maintained linking sales of Heat Treated Bark Batch numbers to specific sales or product mixes providing full traceability from source to destination.

### **Note.**

This becomes more difficult if the Heat Treated Bark is screened and mixed with other materials to form a new product. A record should be maintained of the dates and products the Batch has been used for.

## 10. **DECLARATION CERTIFICATE OF CONFORMITY FOR EACH BATCH**

A Certificate or label declaring conformity to the testing process should be raised by the processing company for each batch and made available to purchasers of treated material or products screened or made from treated material.



## EXAMPLE

*Bark R Us*

### HEAT TREATED LARCH BARK

CERTIFICATE NUMBER.....(printed here)  
TREATED BATCH REFERENCE NUMBER...(printed here)  
DELIVERY NOTE NUMBER ...(recorded here)  
PRODUCT NAME.....

#### **WARNING**

THIS PRODUCT CONTAINS LARCH BARK SOURCED FROM POTENTIALLY PHYTOPHTHORA RAMORUM INFECTED TIMBER

THE BARK HAS UNDERGONE A FORESTRY COMMISSION APPROVED HEAT TREATMENT PROCESS TO ELIMINATE THE P. RAMORUM SPORES PERMITTING THE USE OF THIS PRODUCT IN ENGLAND AND WALES IN LOW RISK SITUATIONS e.g. PLAY AREAS, LANDSCAPING AND AMATEUR DOMESTIC USE.

**THIS PRODUCT SHOULD NOT BE USED IN HORTICULTURAL GROWING MEDIA OR IN HIGH RISK AREAS SUCH AS LANDSCAPING AROUND P.RAMORUM HOST SPECIES**

BARK SUPPLIER'S PROCESSOR LICENCE NUMBER...(printed here).....

#### 11. **RECORD KEEPING.**

All records should be retained for 6 years and made available for inspection by Plant Health Officers or other agencies as may be required.  
Records may be held in hard copy or electronic format.

#### 12. **BIOSECURITY**

**12.1** Transport Vehicles carrying potentially contaminated material should be cleaned after each load as prescribed under the **Phytophthora Ramorum Movement Licence.**

**12.2** On site plant such as the windrow turner, shredder and loading shovels should be cleaned thoroughly after each batch and sprayed with an approved disinfectant effective against phytophthora ramorum.