LINNELL BROS (Silverstone)

Engineering & Technical Services Report

Part A2 Site Closure Plan

Date: 12th January 2015
1 Introduction

Linnell Bros Ltd operates an activity for the preservation of wood and wood products using water-based Copper and Triazole biocides applied by vacuum pressure.

The treatment vessel and associated plant, buildings and structures are located within the current Linnel Bros site boundary. The site currently has no other permitted activities. The wood preservation activity has been on site in its current form since 2004, but now requires a Part A2 permit for a wood preservation activity with a production capacity exceeding 75m³ per day due to a change in the Environmental Permitting Regulations.

Preservative chemicals are delivered to site in concentrate form by bulk tanker, and are diluted to working specification with water. Working mixtures are stored on site in bulk storage tanks. All IBCs and bulk storage tanks are contained within a specially constructed concrete bund.

Timber for treatment is either delivered to site ready for treatment, or is machined on site to the customer’s specification prior to treatment. Packs of timber for treatment are loaded onto a trolley (bogie) which runs via a short section of rail line into the treatment vessel. The vessel is sealed, then flooded with preservative chemical, and the required treatment pressure is applied for the desired treatment time in order to meet the treatment standard specified by the customer. On the completion of the treatment cycle, the vessel is opened and the bogie is withdrawn from the process back up the rail line. Treated packs are removed from the bogie and are left to drip dry.

The site layout plan is detailed in appendix 1.

Treated packs of timber drip dry in an uncovered but contained area that drains back to the bunded process vessels. This includes the concrete yard incorporating the rail line leading to the treatment vessels, and a contained area forming the post treatment drying area.

Linnell’s envisage many more years of trading from the Silverstone site, however we are obliged to produce a site closure plan as part of the Environmental Permit application process. This document provides information on the steps which may be taken if the treatment activity closes, and associated plant, buildings and structures are decommissioned. The decision on the future of the site, its structures, plant and equipment may change at the time of closure, and this may result in alterations to this plan.
2 Site Security

The timber treatment vessel and associated plant, buildings and structures are located within the Linnell Bros boundary fence, which serves to discourage unauthorised access to the site. During the closure and decommissioning phase, additional security fencing such as Herras fence will be used to contain the timber treatment vessel and associated plant (if required) until fully decommissioned and the permit surrendered.

Particular care will be taken where there an identified environmental or safety hazard within the site exists. Security staff may also be employed during site closure. Site security provisions will be reviewed dynamically as circumstances on site change.

3 General principles of decommissioning, dismantling and site clearance

Any demolition of the timber treatment vessel and associated plant buildings and structures will be carried out by specialist contractors, who will have provided written method statements and risk assessments that take account of both safety and environmental issues. All work will be subject to company safety and environmental procedures. Work will be carried out in such a way that risks of fugitive releases, such as dust and noise are avoided or minimised as far as is reasonably practicable. Wherever possible materials will be identified for re-cycling and every effort made to minimise landfill disposals. Site specific decommissioning, dismantling and clearance proposals and options are detailed in the following sections

4 Site specific decommissioning, dismantling and clearance proposals

The key elements highlighted for decommissioning, dismantling and clearance as appropriate are detailed below:

- Preservative concentrates
- Town mains water
- Bulk storage tanks
- Above ground process pipelines
- Underground pipelines (excluding drains)
- Process vessel(s)
- Oils
- Air compressors
- Buildings & structures
- Electrical systems
- Concrete bund
- Concrete surfaces
- Rainwater and other drains
- Sumps and interceptors
- Lagoons
- Landfill
4.1 Preservative concentrates

Currently used preservative concentrates are:

- Tanalith E 8000

Currently used additives

- Tanaguard
- Tanantone

The preservative concentrate is contained in a dedicated bulk storage tank and the additives are contained in dedicated storage vessels (IBCs) as purchased from the supplier. On decommissioning, any unused stock will be re-allocated if possible or removed from site by an appropriately licenced waste contractor. Safety data sheets for the preservatives used are contained in appendix 2.

4.2 Town mains water

Town mains water pipework valve isolations will be carried out at the terminal points as agreed with the water supplier. Blanking plates will be fixed to the terminal points prior to the dismantling and removal of any town main water pipework within the site if removal is deemed required.

4.3 Bulk storage tanks

Bulk storage tanks, including mixing tanks and recovered water tanks will be safely drained and flushed to minimise preservative residues prior to their removal. The drained contents of the tanks will be removed from site by an appropriately licenced waste contractor. Tanks will be removed from site if deemed required.

4.4 Above ground process pipelines

Above ground redundant pipework will be safely drained and flushed to minimise preservative residues prior to their removal. The drained contents of the above ground process pipelines will be removed from site by an appropriately licenced waste contractor. Pipework will be removed from site if deemed required.

4.5 Underground pipelines (excluding drains)

If identified underground redundant pipework will be safely drained and flushed to minimise preservative residues prior to their removal. The drained contents of the underground process pipelines will be removed from site by an appropriately licenced waste contractor. Redundant underground pipe entry points will then be closed.
4.6 Process vessel(s)

The process vessel will be drained and cleaned by an approved contractor prior to decommissioning. The drained contents of the process vessel will be removed from site by an appropriately licenced waste contractor. The process vessel will be removed from site if deemed required.

4.7 Oils

Serviceable oils will be drained from equipment removed from site for recycling. Waste oil and oil contaminated materials (filters, rags, etc.) will be removed from site by a licensed contractor and disposed of in an approved manner.

4.8 Air compressors

Compressed air systems will be isolated at suitable terminal points. Compressors will be removed and either reused, recycled or disposed of. All compressed air pipework, including air receivers will be depressurised and drained prior to dismantling and removal.

4.9 Buildings & structures

The building will be dismantled by an approved contractor (according to its construction) unless it is required for alternative use. Steelwork forming the racking will be dismantled by an approved contractor and removed from site unless required for an alternative use.

4.10 Electrical systems

Electrical switchgear isolations will be carried out at the terminal points agreed with National Grid. High voltage cabling (including cable ducting, tray work, earth/ground connections etc.) will be disconnected and removed observing the necessary safety rule precautions. Electrical switchgear isolations will be carried out in accordance with necessary safety rule precautions. Medium and low voltage cabling (including cable ducting, tray work, earth/ground connections etc.) will be disconnected and removed following the above isolations. Plant protection (control and instrumentation) isolations will be carried out in accordance with safety rules. Cabling (including cable ducting, tray work, earth/ground connections etc.) will be disconnected and removed observing the necessary safety rule precautions. Control and Instrumentation isolations will be carried out observing safety rules precautions. Cabling (including cable ducting, tray work, earth/ground connections etc.) will be disconnected and removed observing the necessary safety rule precautions. All control panels, switchgear, etc. will be disconnected from their connected cabling according to a pre-determined schedule and the necessary safety rule precautions observed. Panels and cabling will be considered for re-use or recycling prior to considering as scrap material.

Waste electrical & electronic equipment will be reused wherever possible & disposed as waste (in compliance with the WEEE Regulations) as a last resort

4.11 Concrete bund

Concrete bunds will be removed to ground level, provided they are not required for further use.
4.12 Concrete surfaces

Concrete surfaces will remain in place.

4.13 Rainwater and other drains

On decommissioning, above ground redundant pipework will be removed and redundant underground entry points closed. SUDS systems will be removed or retained as appropriate depending upon final drainage arrangements for the site.

The site draining plan is detailed in appendix 3.

4.14 Sumps and interceptors

All sumps and interceptors will be closed and blanked where necessary. The sumps will be emptied of fluid and cleaned as appropriate.

4.15 Lagoons

There are no lagoons associated with the treatment activity.

4.16 landfill

There are no landfills associated with the treatment activity.
5 Site condition and soil testing

A site condition report was produced at the time of the permit application as a benchmark of the current state of the land occupied by the wood preservation activity. This is included as appendix 4.

The aim of the report is to identify whether or not current activities subject to environmental permitting have had a detrimental impact on land such that land can be returned to a satisfactory state on cessation of regulated activates.

Land will be assumed as ‘clean’ or ‘uncontaminated’ unless the site condition report identifies historical activities having the potential to cause contamination. The presence of actual contamination caused by either historical or current land uses may be confirmed by soil testing, however soil testing will not be carried out to the detriment of any containment bund or solid concrete surface, as this is likely to have the potential to cause pollution.

The land comprising the timber treatment installation will be considered uncontaminated on cessation of operational activities provided that all containment bunds and solid concrete surfaces remain intact and uncompromised, and a record of any pollution incident is made should it occur.

A pollution incident record sheet is maintained as part of the site closure plan and a copy is included as appendix 5.

6 Plan updates

This plan will be maintained to demonstrate that, in its current state, the installation can be decommissioned to avoid any pollution risk and return the site of operation to a satisfactory state.

This plan will be kept updated as material changes occur and will be reviewed at a period of up to four years. Material changes include:

6.1 Changes to the activity

Where there have been changes to the installation affecting the boundary, the site boundary plan will be re-drawn. It may also be necessary to consider updating the baseline data to include or exclude areas within or outside the new boundary.

Where there have been changes to the activity that fundamentally affect the site closure plan, for example a change to the treatment chemicals, replacement treatment vessel, new or substantial building alterations, these changes and any potential for impact of the site closure plan and the baseline data will be recorded.

Where any ‘dangerous substances’ not identified in the Application Site Condition Report have been used or produced as a result of the permitted activities these changes and any potential for impact of the site closure plan and the baseline data will be recorded.

6.2 Measures taken to protect land

Site audit records will be used to summarise whether pollution prevention measures worked. This will include:
➢ Inspection records and summary of findings of inspections for all pollution prevention measures.
➢ Records of maintenance, repair and replacement of pollution prevention measures.

6.3 Pollution incidents that may have had an impact on land, and their remediation

All pollution incidents that may have damaged the land will be recorded. The records aim to demonstrate how pollution incidents were investigated and remedied. This will include:

➢ Records of pollution incidents that may have impacted on land
➢ Records of their investigation and remediation

6.4 Soil, gas and water quality monitoring

Where relevant, soil and water quality information for the installation will be updated. Where new data is obtained, this will be assessed against the baseline to see if the quality has deteriorated as a result of the permitted activities. Monitoring information will include:

➢ The investigation process.
➢ A description of the soil and/or water monitoring undertaken.
➢ Monitoring results.
➢ Any remediation undertaken.

6.5 Site closure planning

Linnell’s will endeavour to ensure that a financial contingency in place to return the site of the installation to a satisfactory state upon definitive cessation of activities.
7  Site closure report

Upon definitive cessation of activities a site closure report will be produced, and will aim to include the following:

7.1  Decommissioning and removal of pollution risk

This section will aim to describe how the site was decommissioned, and will aim to demonstrate that all sources of pollution risk have been removed. The report will also aim to describe whether the decommissioning had any impact on the land. Details of any investigation and remediation will be described, including:

- The final site closure plan
- List of potential sources of pollution risk
- Investigation reports (where relevant)

7.2  Reference data and remediation (where relevant)

This section will describe whether further soil and/or groundwater data had to be collected, or reasons why no further sampling was required where the following show that the land has not deteriorated:

- Inspection records and summary of findings of inspections for all pollution prevention measures.
- Records of maintenance, repair and replacement of pollution prevention measures
- Records of pollution incidents that may have impacted on land
- Records of their investigation and remediation

Where additional soil and/or groundwater data needed to be collected, the report will summarise the new data and will say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a “satisfactory state”.

If the land cannot be considered as in a satisfactory state, the report will also summarise what was done to remedy that and confirm that the land is now in a “satisfactory state” at surrender. The report will include details of:

- Land and/or groundwater data collected at application (if collected)
- Land and/or groundwater data collected at surrender (where needed)
- Assessment of satisfactory state
- Remediation and verification reports (where undertaken)
7.3 Statement of site condition

Using the information from the site closure reporting process including the following information a statement about the condition of the land will be produced:

- Changes to the activity
- Measures taken to protect land
- Pollution incidents that may have had an impact on land, and their remediation
- Soil, gas and water quality monitoring
- Decommissioning and removal of pollution risk
- Reference data and remediation (where relevant)

Ultimately, the statement of site condition aims to confirm that:

- The permitted activities have stopped
- Decommissioning is complete, and the pollution risk has been removed
- The land is in a satisfactory condition.
Appendices

Appendix 1: Site plan
Appendix 2: Safety data sheets
Appendix 3: Site drainage plan
Appendix 4: Site condition report
Appendix 5: Pollution incident record
# Pollution Incident Record

<table>
<thead>
<tr>
<th>Date and time of incident</th>
<th>Description of the incident (Include details of what happened, how it happened, approximate quantities released and the fate of any releases. Take photographs to help describe the incident. Use a separate referenced continuation sheet if necessary).</th>
<th>Action taken (Include details of all actions taken any incident reference number and the name(s) of any Council or EA Officers in attendance if applicable. Use a separate referenced continuation sheet if necessary).</th>
<th>Name and Signature (of the person making the report)</th>
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