

## C8 - Site Condition Report

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### *Description of the location and environmental setting*

Location:

Address: Ashmead Road, Ashmead Industrial Estate, Keynsham, Bristol.

Postcode: BS31 1SX

GPS Coordinates: 51.413999, -2.481448

The treatment plant site is adjacent to a Jewsons Builders Merchants yard, on the Ashmead Industrial Estate in Keynsham, Bristol. It is accessed from Ashmead Road.

### *Description of historical land uses.*

The history of the site dates back many decades, where it has been used for a wide range of applications, including (but possibly not limited to):

- An animal feed processing plant (circa 1960)
- Slurry storage silo
- WW2 Bunker, filled in and sealed with concrete.
- Warehousing / Depot
- Jewsons Builder's Merchants Yard Area.

The site on which the current installation sits is leased from Jewson's Builders Merchants. Prior to installation of the treatment facility, the site was covered in a concrete floor, which was modified to meet the requirements of the plant.

The following image shows installation of the existing plant, in 1995:



#### *Description of the site and current land use*

The current site was leased from Jewsons in 1995. It was separated from the Jewsons yard by a steel fence, and civil works commenced. Subject to a lengthy design phase by experienced engineers, the site was custom built to house a timber treatment plant based upon the experience of the owner running other plants elsewhere in the country. All plant equipment and chemical storage tanks are located within the custom built impermeable silica concrete bund, and housed under the timber and steel frame building. The only exception to this is the 60,000 litre water tank, which is housed outside the main building, and used to capture and re-cycle run-off rain water from the roof.

In addition to storing the plant equipment, the bunded and covered area extends out to provide the drip area for freshly treated timber to drip dry, and for the drip run-off to be reclaimed and re-used. *(For more detail see Document Reference 1.1 "C1 - How will the installation operate")*

*History of chemicals stored / used on site.*

Since the sites inception in 1995, the following chemical preservatives have been used:

Year	Product	Plant	Manufacturer
1995 – 2003	Celcure 'A' (Copper Chrome Arsenic)	Pressure	Rentokil / Protim Solignum
1998 – 2000	Celbor 'P'	Vac Vac	Protim Solignum
2000 – 2001	WB11	Vac Vac	Osmose
2001 - 2011	Protim E415	Vac Vac	Osmose
2003 - 2004	Tanalith 'E'	Pressure	Arch Chemicals
2004 - 2013	Celcure AC500	Pressure	Osmose
2011 – To Date	Protim E406	Vac Vac	Osmose
2013 – To Date	Celcure AC10	Pressure	Osmose

*Description of site activities*

The site is used exclusively for the treatment of timber.

Timber is delivered by customers to the site, where it is off-loaded by forklift trucks. Timber is then passed through the treatment process, before being allowed to dry in the covered drying area. Once dry the timber is loaded back on to customer vehicles and removed from site.

Chemical is delivered either in bulk storage tanker or in IBC's, where it is transferred into storage tanks within the building and bunded area, for mixing / dilution and ultimately is used in the treatment process.

*(For more detail see Document Reference 1.1 " C1 - How will the installation operate")*

*Hours of operation*

Standard hours of operation are Monday-Friday 6am-4pm.

*Mitigation of noise, odour, and light pollution.*

**Noise** is managed by staggering the use of equipment. The elements of the process which generate the most noise are the pumps. By design, these pumps never run at the same time, this means that noise pollution is reduced as much as possible.

**Odour** is not a significant factor in the timber treatment process. The only real source of odour would be from the raw, undiluted chemical product, but this is delivered in sealed IBC's, and is transferred via pipes to a sealed container, from which no odours can escape.

Light Pollution is not deemed an issue, as the plant does not run through the night. In winter, when some operations do occur beyond the hours of light, the lighting is generally constrained to indoor areas, where light does not escape to the surrounding environment



*Site Plan:*

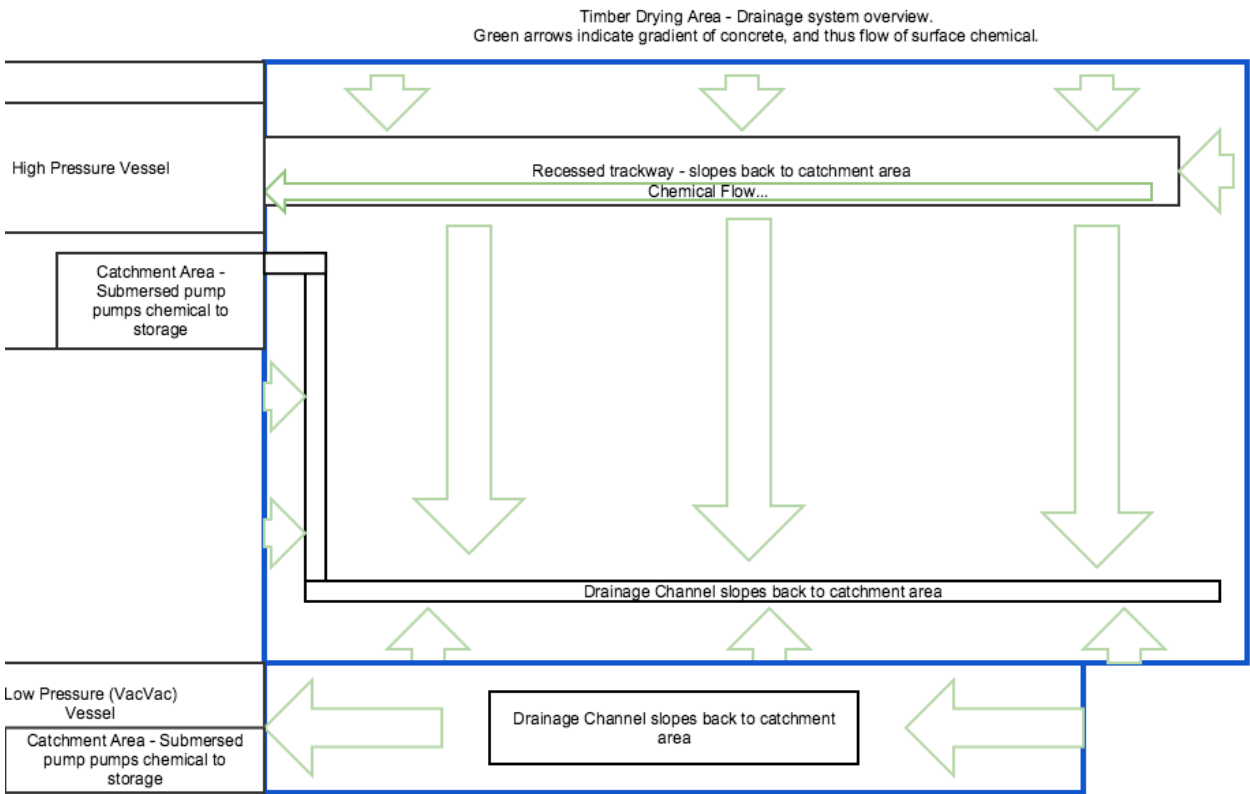




Site Storage / Drainage Plan:



Drip Area Drainage Diagram:



## *Summary of likely pollution*

### *Historical Pollution*

Given the long and varied history of land use at the site it is difficult to predict what sources of pollution have been in place prior to the use of the site as a timber treatment plant. As an example, during construction, it was discovered that a large silo of slurry had been sealed in concrete and left underground. When this was discovered, the contents of the silo were pumped out and removed by contractors before building could continue. There still exists a World War 2 Bunker below the site which was filled with concrete.

### *Current Pollution Status*

It is highly unlikely that any land pollution occurs as part of the current operations. All chemical products are only used within the impermeable concrete bunded area, and where chemical leaves the wood by way of drip-drying, this is specifically engineered so that all chemical is reclaimed and re-used rather than being allowed to escape into the environment.

The entire site is concreted, so no 'bare earth' areas exist. All water drains are well clear of the bunded area and as such will only be used to disperse run-off rainwater as they were designed to do.

### *Condition of containment measures and hardstanding.*

The aforementioned impermeable silica concrete bund is in fine condition, and inspected at regular intervals as part of on-going and vigilant maintenance check procedures. The hardstanding concrete areas are also in good condition, having been subject to a not unusual level of wear and tear for an industrial site.

### *Previous contaminated land assessments.*

Historically contaminated land assessments were not required as they are now, so no records exist of formal assessment, but as mentioned, where contaminants were discovered by the building process, they were dealt with effectively at that time.

## *Risk Assessment(s)*

When assessing the risk to soil and groundwater from products used by the treatment process on site, it is important to remember the design considerations that have been used when the plant was built. All chemical is stored, processed and reclaimed within a bunded area built from impermeable silica concrete. The total volume of this bunded area is calculated to exceed the maximum possible amount of chemical stored within it by 10%. That is to say, that if every single storage vessel in the plant was to catastrophically fail, the chemical would still be contained within the bund, with a 10% margin for error, including an allowance for any firefighting materials introduced into the area.

A spillage containment procedure is defined for the site, and all staff are trained to deal with such an event. Suitable signage is displayed in the office detailing spillage containment procedures.

In the event of such a catastrophic failure, which, in 20 years of operation we have never seen, nor heard about, then regulated external contractors are on standby to remove the

chemical according to current legislation, and the repairs could then be made. In this scenario no chemical would be able to either enter the substrate soil, nor enter the water course / ground water systems.

Given this information, the risk to soil and groundwater from the operations performed at this plant are non existant.