

Additional Information

PERMIT

Summary of Brewing Process

All containers have a nominal volume of 400 litres.

The Copper/Hot Liquor Tank provides a source of hot water, being a tank with electric immersion heaters fitted.

The day before brewing, around 100 litres of water are heated, containing a 0.5% solution of Sodium Hydroxide (Caustic Soda)

This is pumped around the required Fermenting Vessel, using the pump contained in the Underback. This cleans and sterilises the fermenting vessel prior to brewing. The sterilising solution is discharged to the drain.

On a brewing day, around 200 litres of hot water (68 degrees Celsius) are pumped from the Copper into the Mash Tun, and the required quantity of malt (between 50kg and 75kg depending on the brew) is added. This is allowed to steep ("mash") for around 90 minutes. The dissolves the sugars from the mashed grains.

After this time, the resultant liquid (wort) is pumped into the Copper, and the mashed grain is rinsed ("sparged") with fresh water to extract the remaining sugars. This is also pumped into the Copper.

The "spent" grain is put into the original sacks, and made available as animal feed (probably horse feed) for collection.

The required hops are then added, and the wort is boiled for around 90 minutes. Additional hops may be added during or after the boil.

The "spent" hops will be composted.

The wort is then cooled by passing it through a heat exchanger (part of the Underback), and transferred to the previously-cleaned fermenting vessel. Additional water may be added to adjust the specific gravity of the wort to the required value - a higher specific gravity will produce a stronger brew.

Yeast is then added, and the fermentation will start.

The temperature and specific gravity have to be checked twice a day to ensure that the fermentation is progressing.

After about a week, the fermentation will be complete, and the beer is then chilled and put into casks and/or bottles for maturation prior to shipping.

Two fermentation vessels are available, so brewing can be done up to twice a week, depending on demand.

The beer will be supplied to local pubs/restaurants/off-licences and bottled beer may be sold at local farmers' markets/food festivals.

Most of the process is odour-free with the exception of boiling the wort, which produces the typical "brewery" smell. This can be minimised by either filtered ventilation or by fitting a condenser to the Copper.

There is no untoward noise associated with any of the process.

Vehicle Movements

There will be additional vehicle movements associated with the brewery, as follows:

Deliveries:

Sacks of malt will be delivered about every month.

These deliveries will only occur when the premises are occupied. If a small van is used, sacks will be delivered directly to the rear of the premises, and offloaded into the large store. If a large vehicle (too large to negotiate the private access) the sacks will be offloaded at the front of the building onto a trolley, and transferred to the large store.

Bottles will be delivered about every 6 months.

These will be delivered at the front of the premises on pallets, and transferred into the small store using a pallet truck.

Despatching:

Full casks will be delivered from the large store, using a small van (currently a Berlingo). This will occur once a week.

Empty casks will be offloaded on the return journey.

All deliveries will be during regular working hours.

Spent malt will be collected weekly, by arrangement. It is anticipated that a domestic vehicle will be used.

Pedestrian Movements

On brewing days, access will be by private car for up to 3 people, or on foot.

The fermenting beer will need to be checked daily: again foot or private car will be used.

Note: the applicant lives less than 500 metres from the application site.

Waste Handling

As detailed above, the waste products are:

Spent yeast, detergents etc: discharged into the existing sewerage. Southern Water has agreed to the volume of discharge required.

Spent grains: to be collected for animal feed, in the original delivery sacks

Spent hops: composted

There will be a minimum of other packaging to be put into a standard waste stream (eg delivery packaging for hops)

Other Environmental Considerations

Noise:

Brewing is not a noisy process. Any noise can be kept to a minimum. For example, it is intended to reduce handling noise by using plastic rather than stainless-steel casks.

It is not intended to operate any pumps or cleaning equipment outside of regular working hours.

Odours:

While the wort is being boiled (an approximately 2-hour activity), the typical "brewery smell" is produced. This will be minimised by air filtering, or, if necessary, by fitting a condenser to the Copper, which will prevent the volatile components escaping into the atmosphere.

At other times, the process is odour-free.