Waste plan and Outside Lighting plan for the Moorland Spirit distillery, Old Coach House, Hepple Whitefield, NE65 7LN:

Waste Plan:

Waste streams -

- 1. Office foul water from office
- 2. Distillation residue from the distilling process
- 3. Cleaning products for still and distillery rooms
- 4. Discarded spirit ("Heads" and "Tails") from the distillation process
- 5. Used spring water from the still's condenser

Sent to package treatment plant

- 1. Office foul water waste. We will have a small quantity of waste from the toilet in the office and an office sink.
- 2. The residue from the gin distilling will produce max 300L per day of water with the boiled botanicals (juniper, bog myrtle etc) that are used to flavour our gin. These botanicals will be sieved from the residue and can be composted. Once the residue has cooled to ambient temperature (on testing) it will flow into the package treatment works.
- 3. We will use a small quantity of cleaning products for our machinery and for the distillery rooms compatible with the septic tank's biology.

The manufacturer of the treatment works has confirmed that their plant is appropriate to accept this quantity and type of liquid (see below).

Removed off-site

4. "Heads" and "Tails" from the distilling process up to 20% of the alcohol run through the still, corresponding to around 50L per day at full production. We need to have this disposed of to HMRC's satisfaction (eg removed by Waste Care Group who are experienced in removing and destroying such compounds to HMRC's satisfaction).

Untouched cooling water returned to stream

5. Spring water used to cool the condenser during the distillation run, 2,000L per day at full production. This water passes through stainless steel cooling pipes in the condenser at a maximum temperature of 80 degrees C. This will run to outside tanks specifically for this purpose before being returned to the stream at ambient temperature.

Outside lighting plan

- 1. All lights are turned on by movement sensors only and after dark.
- 2. The lights are 30W LED floodlights (2,400 lumen), and are pointed downwards. The beam angle is 100 degrees so spread to 50 degrees from the vertical. (see attached photographs)
- 3. A site plan showing the position of the three outside lights is being sent with this.

Lights:



Example of position:



From: Paul Mason - ECS Sales

25 September 2014 12:53 To: Darren Whitfield Subject: ECS file
PMS/2370

Good Afternoon Darren

Further to our recent discussions with regards to the Matrix sewage treatment plant supplied to Sir Walter Riddell at Hepple Whitefield, we confirm as follows, after consulting with the manufacturers of the plant, for whom we act as agents.

The additional organic load from the 300 litres/day is likely to be the equivalent to 5 fully residential persons. Based on the existing load on the system (figures provided by Client at 20-22 persons & 2 office staff) together with the 300l/day gin distillery residue, the CLF5 Matrix treatment plant (30 population equivalent) will be within it's operational capability.

The distillery residue should be strained prior to discharge to remove as many solids as possible.

As always, the cleaning regimes need to be closely monitored to minimise the effects on the biological performance of the plant. The plant should be monitored closely following commencement of the discharge of the distillery residue and should it's performance be affected, this may potentially be down to the PH variation and it may be necessary to install a PH correction system prior to discharge of the residue to the system.

Trusting to be acceptable, we trust this sufficiently clarifies the application proposed.

Yours sincerely

Paul Mason

Paul J Mason - Managing Director Mobile - Email Address:

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