



SCA Hygiene UK Ltd

Oakenholt Mill

Noise Management Plan

(Submitted by Alana Corbett 12 March 2015)

Key SCA Noise Sources

A noise mapping survey was conducted by SCA personnel where various positions around the perimeter and key noise sources were mapped and recorded. Refer to appendix 1 (noise levels recorded in dB).

Demonstration of BAT

There are a number of existing measures in place at SCA Oakenholt which are used to reduce the noise emissions, namely;

- Roller shutter doors to Paper Mills and Windows kept closed wherever possible.
- Landscaping around the site provides an earth bund.
- Noise complaints received are recorded internally and investigated (recorded within the SHE system)
- Silencers fitted to main extraction fans.

Recent Complaint Overview:

In 2012 the Mill started to receive complaints from a resident located down Papermill Lane (see appendix 2). PM1 extraction fan appeared to be the focus of the issues.

A summary of events following receipt of the complaints:

- Resident invited to site to discuss the issues / have a look round site.
- Natural Resources Wales informed.
- Various complaints being reported (from same resident) - Recording all complaints within the SHE system as we go along.
- New silencer installed to PM1 main extraction fan 24.06.2013
- Seeking quotations for noise survey on site
- Noise still reported to be occurring
- Modifications made to silencer 07.11.2013 – change direction so pointing to the floor
- Complaints still being received – resident asked to keep a log (Dec 2013). Nothing recorded in log as noise reported to have been better.
- Order approved to conduct noise survey April 2014
- Noise issues come back.
- Noise survey conducted by Environmental Evaluations July 2014 – stating fan frequency could not be ID at complainant's property.
- Noise survey forwarded to Natural Resources Sep 2014.
- Natural Resources conducted monitoring 03.02.2015. Letter received from Natural Resources 12.03.2015 - ID PM1 fan to be reviewed against BAT

compliance and to submit Noise Management plan to Natural Resources by 12 March 2015.

- Meeting held on site at SCA on the 11.03.2015 (attendees: Ian Oakes, Alison Soper, Alana Corbett, David Lomax). More monitoring at PM1 extraction fan was conducted. Agreement to conduct more monitoring at a later date to ID specific nuisance noise being heard by complainant. Submit short and long term action plan relating to BAT for PM1 extraction fan.

Improvement Programme

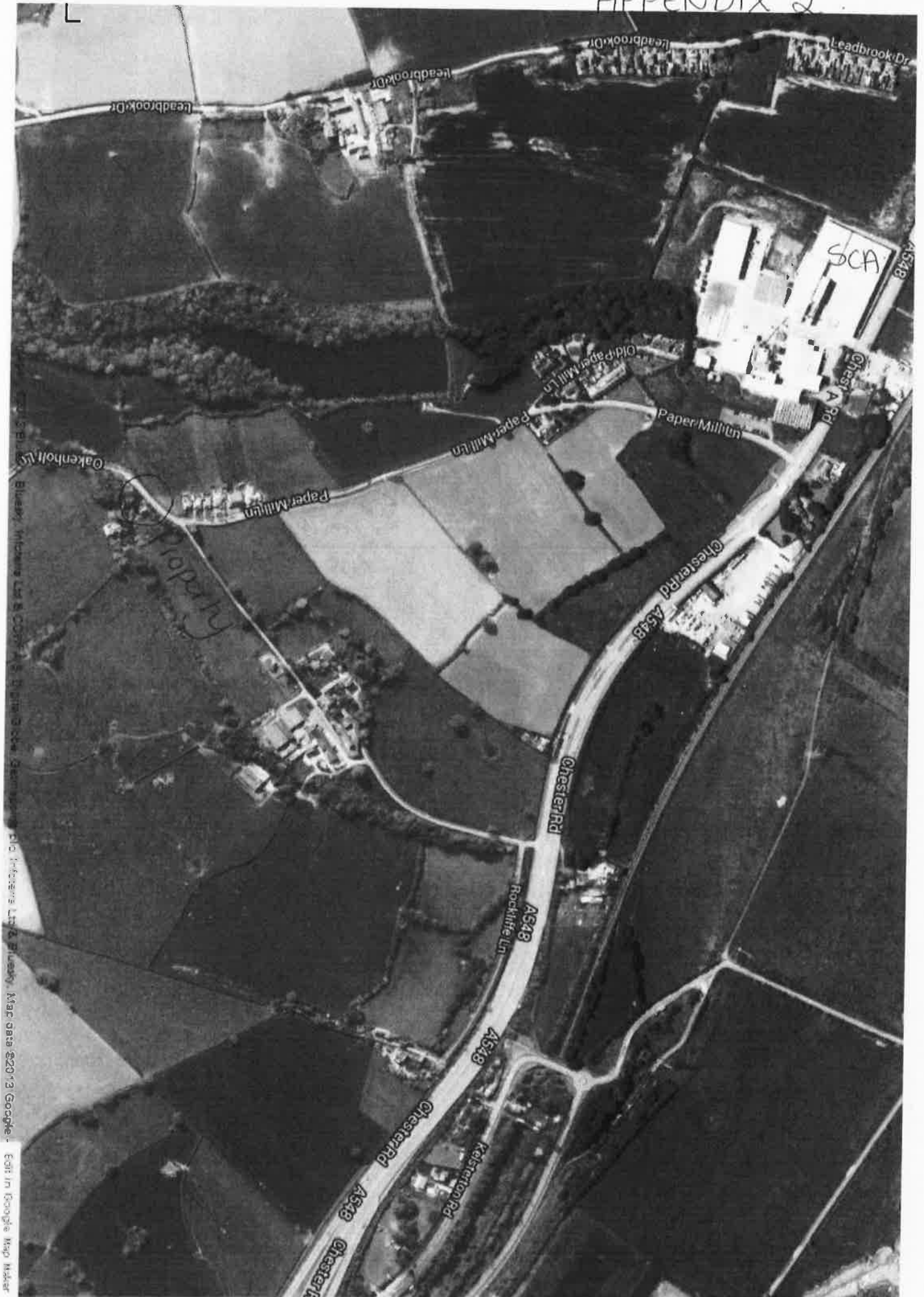
- Noise meter to be purchased by the site so that monitoring can be conducted at planned intervals to monitor changes / problem areas (in comparison to appendix 1)
- A new fleet of FLT's are being ordered for 2015. The manufacturer will be contacted regarding the possibility of low noise emitting reversing sirens. Loading on site is currently conducted 24 hours a day.
- PM1 main extraction fan is being reviewed in accordance with BAT 17. The silencer was cleaned on the 16th Feb 2015. The internals of the silencer have deteriorated, and were made worse by the cleaning process. Noise monitoring after the clean was conducted on the top of the bank adjacent to the fan measuring at 80.5dB. When the new silencer was initially installed the readings in the same area were recorded at 72dB. This is showing a loss in functionality of the silencer. PM1 Engineering team are currently working to find a short term solution to this. A quotation has already been received for a new silencer made of stainless steel costing in the region of £9000. The stainless steel structure will be more resilient to the cleaning process and general deterioration (as a consequence of the fibre being passed through it). See appendix 3.
- Subsequent to the short term fix the Engineering team will investigate a longer term fix to the extraction system on PM1 (initial discussions have involved new fans, the use of a scrubber system to limit the amount of fibre being passed through etc). The long term fix is likely to cost a significant amount of money therefore a CAPEX would be required; Information on this will be communicated in due course.
- Further noise monitoring (by Natural Resources & Environmental Evaluations) will be conducted on site March / April 2015 to identify / conclude the source of the noise being experienced by the complainant at Papermill Lane.

- **Trees are being planted parallel to the fence running along the staff carpark. This will serve as a longer term fix once the trees have grown to a suitable height. They will act as a sound barrier and also look aesthetically pleasing.**

The site plan illustrates the layout of the Pulp Mill facility. Key areas include the Pulp Warehouse, Pulp Mill, Paper Machine House, Mills Warehouse, and Mills Warehouse. The plan is numbered 01 through 29, with 01 being the main entrance and 29 being the exit. A north arrow is located in the bottom left corner. The plan is titled 'PULP MILL' and 'MILLS WAREHOUSE'.

No	Location	Db
1	First house	51
2	Top of embankment	52.6
3	Far corner of embankment	49.3
4	Papermill lane	55.5
5	Top of hill rear of pm1	80.5
6	Outside of boiler house	70.3
7	Middle of pulp yard	60.5
8	Embankment behind LPG tanks	55.5
9	Rear of pm1 and beaterhouse	92
10	Outside front door of beaterhouse	82.3
11	Side fan of PM1	64
12	Near water pump house	72.5
13	Outside PM2 krofta	67.2
14	Rear of pm2 control room	61.4
15	Far corner of PM2 building	51.7
16	Adjacent to effluent blower	76.7
17	Outside PM1 machine hall roller shutter door	83
18	Next to new weighbridge	71.2
19	Site car park entrance	52
20	Corner of pm1 warehouse	70
21	Middle of yard PM2 roller shutter door basement	85.1
22	Next to PM2 chemical filling point	82.4
23	Next to PM2 fast acting door	82.9
24	Rear of PM2 warehouse	50.5
25	Site main entrance	60
26	Front of PM2 warehouse	66.4
27	Corner of PM2 warehouse	62.4
28	Front of logistics office near to road	63
29	Front of house opposite site	63

APPENDIX 2





Replacement PM1 Discharge Fan and Silencer

Outline Quotation for SCA Flint

Quotation Reference: Q5.6227.15 REV A

18 February 2015

Description of Work:

Replacement of Belt driven Axial Fan.

Duty 40,000m³/hr @ 30mm Wg complete with 7.5 KW motor. Complete with

- Casing feet
- spigot flange
- flexible connection
- anti-vibration mounts

Noise Spectrum @1m F/F Ducted system;

63 Hz	125 Hz	250 Hz	500 Hz	1KHZ	2KHz	4KHz	8KHz
35 dBA	52 dBA	57 dBA	67 dBA	70 dBA	66 dBA	65 dBA	62 dBA

New Silencer with

Remove Existing Silencer from steelwork

Replace the existing silencer with a new silencer to Delta Neu Standard Designs based on an air velocity of 12m/s. This would incorporate;

- 100mm Pyrosorb
- 2m long Body
Stainless Construction Outer body from 1.2 st/st
Inner perf 4mm dia holes x 6mm pitch x 40% open area. 1mm st/st
- End flanges from 3mm st/st
- New supports to link with existing steel framework
- Lifting points

Estimated 10 dBA attenuation

Items Included:

- Labour
- Silencer

Items Excluded:

- Duct transitions
- Discharge Bend
- Cherry picker
- Crane

Client's Responsibility: - Safe working access to the equipment

Price: £ 9,127.00

Above prices are exclusive of V.A.T

Delivery: 6 weeks

Terms of Payment: 100% on completion

Terms of Business: To DELTA NEU Terms of Business form, a copy of which can be obtained on request.

Validity: 30 days from quotation date.

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