

Visy's Recycled Paper Mill — Reservoir

COMMUNITY UPDATE — JUNE 2022

This update has been prepared to keep the local community, the EPA and Darebin Council informed on progress made against the Odour Management Plan (OMP). The key objective of the Visy Odour Management Plan (OMP) is to provide a strategic multi-stage plan to identify, prioritise and implement effective and practicable control of odour emissions from Visy's Reservoir site to reduce odour impacts on the community to an acceptable level. A full copy of the OMP can be accessed at: www.visy.com.au/vp2reservoir.

Stage one: Biocide program, extension of vacuum stacks and increase of discharge velocity

The stage one works involved

- combining the two vacuum stacks;
- extending the height of the stack by a height of at least 3.0 metres above the nearest structure; and
- increasing exit velocity to > 10m/s

These works were completed on 21 October 2021.

Stage two: Alternative bacteria control program to reduce Volatile Fatty Acids (VFA)

Alternative bacteria control program

The alternative bacteria control program commenced on 24 November 2021. The program aim is to manage the bacterial growth leading to the generation of volatile fatty acids (VFA) and sulphides in the process. VFAs are a by-product of the paper recycling process which, whilst not hazardous, can result in an odour depending on weather conditions.

We monitor the progress of the program by measuring VFAs in our water system. Samples are taken from five locations within the mill every two to three days and the results are compared to our target. Figure 1 below is the average of the five samples taken from 14/02/22 through to 23/05/2022.

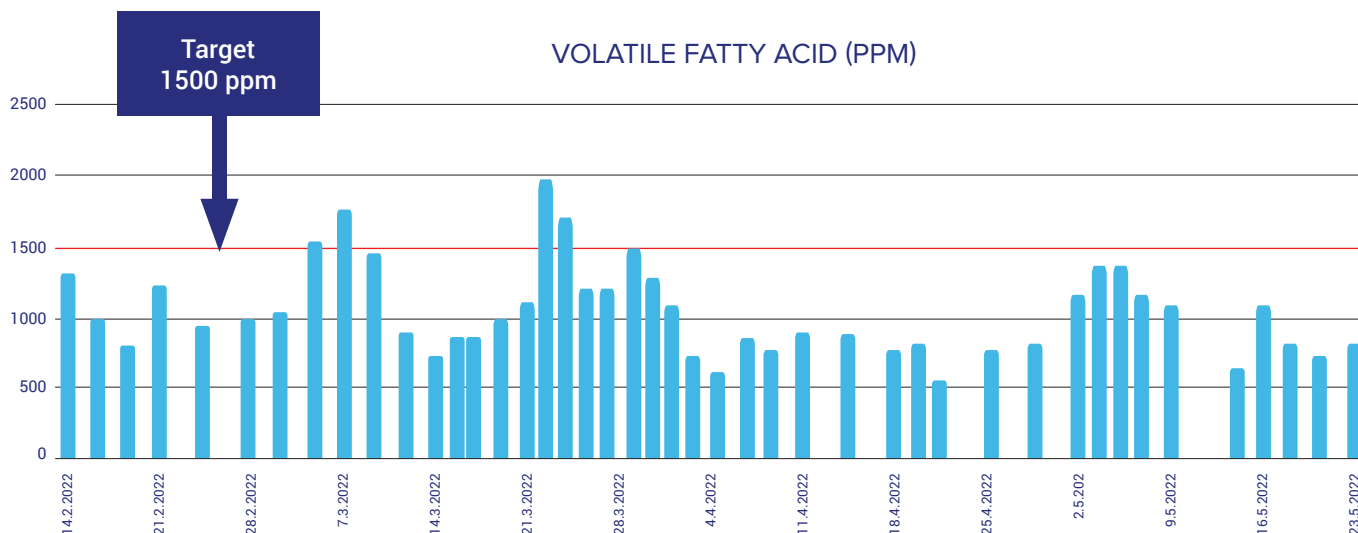


Figure 1: Volatile Fatty Acid in the Water System (14/02/22 – 23/05/22)

The OMP set an initial VFA target of 2,000ppm. The target was chosen based on our experience on control of odour from Visy's other paper recycling facilities and from pulp and paper industry experts. Samples taken have all remained under the 2,000ppm target.

The VFA target has now been further reduced to 1500ppm to achieve more effective control of bacteria growth and hence odour emissions, and samples have generally maintained below our target of 1500ppm.

The mill water chemistry is complex and process conditions can vary which may lead to adjustments in biocide application. Apart from VFAs, there are several other parameters (e.g. ORP, DO, pH, Conductivity, Alkalinity, Sulphide etc) that we track daily to provide real-time information on process conditions.

We have installed additional online instruments to measure these parameters continuously, to further improve monitoring, allow real-time trouble shooting and to further fine-tune the control of the biocide program.

Stage three: Modify existing hood recovery system

Visy has engaged a specialist to carry out the design for the modification to the hood recovery system. Initial meetings have been held to discuss the key design criteria to achieve effective odour control. This design work has commenced and is progressing. We expect to have completed the design by the end of August.

Stage four: Modify existing roof fans

The first phase to seal off the existing ridge vents to prevent the release of fugitive odour emissions has been completed. Figure 2 below shows ridge vents with openings allowing air from inside the building to be released directly to atmosphere. Figure 3 shows the same ridge vents completely sealed. This will direct air from inside the building to be exhausted via the existing roof fans.



Figure 2: Ridge Vent – Pre-sealing



Figure 3: Ridge Vent – Post Sealing

The second phase will extend the discharge stacks on the existing roof fans in accordance with EPA design guidelines for stacks, to achieve more effective dispersion of odours. The progress to date is as follows:

- contract for the design and supply of fans has been let; and
- structural design for the new stacks and supporting steelwork is underway.

Designing the new taller stacks to withstand wind loads is adding significant complexity to how they will be supported and may require modification to the existing building structural elements.

While we finalise the design, we will review the fabrication and installation program and provide an updated completion date in the next community update.

Odour monitoring

A round of odour monitoring from the key odour sources was conducted on the 19 April 2022. The results are summarised in figures 4 & 5 below. The results show a further significant reduction in the odour concentration (OU) and odour mass rate (OU m3/min) from the previous sampling carried out in 2020 and 2021.

These results demonstrate the bacteria control program is reducing the source of odour from the water system. By controlling the VFA's to below 1500 ppm, we can minimise the amount of odour emitted from the key odour sources.

The next stage of works will involve improving the dispersion of the remaining odour to further reduce any impacts to the neighbouring residential areas.

ODOUR CONCENTRATION (OU)

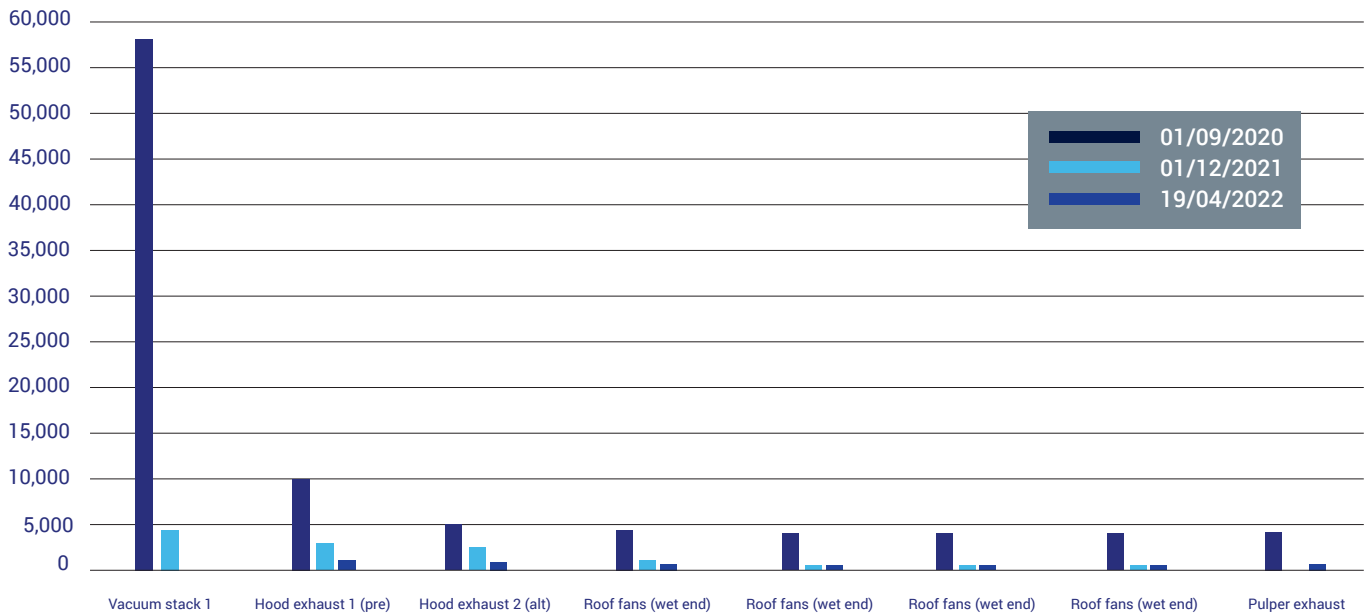


Figure 4: Odour Sampling from Key Odour Sources – Odour Concentration (OU)

ODOUR MASS RATE (OU/M3)

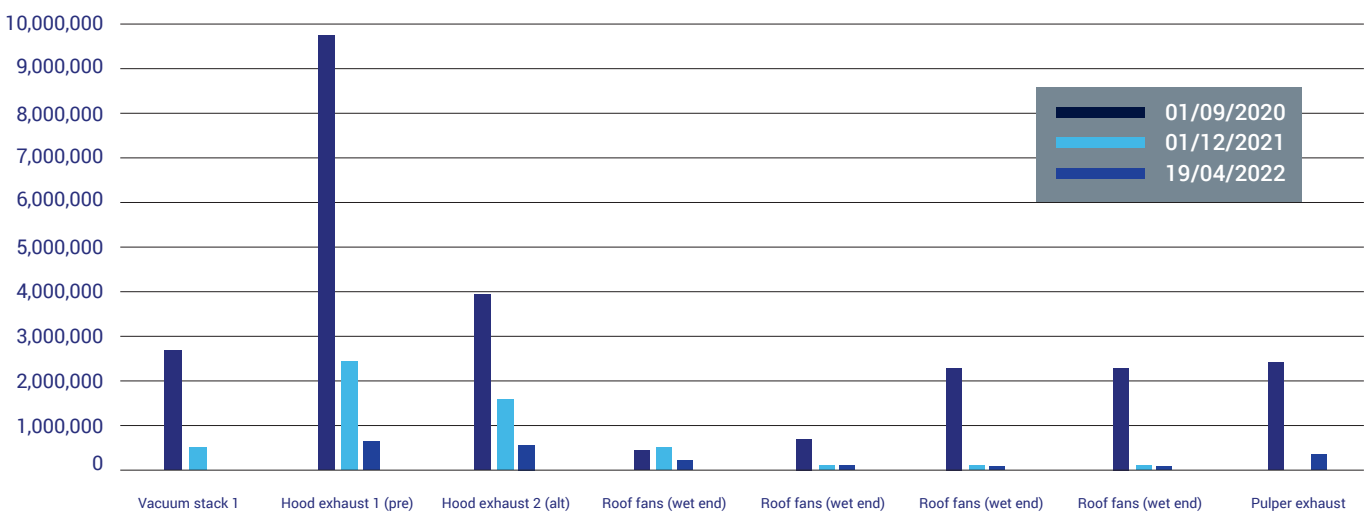


Figure 5: Odour Sampling from Key Odour Sources – Odour Mass Rate (OU/m3)

Odour complaints

The number of monthly odour reports to the EPA from the community is shown in figure 6 below. The number of reports has reduced since the peak in October/November 2021, when the bacteria control program commenced.

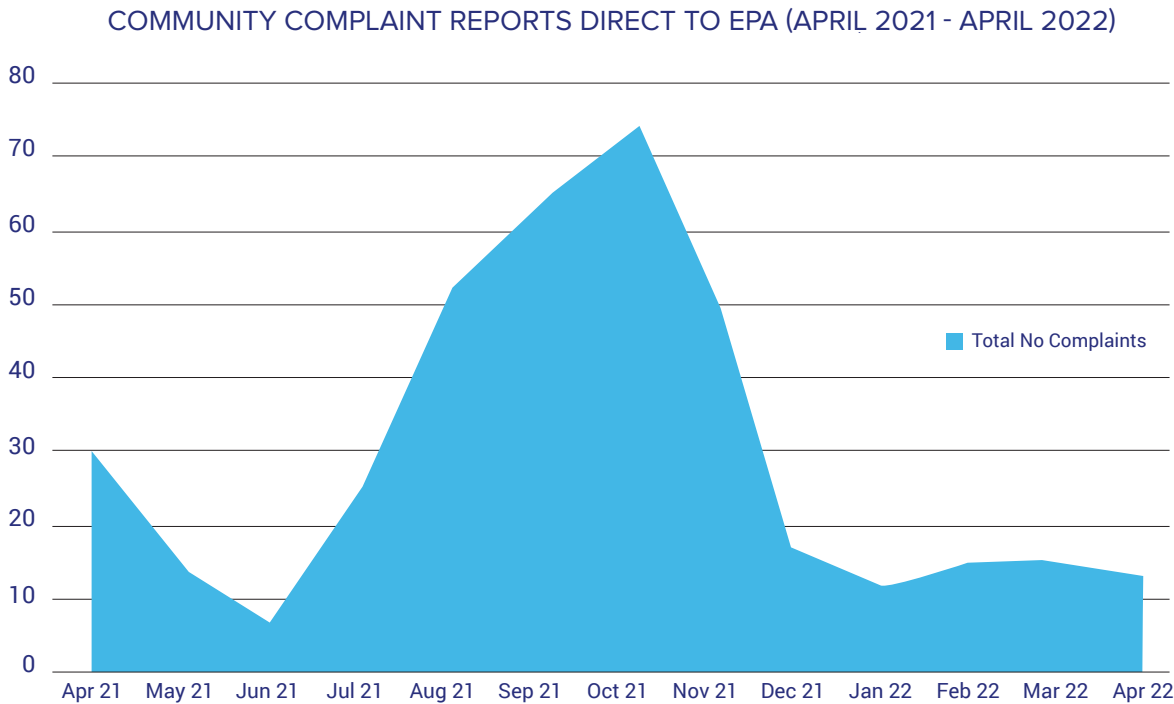


Figure 6: Community Odour Reports to EPA

Visy have received 19 odour reports from 12/02/2022 to 15/05/2022. The reports were made directly to the VP2 Webpage (www.visy.com.au/vp2reservoir) webform or via text. The odour reports are from residents living in areas to the north and south of the premises.

Each odour report is investigated, and feedback provided to the complainant when requested.

Community letter drop

The community letter-drop was distributed on the 17/03/2022 to over 300 residents located to the south, east, and north of the VP2 paper mill. The community letter provided residents with information about how they can access the VP2 webpage to keep informed about our odour management actions and how they can report odour to Visy via the webform.

Any community members that would like to stay informed are encouraged to contact Visy via the webform on the VP2 Webpage (www.visy.com.au/vp2reservoir).