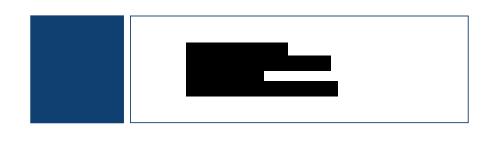


ENVIRONMENT PROTECTION ACT 1970 SECTION 62A

CLEAN UP NOTICE



TO:

ADDRESS: 51 Mcintyre RD, SUNSHINE NORTH VIC 3020

PREMISES: 51 MCINTYRE RD, SUNSHINE NORTH VIC 3020

LEGAL REFERENCE: EP Act 1970 s.62A(1) Clean up and ongoing management measures required

Who we are: Environment Protection Authority (EPA) Victoria is an independent statutory authority established under the *Environment Protection Act 1970* (the EP Act). Our purpose is to protect and improve our environment by preventing harm to the environment and human health.

Why we serve remedial notices: Remedial notices are served to prevent or remedy actual or likely pollution, environmental hazards and a range of non-compliances with the EP Act.

What you are required to do: Section 62A(1) of the EP Act requires you to comply with the requirements in this notice with one or more actions to prevent or remedy an actual or likely non-compliance. Under section 60A(1), if someone plans to take control of your premises, you must notify them of this notice and your progress towards compliance.

When you are required to act: Immediately, from the date below.

If you want compliance dates extended: An application to extend a compliance date listed in Section 3 of this notice must be received at least 10 working days prior to the compliance date. Application forms, available at www.epa.vic.gov.au/business-and-industry/forms must be addressed to the Manager of the EPA office listed on this notice with the subject line: "Notice amendment application". Your served notice remains legally binding until EPA advises of any change. Refer to the Remedial notices policy (publication 1418) for further information on amendment applications.

What happens if you don't comply: If found guilty of contravening a requirement of this notice, you may be ordered to pay a fine of up to 2400 penalty units (\$396,528).

What your review rights are: An application for review of this notice can be made to EPA and/or the Supreme Court. Applications for an EPA review must be made within 7 calendar days from the notice issue date (below). Application forms are available at <u>www.epa.vic.gov.au/business-and-industry/forms</u>, or from our offices. For more information on your review rights, refer to the Remedial notice review policy (publication 1531) or contact us on 1300 EPA VIC (1300 372 842).

For the purpose of this notice 'You' means the recipient of this notice and 'Premises' means the site at the premises address, as identified above.



DELEGATE OF THE ENVIRONMENT PROTECTION AUTHORITY

DATE OF ISSUE: 25/03/2021



NOTICE STRUCTURE

1 EPA OBSERVATIONS

This section details what was observed during the inspection.

2 REASONS FOR VIEW FORMED

This section interprets the observations and articulates why the authorised officer believes a clean up notice should be issued in accordance with section 62A of the EP Act.

3 REQUIREMENTS - WHAT OUTCOMES ARE REQUIRED TO COMPLY?

Considering the view that has been formed, this section lists the requirements or actions to address the environmental risk(s) or impact(s).

4 AN EXAMPLE OF HOW YOU CAN COMPLY

This section provides an example of how you may achieve compliance with the requirements of this notice.



1 EPA OBSERVATIONS

1.1 On Monday 13 May 2019 at about 1347 hours, an EPA officer conducted odour monitoring in SUNSHINE NORTH, and detected a strong odour with sweet chemical characteristics in the area. Observed that the wind direction at the time of the monitoring was north-westerly, and that the strongest odour was detected at the entrance to 49 McIntyre Road, south-east of the premises of

at 51 McIntyre Road, SUNSHINE NORTH

1.2 On Wednesday 29 May 2019 at about 0805 hours, an EPA officer conducted odour monitoring in SUNSHINE NORTH, and detected strong odour with sweet chemical characteristics in the area. Observed that the wind direction at the time of the monitoring was north-westerly, and that the strongest odour was detected outside the entrance to 49 McIntyre Road, south-east of the premises of the premises of the strongest.

1.3 On Monday 17 June 2019 at about 0937 hours, EPA officers conducted an off-site odour assessment of the premises at 51 McIntyre Road, SUNSHINE NORTH. The officers:

1.3.1 Looked up the weather conditions from the Bureau of Meteorology website and noted that the wind direction was north northwesterly with a wind speed of 19km/hr.

1.3.2 Confirmed that the prevailing wind direction at this location was from the north.

1.3.3 Arrived at the western end of Anastasia Way near Stony Creek, and detected a strong odour with sweet, chemical characteristics adjacent to Stony Creek.

1.3.4 Observed a nearby stack with a steam plume emitting from it, and noted that the wind direction was from the north.

1.3.5 Arrived at the front carpark of the hotel located at 47 McIntyre Rd, SUNSHINE NORTH, and noted there was no odour present.

1.3.6 Walked west along the main driveway into the grounds a vehicle auctioning premises at 41-45 McIntyre Rd, SUNSHINE NORTH.

1.3.7 At a location in the vehicle auctioning premises' car park, to the south-west of the premises, an EPA officer:

1.3.7.1 Detected a strong odour with sweet chemical characteristics.

1.3.7.2 Noted that this was the same odour as that observed on Anastasia Way.

1.4 On Monday 17 June 2019 at about 1010 hours, EPA officers attended the premises of located at 51 McIntyre Rd, SUNSHINE NORTH to investigate the source of a strong odour with sweet chemical characteristics detected offsite. The officers:

1.4.1 Noted that hold EPA licence for the premises in relation to G01 - Chemical Works for the manufacture of paints, powder coatings and resins for the industrial and powder coating markets, which includes licence condition "LI_A1 You must ensure that odours offensive to the senses of human beings are not discharged, emitted or released beyond the boundaries of the premises", and a bubble limit under condition LI_DA1 for total volatile organic compounds released from all discharge points of 241 grams/minute.

1.4.2 Were informed by the site representative that processes at the premises included both reacting and blending base chemicals to manufacture products including resins, paints and coatings.

1.4.3 Were informed by the site representative that the premises have many stacks releasing air emissions, including stacks on equipment involved in paint and resin manufacturing.

1.4.4 Detected that a strong odour with sweet chemical characteristics was present at ground level on the southern boundary outside the resin production building and noted that this odour was consistent with the odour detected offsite.

1.4.5 Detected that a strong odour with sweet chemical characteristics was present but that it was weaker inside the resin production building.

1.4.6 Were informed by the site representative that the tanks inside the resin production building were used in the resin manufacturing process and heated up during production due to the chemical reaction that



creates the resin.

1.4.7 Detected a strong odour with sweet chemical characteristics, which was present most strongly when standing next to a pump fan attached to a 3m high stack to the south of the resin production building.1.4.8 Were informed by the site representative that a polyester reaction occurred in the 20-tonne reactor and the 12-tonne reactor in the resin production shed. The inputs into the 20-tonne reactor include neopentyl glycol and either terephthalic acid to isophthalic acid.

1.5 On 2 August 2019 at approximately 1008 hours, EPA officers conducted a licence compliance inspection at licensed premises located at 51 MCINTYRE RD, SUNSHINE NORTH, VIC, 3020

"the premises". The objective of the inspection was to assess compliance against EPA Licence . The officers:

1.5.1 Conducted odour monitoring in Hassett Street, SUNSHINE NORTH, located east of the premises boundary at approximately 1008 hours.

1.5.2 Observed a strong odour with sweet chemical like characteristics.

1.5.3 Looked up wind conditions on the Bureau of Meteorology website and noted that the wind direction was westerly with a wind speed of 15 km/h.

1.5.4 Confirmed the current wind direction at this location as westerly.

1.5.5 Traced the strong odour with sweet chemical characteristics for 100m to the premises car park.

1.5.6 Observed a strong odour with sweet chemical characteristics in the premises car park

1.5.7 Observed 20 and 12 tonne reactors inside the resin plant on the second floor of the building.

1.5.8 Observed a strong odour with sweet chemical characteristics inside resin plant on second floor of building.

1.5.9 Were informed by site representative that room air pressure is not measured and therefore they were unable to determine if resin plant is under negative air pressure.

1.5.10 Observed temperature gauge inside resin plant on second floor, reading 17 degrees Celsius.

1.5.11 Observed an open door of the loading area, located east on the second floor of the resin plant.

1.5.12 Observed a strong odour with sweet chemical characteristics outside, adjacent to drop tank number 5.

1.5.13 Observed no odour from the inspection point on scrubber.

1.5.14 Observed approximately 80 metres of pipework between the scrubber and the resin plant.

1.5.15 Observed no physical leaks or gaps in the pipework connected to the scrubber.

1.5.16 Observed a strong odour with sweet chemical characteristics adjacent to pipework between the resin plant and scrubber.

1.5.17 Observed a strong odour with sweet chemical characteristics adjacent to the trade waste pit when the pit lid was lifted, at approximately 1220 hours.

1.5.18 Observed westerly wind gusts adjacent to the trade waste pit at approximately 1220 hours.

1.5.19 Were informed by site representative at approximately 1220 hours that resin production would be at the stage where waste water is discharged from the process to the trade waste pit.

1.5.20 Observed a strong odour with sweet chemical characteristics outside paint shed, on second level external stairs, downwind from the resin plant.

1.6 On 9 October 2019 EPA served Amended Pollution Abatement Notice **and the served**. This notice included a requirement for **actions of how the resin plant** to supply to the authority specifications of how the resin plant building and pollution controls servicing the resin plant building systems will be modified or controlled so that odorous emissions are not discharged to atmosphere. These specifications included an assessment as to whether current operating stacks are appropriate to treat the type and volume of waste gases.

1.7 On 27 May 2020 EPA issued **Example and the second seco**

1.8 On 26 August 2020, an EPA officer conducted a desktop assessment and reviewed the report titled Odour Monitoring Assessment prepared by Golder Associated Pty Ltd, dated 13 March 2020, and submitted to EPA as an updated response to requirement 3.1 of remedial notice number **Control**. The officer:



1.8.1 Read that the wet chemical (caustic) scrubber is the main waste gas treatment system attached to the resin production facility, with all reaction vessels directed to this emissions control equipment, except for Tank 6 which is directed to the water scrubber (Page 8).

1.8.2 Read that odour capture efficiency was assessed at stack 1000 (the caustic scrubber) and stack 1007 (the water scrubber), and was measured through comparison of odour sampled at the inlet and the outlet of the emission control equipment (Page 10).

1.8.3 Read that the average odour removal efficiency of the caustic scrubber during the November 2019 sampling event was calculated to be 20%. Read that the average odour removal efficiency of the caustic scrubber during the February 2020 sampling event was 0%, with the odour concentration increasing from the inlet to the outlet. (Page 11).

1.8.4 Read that the volume of air from the caustic scrubber inlet to outlet increased by 50%, indicating that ambient air is infiltrating the system between the inlet and outlet. Read that this would indicate that the caustic scrubber is not operating at an appropriate level to treat odorous emissions. (Page 11).

1.8.5 Read a Table summarising the VOC sampling results for the caustic scrubber and noted that VOC levels were consistently, and at times substantially, higher at Outlet 2. (Page 12).

1.8.6 Read that water scrubber VOCs are below the LOR, however there is no capture efficiency for odour. Read a recommendation to implement odour treatment at this stack. (Page 10).

1.8.7 Read that the caustic scrubber is nearing the end of its operating life. Read a recommendation to replace the caustic scrubber with a more effective regenerative thermal oxidiser (RTO) system to collect and treat resin plant emissions. (Page 10).

1.9 On 11 December 2020

submitted to EPA an Approvals Proposal Pathway Form.

1.10 On 15 February 2021 an EPA officer conducted a desktop assessment of the Approvals Proposal Pathway Form previously submitted to EPA by Golder Associates Pty Ltd on behalf of 11 December 2020. The officer:

1.10.1 Noted that the Approvals Proposal Pathway Form was signed by Chief Executive Officer.

1.10.2 Noted that the Approvals Proposal Pathway Form was regarding the proposal to install a regenerative thermal oxidiser (RTO) to replace the existing wet chemical scrubber to treat odourous and Volatile Organic Compounds (VOCs) emissions from the resin plant.

1.10.3 Read that the RTO will be located in approximately the same location as the wet chemical scrubber. 1.10.4 Read that the RTO will be the principal source of VOC and odour abatement for the resin plant.

1.10.5 Read that the RTO uses thermal degradation to destroy odour and VOCs in the discharge from the resin plant.

1.10.6 Read that a puff box has been added to capture untreated air that by-passes the system during the change in flow direction through the RTO.

1.10.7 Read that natural gas injection is used to boost the calorific emissions if they are insufficient to maintain the desired operating temperature. Read that this means there is minimal NOx production during normal operations.

1.10.8 Read that emissions from the RTO stack will consist primarily of products of combustion (i.e. carbon dioxide, water vapour, carbon monoxide and residual VOC's).

1.10.9 Read a range of estimated of emissions from the RTO stack based on a nominal full flow, including; 1.10.9.1 Read that inlet concentrations for VOC's are estimated to be 7.5g/min and based on a 99% removal efficiency of the RTO the estimated emission rate will be approximately 0.75g/min.

1.10.9.2 Read that during normal operation testing on similar units indicates a NOx emission rate of 0.003g/ min during normal operation.

1.10.9.3 Read that during start-up of the RTO NOx emission rates are estimated to be 69g/min. Read that start up is expected to occur infrequently (twice per year) to enable servicing of the RTO, for a period of two to three hours per occurrence.

1.10.9.4 Read that during normal operation CO production is expected to be approximately 0.8g/min.

1.10.9.5 Read that during start-up of the RTO CO emission rates are expected to be approximately 33-g/min. Read that start up is expected to occur infrequently (twice per year) to enable servicing of the RTO, for a period of two to three hours per occurrence.

on



1.10.9.6 Read that CO2 production during normal operation at full flow is approximately 23kg/hr.

1.10.10 Noted that EPA Publication 1659 – Selected Scheduled Premises outlines an RTO as an example of a best practice control for emissions to air under Schedule Category G01 Chemical Works.

1.10.11 Read that the proposed RTO has the key design parameters of a residence time of at least 0.5 s, and a combustion chamber temperature of between 845 and 1090 degrees Celsius.

1.10.12 Read that the use of an RTO will reduce the consumption of natural gas by approximately 95% compared to a conventional thermal oxidiser.

1.10.13 Read that other than discharges of waste to air, the other waste generated by the RTO is an alumina silicate ceramic noodle which has a typical life expectancy of greater than 10 years.

1.10.14 Read that a new discharge point for the stack serving the RTO is proposed to be included in EPA Licence 9269 replacing the existing wet chemical scrubber.

1.10.15 Read that estimated emission rates for VOC's from the RTO are expected to be approximately 0.3% of the current bubble limit of 241g/min under EPA Licence

1.10.16 Read that under normal operation NOx emissions are expected to be approximately 0.01% of the current discharge limit for the now decommissioned incinerator.

1.10.17 Read that CO emissions are expected to be approximately 1% of the current discharge limit for the now decommissioned incinerator.

1.10.18 Read that **sectors** have had discussions with a resident who represents a local community action group and are committed to continuing to engage with and provide information to this resident and the local community action group they represent.

1.10.19 Read that **the second second** intends to work with the EPA to convene a community forum to present information on the planned improvements.

1.11 On 2 March 2021, an EPA officer conducted a search of EPA internal systems for pollution reports. The officer:

1.11.1 Noted that EPA had received more than 180 pollution reports alleging SUNSHINE NORTH premises at 51 McIntyre Rd as the source of offensive odour throughout 2020 and 2021.

1.11.2 Noted that these pollution reports commonly detailed an odour with "sweet chemical" characteristics. 1.11.3 Noted that these pollution reports outlined that the offensive odour was identified at multiple locations in the suburbs SUNSHINE NORTH, SUNSHINE, and ALBION, with a distance of up to approximately 3km from SUNSHINE NORTH premises.

1.11.4 Noted that some of these pollution reports described impacts from the odour such as dizziness, nausea, burning eyes and nose, headaches, and being forced to stay indoors.



2 REASONS FOR VIEW FORMED

2.1 Sector 2.1 Is the occupier of the SUNSHINE NORTH premises, located at 51 McIntyre Road, and holds an EPA licence for chemical works. The licence allows to manufacture paints, powder coatings and resins for the industrial and powder coating markets at the premises.

2.2 EPA licence **includes** licence condition "LI_A1 You must ensure that odours offensive to the senses of human beings are not discharged, emitted or released beyond the boundaries of the premises."

2.3 On numerous occasions an EPA officer conducted odour monitoring in SUNSHINE NORTH and detected a strong odour with sweet chemical characteristics. This odour was traced back by EPA officers from residential areas to the resin plant building at the premises.

2.4 Investigative reports provided by **Example 1**, in response to a preceding Pollution Abatement Notice, identified that while a wet chemical (caustic) scrubber and a water scrubber are the main waste gas treatment systems for the resin plant building, the wet chemical (caustic) scrubber is nearing the end of its operating life and has limited efficiency, and the water scrubber is not designed to treat odour.

2.5 Resin production at the premises involves chemicals that have sweet chemical odour characteristics. The odours observed onsite are consistent with those observed offsite and reported by the community. The odours detected on and off the premises from resin production areas of the premises would reasonably be expected to make the atmosphere offensive to the senses of human beings.

2.6 EPA has received more than 180 pollution reports from residential receptors alleging offensive odour emanating from the premises throughout 2020 and 2021.

On this basis, and considering the observations previously stated, I have formed a view and I am satisfied that you are the occupier of the premises upon or from which pollution has occurred or been permitted to occur, as per section 62A(1)(a) of the EP Act.

In order to address this, you must take the clean up and ongoing management measures listed in this notice.



AUTHORISED OFFICER EPA Metropolitan West EPA Victoria DATE OF ISSUE: 25/03/2021



3 REQUIREMENTS - WHAT OUTCOMES ARE REQUIRED TO COMPLY?

General Requirements

3.1 By 14 April 2021 you must supply to the Authorized Officer listed on page 7 of this notice a communications and engagement plan for EPA approval. This communications and engagement plan must include, but not be limited to;

a) the identification of all stakeholders affected, or potentially affected, by offensive odours discharging, emitting, or being released from the resin plant building at the premises.

b) the development of a range of channels or mediums to disseminate information to stakeholders, as outlined in requirement 3.1(a), regarding;

i) the offensive odours discharging from the premises;

ii) any potential impacts and risks to the environment and community stemming from the discharge of offensive odours and associated VOC's, and;

iii) the proposed modifications to the resin plant building to prevent offensive odours being discharged, emitted, or released beyond the boundaries of the premises.

c) the development of a system to identify and manage any issues raised by the stakeholders outlined in requirement 3.1(a).

d) the development of a range of stakeholder engagement activities, including, but not limited to, periodic stakeholder and community engagement meetings.

3.2 By 28 April 2021, you must carry on implementing an EPA approved communications and engagement plan in according with requirement 3.1 of this remedial notice.

3.3 By 28 April 2021 you must supply to the Authorized Officer listed on page 7 of this notice a plan for minimising the generation of, and associated impact on sensitive receptors from, odours offensive to the senses of human beings being emitted beyond the boundary of the premises until you have complied with Requirement 3.4 of this notice

3.4 By 21 October 2021, you must modify the odour controls of the resin plant building to prevent odours offensive to the senses of human beings from being discharged, emitted, or released beyond the boundaries of the premises. This must be in line with the Approvals Proposal Pathway Form submitted to EPA on 11 December 2020, and EPA Licence

3.5 By 28 October 2021, you must engage a National Association of Testing Authorities accredited consultant to carry out air emissions testing of discharges to air from the regenerative thermal oxidiser in order to demonstrate compliance with the emission limits for stationary sources in Victoria as set out in State Environment Protection Policy (Air Quality Management) Schedule D, and EPA Licence

3.6 By 18 November 2021, you must supply to the Authorized Officer listed on page 7 of this notice a report that, includes, but is not limited to;

a) The methodology and results of air emissions testing of discharges to air from the regenerative thermal oxidiser in accordance with requirement 3.5 of this notice.

b) A summary of how the results of the air emissions testing of discharges to air from the regenerative thermal oxidiser in accordance with requirement 3.5 of this notice compare with the emissions limits for stationary sources in Victoria as set out in the State Environment Protection Policy (Air Quality Management)



Schedule D, and EPA Licence

c) The final specifications, and location, of the regenerative thermal oxidiser and associated stack.

d) A revised premises plan, including discharge points.

e) Any recommendations for amendments to EPA Licence

Reporting Requirements

3.7 By 2 July 2021 you must, in writing to the Authorized Officer listed on 7 of this notice, provide an update on how the clean up and on-going management of the premises has been or is likely to be achieved to comply with each of the notice requirements.

3.8 By 25 November 2021 you must, in writing to the Authorized Officer listed on page 7 of this notice, provide a report that:

a) specifies how the clean up or on-going management of the premises has been achieved, and

b) is signed by your managing director, most senior executive, or a person authorised to sign on behalf of the notice recipient.



4 AN EXAMPLE OF HOW YOU CAN COMPLY

One way of achieving compliance with this notice would be to:

4.1 By the due date, supply to the Authorised Officer listed on page 7 of this notice a communications and engagement plan. This communications and engagement plan should, at a minimum;

a) identify all stakeholders affected, or potentially affected, by offensive odours discharging, emitting, or being released from the resin plant building at the premises. This could include local residents affected by the odour, local community groups, regulators, government bodies, local businesses, or any other potentially affected stakeholders.

b) develop a range of channels or mediums to disseminate information to stakeholders, regarding the odour, any potential impacts and risks, and the modifications to the resin plant building. This could include multiple means of dispersing information including publishing information on a website, posting information on social media, stakeholder meetings and forums, telephone hotlines, emails, and letter box drops. These channels or mediums should be developed to address the individual needs of stakeholder groups.

c) develop a system to identify and manage any issues raised by the stakeholders. This could be by developing feedback loops for information flows between the aforementioned channels or mediums to provide timely responses to queries from stakeholders, and escalate any issues as required.

d) develop a range of stakeholder engagement activities. This should include a range of periodic community or stakeholder meetings to discuss progress on clean up of the offensive odour stemming from the premises. These meetings should be publicised to all stakeholders identified in response to requirement 3.1(a), and be published through the channels and mediums developed in response to requirement 3.1(b).

4.2 By the due date, and upon EPA approval, implement the communications and engagement plan supplied in response to requirement 3.1.

4.3 By the due date, supply to the Authorized Officer listed on page 7 of this notice a plan for both minimising the emission of odourous VOC's beyond the boundary of the premises, and when not possible to eliminate these odourous VOC's minimise their impacts to sensitive receptors. This plan should;a) identify any ways to reduce the generation of odourous VOC's at the premises before the installation of the regenerative thermal oxidiser is complete.

b) identify any interim controls to reduce the impacts of odourous VOC's at the premises before the installation of the regenerative thermal oxidiser is complete. This could include by minimising fugitive emissions in the resin plant building, or by installing interim controls on the current odour control equipment.

c) where not possible to reduce or control the generation and impacts of odourous VOC's at the premises, outline ways to reduce their impacts on sensitive receptors. This could include by altering shift patterns or scheduling shut-down periods in consultation with identified stakeholders.

4.4 By the due date, install the regenerative thermal oxidiser as described in the Approvals Proposal Pathway Form submitted to EPA on 11 December 2020. During and after the installation you should remain compliant with EPA Licence **I**.

4.5 By the due date, engage a National Association of Testing Authorities accredited consultant to carry out air emissions testing of discharges to air from the regenerative thermal oxidiser in order to demonstrate



compliance with the emission limits for stationary sources in Victoria as set out in State Environment Protection Policy (Air Quality Management) Schedule D, and EPA License

4.6 By the due date, supply to the Authorized Officer listed on page 7 of this notice a report that, includes, but is not limited to;

a) The methodology and results of air emissions testing of discharges to air from the regenerative thermal oxidiser in accordance with requirement 3.5 of this Clean Up Notice.

b) A summary of how the results of the air emissions testing of discharges to air from the regenerative thermal oxidiser in accordance with requirement 3.5 of this notice compare with the emissions limits for stationary sources in Victoria as set out in the State Environment Protection Policy (Air Quality Management) Schedule D, and EPA Licence

c) The final specifications, and location, of the regenerative thermal oxidiser and associated stack. This should include, at a minimum, the height, location, and diameter of the stack, the velocity through the stack, and the operating temperature.

d) A revised premises plan for EPA Licence

e) Recommendations for amendments to EPA Licence , including discharge limits, and discharge points.

4.7 By the due date, supply in writing to the Authorized Officer listed on page 7 of this notice, an update on the progress of each requirement of this Clean up Notice.

4.8 By the due date, supply in writing to the Authorised Officer listed on page 7 of this notice, a report that: a) specifies how compliance with each requirement of this remedial notice has been met.

b) is signed by your managing director, most senior executive, or a person authorised to sign on behalf of the notice recipient.