

Stericycle Telford Healthcare Waste Treatment Plant and Transfer Station Odour Management Plan Application Document Number 16

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1. Stericycle Telford

The proposed development comprises a healthcare waste treatment plant and transfer station. The site will receive packaged healthcare and related wastes that are suitable for either on-site treatment (physico-chemical or mechanical) or transfer off-site to other disposal or recovery facilities.

The on-site treatment plant consists of a single steam auger with integral shredder and a separate cold shred line (for mechanical treatment only) for the following activities:

- Installation the heat disinfection and mechanical re-processing of hazardous healthcare wastes for disposal or recovery
- Waste operation the mechanical re-processing of non-hazardous healthcare wastes for disposal or recovery

The following are directly associated activities to the treatment plant:

- Gas fired steam raising plant to supply the steam auger
- Bin washing system for re-usable waste containers
- Storage of treatment plant residues pending transfer off-site for disposal or recovery

The transfer station consists of the following activities:

- Installation the storage of hazardous wastes pending on-site treatment or transfer off-site for disposal or recovery
- Waste operation the storage of non-hazardous wastes pending on-site treatment or transfer off-site for disposal or recovery
- Waste operation repackaging of offensive waste (light compaction) pending transfer off site for disposal or recovery

The main features of the facility are as follows:

The treatment plant consists of a shredder, a single chamber steam auger and pollution abatement equipment. Waste is shredded under negative pressure before transfer to the auger chamber where a combination of heat, moisture and residence time is sufficient to disinfect the waste. Steam is supplied to the auger from the gas fired steam raising plant. Off-gases from the auger are cooled in a condenser with the resulting water being discharged to foul sewer. Any residual gases are transferred through the abatement system with the off-gases from the shredder system.

The abatement system comprises a high efficiency particulate air (HEPA) filter, a coalescing vessel and a carbon filter bed that in combination are designed to remove any infectious bio-aerosols, excess moisture and any residual organic compounds and odours from the offgases before their release to atmosphere.

There is a single emission point to air from the treatment process where the final off-gases are released, and a further associated emission point to air from the gas fired steam raising





plant. There is also an emission point to foul sewer for effluent arising from the treatment process condensate and for effluent arising from the container washing process. There are no emissions to surface water arising from the activities at the site.

The shredded and treated residue is stored on site pending transfer off-site for disposal to landfill or for recovery and use as a refuse derived fuel.

The thermal waste treatment process and mechanical treatment of offensive waste is undertaken wholly within the process building with no treatment activities being undertaken outside the building. Light compaction of offensive waste is the only activity which occurs externally however this will under a canopy enclosed on three sides. Waste is stored in designated storage areas inside the building and in a designated trailer holding area outside of the building. All designated storage areas have impermeable surfaces with sealed drainage and all waste is stored in fully enclosed, leak-proof containers.

The site is located on at the end of Stafford Park 18 Industrial Estate. All adjacent property and land is in commercial/industrial use and the site is less than two miles from Junction 4 of the M54 motorway. The nearest built up residential area to the site is the Hollinswood Estate approximately 580m to the West. The site is located within flood zone 1 with a low probability of flooding and the nearest watercourse is Wesley Brook, 1.3km to the North East.







2. Odour Assessment

2.1 Executive summary

As part of the planning permission for the Telford facility, a detailed air quality and odour assessment was carried out in March 2020 by an independent consultant. This assessment has been undertaken to quantify the impact of odour on sensitive locations surrounding the site. It has been based upon odour risk during normal operation i.e. operation of control measures as outlined in section 3 and has included detailed modelling of dispersion patterns, wind directions and wind speeds. The report concludes the following:

"The overall significance of odour effects is insignificant. This conclusion is based on the findings of the risk assessment, which has identified a negligible risk of odour effects at all receptor locations, with all of the resultant predicted odour effects being negligible.

To summarise, the below items have been extracted from the report showing:

- Site location
- Sensitive locations/receptors surrounding the site
- Receptor sensitivity
- Odour pathway
- Effectiveness of odour pathway
- Likely odour effect at receptor

2.2 Site location, receptors and sensitivity of receptors

There are a total of 16 receptors that have been identified and assessed for their sensitivity surrounding the Telford site. These have been categorised as follows:

- 3 low sensitivity, all industrial industries
- 12 medium sensitivity, all commercial premises and a children's leisure centre
- 1 high sensitivity which is the residential area more than 500m away





Source: Figure 1, Sensitive Receptor Locations, Air Quality and Odour Assessment, March 2020

Receptor ID	Description	Grid Reference (OSGB X, Y)	Type of Receptor	Receptor Sensitivity
R1	Arriva Bus Depot	371521, 308466	Commercial	Medium
R2	Qi Van Systems	371546, 308592	Industrial	Low
R3	Preston Innovations Ltd	371699, 308433	Commercial	Medium
R4	Futuretech Computers Ltd	371663, 308642	Commercial	Medium
R5	M&P Engineering Ltd	371721, 308616	Industrial	Low
R6	AIRea51	371808, 308422	Children's Leisure Centre	Medium
R7	Emerys Builders Merchants	371556, 308670	Commercial	Medium
R8	Unitron Systems & Development Ltd 371510, 371510 Commercial		Medium	
R9	Residential property at Doddington	371054, 308393	Residential	High





Receptor ID	Description	Grid Reference (OSGB X, Y)	Type of Receptor	Receptor Sensitivity
R10	Wrekin Windows	371817, 308579	Commercial	Medium
R11	Tamtec Electronics	371844, 308459	Industrial	Low
R12	Choice Shops Ltd	371426, 308480	Commercial	Medium
R13	R13 Denwell Technical Services 371607, 308389 Commercial		Commercial	Medium
R14	Brandon Hire Station	371765, 308765	Commercial	Medium
R15	Edmundson Electrical 371536, 308323 Commercial		Medium	
R16	Nidec, Control Techniques and Leroy Somer UK	371899, 308638	Commercial	Medium

Source: Table 5, Sensitive Receptor Locations, Air Quality and Odour Assessment, March 2020

2.3 Odour Pathway

The below table outlines the effectiveness of the odour pathway based upon the modelling of dispersion patterns, wind directions and wind speeds. These have been categorised as follows:

- 3 ineffective
- 9 moderately effective
- 4 highly effective which are the immediate businesses to the North West, North East and South East of the site





	Receptor	Distance from	Direction	% Winds	Pathway
ID	Description	Source (m) ^a	from Site (°) ^b	from Source	Effectiveness ^c
1	Arriva Bus Depot	15	210-290	13.9	Moderately Effective
2	Qi Van Systems	30	250-350	35.3	Highly Effective
3	Preston Innovations Ltd	50	90-180	27.1	Highly Effective
4	Futuretech Computers Ltd	35	340-60	37.8	Highly Effective
5	M&P Engineering Ltd	40	40-90	33.8	Highly Effective
6	AIRea51	130	90-150	9.0	Moderately Effective
7	Emerys Builders Merchants	50	300-330	9.0	Moderately Effective
8	Unitron Systems & Development Ltd	75	200-240	4.5	Ineffective
9	Residential properties at Doddington	510	240-270	7.0	Ineffective
10	Wrekin Windows	115	60-100	26.3	Moderately Effective
11	Tamtec Electronics	160	80-130	18.5	Moderately Effective
12	Choice Shops Ltd	110	230-280	10.0	Moderately Effective
13	Denwell Technical Services	40	160-210	9.5	Moderately Effective
14	Brandon Hire Station	195	20-50	17.5	Moderately Effective
15	Edmundson Electrical	105	180-220	4.3	Ineffective
16	Nidec, Control Techniques and Leroy Somer UK	200	50-90	29.5	Moderately Effective

Source: Table 8, Effectiveness of Odour Pathway, Air Quality and Odour Assessment, March 2020

2.4 Likely odour effect

The below table summarises the likely odour effect at each of the receptors based upon the modelled pathways. All 16 sensitive receptors have been categorised as negligible effect showing that the site is highly unlikely to cause any odour issues when during normal operation based upon the relevant control measures implemented as per section 3.

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Receptor	Ris	sk of Odour Impact (Do	se)	Receptor	Likely Odour
	Source Odour Potential	Effectiveness of Pathway	Risk of Odour Impact	Sensitivity	Effect
1	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect
2	Small	Highly Effective	Low Risk	Low	Negligible Effect
3	Small	Highly Effective	Low Risk	Medium	Negligible Effect
4	Small	Highly Effective	Low Risk	Medium	Negligible Effect
5	Small	Highly Effective	Low Risk	Low	Negligible Effect
6	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect
7	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect
8	Small	Ineffective	Negligible Risk	Medium	Negligible Effect
9	Small	Ineffective	Negligible Risk	High	Negligible Effect
10	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect
11	Small	Moderately Effective	Negligible Risk	Low	Negligible Effect
12	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect
13	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect
14	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect
15	Small	Ineffective	Negligible Risk	Medium	Negligible Effect
16	Small	Moderately Effective	Negligible Risk	Medium	Negligible Effect

Source: Table 9, Assessment of Potential Odour Effects from Healthcare Waste Treatment and Transfer Station, Air Quality and Odour Assessment, March 2020





3. Odour Control Measures

The following sections outline the control measures that are adopted by Stericycle in the facility design and relevant EMS procedures to mitigate and limit odour.

3.1 Facility Design and EMS procedures

- All waste is unloaded and loaded inside of the building
- Fast-acting roller shutter doors are installed on every bay which automatically close when not in use. These will also be subject to routine maintenance to ensure continued and reliable operation.
- Residues from the treatment process are loaded inside of the building
- Site is equipped with impermeable surfaces and a sealed drainage system
- Offensive waste compaction is undertaken under the northern canopy and the static skip or mobile compaction vehicle are completely sealed and leak proof.

3.2 Pre-Acceptance and Acceptance

All waste accepted into the facility is subject to pre-acceptance audits and acceptance will be conducted as per the permit application document. As a result, all the waste is packaged in UN approved primary packaging, such as plastic bags, sharps bins etc.

3.3 Fugitive emissions, Waste Storage and Storage Timescales

Fugitive emissions

Fugitive emissions of odour can potentially be emitted from one of two sources:

- The storage of waste
- The treatment process

The risk of fugitive emissions to air from the treatment process is minimised as the system is fully enclosed and operates under negative pressure, therefore drawing all emissions through the abatement system. The abatement system is summarized in section 3.4.

Waste Storage

Risks of fugitive emissions from stored waste can be caused by the following:

- Inappropriately packaged wastes
- Poor rotation of wastes resulting in a build up of 'old waste' on site
- Poor housekeeping

The following control measures are adopted to ensure the risks are mitigated:

Waste is only accepted into site when packaged appropriately





- All bagged waste is stored in 770ltr wheeled carts that are lockable, fully enclosed and leak-proof
- All rigid units are stored in 770ltr wheeled carts that are lockable, fully enclosed and leak-proof, on pallets or in other approved containers such as re-usable sharps containers with their associated carts/cages
- All dental wastes are stored in a designated, bunded storage area inside the building
- Waste stocks are managed using the bar-coded tags to ensure there is a routine and efficient turnover of waste
- On acceptance into the facility any odorous material is prioritised for treatment /
- Storage timescales will be abided by as per the below table
- Waste in trailers which is designated as in transit are checked when receipted into the site and/or dispatched from the site to ensure the waste is stored appropriately and no leaks are present.
- Fast-acting roller shutter doors are kept shut unless open for loading/unloading
- No waste is stored outside of the building unless in an approved container (static/mobile compactor skip or sealed trailer unit)
- Housekeeping and daily site checks are carried out as per section 3.5

Storage timescales

Waste received onto site for treatment or transfer are processed or transferred within the quickest possible timescales. In some abnormal situations i.e. major plant shutdowns waste timescales may extend those outlined below however during these periods Stericycle endeavor to find alternative outlet routes as far as reasonably practicable. All waste received onto site aim to be stored for no longer than the timescales prescribed below:

Waste Type	Normal Operational Storage
	timescales
Infectious clinical waste (contaminated which chemicals)	Up to 14 days
Infectious clinical waste (not contaminated with chemicals)	Up to 14 days
Offensive waste or non-infectious waste	Up to 14 days
Any of the above stored in trailers, pending transfer	24 hours (no longer than 72 over
	weekends)
Anatomical waste	24 hours (no longer than 72 over
	weekends)
Cytotoxic and cytostatic drugs	Up to 6 months
Other medicines or drugs (non-haz pharecuiticals)	Up to 6 months
Dental amalgam	Up to 6 months
Other chemicals or other wastes	Up to 6 months

Waste residues

Treatment process and waste operation residues will be stored by the following means:





- In walking floor containers loaded inside the building
- In walking floor containers sealed and held within the designated bay locations which are under a canopy enclosed on three sides.

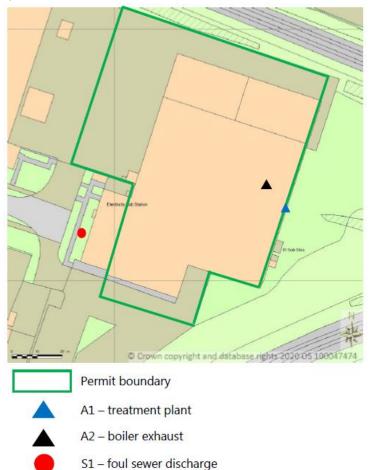
Residues are sent off site on a daily basis and the business continuity plan has alternative disposal outlets in place to ensure residues are not held on site for a significant period of time.

3.4 Abatement System

Overview

The treatment plant air abatement system is designed to minimise point source emissions to air, specifically the emission of any infectious bio-aerosols, any compounds with the potential to cause odour, and any volatile organic compounds.

The hoppers on both the cold shred line and treatment line are fully enclosed, lidded and operates under negative pressure from the hooded abatement system as described below. Both systems are fully sealed until the point of the walking floor trailer where all waste requiring treatment will have been rendered safe. The emission point from the abatement system is shown below as emission point A1:







System Summary

Off-gases from the treatment plant are transferred to the abatement system from two different sources as follows:

- Steam and air emissions from the auger are transferred under slight negative pressure to a condenser, which removes the excess moisture from the off-gases by condensation, the resulting condensate being transferred to foul sewer as a trade effluent.
- Air is drawn off from the shredder systems under negative pressure and transferred through air ducts to the abatement system.

The remaining auger off-gases present after the condenser are transferred under negative pressure to the abatement process which comprises the following:

- A coalescing vessel containing matrix material to remove the remaining moisture from the gas stream, the resulting moisture being transferred to foul sewer as a trade effluent.
- A carbon adsorption filter bed to remove odorous organic compounds and any residual volatile organic compounds

The air drawn off from the shredder system is transferred to a HEPA filter designed to remove any infectious bio-aerosols. The H13 HEPA filter has a 99.95% efficacy rate for the removal of particulates. After the HEPA filter the remaining shredder off-gases are transferred to the coalescing vessel and carbon filter beds with the off-gases from the auger for the removal of odorous organic compounds.

The final off-gases are then released to atmosphere via a short stack positioned horizontally out of the rear wall of the facility (emission point A1).

Routine Maintenance

All elements of the pollution control system are subject to routine planned preventative maintenance as specified in the Company business management system.

Calibration of magnahelic gauges used to monitor pressure gradients across the system for maintenance of negative pressure; replacement of carbon filter media for the carbon adsorption system, and replacement of the HEPA filters are all scheduled maintenance activities.

3.5 Housekeeping

- Site diaries which include an inspection of the following is conducted daily:
 - o Identification of infrastructure issues
 - o Amenity issues including an odour check
 - o Review of housekeeping across the site
 - o Investigation of any complaints or incidents on the site





- Daily localised housekeeping regime led by shift managers/team leaders i.e. around work stations, auger, walking floor trailers etc.
- Weekly housekeeping regime led by the plant manager which includes litter picks, clean down of maintenance areas etc
- Housekeeping standards and requirements are recorded on the site diaries and any areas requiring attention are dealt with promptly
- A deep clean of high-level areas is undertaken annually as part of the site maintenance strategy





4. Odour Management Plan Overview

This Odour Management Plan has been produced in accordance with the IPPC H4 Horizontal Guidance for Odour.

In order to prepare the plan, Stericycle have considered the following for potential odours during normal operations:

- Source The activity which produces the odour and the point(s) of odour release
- Pathway/Location Emission release point and or pathway to sensitive receptors
- Control Measure The actions which are to be taken to mitigate the effect of the odour release
- Responsible The person or persons responsible for ensuring the control measures are implemented

For abnormal operations, Stericycle have considered the following:

- Event Possible process or control failures or abnormal situations which could lead to a change in the effectiveness of the control measures highlighted above
- Pathway/Location Emission release point and or pathway to sensitive receptors
- Likely effect on emissions The potential outcome of event in respect of the likely odour impact on sensitive receptors
- Response measures The reactive measures Stericycle will take to mitigate the effect of the odour release
- Responsible The person or persons responsible for ensuring the response measures and enacted

Where there is potential for pollution in the form of offence to the sense of smell (i.e. where there is potential for reasonable cause for annoyance), Stericycle have used the aim of BAT to achieve the following:

- To prevent the generation of odour where possible
- To contain the odour and use effective treatment techniques, or other means of minimising emissions, where prevention is not possible.
- To promote the use of good practices for the control of odour, including adequate maintenance and cleaning, storage, containment etc.
- To keep the exposure to odour at sensitive receptors below the level at which it would give reasonable cause for annoyance.

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As stated in the IPPC H4 Horizontal Guidance for Odour, there are four main types of failure which may lead to an increase in emissions of offensive odour. These are:

- Those which have potential to affect the process and the generation of odour
- Those which affect the ability to abate/reduce odour
- Those which affect the ability to contain odour (where releases are not normally permitted)
- Those affecting dispersion between the source and sensitive receptors (for permitted release points such as vents, stacks or permitted open (area) sources).

Stericycle has considered all of the above in producing the tables below which have been compiled using the IPPC H4 Horizontal Guidance for Odour.





5. Odour Management Plan

5.1 Normal Operation

Odour source	Pathway/Location	Control measure	Responsible
Clinical waste storage pending processing	Loading bay doors during delivery or trailer loading periods	 Section 3 of this report, specifically: Appropriately packaged wastes and storage when accepted into the facility – Section 3.3 Limited storage timescales – Section 3.3 Odorous material is prioritised for treatment – Section 3.3 Regular housekeeping checks and inspections – Section 3.5 Loading bay doors kept closed when not being used for loading/unloading – Section 3.3 Routine and efficient turnover of waste (rotation) – Section 3.3 	All operational staff
Clinical waste storage pending transfer	Loading bay doors during delivery or trailer loading periods Externally within designated storage area E1 and S1	 Section 3 of this report, specifically: Appropriately packaged wastes and storage when accepted into the facility – Section 3.3 Limited storage and transfer timescales – Section 3.3 Odorous material is prioritised for transfer – Section 3.3 Regular housekeeping checks and inspections – Section 3.5 Loading bay doors kept closed when not being used for loading/unloading – Section 3.3 Routine and efficient turnover of waste (rotation) – Section 3.3 Waste in trailers (externally) which is designated as in transit are checked to ensure appropriate storage, no leaks and no odour issues – Section 3.3 	All operational staff
The shredding of heat treatable waste and cold shredding of offensive waste	Loading bay doors during delivery or trailer loading periods Emission point A1	 Section 3 of this report, specifically: The hopper is fully enclosed, lidded and operates under negative pressure – Section 3.4 The system from shredding to loading of the walking floors is sealed – Section 3.4 Air is drawn off from the shredder systems under negative pressure and transferred through air ducts to the abatement system – Section 3.4 Air is passed through a HEPA filter and the System utilises a carbon absorption filter to remove odorous organic compounds – Section 3.4 Regular housekeeping checks and inspections – Section 3.5 Loading bay doors kept closed when not being used for loading/unloading – Section 3.3 Routine and efficient turnover of waste (rotation) – Section 3.3 	Maintenance Staff Plant Manager General Manager



		Planned preventative maintenance regime to ensure effectiveness of the system is maintained – Section 3.4	
The Treatment of waste in the Heat Disinfection Unit (HDU)	Loading bay doors during delivery or trailer loading periods Emission point A1	 Section 3 of this report, specifically: The hopper is fully enclosed, lidded and operates under negative pressure – Section 3.4 The system from shredding to loading of the walking floors is sealed – Section 3.4 Air is drawn off from the shredder systems under negative pressure and transferred through air ducts to the abatement system – Section 3.4 Air is passed through a HEPA filter and the System utilises a carbon absorption filter to remove odorous organic compounds – Section 3.4 Regular housekeeping checks and inspections – Section 3.5 Loading bay doors kept closed when not being used for loading/unloading – Section 3.3 Routine and efficient turnover of waste (rotation) – Section 3.3 Planned preventative maintenance regime to ensure effectiveness of the system is maintained – Section 3.4 	Maintenance Staff Plant Manager General Manager
Residues pending disposal	Loading bay doors during delivery or trailer loading periods Externally within designated storage area S8	 Section 3 of this report, specifically: Regular housekeeping checks and inspections – Section 3.5 Loading bay doors kept closed when not being used for loading/unloading – Section 3.3 Trailers held externally will be fully sealed before leaving the building – Section 3.3 Business continuity plan to prevent the build up of trailers containing residues on site – Section 3.3. 	All operational staff Plant Manager General Manager
The compaction of offensive waste	Externally within designed waste operation area (B3)	 Section 3 of this report, specifically: Appropriately packaged wastes and storage when accepted into the facility – Section 3.3 Limited storage and transfer timescales – Section 3.3 Regular housekeeping checks and inspections – Section 3.5 Routine and efficient turnover of waste (rotation) – Section 3.3 Static skip or mobile compaction vehicle are completely sealed and leak proof – Section 3.3 	All operational staff



5.2 Abnormal Operation

Event	Pathway/Location	Likely effect on emissions	Response measures	Responsible
Quarantined wastes	Loading bay doors during delivery or trailer loading periods	Outside of normal acceptance requirements, thus potential to produce an unintended odour	 Remove or treat waste within EMS timeframe Use deodouriser where odour is significant 	All operational staff Plant Manager
Waste spillages	Externally or internally within the site boundary	Potential to produce an unintended odour Potential to increase odour risk to local sensitive receptors	Implement EMS emergency response for healthcare waste spill	All operational staff
Mechanical/electrical failure of the plant equipment	Loading bay doors during delivery or trailer loading periods	Fugitive emission release within the building	 Cease processing of waste until relevant repairs are made If repairs are likely to take a significant amount of time, enact business continuity plan to remove wastes off site within the relevant time periods in section 3.4 Use deodouriser where odour is significant 	All operational staff Plant Manager General Manager
Electrical power failure	Loading bay doors during delivery or trailer loading periods	Fugitive emission release within the building	 Cease processing of waste until relevant repairs are made If power not restored within a reasonable timeframe, enact business continuity plan to remove wastes off site within the relevant time periods in section 3.4 Use deodouriser where odour is significant 	All operational staff Plant Manager General Manager
Failure of the abatement system	Emission point A1 Loading bay doors during delivery or	Unabated emission release from emission point A1 Fugitive emission release within the building	 Cease processing of waste until relevant repairs are made If repairs are likely to take a significant amount of time, enact business continuity plan to 	All operational staff Plant Manager General Manager



	trailer loading periods	Potential to increase odour risk to local sensitive receptors	remove wastes off site within the relevant time periods in section 3.4 • Use deodouriser where odour is significant	
Spore failure resulting in a need to stockpile residues as per EMS procedure	External bay locations	Potential to produce an unintended odour Potential to increase odour risk to local sensitive receptors	 Increase odour monitoring frequency though housekeeping regime – section 3.5 Use deodouriser where odour is significant 	Plant Manager General Manager
Roller shutter door failure	Loading bay doors	Potential to increase odour risk to local sensitive receptors	 Increase odour monitoring frequency though housekeeping regime – section 3.5 Use deodouriser where odour is significant 	Maintenance Staff Plant Manager General Manager
Extreme weather – Heat	Loading bay doors during delivery or trailer loading periods	Potential to increase odour risk to local sensitive receptors	 Increase odour monitoring frequency though housekeeping regime – section 3.5 Use deodouriser where odour is significant 	All operational staff Plant Manager
Extreme weather - Wind	Loading bay doors during delivery or trailer loading periods	Potential to increase odour risk to local sensitive receptors	 Increase odour monitoring frequency though housekeeping regime – section 3.5 Use deodouriser where odour is significant 	All operational staff Plant Manager





6. Investigation of odour complaints

On receipt of a complaint, Stericycle will investigate the cause of the complaint as soon as practicable. Should the cause be found to be the result of malfunction or maloperation of the process, then immediate corrective action will be taken. Where a substantive reply cannot be provided or the cause of the odour not known, the operational activities in progress on site at the time the complaint was received will be investigated. This will be undertaken as part of Stericycle's incident reporting system and associated EMS.

7. Summary

Section 2 of this report summarises the odour assessment that has undertaken by an independent third party based upon Stericycle implementing EMS control measures. The assessment concludes that:

"The overall significance of odour effects is insignificant. This conclusion is based on the findings of the risk assessment, which has identified a negligible risk of odour effects at all receptor locations, with all of the resultant predicted odour effects being negligible.

Without adequate control measures, the treatment process does have a potential to cause Odour. Stericycle believe that the control measures outlined in section 3 of this plan are sufficient to ensure that odour risk and effects are negligible as per the independent odour assessment. Section 5.1 outlines the odour sources, risks and measures to ensure that odour is maintained to an acceptable and negligible level.

In the event of abnormal operations where there is the potential for unexpected odour and an increased odour risk to local sensitive receptors, Stericycle will implement reactive response measures as set out in section 5.2 to limit the odour effect.

Overall, odour levels are considered to be negligible.

Stericycle will periodically review this plan to ensure control measures and response measures are suitable and effective.

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