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| What do you do that can harm and what could be harmed | Managing the Risk | Assessing the Risk |
| Hazard | Receptor | Pathway | Risk Management | Probability of exposure | Consequence | What is the overall risk |
| Oil spills | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface and groundwater, Land. | * All storage/treatment areas will be on impermeable surfaces
* All stored oil/fuel will be stored in bunded areas which can hold 110% of the oil stored
* Drainage will be placed throughout the storage area which will all go through an interceptor straight to foul sewer following our discharge agreement
* All spills will be cleaned up immediately following a spillage procedure
* Spillage drills will be completed every two months to ensure all staff are continually monitored and trained in how to control spillages if they arise.
* A spillage procedure is set out in the company management system
* site perimeter will be surrounded with kerb and channel to stop water run off (SL3)
 | LowUnchecked run off/leaching could reach sensitive receptor but management actions should prevent this | ContaminationPollution of local surface or groundwater + contamination of soil | Low |
| Effluents washed from yard to sewer | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface and groundwater | * Storage area drainage will all go through an interceptor strait to foul sewer following our discharge agreement.
* All surfaces, drains and interceptor regularly inspected maintained.
 | Low | Pollution of local surface or groundwater | Low |
| Refrigerant Gas escape from Degassing process | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * All staff that use the degassing process are trained and supervised by an F-Gas Recovery Engineer
* A degassing procedure is set out in the company management system
* The degassing chamber/ bottles are emptied regularly to ensure minimal leakage if the system fails
* Active monitoring: checking piercing pliers, recovery data.
* The degassing system is checked daily
* The degassing system is serviced every three months
* Collected gas is monitored and a report is produced every week any low results will be investigated
 | Low | Pollution of atmosphere | Low |
| Refrigerant gas escape from decanting process | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * Decanting operators are trained in accordance with a SSoW regarding handling, transporting and decanting gas bottles.
* Gas monitoring during Decanting process. Persons evacuate and decanting operation stopped if leak detected.
* Ability to isolate gas at gas bottle or at ISO tanker in the event of a leak.
 | Medium | Pollution of atmosphere | Low Low due to controls in place. |
| ODS Gas released from Shredding of fridges | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * Shredding plant is completely enclosed with extraction of All refrigerant gases sent through the filtration system
* Emissions monitored to ensure emission limits are met
 | Low | Pollution of atmosphere | LowLow due to controls in place. |
| Cyclopentane release from Shredding of fridges | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * Shredding plant is completely enclosed with extraction of All refrigerant gases sent through the filtration system
* Emissions monitored to ensure emission limits are met
 | Low | Pollution of atmosphere | LowLow due to controls in place. |
| Cyclopentane release from failure of Filtration System | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * Shredding Filter is controlled by a computer system that can be accessed remotely
* This will alarm if there are any failures
* Safety logic in place: When the system alarms it has the ability to cause a direct shutdown of the plant
 | Low | Pollution of atmosphere | LowLow due to controls in place. |
| ODS Gas release from failure of Filtration System | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * Shredding Filter is controlled by a computer system that can be accessed remotely
* This will alarm if there are any failures
* Safety logic in place: When the system alarms it has the ability to cause a direct shutdown of the plant
 | Low | Pollution of atmosphere | LowLow due to controls in place. |
| Dust from shredding plant | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * Shredding plant is completely enclosed with dust extraction
* LEV extraction system in place which is regularly maintained.
* LEV system statutory inspected annually by Allianz.
 | Low | Pollution of atmosphere | LowLow due to controls in place. |
| Refrigerant Gas released from stored/handled fridges | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * FLT Operators are trained in accordance with a SSoW regarding handling, transporting and storage of cooling units.
* FLT clamp attachments to handle cooling units appropriately.
* Cooling units stored in fire storage bays have 150mm gaps between rows to prevent damage when removing from storage bay.
* Active monitoring program in place: inspection of fire bays.
 | Low | Pollution of atmosphere | LowLow due to controls in place. |
| Noise | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * Internal roads & surfacing will be kept clean and maintained in a good state of repair and subject to a speed limit so as to avoid unwanted rattle and “body slap” from vehicles;
* Plant shall be operated so as to minimise noise emissions, for example, no unnecessary revving of engines, etc.
 | Low | Nuisance | Low |
| Odour | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * It is not expected that the activities on Site will give rise to significant levels of odour, due to the waste types proposed to be accepted on Site.
* Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on site.
* The Site will only accept WEEE waste which is non-odorous. Removal of putrescible contents from fridges is stipulated in pre-acceptance checks.
* Any fridges that are found to be damaged or odorous upon arrival will be transferred to treatment sites immediately.
* Visual inspections will be undertaken upon acceptance of the waste and before their movement to storage bays, to ensure that no residual food waste is contained within the fridges. Any such waste identified will be removed from the fridges, quarantined and sent off site to be dealt with by a suitably licenced facility.
 | Low | Nuisance | Low |
| Fire caused by shredding plant | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface & Groundwater, air & land | * The Site will be operated in accordance with the approved Fire Prevention Plan (FPP) to ensure that the risk of fire is minimised.
* Nitrogen inertion of plant in Shredding line.
* Regular housekeeping of MEWA plant by dedicated cleaners.
 | Low | Pollution of atmosphereContaminationPollutionInjury/death  | LowLow due to controls in place. |
| Fire caused by stored fridges | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface & Groundwater, air & land | * Fridges will be stored in bays that are surrounded by Legato A1 fire-resistant concrete blocks to prevent the spread of fire.
* FLT Operators are trained in accordance with a SSoW regarding handling, transporting and storage of cooling units.
* FLT clamp attachments to handle cooling units appropriately.
* Spill kits located in strategic locations on site with trained spill responders.
 | Medium | Pollution of atmosphereContaminationPollutionInjury/death | LowLow due to controls in place. |
| Fire caused by arson | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface & Groundwater, air & land | * The Site will be manned during operational hours 24 hours a day and will benefit from security fencing around the perimeter and lockable gates.
* The fencing will be inspected weekly. Any weaknesses will be fitted with temporary repairs immediately and will be repaired with permanent measures within 7 working days.
* The Site will also benefit from 24-hour CCTV and security lighting.
* All visitors to the Site will be required to register in the visitor’s book and sign out again on exit. This minimises the risk of unauthorised visitors being present at the Site
* Operational procedures, including regular inspections, ensure continual monitoring of security provision at the Site.
 | Very low | Pollution of atmosphereContaminationPollutionInjury/death | LowLow due to controls in place. |
| Explosion from shredding plant | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * The plant will have systems which will control dust
* The plant will have systems which will minimise explosion risk
* Nitrogen inertion of plant in Shredding line.
* Process safety logic in place.
 | Low | Pollution of Atmosphere.Injury/death. | Low |
| Explosion from shredding plant dust | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * The plant will have systems which will control dust
* The plant will have systems which will minimise explosion risk
* Nitrogen inertion of plant in Shredding line.
* Process safety logic in place.
 | Low | Pollution of Atmosphere.Injury/death. | Low |
| Explosion from ullage of ISOTANKER | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * DSEAR risk assessment has been conducted by external provider.
* ATEX zoning in place – ignition sources preventing from entering ATEX zones.
* Earthing and equipotential bonding of ISO Tanker and transfer equipment to prevent static build-up.
* ISO Tanker is suitable for refrigerant and blowing agent. Pressure relief valves on ISO Tanker.
* Monitoring of quantities of blowing agent & refrigerant and confirmation using calibrated weighbridge. Prevent ‘overfilling’ of tanker.
 | Very Low | Pollution of Atmosphere.Injury/death. | Low |
| Explosion from decanting process | Potentially sensitive receptors as listed in Fire Prevention Plan | Air | * DSEAR risk assessment has been conducted by external provider.
* ATEX zoning in place – ignition sources preventing from entering ATEX zones.
* Earthing and equipotential bonding of ISO Tanker and transfer equipment to prevent static build-up.
* Decanting operators are trained in accordance with a SSoW regarding handling, transporting and decanting gas bottles.
* Gas monitoring during Decanting process. Persons evacuate and decanting operation stopped if leak detected.
* Ability to isolate gas at gas bottle or at ISO tanker in the event of a leak
 | Very Low | Pollution of Atmosphere.Injury/death. | Low |
| Pests | Potentially sensitive receptors as listed in Fire Prevention Plan | Land, Water, Air | * The waste codes accepted on site are not expected to attract pests. However, it is possible that the fridges may arrive at site containing residual food waste.
* Fridges will be inspected upon arrival on Site, and any food identified will be removed immediately, quarantined in a sealed container and removed off site to a suitably licenced contractor as soon as possible, to prevent the attraction of pests.
* Fridges and bagged WEEE waste will be stored for a maximum of 3 months before removal off site.
* Active monitoring: The Site will be inspected daily to ensure that pests are not present on Site.
 | Low | Nuisance | Low |
| Soap Suds from Reuse procedure | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface and Groundwater | * Drainage of Residue from the reuse facility will go straight to foul sewer following our discharge agreement.
* All storage/treatment areas will be on impermeable surfaces
 | Low | Contamination & Pollution | Low |
| Litter from wasteLitter from vehicles | Potentially sensitive receptors as listed in Fire Prevention Plan | Land, Air | * The waste codes proposed for the Site, which comprise only WEEE waste, are unlikely to generate litter.
* The waste is enclosed within the delivery vehicles.
* Fridges will be inspected upon arrival for any residual food waste which may include food packaging. To prevent this litter impacting the environment, all food and packaging waste will be removed from the fridges and stored in a sealed container for treatment offsite by a suitably licenced facility.
* Bins will be provided outside for site workers and visitors to use.
* The Site will be cleaned daily, and good housekeeping procedures will be followed. The Site and Site boundary will also be inspected by Site Personnel. In the event that litter arising from the site is deposited outside the site, the affected area will be cleaned.
 | Low | Nuisance | Low |
| Mud | Potentially sensitive receptors as listed in Fire Prevention Plan | Land | * The Site is covered by impermeable concrete which will not generate mud. Furthermore, it is unlikely that vehicles will bring mud onto the Site, due to the extensive bituminous road network surrounding the Site.
* Areas of hardstanding and impermeable surfacing will benefit from good housekeeping and will be cleaned daily to ensure the Site is free of significant quantities of mud and debris.
 | Low | Nuisance | Low |
| Flooding | Potentially sensitive receptors as listed in Fire Prevention Plan | Land, water | * Management System controls the storage of Waste and non- wastes such as fuels.
* All liquids shall be provided with secondary containment. (applies to Hazardous wastes and non- wastes such as fuels).
 | Low | Nuisance & Contamination | Low |
| Security & Vandalism | Potentially sensitive receptors as listed in Fire Prevention Plan | Land | * The Site will be manned during operational hours 24 hours a day and will benefit from security fencing around the perimeter and lockable gates.
* The fencing will be inspected weekly. Any weaknesses will be fitted with temporary repairs immediately and will be repaired with permanent measures within 7 working days.
* The Site will also benefit from 24-hour CCTV and security lighting.
* All visitors to the Site will be required to register in the visitor’s book and sign out again on exit. This minimises the risk of unauthorised visitors being present at the Site
* Operational procedures, including regular inspections, ensure continual monitoring of security provision at the Site.
 | Low | Nuisance | Low |
| Overflowing of storage bunds | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface and Groundwater | * Active monitoring program which includes inspecting secondary containment facilities.
* Near miss reporting system for environmental issues.
 | Low | Pollution | Low |
| Overfilling of oil storage IBCs | Potentially sensitive receptors as listed in Fire Prevention Plan | Surface and Groundwater | * Active monitoring program which includes inspecting secondary containment facilities.
* Near miss reporting system for environmental issues.
 | Low | Pollution | Low |