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
Fugitive VOC emissions from thermal polymer degradation	Local human population	Air	• The Site will be visually monitored by Site personnel throughout each shift. If odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken. • Weather conditions monitored. • Maintenance regime in place • Once installed, stack and sensitive receptor monitoring conducted in line with operating procedures	Medium. Emissions could potentially reach sensitive receptors as listed in Fire Prevention Plan	Low. Harm to human health - respiratory irritation and illness from VOC exposure	Low
Additional VOC emissions from waste polymers (residual compounds, additives, cleaning agents)	Local human population	Air	• The Site will be visually monitored by Site personnel throughout each shift. If odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken. • Weather conditions monitored. • Maintenance regime in place • Once installed, stack and sensitive receptor monitoring conducted in line with operating procedures	Medium. Emissions could potentially reach sensitive receptors as listed in Fire Prevention Plan	Low. Harm to human health - respiratory irritation and illness from VOC exposure	Low
Additional odour from contaminated waste polymer	Local human population	Air	• Waste accepted on Site consists only of mixed plastics with a negligible quantity of other contaminants. The waste does not contain any odorous materials. All waste accepted on Site will be pre-treated. • Incoming waste material will be stored in dedicated external bays before treatment within the main processing building • The main processing building benefits from roller shutter doors that will remain closed except when waste is being transferred to and from the building; • Waste handling will be kept to a minimum. • Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on Site.	Low	Very Low. Nuisance, loss of amenity	Low

			• If odorous waste is delivered to Site it will be segregated and removed at the earliest opportunity. It will then be re-loaded into the delivery vehicle or loaded into a sealable container. • The Site is monitored for odours by Site personnel throughout each shift. If odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.			
Dust emissions from extrusion process	Local human population	Air	• Extrusion will occur within the main processing building. • The main treatment building benefits from roller action doors which will be kept closed when extrusion takes place. • Extruded pellets are not dusty in nature and will be stored in bulk bags.	Very Low	Very Low. Nuisance, loss of amenity	Low
Emission control equipment failure	Local human population	Air	• Maintenance regime in place • Operations will be halted in the event of emission control equipment failure	Low	Low. Harm to human health - respiratory irritation and illness from VOC exposure	Low
Visible emissions	Local human population	Air	• The Site will be visually monitored by Site personnel throughout each shift. If odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken. • Weather conditions monitored. • Maintenance regime in place • Operations will be suspended if visible emission occurred.	Low. Visible emissions may occur because of a break-down and reach sensitive receptors as listed in Fire Prevention Plan	Low. Nuisance, loss of amenity	Low
Plant or equipment failure	Local human population	Air Water & Land in the event of dealing	• Maintenance regime in place • Operations will be halted in the event of plant/equipment failure • Fire Prevention Plan in place	Low. A fire may occur if equipment is not maintained	Low. Harm to human health - respiratory irritation and	Low

		with a fire (firewater)	• Sprinkler system in place • Drench system in place	or if human error	illness from VOC exposure	
Receipt of waste. Processing and storage of waste.	Potentially sensitive receptors as listed in Fire Prevention Plan	Air	• Waste accepted on Site will consist only of mixed plastics with a negligible quantity of other contaminants. The waste will not contain any odorous materials. All waste accepted on Site will be pre-treated. • Incoming waste material will be stored in dedicated external bays before treatment within the main processing building • The main processing building benefits from roller shutter doors that will remain closed except when waste is being transferred to and from the building; • Waste handling will be kept to a minimum. • Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on Site. • If odorous waste is delivered to Site it will be segregated and removed at the earliest opportunity. It will then be re-loaded into the delivery vehicle or loaded into a sealable container. • The Site will be monitored for odours by Site personnel throughout each shift. If odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.	Very low	Odour Nuisance	Low
Vehicle movements. Operation of fixed and mobile plant. Processing of waste.	Potentially sensitive receptors as listed in Fire Prevention Plan	Air	• The Site is located within an area dominated by industrial/commercial premises. There are no residential receptors within 500m of the Site. • All treatment of waste will occur within the main processing building. • Vehicle movements will be restricted to operations within the daytime period.	Medium	Nuisance and health risk to human receptors during daytime hours.	Low

			• Speed limits will be implemented for vehicles using the Site and traffic calming measures will be implemented to enforce speed limits. • Site access and operational areas will be maintained and repaired to minimise emissions of noise due to uneven and poor surfacing. • If horns or alarms are deemed to cause unacceptably high levels of noise, alternative technologies will be explored and implemented • Plant will be selected & operated to minimise noise • Plant will be fitted with noise silencers where possible. • All Site plant and machinery will be operated and maintained in accordance with manufacturer's specifications. • Auditory inspections will be carried out daily and in response to complaints. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.			
Dust from: Waste processing operations. Waste storage. Vehicle movements	Potentially sensitive receptors as listed in Fire Prevention Plan	Air	• The incoming plastic waste originates from a metal shredding process and may contain residual amounts of fine material. • Waste will arrive within sheeted or enclosed vehicles if possible to ensure no escape of dust during transit. • Wastes will be stored in dedicated external storage bays. • The main treatment building benefits from roller action doors which will be kept closed when movements of waste are not taking place. • All waste processing will take place within the main building. All fines and dust generated will be captured and retained by a dust extraction system within the building.	Low	Dust nuisance	Low

			• Fines removed through mechanical treatment or generated as a result of drying will be removed from the process, loaded into bags and removed from Site to a suitably licenced facility. • A vehicle speed limit will be implemented on Site to minimise the mobilisation of dust particles. • Site surfacing will be maintained in good condition to minimise the mobilisation of dust particles. • Transfer of dusty materials to containers/skips will be undertaken within the confines of a building; and Daily visual inspection of the Site and Site boundary will be carried out by Site personnel. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.			
Runoff from the Site	Surface water and groundwater	Land and surface water	• All waste will be stored and treated on impermeable surfacing within the main processing building and external storage yard. • Due to the nature of the waste to be accepted and the proposed operations on Site, there will be no contaminated run off generated under normal operating conditions. • The Site will hold a discharge consent for the release of trade effluent to foul sewer. AO are currently in the process of obtaining the consent which will be approved by Severn Trent before operations begin on Site. • The main processing building benefits from impermeable surfacing throughout and all runoff will be contained within the confines of the building. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated	Low – due to preventative management measures in place and the waste types accepted on Site	Contamination of surrounding land and water	Low

			Management System (IMS), which is certified to ISO 9001, 14001 & 45001.			
Birds, vermin and pests	Potentially sensitive receptors as listed in Fire Prevention Plan	Land and Air	• The wastes accepted at the Site will not be susceptible to pests due to negligible contamination with organic residues. • Waste will be stored on site for a maximum of 3 months. • The facility will be inspected by both Site management and operatives for infestations of pests, vermin and insects on a daily basis. • If the presence of pests can be attributed to a particular waste type, this waste will be removed from Site as soon as practicable. • In the unlikely event that birds, vermin or pests are identified on Site, a specialist pest control contractor will be employed to undertake measures to remove the animals from the Site. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.	Low	Nuisance to human and commercial receptors	Low
Mud from vehicle movements	Potentially sensitive receptors as listed in Fire Prevention Plan	Land	• Site roads will be maintained free of significant quantities of mud and debris. • All operational areas will be subject to monitoring by staff throughout their shift to identify accumulations of mud or debris requiring remedial action and where necessary road cleaning equipment will be deployed • All vehicles and mobile plant leaving operational areas will be checked to ensure that they are clear of loose waste. • Before leaving the Site, vehicles will be cleaned as necessary and checked to ensure that their load is secure. • Daily visual inspection of the Site-by-Site Management will identify any problem associated with mud and debris which will be cleaned up as soon as possible. Where	Low	Mud on road, road safety	Low

			necessary road cleaning equipment will be deployed. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.			
Litter from waste	Potentially sensitive receptors as listed in Fire Prevention Plan	Air	• Waste acceptance procedures will ensure that only authorised wastes are accepted. • Plastics accepted at the site are from the processing of domestic appliances, are relatively dense in nature and less liable to create wind-borne litter. • All waste processing will occur within the building which benefits from roller shutter doors that will remain closed unless a material movement is taking place • Bins will be provided on Site around welfare areas for the use of Site visitors and personnel. • The Site and its immediate surrounding will be inspected daily, and action will be taken to maintain the area free of significant accumulations of litter and debris • Any excessive litter material at the Site or on the highways will be cleared using a mechanical sweeper and/or litter picker if required. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.	Low	Nuisance from litter	Low
Spillage and Leakage	Local land quality, surface water and groundwater	Runoff and percolation through ground	• Diesel fuel storage tank will have an integral bund capable of containing 110% of the tank capacity • Containers used for the storage of other process liquids and maintenance oil, will be stored over drip trays or within a bunded area bund capable of containing at least 110% of the volume of the largest container within the bund or 25% of the total tank	Low	Contamination of land, groundwater and surface water	Low

			volume within the bund, whichever is the greater • Drip trays/bunds will be inspected visually on a regular basis by the Site staff to ensure the continued integrity of the drip trays/bunds and identify the requirement for any remedial action. • Materials suitable for absorbing and containing minor spillages will be maintained on Site. Minor spillages will be cleaned up immediately, using sand or proprietary absorbent to clean up liquids and placed in alternative containers. • Site staff will undertake daily monitoring for evidence of spillage and leakage. • In the event of a major spillage immediate action will be taken to contain the spillage and prevent liquid from entering surface water drains and the unsurfaced ground. The spillage will be cleared immediately and placed in containers for off-site disposal and the EA will be notified. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.			
Fire	Potentially sensitive receptors as listed in Fire Prevention Plan	Air (smoke) Ground (spillages and firewater)	• The Site will be managed in accordance with the approved Fire Prevention Plan.	Medium	Harm and nuisance	Not significant – due to the comprehensive mitigation and management methods outlined in the Fire Prevention Plan.
Vandalism and Security	Harm to Human Receptors, Ecological Receptors, Commercial/industrial	Land and air.	• In order to prevent unauthorised access, a number of security measures will be in place at the site including: Security fencing surrounding the site; Security lighting; and	Low	Theft, Plant failure, harm to human health	Low

	receptors, Land and Water		24 hour CCTV surveillance, monitored from the Halesfield, Telford site which is operational 24 hours. • Site boundary checks are completed weekly to ensure site security is maintained. • Any defects or damage which may compromise the integrity of the enclosure will be made secure by temporary repair by the end of the working day. • Permanent repairs will be affected as soon as practicable. • All inspections and any defects, damage or repairs will be recorded in the site diary. • 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. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.			
Unauthorised Waste Acceptance	Potentially sensitive receptors as listed in Fire Prevention Plan	Air, Land	• Waste will be subject to strict waste acceptance procedures to identify, reject and/or segregate potentially non-conforming waste. • Only waste authorised by the EP will be accepted at the Site. • All wastes will be subject to inspection and checking against the declaration on the waste transfer note. If unauthorised waste is delivered to the Site, it will be segregated and stored in a designated quarantine area prior to export from Site. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.	Low	Nuisance, harm to human health	Low

Flooding	Surface water, soils and groundwater Potentially sensitive receptors as listed in Fire Prevention Plan	Flood waters over land	• The Site lies within a flood zone 1 and therefore has a low probability of flooding. • Site Management responsible for implementing risk management measures in accordance with the Site's Integrated Management System (IMS), which is certified to ISO 9001, 14001 & 45001.	Very Low	Contaminated flood waters impacting land in residential, ecological and commercial areas	Negligible