Environment, Fugitive Emissions & Accidents Risk Assessment and Management Plan

Sims Group UK Limited
Temporary Waste Refrigeration Storage Area
South Dock
Alexandra Dock
Newport
NP20 2WE

Date: May 2016

Reviewed by: Site Management and Environment Department

Hazard	Receptor	Pathway	Risk Management	Probability	Consequence	Risk
TO **AIR** FROM SITE ACTIVITIES						
Dusts and Particulates Releases of particulates or dust from the acceptance of ELF. Releases of particulates or dust from storage and handling of ELF. Releases of particulates or dust from the movement of vehicles on site.	Local industrial receptors/ residential receptors 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk Air quality	Air transport/ Wind blown	The waste materials handled will be of solid form (ELF units) and the potential for dust generation is therefore limited. Compliance with waste acceptance procedures will prevent the receipt of dust generating wastes. Wastes will be inspected at weighbridge and in unloading areas. The wastes will be stored a manner so as to prevent the potential release of dusts and particulates. No treatment activities take place on site. Dust/particulates will be controlled through the ongoing visual monitoring of site operations by the site management team who will undertake regular inspections and undertake remedial action if dust/particulates are identified as a problem. Good housekeeping will be employed to reduce quantities of particulates and dust on the site. Site housekeeping involves sweeping of operational areas to reduce buildup of dust. Materials will be handled with suitable scrap handling equipment (FLTs with clamp attachment) and employees appropriately trained. Distances that material has to travel will be kept to a minimum with due care and consideration being given to unloading and loading areas and distance from storage area. Traffic speed including vehicles and mobile plant will be limited to 10mph to minimise dust generation by vehicle movement on site.	Low	Dust Nuisance, loss of amenity Respiratory illness	Low / Not significant with measures indicated in place

Hazard	Receptor	Pathway	Risk Management	Probability	Consequence	Risk
			All plant and machinery associated with the site operations & used for the prevention of fugitive emissions will be subject to a preventative maintenance programme. Any complaints regarding dusts/particulates will be investigated and appropriate action taken if the site is found to be the source of the emission. All complaints will be recorded.			
Noise & Vibration Noise from: Receipt & handling of ELF Moving wastes on site. Noise and vibrations from mobile plant, and vehicle movements	Local industrial receptors/ residential receptors 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk Structures	Air transport and vibration through the ground	Mobile plant and vehicles within the control of Sims Group and subcontractors will be silenced to current recommended standards. All equipment and vehicles will be maintained in line with manufacturer recommendations. Vehicles will be switched off when not in use where practicable. Delivery vehicles processed as quickly as possible to minimise noise from engines, reversing warning signals etc. Sympathetic driving of vehicles will reduce unnecessary revving of engines. Personnel will be trained in work procedures and environment awareness training. Site employees will undertake regular inspections and will undertake remedial action if noise or vibrations are identified as a problem. Any complaints regarding noise or vibration will be investigated and appropriate action taken if the site is found to be the source. All complaints will be recorded.	Medium	Noise Nuisance, loss of amenity	Low / Not significant with measures indicated in place
Odour from Waste activities Odour from residues in refrigeration units	Local industrial receptors/ residential receptors 1.2km	Air transport/ Wind blown	Control and monitoring of waste acceptance procedures will ensure wastes likely to cause malodours are minimised. All ELF will have been cleaned of foodstuffs prior to acceptance. Any fridges which are found to contain foodstuffs will either be sent directly to the fridge plant, or when detected will be moved within 12 hours. Site employees will undertake regular inspections and undertake remedial action if odour is identified as a problem. Good housekeeping will be implemented across the site to minimise the risk of odours occurring. Any complaints regarding odour will be investigated and appropriate action will be taken if the site is found to be the source of odour. All complaints will be recorded.	Low	Odour Nuisance, loss of amenity	Low / Not significant with measures indicated in place
Ozone Depleting Substances from refrigeration units	Air Quality	Air Transport/ Wind blown	Fridges will be stored in a manner that prevents damage to the cooling system.	Low	Release of ODS and deterioration of air quality	Low/Not significant with measures indicated in place

Hazard	Receptor	Pathway	Risk Management	Probability	Consequence	Risk
Emissions from vehicles & mobile and static plant	Local industrial receptors/ residential receptors 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk Air Quality	Air transport	Vehicles fitted with catalytic converter where appropriate to reduce emissions. Sympathetic driving of vehicles and operation of mobile plant to reduce fuel consumption and thus emissions. Vehicles and mobile plant will not be left idling or used unnecessarily and where appropriate and will be switched off when not in use. Mobile plant will be regularly maintained in accordance with manufacturer recommendations and operation sympathetically as above to reduce emissions.	Medium	Deterioration in local air quality.	Very Low/Not significant

TO **WATER** FROM SITE ACTIVITIES						
Potentially contaminated run off from Waste reception and storage of ELF	Local watercourse - dock Ground water Land Ecosystems/ Habitats Severn Estuary/ River Usk	Run-off, via drainage system Through the ground	No treatment activities take place onsite. Operations limited to the storage of waste end of life refrigeration units The integrity of site surfacing will be monitored and maintained. All ELF units will be inspected during unloading. Any units found to be leaking oils will be immediately removed and transferred to the fridge plant for stage 1 processing. Storage area will be regularly inspected and any ELF units found to be leaking oils will be removed and transferred to the fridge plant for stage 1 processing immediately. Good housekeeping will prevent the buildup of dust/ mud and debris on site which has the potential to adversely affect the water quality. Please see dust and particulates and mud and debris section for more details. Compliance with waste acceptance procedures will prevent the receipt of non-permitted wastes and ensure wastes are adequately stored. Duty of care will ensure a written description of waste is obtained. Personnel will be suitable trained and wastes will be inspected at weighbridge and unloading areas. Site employees will undertake regular inspections of waste storage areas. Spill kits will be located at key locations on site and are mobile so that they may be taken to the site of an incident.	Low	Deterioration of water quality of aquatic ecosystems Contamination of groundwater Contamination of land Loss of amenity Loss of resource	Low/Not significant with measures indicated in place

TO **LAND** FROM SITE ACTIVITIES						
Mud and Debris Mud and debris from wastes received on site Mud and debris generated on site	Local industrial receptors/ residential recepotrs 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk HIghways	Vehicles entering and leaving site	Integrity of the surfacing will be maintained. Mud and debris will be controlled through the ongoing monitoring of site operations by the site management team who will undertake regular inspections and undertake remedial action if a problem is identified. Good housekeeping will be employed to reduce quantities of mud and debris on the site. Sweeping will be employed as necessary to keep surfaces clean and minimise unacceptable build up on site and prevent emissions from site. Any complaints regarding mud and debris will be investigated and appropriate action taken if the site is found to be the source of the emission. All complaints will be recorded.	Low	Mud Nuisance, loss of amenity. Health & Safety.	Low / Not significant with measures indicated in place
Litter from wastes received on site Litter from storage of waste	Local industrial receptors/ residential receptors 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk	Air transport/ Wind blown Scavenger Birds and animals – Pests Vehicles entering and leaving site	The incoming waste materials handled will be end of life refrigeration units and the potential for litter generation is therefore limited. Compliance with waste acceptance procedures will prevent the receipt of litter generating wastes. Duty of care - the wastes will be adequately stored in a manner so as to prevent the potential release of litter. Site employees will undertake regular inspections and undertake remedial action if litter is identified as a problem. Good housekeeping will be implemented across the site to minimise the risk of litter accumulating on site. Mechanical/manual sweeping will be available to collect litter. Suppliers will be instructed that refrigeration units must be emptied of residual wastes prior to delivery and will be inspected upon receipt. Any fridges which are found to contain foodstuffs will either be sent directly to the fridge plant, or when detected will be moved within 12 hours. The likelihood of pests carrying litter from site is negligible. Plus, appropriate measures to prevent/ minimise pests will include regular inspections by site management. Pest control contractors will be used if deemed necessary. Any escape of litter beyond the boundary of the site will be cleared up as soon as it is practicable and safe to do so. Any complaints regarding litter will be investigated and appropriate action taken if the site is found to be the source of litter. All complaints will be recorded.	Low	Litter Nuisance, loss of amenity	Low / Not significant with measures indicated in place
Vermin disease, impact people & on wildlife	Local industrial receptors/ residential	Migration of vermin from site.	The waste materials should be cleaned prior to delivery and will be inspected upon receipt. Wastes will be handled in a manner that is unlikely to attract pests. Plus, appropriate measures to prevent/ minimise pests will include regular inspections by site management.	Low	H&S implications eg weils disease, nuisance	Low / Not significant with measures

	receptors 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk		Contractor will be used to control vermin if deemed necessary.		Habitat & fauna disturbance	indicated in place

TO **AIR, WATER** & **LAND** FROM ACCIDENTS						
Plant or equipment failure. Resulting in spillage e.g. hydraulic pipe failure	Local water course - Dock Land Local industrial receptors/ residential receptors 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk	Run-off, via drainage system Through the ground or cracks in impermeable surface	The integrity of the surfacing will be monitored and maintained. Scheduled programme of maintenance for plant and equipment will be in place. Approved contractors will be used and records kept. Inspections/ check sheets will be completed in accordance with company policy. Employees training will be undertaken and the correct equipment will be used for specific tasks. Spill kits will be located at key locations on site and will be mobile so that they may be taken to the site of an incident. Site will be manned by Sims employees who will supervise loading and unloading operations. Sims employees will be equipped with 2 way radios linked to the fridge plant in order that the responsible person can be contacted and the alarm raised in an emergency situation. Employees will have training on emergency contingency procedures and environmental awareness. There will be no oil/ fuel storage vessels located at the site.	Low	As above	Low/ Not significant
Fumes/ smoke from accidental combustion of incoming / stored wastes; or Vandalism/Arson	Local industrial receptors/ residential receptors 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk	Air Transport/ Wind blown	Waste acceptance procedures as previously detailed will minimise risk of acceptance of wastes likely to accidently combust. Inspection of loads at unloading area and subsequently during handling will facilitate segregation of wastes with combustion potential. Non conforming wastes will be quarantined and removed from site immediately. Wastes will not be burnt on site. Site security (fencing and gates) will prevent unauthorised access and minimise risk of arson. Employees will have training on emergency contingency procedures and environmental awareness. Firefighting equipment will be held (mobile 50 litre foam extinguisher), site personnel will be appropriately trained in use of firefighting equipment and Emergency Contingency Procedures. Regular inspections and maintenance of firefighting equipment will be undertaken in accordance with H&S legislation.	Low	Smoke nuisance, loss of amenity, respiratory irritation Deterioration of air quality Chance of fire spreading.	Low / Not significant with measures indicated in place

			Site will be manned by Sims employees who will supervise loading and unloading operations. Sims employees will be equipped with 2 way radios linked to the fridge plant in order that the responsible person can be contacted and the alarm raised in an emergency situation. Stockpile Management: Fridges will be neatly stacked to prevent damage to cooling system. The first row of fridges adjacent to the palisade fence will be stacked to a height below the top fence line to avoid falling fridges landing outside of the site perimeter. The second inner and other rows of fridges will be stacked a maximum of six units high. For larger fridges this will be less. Fridges will be stacked to a maximum of 5m high. Piles will be a maximum of 20m in length/ width, a maximum area of 235m^2 and a maximum volume of 300m^3. A separation distance of 6m between piles will be maintained. 6m fire breaks between refrigeration units and the lighting towers will be maintained. Refrigeration units will not be stacked on top of drains/ gulleys to ensure access is maintained for isolating drainage.			
Failure to contain Fire Fighting water	Local water course – Dock Ecosystems	Drainage system	Equipment for isolating drainage will be available e.g. – drain covers and bunds. Waste refrigeration equipment will not be stacked on top of drains/ gulleys to ensure access is maintained for isolating drainage. Site will be manned by Sims employees who will supervise loading and unloading operations. Sims employees will be equipped with 2 way radios linked to the fridge plant in order that the responsible person can be contacted and the alarm raised in an emergency situation. Site Management and Fire Brigade will be responsible in event of emergency.	Low	Contamination of local watercourse	Low / Not significant
Incompatible wastes coming into contact	Local human Population & air, water and land	Drainage system, Air Transport	Waste acceptance and control procedures as detailed above will be in place. Non-conforming waste types will be rejected or quarantined. Waste handled will be easily identifiable and with solid properties that mean they are generally compatible with other waste types handled. Site will be manned by Sims employees who will supervise loading and unloading operations. Sims employees will be equipped with 2 way radios linked to the fridge plant in order that the responsible person can be contacted and the alarm raised in an emergency situation.	Low	Fumes, smoke nuisance, potential H&S implications. Contamination of waters	Low/Not significant
Flooding	Local	Water	Individual Risk assessment will be carried out with regard to flooding from Rivers/sea, surface waters and	Low	H&S	Low / Not

	industrial receptors/ residential receptor 1.2km Ecosystems/ Habitats Severn Estuary/ River Usk Structures Water quality	transport	reservoirs using Flood Mapping tool. The site is not at risk of flooding.		implications. Materials washed from site and deposited elsewhere. Contamination of water systems and land. Damage to on site structures	significant with measures indicated in place