

Site Based Activities			Normal or Abnormal Operations?		Significance Assessment without Control Measures			Impact Significance	Standard Control Measures	Residual Impact		Residual Impact Score	Residual Impact Significance Rating
Activity	Aspect	Impact to Environment	Impact Under Normal Operations	Impact Under Abnormal Operations / Emergency Scenario	What is the severity of consequence if the impact occurs? (A)	What is the likelihood of the impact occurring (B)	Significance Rating (Ax B)			What is the severity of consequence if the impact occurs? (A)	What is the likelihood of the impact occurring (B)		
Chemical Storage													
	Storage of various refrigerants	Ozone depletion resulting from leaks		✓	2	2	4	L	Regular leak checks carried out by competent 3rd party contractors, in accordance with ODS and Fgas legislation. Fgas Register held on site and updated as required. Gas leaks are recorded and submitted to Group in accordance with KPIs (and for GHG reporting). Leak detection systems in place on some items (where size requires it). Containment in accordance with materials being stored.	2	1	2	VL
	Storage of ammonia	Odour releases during top up	✓		1	4	4	L	Charge quantities are limited (Deli - 40 kg + 40 kg + 50 kg, Cerb - 80 kg, Fact1 - 400 kg, BlueAir - 110 kg, SDC - 200 kg). The units are within proprietary housing which provides additional mitigation during top up (the unit is not within the confines of the factory so a release would not expose employees to ammonia). Top ups are completed by contracted qualified FGas Engineers who follow a standard delivery procedure, and use of appropriate equipment to transfer the material.	1	3	3	VL
		Odour releases resulting from leaks		✓	1	2	2	VL	Containment is appropriate to the materials being stored; storage is within the confines of a proprietary container which provides additional mitigation (the unit is not within the confines of the factory so a release would not expose employees to ammonia). Containment visual inspections are included in the PPM and remediation undertaken as required (all carried out by qualified FGas Engineers under contract (GEA) - engineers are present on site 5 days per week). Only small volumes of charge are required. Leak detection is fitted to the units which will alarm, and the weekly checks will identify any abnormal reading on the panels.	1	1	1	VL
	Storage of food grade glycol	Contamination of ground, surface water, groundwater resulting from spillage or leaks		✓	2	2	4	L	Containment (IBCs and barrels) is appropriate for the materials being stored. Containment visual inspections and remediation undertaken as required. Stored primarily within the SDC plant room (restricted access) and banded; banded where stored outside at Factory 1. Runs of external pipework are over areas of impermeable handstanding and at height to avoid vehicle collision. Pipework is inspected visually as part of the 6 monthly PPM. In the event of spillage, drainage can be isolated and directed to the first holding lagoon, where it is tested prior to transfer off site for disposal or discharge to the second lagoon and discharge to surface water. Spillage procedures are in place at the site and personnel are trained in them.	2	1	2	VL
	Storage of various chemicals including bulk nitrogen, LQ5, Quadet Clear, Fatsolve, High Star, Ultraclean VK3, PDQ salt, rock salt, and granulate salt, sodium chlorite, hydrochloric acid	Contamination of ground, surface water, groundwater resulting from spillage or leaks		✓	3	2	6	L	Containment is appropriate to the materials being stored and with compatibility of chemicals taken into consideration. Containment visual inspections are carried out and remediation is undertaken as required and an annual tank/bund audit is carried out (latest November 2018). Tanks and pipework are over areas of impermeable handstanding. These are stored in areas where drainage is directed to the on site effluent treatment plant prior to discharge. Materials are stored in relatively low volumes. Chemical deliveries are covered by site procedure. Spillage procedures are in place at the site and personnel are trained in them.	3	1	3	VL
	Storage of effluent treatment chemicals: caustic soda, polyaluminium chloride, coagulant (18,000 ltr bulk tanks), and MPOX (in IBCs)	Contamination of ground, surface water, groundwater, air resulting from spillage or leaks, leading to potential impact on fauna and flora.		✓	3	2	6	L	Containment is appropriate to the material being stored; the tanks and IBCs are within the treatment plant building. The effluent plant operator is present 9 - 5 and there is restricted access to the plant. Internal drainage captures any spill or leak and directs it to the treatment plant. Containment visual inspections are carried out and remediation is undertaken as required. The materials are used to treat the effluent in order to enable discharge in accordance with consent parameters. Chemical deliveries to the treatment plant are covered by site procedures. Fill points are outside the building but within a bund which is subject to regular audit and emptied out following heavy rainfall to ensure that spill capacity is retained. Spill materials are provided and personnel are trained in the spillage procedure.	3	1	3	VL
Raw Material Storage and Use													
	Use of electricity	Fossil fuel use → depletion of non-renewable, CO2 emissions to the atmosphere → global warming	✓		2	5	10	M	Electricity is used for mains supplied equipment required to operate the production lines and ancillary equipment. Where appropriate, plant and equipment is chosen based on energy consumption. The site is in progress with a programme of lighting replacement (with energy efficient lighting where appropriate). Electricity usage is assessed by tonne of product in order to trend it and identify opportunity for reduction measures. Carbon Desktop, a tracking software, has been implemented across the site, to better present usage data.	2	5	10	M
	Use of diesel	Resource use → CO2 emissions to the atmosphere → global warming	✓		2	5	10	M	Diesel is used as standard for forklift trucks. Regular maintenance and servicing of these vehicles optimises fuel efficiency. On occasion, if bringing in a hired boiler this will run on natural gas. Operation is in accordance with supplier procedures.	1	5	5	L
	Storage of diesel	Contamination of ground, surface water, groundwater, air resulting from spillage or leaks. Leading to potential impact on fauna and flora. Potential fire hazards leading to issues with management of fire water, and creation of fire smoke plume.		✓	4	2	8	M	Containment is appropriate to the material being stored. Containment visual inspections are carried out and remediation is undertaken as required. All tanks in use are banded and bunds are inspected on a regular basis and an annual tank/bund audit is carried out (latest November 2018). Use of appropriate coupling during delivery, and supervision of delivery. Delivery point is locked when not in use. Fire detection and fighting equipment is maintained on site, including fire extinguishers and alarms. Fire systems are subject to regular servicing and checks. The fire brigade undertakes its own regular checks. Where a hired boiler is used, this has integral diesel storage which is drained when off-hired and pumped into an IBC for transfer into the on-site diesel tanks.	4	1	4	L
	Use of natural gas	Fossil fuel use → depletion of non-renewable, CO2 emissions to the atmosphere → global warming	✓		2	5	10	M	Gas is used for steam raising boilers (for the cooking process), domestic heating and industrial oven operations. A programme of maintenance and servicing retains efficiency. A programme of burner control improvements is in progress (completed at soups). Boilers and pipework are lagged to prevent heat loss (and this is visually inspected). Gas usage is assessed by tonne of product in order to trend it and identify opportunity for reduction measures, via the Carbon Desktop programme. The reverse osmosis plant has a reduction in gas usage, and a future project to isolate sections of pipework and remove gas central heating from a number of office spaces (replacing with more efficient, electrical, systems) will also reduce gas usage.	2	5	10	M

	Storage and use of raw materials: vinegar, cooking oil, tomato paste, mayonnaise	Contamination of ground, surface water, groundwater, air resulting from spillage or leaks, leading to potential impact on fauna and flora.		✓	2	2	4	L	Containment is in accordance with the nature of the materials being stored. Containment measures are visually inspected and remediation undertaken as required. Stock control measures ensure quantities held on site at any one time are minimised. Minor releases of mayonnaise within buildings will go to factory drains and therefore are captured by the effluent treatment plant. Where possible, materials are stored away from vehicle movements and are in areas of low level vehicle usage. Vehicle operatives receive training in use of spill kits. The vinegar and oil tanks are banded.	1	1	1	VL
Water Storage and Use													
	Use of mains supplied water - for sanitary purposes, washing of raw materials, washing of trays, production of steam, cooling of cooked products and as an ingredient.	Depletion of Natural Resources		✓	2	5	10	M	Daily monitoring of levels in main tank (via telemetry). The other tanks are monitored weekly. Tank visual inspections included in the PPM and remediation undertaken as required. Water use analysis undertaken per tonne of product in order to identify opportunities for reduction, now tracked on Carbon Desktop for meals and salads. Tracking enables identification of leaks which can then be rectified. Use of dual flush toilets, waterless urinals, small toilet cisterns, and push button taps (to prevent taps being left accidentally on). Legionella contractor completes 6-monthly checks which include the condition of the tank. Actions raised in the Legionella risk assessments for the site are used to generate a programme of works. The installation of a reverse osmosis plant in 2018 enables the recovery of water therefore reducing the use of mains supplied water.	1	5	5	L
	Use of mains supplied water - for fire fighting purposes	Depletion of Natural Resources		✓	2	2	4	L	Fire control measures implemented on site to prevent fires occurring (e.g. fire detection, fire walls, fire doors, fire extinguishers, alarms that are regularly tested). The fire brigade undertakes regular on site checks and has completed a risk assessment. The connections on all the water tanks are consistent with the types used by the fire brigade to connect to and use the water for fire fighting. The lagoon can also be used to provide fire water. Appropriate storage of flammable materials, regular inspections and checks to check integrity of control measures and key plant/ equipment.	2	1	2	VL
	Generation of fire water - as a result of fire fighting on site	Pollution of land/water resulting from run-off of contaminated fire water		✓	3	2	6	L	Fire control measures implemented on site to prevent fires occurring (e.g. fire detection, fire walls, fire doors, fire extinguishers, alarms that are regularly tested). The fire brigade undertakes regular on site checks and has completed a risk assessment. The on site lagoon, and the ETP balancing tanks can, if needed, be used to contain fire water generated during fire fighting.	3	1	3	VL
Handling, storage, and loading of Waste													
	Temporary storage of wastes within buildings, in particular workshops (e.g. fluorescent tubes, oils, greases, batteries, WEEE)	Pollution of land/water/air resulting from failure of storage facilities		✓	1	2	2	VL	Within the building, internal floors are coated with impermeable material and connect to a sealed drainage system which channels any spillages via the effluent treatment plant. Storage containers are appropriate for the purpose and sealed/lidded as required. Scheduled regular inspection is carried out to assess the condition of the containment measures and remedial action is taken as required. Operators trained in rapid spillage response (tool box talk and spillage procedure (ref. INCMGT003a). Waste training is provided to relevant staff. Smoking is only permitted in designated smoking shelters. Regular removal of waste from site prevents accumulation of large quantities of waste materials.	1	1	1	VL
	Operation of effluent treatment plant	Pollution of land/water/air resulting from failure of plant tanks, pipework, and process		✓	2	3	6	L	The balance tanks are outside and open to atmosphere. The sludge tank is inside the building but open to air. The DAF is inside the building but open to air, and the discharge point is outside. Within the building, internal floors are coated with impermeable material and connect to a sealed drainage system which channels any spillages back through the effluent treatment plant. Treatment chemicals in the building are in bulk or in IBCs which are appropriate for the purpose and sealed/lidded as required. Scheduled regular inspection is carried out to assess the condition of the containment measures and remedial action is taken as required. Operators trained in rapid spillage response (tool box talk and spillage procedure (ref. INCMGT003a). Quarterly performance reporting identifies issues, monitoring is carried out to confirm compliance with discharge consent.	2	2	4	L
	Storage of liquid wastes outside the building (waste oil in a tank, waste ink, waste products in skips)	Pollution of land/water/air resulting from failure of storage facilities		✓	2	2	4	L	Storage tanks are appropriate for the contents and located on areas of impermeable hardstanding. Tanks are appropriately banded. Scheduled regular inspection is carried out to assess the condition of the containment and bunding, and remedial action is taken as required. Bunds are emptied routinely to ensure that the design containment capacity is maintained in case of spillage. Smoking is only permitted in designated smoking shelters. Regular removal of waste from site prevents accumulation of large quantities of waste materials. Specific areas are protected from rainfall e.g. battery stores, to eliminate the generation of contaminated surface water. Operators trained in rapid spillage response (tool box talk and spillage procedure (ref. INCMGT003a). Waste training is provided to relevant staff.	2	1	2	VL
	Storage of solid wastes outside the buildings (RDF, food, ETP screenings, cardboard, metal drums, plastic containers, fluorescent tubes, scrap machinery, batteries, WEEE, pallets/wood)	Pollution of land/water/air resulting from failure of storage facilities		✓	2	2	4	L	External storage areas have an impermeable hardstanding. Areas are designated based on whether surface water run-off can be discharged to surface water, or whether it drains to foul sewer via the on-site effluent treatment plant (by colour coded manholes). Storage containers are appropriate for purpose. Scheduled regular inspection is carried out to assess the condition of the containment and remedial action is taken as required. Bunds are emptied routinely to ensure that the design containment capacity is maintained in case of spillage. Litter picking is carried out twice per day. Smoking is only permitted in designated smoking shelters. Regular removal of waste from site prevents accumulation of large quantities of waste materials. There are clear designated storage areas which are separated from traffic routes/vehicle movements. Signage depicts what goes where and hazardous materials are kept separate from non-hazardous.	2	1	2	VL
General On-Site Activities													
		Emissions to air from site vehicles (forklifts) and delivery/loading vehicles		✓	1	5	5	L	Forklifts and Bakkavor fleet vehicles are subject to regular maintenance, roadworthy checks. Speed restrictions imposed on site. Yard areas kept clean to minimise dust emissions. Complaints are monitored and remedial action taken when necessary. Minimisation of movements through implementation of centralised distribution. Workplace transport procedure in place and workplace transport risk assessment in progress for the whole site; this includes the use of electronic speed signage on the main internal haul road and the use of speed guns.	1	5	5	L

	Movement of vehicles within the site	Pollution of land/water/air resulting from spillages caused by potential collision with plant/equipment/containers or from leakage of vehicle diesel tanks	✓		2	3	6	L	Bulk liquids are banded and positioned to minimise the potential for impact from moving vehicles. Areas identified as high risk are protected by use of barriers to prevent collision. Pipework is, where appropriate, located at height, out of the way of vehicles or buried underground (e.g. at the ETP). A speed restriction is imposed on the site and drivers (third party) are supervised on site during loading and unloading to ensure that they are complying with site rules. Bakkavor staff driving forklifts are fully trained and must comply with the associated procedures. The sealed drainage system, which can be isolated, protects from the impacts of spillages. Spills are covered by spillage procedure (ref. INCMGT003a). Workplace transport procedure in place and workplace transport risk assessment in progress for the whole site.	2	1	2	VL
Production Process	Emission to air - dust		✓		2	4	8	M	All production processes are carried out within buildings; all of which are sealed to prevent fugitive emissions (use of roller shutter door systems). Plant and equipment maintained in accordance with PPM which reflects supplier/manufacturer's recommendations. Where issues occur, e.g. dust release as a result of failure of equipment, this is fixed in a timely manner. Complaints are monitored and remedial action taken when necessary. Extraction systems are in place, and where LEVs are used, these are inspected annually and serviced and maintained regularly (e.g. particulate filters/AHU filters in the spice rooms).	2	2	4	L
	Emission - noise		✓		2	5	10	M	All production processes are carried out within buildings; all of which are sealed to prevent fugitive emissions (use of roller shutter door systems). Plant and equipment maintained in accordance with PPM which reflects supplier/manufacturer's recommendations. When new equipment or plant is proposed, consideration is given to purchasing quieter alternatives and the location the equipment will be placed in. Where issues occur, e.g. noise as a result of failure of equipment, this is fixed in a timely manner. Complaints are monitored and remedial action taken when necessary.	1	5	5	L
	Light pollution - nuisance/disturbance to neighbouring population		✓		2	5	10	M	This is applicable to external lighting. Control measures include: positioning of lighting and direction of lighting downwards to ensure no illumination of neighbouring properties occurs; use of light fittings that are designed to reduce light emitted upwards (or the fitting of covers to existing lights to achieve the same); restriction of lighting to only what is necessary and to appropriate lux levels; lighting is either motion sensitive or manually switched off when not required. Lux levels have been monitored and levels mapped for external areas. This is revisited following changes to external lighting measures. External lights are covered by a maintenance contract.	1	5	5	L
	Release of odour - nuisance to neighbouring population.		✓		2	5	10	M	Plant and equipment maintained in accordance with PPM which reflects supplier/manufacturer's recommendations. Where issues occur, e.g. odour as a result of failure of equipment, this is fixed in a timely manner. Cut-off valves are in place for the gas fired boilers, cooking oven etc. to prevent gas leaks. Complaints are monitored and remedial action taken when necessary. EHO audits are undertaken regularly.	1	5	5	L
Waste generation	Waste to landfill → pollution of land, water and air on disposal Transportation of waste; Waste for treatment → emissions from waste treatment processes		✓		2	5	10	M	Waste generated is recovered where possible. Use of raw materials is minimised using control systems such that waste generation is minimised. Raw materials use is reviewed on a regular basis to determine if efficiencies can be made, or if alternative materials are available that have a lesser environmental impact. The site operates a zero to landfill policy. Appropriately licensed facilities are utilised for all waste recovery/treatment options chosen, and the site undertakes duty of care audits on these.	1	5	5	L
Packaging	Use of raw material, generation of non-hazardous waste		✓		2	5	10	M	The most appropriate type, and quantity of packaging required is a key consideration at the design stage. Decisions, whilst taking this into account, can be led by the necessary specification of the item (i.e. if it needs to withstand heat as it will contain a microwavable product). There is always a steer towards the use of recyclable packaging wherever the ultimate use and design allows it.	1	5	5	L
Procurement of site equipment and PPE	Resource use in production → depletion of resources; Generation of hazardous waste (disposable batteries) → pollution of land, air, water on disposal		✓		2	5	10	M	Reuse equipment and PPE where applicable. Do not waste equipment resources. Dispose of wastes appropriately. Procurement procedure in place to identify the need for new equipment. All equipment is checked that it is suitable for use.	2	3	6	L
Subcontracted Works													
Building / construction / refurbishment works	Contamination of air, harm to human health from exposure to/of asbestos		✓		5	1	5	L	Asbestos survey has been carried out. There is an asbestos register and management plan. ACMs are labelled and a location drawing provided at Permit to Work stations. There is an asbestos policy within the H&S management system. There is an annual review comprising a visual inspection of areas for evidence of damage. Use of qualified contractors if removing or working close to ACMs.	5	1	5	L
Procurement of subcontractors	Contamination of land / pollution to air and water due to poor working standards of subcontractors		✓		3	3	9	M	Contractor Control Spreadsheet in place and suppliers evaluated; Bakkavor provides tool-box talks and supervision of works for subcontractors working on site. Large projects require site waste management plans. Centralised procurement process enabling efficiencies to be made. Regular checks of contractors on site e.g. inspection of the contractor compound. All works are completed under a Permit to Work system.	3	2	6	L