Appendix Two: Coverage of Fugitive Emissions Assessments

Hazard	Receptor	Pathway	Risk Management	Exposure Probability	Consequences	What is the overall risk?
What has the potential to cause harm?	What is the risk? What need protecting?	How can the hazard travel to the receptor?	What measures are taken to mitigate the risk? If it does occur – who is responsible to take action?	How likely is this contact?	What is the harm that can be caused by such exposure?	What is the risk? The balance of probability and consequences
Food dust generated from the loading & unloading of raw material products	Neighbouring residential area, local amenity / industry.	Blown over by wind or during adverse weather conditions.	All food vessels, containers are fully enclosed and have additional secondary containment systems to minimise /reduce the impact on the local environment. The responsible person to manage such event will be primarily the EHS Practitioner.	Approximately 260 operating days a year, however this does depend on production requirements.	The nuisance can be seen in the form of dust deposit on local residential properties, roadways, vehicles and local surrounding.	Dust deposit. This risk is however minimised due to the preventive measures undertaken by the plant. Hazard considered being not significant.
Dust powder deposit on the factory roof space.	Neighbouring residential area, local amenity / industry.	Blown over by wind or during adverse weather conditions.	The implemented planned preventative maintenance does provide a safeguard which minimises the effect of any contaminants. The responsible person to manage such event will be primarily the EHS Practitioner .	This type of events could be caused by a malfunction or blockages to the filtration or the abatement systems currently located on the roof space of the plant.	Nuisance caused by deposited organic dust can easily migrate from the plant under adverse weather conditions. In the event of a rain fall any deposited contaminant can be potentially washed down towards the site balancing ponds which act a secondary containment system.	In this instance the potential is considered to be not significant in view of the mitigating measures put in place by the surveillance regime and the preventive maintenance system.
Open plant doors, windows and louvers.	Neighbouring residential area, local amenity / industry.	Blown over by wind or during adverse weather conditions.	The site has a policy of keeping all doors, windows and louvers closed at all times. This is facilitated by automatic closing mechanism whenever possible as well as an effective signage which provide a timely reminder to all personnel to keep all openings closed at all times. Regular awareness training is also provided to all site personnel of such potential hazard.	Dust and /or noise nuisance could easily originate from doors and windows being left open during adverse weather conditions.	This type of nuisance could manifest itself in form of dust deposit or elevated noise levels on local residential properties, local amenity, industry and pathways.	This type of risks is again considered to be not very significant in view of the preventive measures and surveillance routine currently in place at the plant.

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Loading / unloading animal feed waste	Neighbouring residential area, local amenity / industry.	Blown over by wind or during adverse weather conditions.	All transportation vehicles and storage containers are provided with purposely manufactured covers designed to prevent any waste product. The responsible person to manage such event will be primarily the EHS Practitioner .	This could happen under adverse weather conditions or covers being left opened accidentally or damaged.	The nuisance can be seen in the form of dust deposit on local residential properties, roadways, vehicles and local surrounding.	This type of risk is considered not to be significant because transportation personnel and local workforce maintain a robust surveillance which minimises such incident from occurring.
Organic and non organic waste removal from the plant.	Neighbouring residential area, local amenity / industry.	Carried over under adverse weather windy conditions.	All transportation vehicles are provided with properly designed covers and netting which provide an effective physical barrier to any waste product from being blown away from its containment. The responsible person to manage such event will be primarily the EHS Practitioner .	This could potentially happen if the transportation are not adequately equipped to prevent such incidents from happening.	Litter and waste debris could potentially be deposited on the public highway and local pathways.	This type of risk is considered to be not significant because transportation personnel and local workforce maintain a robust surveillance which minimises such incident from occurring.
Transportation vehicles (Raw ingredients / packaging materials).	Any liquid contaminant / pollutant originating from a leak could potentially enter a local water course.	Surface water runoff.	The site internal operating spillage procedures provide effective guidelines to all transportation personnel on how to deal with such potential eventuality. In addition to the above all transportation vehicles are fully equipped with a spill kit and spill kit stations are also strategically located around the plant and provide another safeguard to deal with a spillage. The emergency preparedness program currently in place has been fully trained site personnel which will deal with any unplanned emergency caused by a vehicle spillage according to the internal operating procedures.	This type of incident could potentially occur accidentally or due to lack of proper maintenance to a transportation vehicle.	In the event of such incident an oil, fuel or other liquid contaminant could potentially be washed down to the balancing ponds which will act as a secondary containment system which will prevent any harmful pollutant from entering a controlled water course.	In view of the fact that the plant has an effective secondary containment system in the form of the East and West Balancing which act as additional safeguards which minimise the risk of water pollution. These preventive measures currently in place in the plant make such incident unlikely to cause a significant environmental impact.

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Liquid pollutants caused by transportation vehicles parked on site.	Any liquid contaminant / pollutant originating from a leak could potentially enter a local water course.	Surface water runoff.	The site internal operating spillage procedures provide effective guidelines to all transportation personnel on how to deal with such potential eventuality. In addition to the above all transportation vehicles are fully equipped with a spill kit and spill kit stations are also strategically located around the plant and provide another safeguard to deal with a spillage. The emergency preparedness program currently in place has fully trained site personnel which will deal with any unplanned emergency caused by a vehicle spillage according to the internal operating procedures. The responsible person to manage such event will be primarily the EHS Practitioner .	This type of incident could potentially occur accidentally or due to a lack of proper maintenance to a transportation vehicle.	In the event of such incident an oil, fuel or other liquid contaminant could potentially be washed down to the balancing ponds which will act as a secondary containment system which will prevent any harmful pollutant from entering a controlled water course.	In view of the fact that the plant has an effective secondary containment system in the form of the East and West Balancing which act as additional safeguards which minimise the risk of water pollution. These preventive measures currently in place in the plant make such incident unlikely to cause a significant environmental impact.
Litter blown from the site onto the highways and the surrounding area.	Adjacent roadways to the plant, footpaths, local residential area and industry.	Blown over or carried over under adverse windy conditions.	Effective measures are currently in place which will prevent / minimise the risk of litter from migrating outside the inner perimeter of the plant by means of a new fencing and the purposely built soil embankment which act as a secondary physical barrier.	This type of risk could occur under adverse weather conditions.	Litter nuisance to the local residents and businesses.	Moderate to minimum due an effective control system currently in place.

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Pest caused by animals (birds, rabbits, foxes etc...)	Residential properties and local businesses.	Food waste carried over by animals to the local area surrounding the site.	All waste containers are kept covered at all times and kept in purposely designed areas which provide a secondary containment system which prevent rodents and other animals from again access to such waste product. The responsible person to manage such event will be primarily the EHS Practitioner .	This type of problem is considered as a likely event and occurs on a regular basis. Birds and rabbits have been identified as potential issues but control mechanism currently in place minimise the risk.	Nuisance of food waste and litter being dropped / deposited by animals on site and in the surrounding area adjacent to the site.	Moderate to minimum due to an effective control system currently in place.
Noise emissions caused by transportation vehicles whilst loading or unloading goods or waste materials	Residential properties and local businesses adjacent and surrounding the plant.	Noise carried transmitted to local areas adjacent to the plant.	All vehicles delivering raw materials / ingredients, packaging and transporting finished goods from the plant are always expected to be properly maintained and according to the manufacturer best practices and instructions. Awareness training sessions are regularly given to all drivers so they are all familiar with the internal operating procedures and requirements. In the event of a noise complaint the site management will investigate and rectify the issue.	It is potentially possible that this type of nuisance could occur which could be caused by a malfunction of equipment or assets but such incident are likely to be of short duration and presenting minimum risk to the local area.	Noise nuisance	The risk of noise emission is potentially probable but it is likely to be of short duration therefore presenting moderate to minimum risk.
Leaks from hazardous storage containers holding engineering / waste oil and other liquid waste.	Any liquid contaminant / pollutant originating from a leak could potentially enter a local water course.	Surface water runoff.	All hazardous waste containers awaiting removal from site are kept and contained in designated and secured areas only. These are designed to effectively contain any unplanned spill from causing a serious polluting incident. The responsible person to manage such event will be primarily the EHS Practitioner .	This type of event is considered to be low to minimum.	Deterioration of the local vicinity but very unlikely to cause a serious polluting incident.	The risk of exposure is perceived and is not significant due to the existing mitigating measures currently in place.

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What has the potential to cause harm	What is the risk? What need protecting	How can the hazard travel to the receptor	What measures are taken to mitigate the risk? If it does occur – who is responsible to take action?	How likely is this contact?	What is the harm that can be caused by such exposure?	What is the risk that remains? The balance of probability and consequences
Noise emissions caused by movement of ingredients/product on the roof and also the other equipment on the roof.	Residential properties and local businesses adjacent and surrounding the plant.	Noise carried transmitted to local areas adjacent to the plant.	All equipment on roof should be properly maintained and according to the manufacturer best practices.	It is potentially possible that this type of nuisance could occur which could be caused by a malfunction of equipment or assets but such incident are likely to be of short duration and presenting minimum risk to the local area.associated with traffic and internal noise). In terms of control measures, did you not recently have equipment acoustically enclosed on the roof? Also you can mention maintenance and roof inspections.	Noise nuisance	The risk of noise emission is potentially probable but it is likely to be of short duration therefore presenting moderate to minimum risk.

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Unplanned fire incident	Neighbouring residential area, local amenity / industry.	Surface water runoff and fume /smoke blown off site.	Preventive measures such as the fire precaution and the emergency preparedness currently in place together with trained personnel who will be ideally placed to deal with such eventuality effectively and according to internal site operating procedure. The responsible person to manage such event will be primarily the EHS Practitioner .	This type of event is considered to be low to minimum.	Smoke / fume drift, odour nuisance and the potential of polluting the local water course located outside the outside perimeter of the plant. This type of water pollution could be caused by the fire fighting water run-off.	In this instance it could be said that the overall risk to the local environment could be kept to a minimum based on the mitigating measures in place to deal with such incident.