BAT in the Food, Drink and Milk Industries

General BAT Conclusions

BAT 1. In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all the following features:	
1.1 commitment and leadership of the management, including senior management to the implementation of an effective EMS	The operator is currently developing a Safety, Health and Environment (SHE) Management System aligned to the requirements of ISO14001:2015 and ISO45001:2018. The developing SHE Management System includes a manual and documented procedures setting out roles and responsibilities.
1.2 an environmental policy, developed by management, that includes the continuous improvement of the environmental performance of the installation;	The operator has an Environmental Policy in place which commits the site to legal compliance and environmentally efficient operation. The Policy is owned by the Supply Chain Director.
1.3 a preliminary analysis that includes the determination of the organisation's context, the identification of the needs and expectations of interested parties, the identification of aspects of the installation with a significant impact on the environment, and the (human health) risks associated with such aspects as well as the applicable legal requirements relating to the environment; establishing environmental objectives, and environmental performance indicators, in relation to significant environmental aspects, including on safeguarding compliance with applicable legal requirements;	The operator is currently developing a Safety, Health and Environment (SHE) Management System aligned to the requirements of ISO14001:2015 and ISO45001:2018. A senior management team workshop was held on 21st January 2020 to determine factors relevant to the context and needs and expectations of interested parties; determine the expected outcomes of the system and outline objectives and targets. An Aspects Register and Compliance Register are in place.
1.4 planning, and implementing the necessary procedures, and actions (including financial planning and investment) to achieve the (environmental) objectives	SOP's are in place for all manufacturing processes and cleaning tasks. The operator has a comprehensive Continuous Improvement (CI) governance structure in place which covers manufacturing and supply chain, supported by a data analyst. Opportunities are identified and assessed for added value, and against ability to impact on key site KPI's including H&S, environmental impacts such as water usage and other business/production KPI's. The tracker is reviewed at Ops period review (monthly).

1.5 determination and provision of the required resources,	As above.
1.6 structure and responsibility in relation to environmental aspects and objectives;	The developing SHE Management System includes a manual and documented procedures setting out roles and responsibilities.
1.7 carrying out training and other activities to ensure: staff awareness of the potential environmental impact of their actions and activities, necessary competence and involvement of staff at all levels; definition of internal and external communication processes in relation to environmental aspects;	All employees receive an induction which will be expanded to include awareness of the environmental permit and the developing SHE Management system. All new starters have an individual learning plan which includes all relevant SOP's which will include any relevant to the management of environmental impacts. The SHE management system manual will contain procedures relating to internal and external communications processes.
1.8 record keeping of relevant documentation and information;	The developing SHE Management System includes a manual, documented procedures and signposting to relevant records.
1.9 effective operational planning and process control;	SOP's are in place for all manufacturing processes and cleaning tasks.
1.10 implementation of appropriate maintenance programmes;	The site operates a computerised PPM system.
1.11 paying particular attention to emergency preparedness and response;	Contingency plans in the event of breakdowns of key plant and equipment or unplanned events such as extreme weather (Crisis Manual and single point of failure register which is owned by engineering – this helps identify critical spares required or where redundancy needed e.g. having two Wanson boilers); An accident plan is present on site which includes any emergency procedures for environmental matters e.g. spillage.
1.12 when (re)designing a (new) installation or a part thereof, consider the environmental impacts throughout its service life, including from its eventual decommissioning;	New equipment goes through a capex process which includes siting and assessment of efficiency including energy and water use. Factory Acceptance Testing in place for installation of new equipment.
1.13 implementation of monitoring and measurement;	The developing SHE Management System includes a manual and documented procedures setting out the monitoring and measurement programme. KPI's including utilities and waste are tracked.

1.14 application of sectoral benchmarking, e.g. via the EMAS Sectoral Reference Document on Food and Beverage Manufacturing, on a regular basis;	The CI team benchmark against other ABF businesses, and sometimes do visits to other companies or take part in industry forums which help identify best practises which could be brought to the site.
1.15 periodic independent (where practicable) internal auditing and periodic, independent external auditing in order to monitor and assess the environmental performance and compliance obligations and to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;	The developing SHE Management System includes a manual and documented procedures setting out the internal/external audit process. The site already receives external environmental audits from the ABF Group.
1.16 evaluation of causes for nonconformities, implementation of corrective actions in response to nonconformities, review of the effectiveness of corrective actions, and determination of whether similar non-conformities exist or could potentially occur;	Various corrective and preventive action procedures are in place in different areas for example GMP audit actions, SHE incidents and action reporting. The operator is moving to a new system for incident reporting called Alcumus which will be used for the reporting, recording and investigation of all SHE incidents and non-conformances.
1.17 review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;	The developing SHE Management System includes a manual and documented procedures setting out the management review process.
1.18 following and taking into account the development of cleaner techniques.	The CI team benchmark against other ABF businesses, and sometimes do visits to other companies or take part in industry forums which help identify best practises which could be brought to the site.
1.19 noise management plan	Noise not considered a significant risk; measures in place including planned preventive maintenance, transport management, engine switch off during deliveries.
1.20 odour management plan	See Appendix C
1.21 inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams	All these KPI's are tracked. Emissions monitoring of air emission has been carried out as part of this application.
1.22 energy efficiency plan	Site has basic energy efficiency measures in place on heating and cooling systems e.g. condensate return, temperature controls. Crowley Carbon energy monitoring system in place. This system provides 'sparks alerts' when energy use is higher than expected. Future plans for the site include investigating the possibility of CHP installation.

BAT 2. In order to increase resource efficiency and to reduce emissions , BAT is to establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features:	
2.1 Information about the food, drink and milk production processes, including: (a) simplified process flow sheets that show the origin of the emissions; (b) descriptions of process-integrated techniques and waste water/waste gas treatment techniques to prevent or reduce emissions, including their performance.	HACCP plans are in place for each process showing production flows. Emissions points are described in the application and shown on site plans.
2.2 Information about water consumption and usage (e.g. flow diagrams and water mass balances), and identification of actions to reduce water consumption and waste water volume	Water consumption and wastewater volumes are tracked. Water mass balance not currently undertaken for site as a whole. Improvement actions documented in CI action plans and SHE Management system.
2.3 Information about the quantity and characteristics of the waste water streams, such as: (a) average values and variability of flow, pH and temperature; (b) average concentration and load values of relevant pollutants/parameters (e.g. TOC or COD, nitrogen species, phosphorus, chloride, conductivity) and their variability.	Effluent sampling in place to generate composite samples for analysis to ensure compliance with discharge consent. Continuous pH and flow monitoring in place.
2.4 Information about the characteristics of the waste gas streams, such as: (a) average values and variability of flow and temperature; (b) average concentration and load values of relevant pollutants/parameters (e.g. dust, TVOC, CO, NO X , SO X) and their variability; (c) presence of other substances that may affect the waste gas treatment system or plant safety (e.g. oxygen, water vapour, dust).	Emissions monitoring has not previously been required, however it has been undertaken for this application, to identify pollutant concentrations, flow rate, temperature etc. Air dispersion modelling has also been completed.
2.5 Information about energy consumption and usage, the quantity of raw materials used, as well as the quantity and characteristics of residues generated, and identification of actions for continuous improvement of resource efficiency.	Energy consumption is tracked and monitored. Crowley Carbon 'sparks alerts' provide information on high usage. Waste volumes, types and destinations tracked and monitored. The operator has a comprehensive Continuous Improvement (CI) governance structure in place which covers manufacturing and supply chain, supported by a data analyst.

	Opportunities are identified and assessed for added value, and against ability to impact on key site KPI's including H&S, environmental impacts such as water usage and other business/production KPI's. The tracker is reviewed at Ops period review (monthly).
2.6 Identification and implementation of an appropriate monitoring strategy with the aim of increasing resource efficiency, taking into account energy, water and raw materials consumption. Monitoring can include direct measurements, calculations or recording with an appropriate frequency. The monitoring is broken down at the most appropriate level.	All relevant KPI's are tracked as described above and discussed at Ops review Meetings.

BAT 3. For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the inlet and/or outlet of the pretreatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	
Effluent discharge to sewer. Flow and pH of effluent is constantly monitored. Effluent sampling in place to generate composite samples for analysis to ensure compliance with discharge consent.	
BAT 4. BAT is to monitor emissions to water with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	
Chemical oxygen demand (COD) (daily)	Weekly composite sample
Total nitrogen (TN) (daily)	N/A
Total organic carbon (TOC) (daily)	N/A
Total phosphorus (TP) (daily)	N/A
Total suspended solids (TSS) (daily)	Weekly composite sample
Biochemical oxygen demand (BOD n) (monthly)	N/A
Chloride (Cl -) (monthly)	N/A

BAT 5. BAT is to monitor channelled emissions to air with at least the frequency given below and in accordance with EN standards.	
Dust (annual)	No current monitoring of emission to atmosphere of dust.

BAT 6. In order to increase energy efficiency, BAT is to use energy efficiency plan and an appropriate combination of the common techniques	
6.1 Energy efficiency plan An energy efficiency plan, as part of the environmental management system (see BAT 1), entails defining and calculating the specific energy consumption of the activity (or activities), setting key performance indicators on an annual basis (for example for the specific energy consumption) and planning periodic improvement targets and related actions. The plan is adapted to the specificities of the installation.	The operator is part of the underlying climate change agreement for the food and drink sector, agreement identifier FDF1/T00447v2, Facility Identifier FDF1/F00499. Basic energy efficiency measures are in place, energy usage is tracked and monitored and Crowley Carbon monitoring system provides the site with 'sparks reports' which highlight high usage. Future plans for the site include potential installation of CHP. Performance KPI's will be set as part of the developing Health, Safety and Environment Management System.
6.2 Use of common techniques Common techniques include techniques such as: - burner regulation and control; - cogeneration; - energy efficient motors; - heat recovery with heat exchangers and/or heat pumps (including mechanical vapour recompression); - lighting; - minimising blowdown from the boiler; - optimising steam distribution systems; - preheating feed-water (including the use of economisers); - process control systems; - reducing compressed air system leaks; - reducing heat losses by insulation; - variable speed drives; - multiple-effect evaporation; - use of solar energy.	Currently no cogeneration, use of solar energy, heat exchangers or heat pumps. Economiser in place on steam boiler 2. Auto blow down in place. Condensate from boilers and cooking vessels returned to boiler hotwell. Steam traps on the condensate return stop/reduce the losses of steam flash. Any pipework that is unused is isolated and then removed, currently no known redundant steam legs still in the system. All steam pipes are insulated. All plant maintained on an ongoing basis to ensure efficient operations. Rolling programme of LED replacement. A leak survey or compressed air systems has been completed and leaks addressed. Start-up and shut-down procedures in place for all lines and hibernation settings are in place. Usage monitored by Crowley Carbon monitoring system. This system provides 'sparks alerts' when energy use is higher than expected. Opportunity for using VSD's has been highlighted by an external contractor site survey and is being addressed by the operator e.g. on air handling units.

	Inverters are applied widespread throughout the facility wherever appropriate. Doors are kept closed on the freezer and cold rooms. Rapid rise doors are in place to keep temperatures controlled during frequent access.

BAT 7. In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7.1.1 and one or a combination of the techniques 7.1.2 to 7.2.6 given below.	
7.1 Common Techniques	
7.1.1 Water recycling and/or reuse Recycling and/or reuse of water streams (preceded or not by water treatment), e.g. for cleaning, washing, cooling or for the process itself.	Cooling water for the pasteurisers is returned to the cooling tower hotwell for reuse. Condensate from boilers and cooking vessels is returned to the boiler hotwell.
7.1.2 Optimisation of water flow Use of control devices, e.g. photocells, flow valves, thermostatic valves, to automatically adjust the water flow.	Water is metered in to cooking vessels.
7.1.3 Optimisation of water nozzles and hoses Use of correct number and position of nozzles; adjustment of water pressure.	Cookhouse hoses are mostly high-pressure hoses with restrictors.
7.1.4 Segregation of water streams Water streams that do not need treatment (e.g. uncontaminated cooling water or uncontaminated run-off water) are segregated from waste water that has to undergo treatment, thus enabling uncontaminated water recycling.	Cooling water for the pasteurisers is returned to the cooling tower hotwell for reuse. Condensate from boilers and cooking vessels is returned to the boiler hotwell.
7.2 Techniques related to cleaning operations	
7.2.1 Dry cleaning Removal of as much residual material as possible from raw materials and equipment before they are cleaned with liquids, e.g. by using compressed air, vacuum systems or catchpots with a mesh cover.	Teams are trained and asked to operate to 'Clean as you Go' principles to minimise waste to drain and employ dry clean up where possible. Tubs/bins are scraped out prior to cleaning; sauce tubs pre-rinse can go in to the vessel as water in product. Mixers have scrapers in to maximise yield and minimise solids to drain. Catchpots in place on factory drains to prevent large solids reaching effluent plant.
7.2.2 Pigging system for pipes Use of a system made of launchers, catchers, compressed air equipment, and a projectile (also referred to as a 'pig', e.g. made of plastic or ice slurry) to clean out pipes. In-line valves are in	Pigging is used to clean through lines prior to changeovers.

place to allow the pig to pass through the pipeline system and to separate the product and the rinsing water.	
7.2.3 High-pressure cleaning Spraying of water onto the surface to be cleaned at pressures ranging from 15 bar to 150 bar.	Cookhouse hoses are mostly high-pressure hoses with restrictors.
7.2.4 Optimisation of chemical dosing and water use in cleaning-in-place (CIP) Optimising the design of CIP and measuring turbidity, conductivity, temperature or pH to dose hot water and chemicals in optimised quantities.	Cleaning chemicals are auto-dosed. All cleaning staff are trained in the handling of chemicals and task cards are in place for each cleaning task. CIP systems are in place for cleaning of fryers, cooking vessels and filling lines. The operator has reviewed CIP operation procedures to ensure consistency. At present there is minimal optimisation of CIP processes. Addressing leaks from the CIP systems is a current project on the CI opportunities tracker.
7.2.5 Low-pressure foam and/or gel cleaning Use of low-pressure foam and/or gel to clean walls, floors and/or equipment surfaces.	N/A
7.2.6 Optimised design and construction of equipment and process areas The equipment and process areas are designed and constructed in a way that facilitates cleaning. When optimising the design and construction, hygiene requirements are taken into account.	New equipment goes through a capex process which includes siting and assessment of efficiency including energy and water use. Factory Acceptance Testing in place for installation of new equipment.
7.2.7 Cleaning of equipment as soon as possible Cleaning is applied as soon as possible after use of equipment to prevent wastes hardening.	Production team review production plan every week and challenge batch sizes/ changes. The high number of different products produced means that there are a high number of changeovers, however the operator is constantly looking for ways to minimise these, for example by combining recipes. Vessels/lines cleaned as soon as possible after a run to enable the next one to begin.

BAT 8. In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below.	
8.1 Proper selection of cleaning chemicals and/or disinfectants Avoidance or minimisation of the use of cleaning chemicals and/or disinfectants that are harmful to the aquatic environment, in particular priority substances considered under the Water Framework Directive. When selecting the substances, hygiene and food safety requirements are taken into account.	Cleaning chemicals are auto-dosed. All cleaning staff are trained in the handling of chemicals and task cards are in place for each cleaning task. An inventory of cleaning chemicals used is given in the main application document, some of which are hazardous to the aquatic environment.
8.2 Reuse of cleaning chemicals in cleaning-in-place (CIP) Collection and reuse of cleaning chemicals in CIP. When reusing cleaning chemicals, hygiene and food safety requirements are taken into account.	CIP chemicals not currently reused. Wastewater from the weekly fryer caustic clean is saved in an IBC for use in the effluent treatment plant to balance acidic wastewater streams.
8.3 Dry cleaning	Teams are trained and asked to operate to 'Clean as you Go' principles to minimise waste to drain and employ dry clean up where possible. Tubs/bins are scraped out prior to cleaning; sauce tubs pre-rinse can go in to the vessel as water in product. Mixers have scrapers in to maximise yield and minimise solids to drain.
8.4 Optimised design and construction of equipment and process areas	New equipment goes through a capex process which includes siting and assessment of efficiency including energy and water use. Factory Acceptance Testing in place for installation of new equipment.

BAT 9. In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.	
Suitable refrigerants include water, carbon dioxide or ammonia.	R407c and R404a are used in current systems.

BAT 10. In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below.	
9.1 Anaerobic digestion Treatment of biodegradable residues by microorganisms in the absence of oxygen, resulting in biogas and digestate. The biogas is used as a fuel, e.g. in a gas engine or in a boiler. May	All food wastes, waste product and effluent sludge is disposed of via AD off site.
9.2 Use of residues Residues are used, e.g. as animal feed.	Pappadum waste and some other food wastes are used for animal feed or landspreading.
9.3 Separation of residues Separation of residues, e.g. using accurately positioned splash protectors, screens, flaps, catchpots, drip trays and troughs.	Pastes can sometimes be reworked but pasteurised sauces cannot be due to food safety requirements. The operator can minimise waste by ordering correct pack sizes etc. and scheduling production to ensure all ingredients are used up. Catch trays are used in the cook house where ingredients are transferred to the cooking and mixing vessels. Wastage from the pappadum lines is contained in trays/bins. Oil from catch trays in RTE is reclaimed. Waste is measured/weighed off lines.
9.4 Recovery and reuse of residues from the pasteuriser Residues from the pasteuriser are fed back to the blending unit and are thereby reused as raw materials.	N/A
9.5 Phosphorus recovery as struvite	N/A
9.6 Use of waste water for landspreading After appropriate treatment, waste water is used for landspreading in order to take advantage of the nutrient content and/or to use the water.	N/A for wastewater – farmer waste landspread.

BAT 11. In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	
10.1 Buffer storage capacity determined by a risk assessment. (taking into account the nature of the pollutant(s), the effects of these pollutants on further waste water treatment, the receiving environment, etc.).	Spills could potentially be held in the initial effluent reception pit or pumped to a bunded area. Effluent reception pit and balance tank which have a combined capacity of 215m^3. If there was a known problem with effluent then it could be held back prior to the DAF plant and tankered off if capacity was reached, or a pump could be used to pump effluent back round to the reception pit. However, out of consent effluent does not automatically recirculate if detected prior to release after treatment. Bunding is in place for all bulk tanks and IBC's to prevent spills reaching surface water drains, as well as spill response kits. Operator investigating potential options for blocking final release points to surface water from the site.
10.2 Measures to treat waste water from buffer storage The waste water from this buffer storage is discharged after appropriate measures are taken (e.g. monitoring, treatment, reuse).	If there was a known problem with effluent then it could be held back prior to the DAF plant and tankered off if capacity was reached, or a pump could be used to pump effluent back round to the reception pit. However, out of consent effluent does not automatically recirculate if detected prior to release after treatment.

BAT 12. In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.	
11.1 Preliminary and primary treatment	
11.1.1 Equalisation	Balance tank in place.
11.1.2 Neutralisation	pH treatment in place.
11.1.3 Physical separation, e.g. screens, sieves, grit separators, oil/fat separators, or primary settlement tanks	Initial screen and oil skimmer
11.2 Aerobic and/or anaerobic treatment (secondary treatment)	
11.2.1 Aerobic and/or anaerobic treatment (secondary treatment), e.g. activated sludge process, aerobic lagoon, upflow anaerobic sludge blanket (UASB) process, anaerobic contact process, membrane bioreactor.	Sludge treated in off-site AD plant.
11.3 Nitrogen Removal	
11.3.1 Nitrification and/or denitrification	N/A
11.3.2 Partial nitritation – Anaerobic ammonium oxidation	N/A
11.4 Phosphorus recovery and/or removal	
11.4.1 Phosphorus recovery as struvite	**N/A**
11.4.2 Precipitation	N/A
11.4.3 Enhanced biological phosphorus removal	N/A
11.5 Final solids removal	
11.5.1 Coagulation and flocculation	DAF plant prior to release
11.5.2 Sedimentation	N/A
11.5.3 Filtration (e.g. sand filtration, microfiltration, ultrafiltration)	N/A
11.5.4 Flotation	N/A
11.6 BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body	
11.6.1 Chemical oxygen demand (COD) (25-100 mg/l)	Effluent sent to Leigh WWTW in compliance with discharge consent. Final discharge to receiving water is from the WWTW.
11.6.2 Total suspended solids (TSS) (4-50 mg/l)	
11.6.3 Total nitrogen (TN) (2-20 mg/l)	
11.6.4 Total phosphorus (TP) (0.2-2 mg/l)	

BAT 13. In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:	
12.1 a protocol containing actions and timelines;	A Noise Management Plan has not been produced as environmental noise is not considered a significant issue at the site.
12.2 a protocol for conducting noise emissions monitoring;	Carried out internally from an OH&S point of view.
12.3 a protocol for response to identified noise events, e.g. complaints;	Complaints process is in place as part of the developing Health, Safety and Environmental Management System. No noise complaints have ever been received.
12.4 a noise reduction programme designed to identify the source(s), to measure/estimate	No current identified issues of concern.
12.5 noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.	Carried out internally from an OH&S point of view.

BAT 14. In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below	
13.1 Appropriate location of equipment and buildings Noise levels can be reduced by increasing the distance between the emitter and the receiver, by using buildings as noise screens and by relocating buildings' exits or entrances.	All potentially noisy equipment is located within the building e.g. compressors.
13.2 Operational measures These include: i. improved inspection and maintenance of equipment; ii. closing of doors and windows of enclosed areas, if possible; iii. equipment operation by experienced staff; iv. avoidance of noisy activities at night, if possible; v. provisions for noise control, e.g. during maintenance activities.	New equipment goes through a capex process which includes H&S sign off to ensure no negative impact on noise exposure for operators. All potentially noisy equipment is located within the building e.g. compressors. All equipment is on the site PPM system. Vehicle movements are limited, with raw material deliveries generally taking place between 6a..m and 2p.m. and product collections about 16 trailers per day. Vehicles switch off engines during loading and unloading.
13.3 Low-noise equipment This includes low-noise compressors, pumps and fans.	All potentially noisy equipment is located within the building e.g. compressors.
13.4 Noise control equipment This includes: i. noise reducers; ii. insulation of equipment; iii. enclosure of noisy equipment; iv. soundproofing of buildings.	All potentially noisy equipment is located within the building e.g. compressors. There have never been any complaints of noise at the site.
13.5 Noise abatement Inserting obstacles between emitters and receivers (e.g. protection walls, embankments and buildings).	All potentially noisy equipment is located within the building e.g. compressors. There have never been any complaints of noise at the site.

BAT 15. In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:	
14.1 Protocol containing actions and timelines	Odour Management Plan submitted as part of the application.
14.2 Protocol for conducting odour monitoring.	Odour Management Plan submitted as part of the application.
14.3 Protocol for response to identified odour incidents, e.g. complaints.	No odour complaints have been received in the past 3 years.
14.4 An odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure; to characterise the contributions of the sources; and to implement prevention and/or reduction measures.	Odour abatement plant in place. Emissions monitoring has been carried out as part of this application.