FOYLE MEATS
MELTON RD
SIX HILLS
MELTON MOWBRAY
LE14 3PR

Environmental Permit Application

BAT Conclusions for the Food, Drink and Milk Industries

Document Ref: Attachment B.3.6 – Revision 1

1. GENERAL BAT CONCLUSIONS

1.1 ENVIRONMENTAL MANAGEMENT SYSTEMS	
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, leadership, and accountability of the management, including senior management, for the implementation of an effective EMS;	Yes in place, The site currently holds ISO14001:2015 accreditation (cert no.: 242/6), which was last reissued on 11th May 2022 and is valid until 22nd June 2025. GM's attend environmental meetings and is aware of site objectives
1.2 an analysis that includes the determination of the organisation's context, the identification of the needs and expectations of interested parties, the identification of characteristics of the installation that are associated with possible risks for the environment (or human health) as well as of the applicable legal requirements relating to the environment	Context statement in place (as per clause 4 of ISO14001 standard)
1.3 development of an environmental policy that includes the continuous improvement of the environmental performance of the installation;	Yes Policy in place all employees receive one on induction.
1.4 establishing objectives and performance indicators in relation to significant environmental aspects, including safeguarding compliance with applicable legal requirements;	Yes, site objectives in place
1.5 planning and implementing the necessary procedures and actions (including corrective and preventive actions where needed), to achieve the environmental objectives and avoid environmental risks;	Yes, CAR system in place
1.6 determination of structures, roles and responsibilities in relation to environmental aspects and objectives and provision of the financial and human resources needed;	Yes in place as per ISO14001 system
1.7 ensuring the necessary competence and awareness of staff whose work may affect the environmental performance of the installation (e.g. by providing information and training);	Done on induction

1.8 internal and external communication;	Yes, TV and Notice boards for relevant information
1.9 fostering employee involvement in good environmental management practices	Yes, ongoing awareness programmes in place
1.10 Establishing and maintaining a management manual and written procedures to control activities with significant environmental impact as well as relevant records	Yes, all procedures stored on share drive
1.11 effective operational planning and process control;	Yes, processes written
1.12 implementation of appropriate maintenance programmes;	Schedules in place and follow manufacturer's instructions
1.13 emergency preparedness and response protocols, including the prevention and/or mitigation of the adverse (environmental) impacts of emergency situations;	Yes, Process in place all relevant employees signed off on process
1.14 when (re)designing a (new) installation or a part thereof, consideration of its environmental impacts throughout its life, which includes construction, maintenance, operation and decommissioning;	Yes when required
1.15 implementation of a monitoring and measurement programme, if necessary, information can be found in the Reference Report on Monitoring of Emissions to Air and Water from IED Installations;	Not in place yet, being worked on
1.16 application of sectoral benchmarking on a regular basis;	Yes
1.17 periodic independent (as far as practicable) internal auditing and periodic independent external auditing in order to assess the environmental performance and to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;	Yes, external company carries out auditing on sites, and internal audits carried out yearly
1.18 evaluation of causes of nonconformities, implementation of corrective actions in response to nonconformities, review of the effectiveness of corrective actions, and determination of whether similar nonconformities exist or could potentially occur;	Process in place ties in with audit findings. All assessed during internal audits.
1.19 periodic review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;	Yes reports made, carried out annually

1.20 following and taking into account the development of cleaner techniques.	Yes, where applicable
1.20 (i) noise management plan (see BAT 13);	Yes assessments carried out
1.20 (ii) odour management plan (see BAT 15);	Not at present
1.20 (iii) inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams (see BAT 2);	Yes monitored weekly, episensors record data and checked daily/weekly
1.20 (iv) energy efficiency plan (see BAT 6a).	Preferred supplies used

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.	N/A
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	Yes Site water maps in place Episensors used for water usage
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.	Not at present, all wastewater is tankered off site daily
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, NOx , SOx) 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).	Not at present, Boiler is serviced twice a year and maintained on a regular basis gas values checked
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.	Yes, Epi sensors send information to power Bi and all usage monitored.

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.	Yes Episensors, Power Bi

1.2 MONITORING
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).
N/A at present

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)	N/A at present
Total nitrogen (TN) (daily)	
Total organic carbon (TOC) (daily)	
Total phosphorus (TP) (daily)	
Total suspended solids (TSS) (daily)	
Biochemical oxygen demand (BOD_n) (monthly)	
Chloride (Cl-) (monthly)	

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)	N/A at present

1.3 ENERGY EFFICIENCY	
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.	Yes, Energy efficiency set by head office, implemented on site and monitored by site.
6.2 Use of common techniques Common techniques include techniques such as: - burner regulation and control; - cogeneration; - energy efficient motors; - heat recovery with heat exchangersand/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.	N/A

1.4 WATER CONSUMPTION AND WASTEWATER DISCHARGE	
BAT 7. In order to reduce water consumption and the volume of wastewater discharged, BAT is to use BAT 7.1.1 and one or a combination of the techniques 7.1.2 to 7.2.7 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.	N/A Not possible at present
7.1.2 Optimisation of water flow Use of control devices, e.g. photocells, flow valves, thermostatic valves, to automatically adjust the water flow.	N/A
7.1.3 Optimisation of water nozzles and hoses Use of correct number and position of nozzles; adjustment of water pressure.	Yes, used by cleaners at night
7.1.4 Segregation of water streams	Yes
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.	Yes Collated in an underground pit and extracted daily.
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.	Yes, cleared of any raw materials prior to cleaning.
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 place to allow the pig to pass through the pipeline system and to separate the product and the rinsing water.	When required
7.2.3 High-pressure cleaning Spraying of water onto the surface to be cleaned at pressures ranging from 15 bar to 150 bar.	Yes, Cleaning of production areas
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.	N/A

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.	Yes, Chemicals supplied by Kersia
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.	Yes, as per industry standards
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.	Yes, at the end of production

1.5 HARMFUL SUBSTANCES	
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.	Yes approved supplier Kersia
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.	N/A
8.3 Dry cleaning (See Bat 7e)	N/A
8.4 Optimised design and construction of equipment and process areas (See Bat 7j)	N/A

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.
Yes All refrigerants used on site is R410A

1.6 RESOURCE EFFICIENCY	
BAT 10. In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below.	
10.1 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.	N/A
10.2 Use of residues Residues are used, e.g. as animal feed.	N/A
10.3 Separation of residues Separation of residues, e.g. using accurately positioned splash protectors, screens, flaps, catchpots, drip trays and troughs.	N/A
10.4 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
10.5 Phosphorus recovery as struvite (See Bat 12g)	N/A
10.6 Use of wastewater 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

1.7 EMISSIONS TO WATER	
BAT 11. In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	
11.1 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.).	N/A
11.2 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).	N/A

BAT 12. In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.	
12.1 Preliminary and primary treatment	
12.1.1 Equalisation	N/A
12.1.2 Neutralisation	
12.1.3 Physical separation, e.g. screens, sieves, grit separators, oil/fat separators, or primary settlement tanks	
12.2 Aerobic and/or anaerobic treatment (secondary treatment)	
12.2.1 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.	N/A
12.3 Nitrogen Removal	
12.3.1 Nitrification and/or denitrification	N/A
12.3.2 Partial nitritation – Anaerobic ammonium oxidation	
12.4 Phosphorus recovery and/or removal	
12.4.1 Phosphorus recovery as struvite	N/A
12.4.2 Precipitation	
12.4.3 Enhanced biological phosphorus removal	
12.5 Final solids removal	
12.5.1 Coagulation and flocculation	N/A
12.5.2 Sedimentation	
12.5.3 Filtration (e.g. sand filtration, microfiltration, ultrafiltration)	
12.5.4 Flotation	
12.6 BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body	
12.6.1 Chemical oxygen demand (COD) (25-120 mg/l)	within the current EA consent. If required
12.6.2 Total suspended solids (TSS) (4-50 mg/l)	
12.6.3 Total nitrogen (TN) (2-20 mg/l)	
12.6.4 Total phosphorus (TP) (0.2-2 mg/l)	

1.8 NOISE	
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:	
13.1 a protocol containing actions and timelines;	Yes
13.2 a protocol for conducting noise emissions monitoring;	Yes
13.3 a protocol for response to identified noise events, e.g. complaints;	Yes
13.4 a noise reduction programme designed to identify the source(s), to measure/estimate	Yes
13.5 noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.	Yes, noise assessment carried out regularly

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	
14.1 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.	Yes
14.2 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.	Yes, carried out as and when required
14.3 Low-noise equipment This includes low-noise compressors, pumps and fans.	Yes, as per industry standards

14.4 Noise control equipment This includes: i. noise reducers; ii. insulation of equipment; iii. enclosure of noisy equipment; iv. soundproofing of buildings.	Yes
14.5 Noise abatement Inserting obstacles between emitters and receivers (e.g. protection walls, embankments and buildings).	Yes

1.9 Odour	
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:	
15.1 Protocol containing actions and timelines	N/A
15.2 Protocol for conducting odour monitoring.	N/A
15.3 Protocol for response to identified odour incidents, e.g. complaints.	N/A
15.4 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.	N/A

2 BAT CONCLUSIONS FOR ANIMAL FEED – Not Applicable

3 BAT CONCLUSIONS FOR BREWING – Not Applicable

4 BAT CONCLUSIONS FOR DAIRIES – Not Applicable

5 BAT CONCLUSIONS FOR ETHANOL PRODUCTION – Not Applicable

6 BAT CONCLUSIONS FOR FISH AND SHELLFISH PROCESSING – Not Applicable

7 BAT CONCLUSIONS FOR THE FRUIT AND VEGETABLE SECTOR – Not Applicable

8 BAT CONCLUSIONS FOR GRAIN MILLING – Not Applicable

9 BAT CONCLUSIONS FOR MEAT PROCESSING

The BAT conclusions presented in this section apply to meat processing. They apply in addition to the general BAT conclusions given in Section 1.

9.1. ENERGY EFFICIENCY	
General techniques to increase energy efficiency are given in Section 1.3 of these BAT conclusions. The indicative environmental performance level is presented in the table below. Specific energy consumption (yearly average): 0.25-2.6 ([1]) ([2]) MWh/tonne of raw materials ([1]) The specific energy consumption level does not apply to the production of ready meals and soups. ([2]) The upper end of the range may not apply in the case of a high percentage of cooked products.	Yes
9.2. Water consumption and waste water discharge	
General techniques to reduce water consumption and the volume of waste water discharged are given in Section 1.4 of these BAT conclusions. The indicative environmental performance level is presented in the table below. Specific waste water discharge (yearly average): 1.5-8.0 ([1]) m3/tonne of raw materials ([1]) The specific waste water discharge level does not apply to processes using direct water cooling and to the production of ready meals and soups.	No water is discharged off site, as site does not have a consent to discharge. All waste tankard off site.
9.3. Emissions to air	
BAT 29. In order to reduce channelled emissions of organic compounds to air from meat smoking, BAT is to use one or a combination of the techniques given below.	
a) Adsorption Organic compounds are removed from a waste gas stream by retention on a solid surface (typically activated carbon).	N/A
b) Thermal oxidation See Section 14.2	N/A
c) Wet scrubber See Section 14.2 An electrostatic precipitator is commonly used as a pretreatment step.	N/A
d) Use of purified smoke	N/A

Smoke generated from purified primary smoke condensates is used to smoke the product in a smoke chamber.	

Table 18: BAT-associated emission level (BAT-AEL) for channelled TVOC emissions to air from a smoke chamber

Parameter	Unit	BAT-AEL (average over the sampling period)
TVOC	mg/Nm^3	3-50 ([1]) ([2])
([1]) The lower end of the range is typically achieved when using adsorption or thermal oxidation. ([2]) The BAT-AEL does not apply when the TVOC emission load is below 500 g/h.		

The associated monitoring is given in BAT 5.

10 BAT CONCLUSIONS FOR OILSEED PROCESSING AND VEGETABLE OIL REFINING – Not Applicable

11 BAT CONCLUSIONS FOR SOFT DRINKS AND NECTAR/JUICE MADE FROM PROCESSED FRUIT AND VEGETABLES – Not Applicable

12 BAT CONCLUSIONS FOR STARCH PRODUCTION – Not Applicable

13 BAT CONCLUSIONS FOR SUGAR MANUFACTURING – Not Applicable

14 DESCRIPTION OF TECHNIQUES

14.1 EMISSIONS TO WATER	
Technique	**Description**
Activated sludge process	A biological process in which the microorganisms are maintained in suspension in the waste water and the whole mixture is mechanically aerated. The activated sludge mixture is sent to a separation facility from where the sludge is recycled to the aeration tank.
Aerobic lagoon	Shallow earthen basins for the biological treatment of waste water, the content of which is periodically mixed to allow oxygen to enter the liquid through atmospheric diffusion.
Anaerobic contact process	An anaerobic process in which waste water is mixed with recycled sludge and then digested in a sealed reactor. The water/sludge mixture is separated externally.
Precipitation	The conversion of dissolved pollutants into insoluble compounds by adding chemical precipitants. The solid precipitates formed are subsequently separated by sedimentation, air flotation, or filtration. Multivalent metal ions (e.g. calcium, aluminium, iron) are used for phosphorus precipitation.
Coagulation and flocculation	Coagulation and flocculation are used to separate suspended solids from waste water and are often carried out in successive steps. Coagulation is carried out by adding coagulants with charges opposite to those of the suspended solids. Flocculation is carried out by adding polymers, so that collisions of microfloc particles cause them to bond to produce larger flocs.
Equalisation	Balancing of flows and pollutant loads by using tanks or other management techniques.
Enhanced biological phosphorus removal	A combination of aerobic and anaerobic treatment to selectively enrich polyphosphate-accumulating microorganisms in the bacterial community within the activated sludge. These microorganisms take up more phosphorus than is required for normal growth.
Filtration	The separation of solids from waste water by passing it through a porous medium, e.g. sand filtration, microfiltration and ultrafiltration.
Flotation	The separation of solid or liquid particles from waste water by attaching them to fine gas bubbles, usually air. The buoyant particles accumulate at the water surface and are collected with skimmers.
Membrane bioreactor	A combination of activated sludge treatment and membrane filtration. Two variants are used: a) an external recirculation loop between the activated sludge tank and the membrane module; and b) immersion of the membrane module in the aerated activated sludge tank, where the effluent is filtered through a hollow fibre membrane, with the biomass remaining in the tank.

Technique	Description
Neutralisation	The adjustment of the pH of waste water to a neutral level (approximately 7) by the addition of chemicals. Sodium hydroxide (NaOH) or calcium hydroxide (Ca(OH)2) is generally used to increase the pH, whereas sulphuric acid (H2SO4), hydrochloric acid (HCl) or carbon dioxide (CO2) is generally used to decrease the pH. The precipitation of some substances may occur during neutralisation.
Nitrification and/or denitrification	A two-step process that is typically incorporated into biological waste water treatment plants. The first step is the aerobic nitrification where microorganisms oxidise ammonium (NH4 +) to the intermediate nitrite (NO2 -), which is then further oxidised to nitrate (NO3 -). In the subsequent anoxic denitrification step, microorganisms chemically reduce nitrate to nitrogen gas.
Partial nitritation — Anaerobic ammonium oxidation	A biological process that converts ammonium and nitrite into nitrogen gas under anaerobic conditions. In waste water treatment, anaerobic ammonium oxidation is preceded by a partial nitrification (i.e. nitritation) that converts about half of the ammonium (NH4 +) into nitrite (NO2 -).
Phosphorus recovery as struvite	Phosphorus is recovered by precipitation in the form of struvite (magnesium ammonium phosphate).
Sedimentation	The separation of suspended particles by gravitational settling.
Upflow anaerobic sludge blanket (UASB) process	An anaerobic process in which waste water is introduced at the bottom of the reactor from where it flows upward through a sludge blanket composed of biologically formed granules or particles. The waste water phase passes into a settling chamber where the solid content is separated; the gases are collected in domes at the top of the reactor.

14.2 Emissions to air	
Technique	**Description**
Bag filter	Bag filters, often referred to as fabric filters, are constructed from porous woven or felted fabric through which gases are passed to remove particles. The use of a bag filter requires the selection of a fabric suitable for the characteristics of the waste gas and the maximum operating temperature.
Cyclone	Dust control system based on centrifugal force, whereby heavier particles are separated from the carrier gas.
Non-thermal plasma treatment	Abatement technique based on creating a plasma (i.e. an ionised gas consisting of positive ions and free electrons in proportions resulting in more or less no overall electric charge) in the waste gas by using a strong electrical field. The plasma oxidises organic and inorganic compounds.
Thermal oxidation	The oxidation of combustible gases and odorants in a waste gas stream by heating the mixture of contaminants with air or oxygen to above its auto-ignition point in a combustion chamber and maintaining it at a high temperature long enough to complete its combustion to carbon dioxide and water.
Use of gaseous fuels	Switching from the combustion of a solid fuel (e.g. coal) to the combustion of a gaseous fuel (e.g. natural gas, biogas) that is less harmful in terms of emissions (e.g. low sulphur content, low ash content or better ash quality).
Wet scrubber	The removal of gaseous or particulate pollutants from a gas stream via mass transfer to a liquid solvent, often water or an aqueous solution. It may involve a chemical reaction (e.g. in an acid or alkaline scrubber). In some cases, the compounds may be recovered from the solvent.