

Schedule 1 Listed Activities including Waste Codes & Directly Associated Activities

Schedule 1 Listed Activity	Description of Listed Activity	Waste types (currently permitted)	Waste types (proposed changes in line with Appendix B of the Anaerobic Digestion Quality Protocol. ¹)
S5.4 Part A(1)(b)(i)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 100 tonnes per day involving biological treatment.	<p>02 WASTES FROM AGRICULTURE, HORTICULTURE, HUNTING, FISHING AND AQUACULTURE PRIMARY PRODUCTION, FOOD PREPARATION AND PROCESSING</p> <p>02 01 Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</p> <p><i>02 01 01 - Sludges from washing and cleaning</i></p> <p><i>02 01 02 - Animal tissue waste – Category 3 ABP including blood, animal flesh, fish processing waste, poultry waste – Category 2 ABP – consisting only of paunch contents</i></p> <p><i>02 01 03 - Plant tissue waste. Including husks, cereal dust, waste animal feeds, off-cuts from vegetable and fruit and other vegetation waste.</i></p> <p><i>02 01 06 - Animal faeces, urine and manure (including spoiled straw) effluent, collected separately and treated off-site</i></p> <p><i>02 01 07 - Wastes from forestry</i></p> <p>02 02 Wastes from preparation and processing of meat, fish and other foods of animal origin</p> <p><i>02 02 01 - Sludges from washing and cleaning</i></p> <p><i>02 02 02 - Animal tissue waste. Category 3 ABP including blood, animal flesh, fish processing waste, poultry waste</i></p> <p><i>02 02 03 - Materials unsuitable for consumption or processing – coffee, mushroom compost, food processing waste, food washing waste, tobacco, tea, vegetable waste – waste fat from processing meat or fish</i></p> <p>02 03 Wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production, yeast and yeast extract production, molasses preparation and fermentation</p>	<p><i>Add - 02 01 99 - Wastes not otherwise specified</i></p> <p><i>Restriction: Spent mushroom compost or discarded mushrooms from commercial mushroom cultivation only</i></p> <p><i>Add - 02 02 04 - Sludges from on-site effluent treatment</i></p> <p><i>Add - 02 02 99</i></p> <p><i>Wastes not otherwise specified</i></p> <p><i>Restriction: Sludges from gelatine production and animal gut contents only.</i></p>

¹ Anaerobic Digestion Quality Protocol, WRAP, January 2014

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		<p><i>02 03 01 - Sludges from washing, cleaning, peeling, centrifuging and separation - coffee, mushroom compost, food processing waste, food washing waste, tobacco</i></p> <p><i>02 03 02 – wastes from preserving agents</i></p> <p><i>02 03 04 – Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances)</i></p> <p><i>02 03 05 - Sludges from on-site effluent treatment – effluent from the processes referred to in sources of waste</i></p> <p>02 04 Wastes from sugar processing</p> <p><i>02 04 03 - Sludges from on-site effluent treatment – biological sludge</i></p> <p>02 05 Wastes from dairy products industry</p> <p><i>02 05 01 – Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) - solid and liquid dairy products, milk, food processing wastes, yoghurt, and whey.</i></p> <p><i>02 05 02 - Sludges from on-site effluent treatment</i></p> <p>02 06 Wastes from the baking and confectionary industry</p> <p><i>02 06 01 – Biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) - condemned food, food processing wastes, biscuits, chocolate, yeast, bread, bakery wastes.</i></p> <p><i>02 06 03 - Sludges from on-site effluent treatment</i></p> <p>02 07 Wastes from production of alcoholic and non-alcoholic beverages (except tea, coffee and cocoa)</p> <p><i>02 07 01 - Wastes from washing, cleaning and mechanical reduction of</i></p>	<p><i>Remove – 02 03 02 – wastes from preserving agents</i></p> <p><i>Add- 02 03 99 Wastes not otherwise specified</i></p> <p><i>Restriction – Only:</i></p> <ul style="list-style-type: none"> <i>– Sludge from production of edible fats and oils</i> <i>– Seasoning residues</i> <i>– Molasses residues</i> <i>– Residues from production of potato, corn or rice starch</i> <p><i>Add – 02 04 99 Other biodegradable wastes</i></p>

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		<p><i>raw materials Including brewing waste, food processing waste, fermentation waste</i></p> <p><i>02 07 02 Wastes from spirits distillation – spent grains, fruit and potato pulp – sludges from distilleries</i></p> <p><i>02 07 04 - Materials unsuitable for consumption or processing (other than those containing dangerous substances) - brewing waste, food processing waste, fermentation waste, beer, alcoholic drinks and fruit juice</i></p> <p><i>02 07 05- sludges from on-site effluent treatment</i></p> <p>03 WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PAPER, CARDBOARD, PULP, PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</p> <p>03 03 Wastes from pump, paper and cardboard production and processing</p> <p><i>03 03 02 – green liquor sludge (from recovery of cooking liquor)</i></p> <p><i>03 03 08 – wastes from sorting paper and cardboard destined for recycling</i></p> <p><i>03 03 10 - Fibre rejects and sludges – paper pulp (delinked only), paper fibre</i></p> <p>04 WASTES FROM LEATHER, FUR AND TEXTILE INDUSTRY</p> <p>04 01 Wastes from the leather and fur industry</p> <p><i>04 01 01 - Fleshings and lime split wastes. (Fleshings may also be described as leather shavings).</i></p>	<p><i>Remove – 02 07 05- sludges from on-site effluent treatment</i></p> <p><i>Add - 02 07 99 – spent grains, hops and whisky filter sheets/ cloths</i></p> <p><i>Restriction Only:</i></p> <ul style="list-style-type: none"> <i>– Malt husks, malt sprouts, malt dust</i> <i>– Spent grains</i> <i>– Hops</i> <i>– Yeast and yeast like residues</i> <i>– Sludges from the production process</i> <p><i>Remove - 03 03 02 – green liquor sludge (from recovery of cooking liquor)</i></p> <p><i>Remove - 03 03 08 – wastes from sorting paper and cardboard destined for recycling</i></p> <p><i>Add – 03 03 11 fibre rejects, fibre-, filler- and coating-sludges from mechanical separation</i></p> <p><i>Restriction: Only allowed if not mixed with, or does not contain, de-inking sludge.</i></p> <p><i>Remove - 04 01 05 – Tanning liquor free of chromium</i></p> <p><i>Remove - 04 01 07 – Sludges in particular from on-site effluent treatment free of chromium</i></p>

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		<p><i>04 01 05 – Tanning liquor free of chromium</i> <i>04 01 07 – Sludges in particular from on-site effluent treatment free of chromium</i></p> <p>04 02 Wastes from the textile industry <i>04 02 10 - Organic matter from natural products (for example grease, wax)</i></p> <p>15 WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED 15 01 Packaging (including separately collected municipal packaging waste) <i>15 01 01 - Paper and cardboard packaging must conform to BS EN 13432 – no manmade substances</i> <i>15 01 02 – Plastic packaging – must conform to BS EN 13432</i> <i>15 01 03 – Wooden packaging</i> <i>15 01 05 – Composite packaging – must conform to BS EN 13432</i></p>	<p><i>Add:</i> 07 WASTE FROM ORGANIC CHEMICAL PROCESSES 07 01 Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals <i>07 01 08* - Other still bottoms and reaction residues</i> <i>Restriction: Glycerol residue from biodiesel manufacture from non-waste vegetable oils only</i></p> <p><i>Remove - 15 01 02 – Plastic packaging – must conform to BS EN 13432</i></p> <p><i>Add:</i> 16 WASTES NOT OTHERWISE SPECIFIED IN THE LIST 16 01 Aqueous liquid wastes destined for off-site treatment</p>

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		<p>19 WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</p> <p>19 02 Wastes from physico/chemical treatments of waste <i>19 02 03 - Premixed wastes composed only of non-hazardous wastes</i> <i>19 02 06 – Sludges from physico/chemical treatment other than those mentioned in 19 02 05</i> <i>19 02 10 - Combustible wastes other than those mentioned in 19 02 08 and</i></p> <p>19 05 - Wastes from the aerobic treatments of wastes <i>19 05 01 – Non-composted fraction of municipal and similar wastes</i> <i>19 05 02 - Non-composted fraction of animal and vegetable waste</i> <i>19 05 03 - Off-specification compost from source segregated biodegradable waste</i></p> <p>19 06 - Wastes from the anaerobic treatment of wastes <i>19 06 03 - Liquor from anaerobic treatment of municipal waste</i> <i>19 06 04 - Digestate from anaerobic treatment of municipal waste</i> <i>19 06 05 - Liquor from anaerobic treatment of animal and vegetable waste</i></p>	<p><i>16 10 02 Aqueous liquid wastes other than those mentioned in 16 10 01</i> <i>Restriction: Allowed only if digestate from an aerobic digestion process that accepts only the waste input types allowed by this Quality Protocol.</i></p> <p><i>Add – 19 05 99 - Wastes not otherwise specified</i> <i>Restriction: Allowed only if:</i> <i>– liquor/leachate from a composting process that accepts only the waste input types allowed by this Quality Protocol; or</i> <i>– digestate from an aerobic digestion process that accepts only the waste input types allowed by this Quality Protocol.</i></p>

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		<p><i>19 06 06 - Digestate from anaerobic treatment of animal and vegetable waste</i></p> <p>19 08 Wastes from waste water treatment plants not otherwise specified</p> <p><i>19 08 09 - Grease and oil mixture from oil/water separation containing edible oils and fats</i></p> <p><i>19 08 12 - Sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11</i></p> <p>20 MUNICIPAL WASTES AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES INCLUDING SEPARATELY COLLECTED FRACTIONS</p> <p>20 01 Separately collected fractions</p> <p><i>20 01 01 - Paper and cardboard</i></p> <p><i>20 01 08 - Biodegradable kitchen and canteen waste</i></p> <p><i>20 01 25 - Edible oil and fat</i></p> <p><i>20 01 38 - Wood other than that mentioned in 20 01 37. (Where no non-biodegradable coating or preserving substance present).</i></p>	<p><i>Add:</i></p> <p>19 12 Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</p> <p><i>19 12 12 - Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11</i></p> <p><i>Restriction: Acceptable only if derived solely from input types allowed by this Quality Protocol and remains segregated from, and uncontaminated by, any other waste type.</i></p>

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		<p>20 02 Garden and park wastes (including cemetery waste) <i>20 02 01 - Biodegradable waste</i> <i>Including animal faeces, manure, garden waste, green waste, horticulture waste, plant tissue, parks and garden waste, hedge and tree trimmings, grass cuttings and leafy materials.</i></p> <p>20 03 Other municipal wastes <i>20 03 01 - Mixed municipal waste – separately collected biowastes</i> <i>20 03 02 - Waste from markets - allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables</i></p>	

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Name of Directly Associated Activity (DAA)	Description of DAA (all serve S5.4 Part A(1)(b)(i) & S6.8 Part A(1)(c))
Storage of waste pending recovery or disposal	<p>Storage of solid waste on an impermeable surface with sealed drainage (inside the Reception Building with odour abatement via a biofilter).</p> <p>Storage of liquid wastes pending treatment in dedicated storage tanks (2 No. 30m³ stainless -steel tanks) within the Reception Building.</p>
Physical treatment for the purpose of recycling	<p>Pre-treatment of waste within the reception building including shredding, sorting, screening, compaction, baling, mixing, blending, maceration and depackaging.</p> <p>Treatment of waste; within depackaging unit (shredder, drum washer, screw press) to separate packaging material from organic waste suitable for anaerobic digestion.</p> <p>Chemical addition for desulphurisation and trace element supplementation.</p> <p>Maceration and separation via a 6mm screen of digestate prior to heat treatment in the pasteurisers (greater than 70°C for 1 hour).</p> <p>Treatment of digestate including screening to remove plastic residues, centrifuge or pressing, addition of thickening agents (polymers) or drying.</p> <p>Gas cleaning by biological or chemical scrubbing.</p>
Steam and electrical power supply	Use of biogas as a fuel in four combined heat and power engines (3.8MWth aggregated thermal input) with 10m stacks to produce heat and electricity. Electricity use on site and export to grid. Heat to AD plant. Some biogas exported to Mole Valley Mill for use in their boiler with an 11m stack (not operating at time of writing).
Emergency flare operation	Combustion of biogas in a surplus gas burner (flare) during abnormal operations only e.g. extended CHP maintenance.
Gas storage	Storage of biogas above the two digesters.
Digestate storage	Storage of waste derived digestate in a storage tank with gas collection.
Raw material storage	Storage of raw materials including ferric chloride, oil, diesel and additives for the anaerobic digestion process.

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Name of Directly Associated Activity (DAA)	Description of DAA (all serve S5.4 Part A(1)(b)(i) & S6.8 Part A(1)(c))
Surface water collection and storage	Collection of rainwater from building roof, external concrete areas and the secondary containment area. Discharge of excess clean water to the soakaway.
Dirty water collection and storage	Collection and storage of dirty water from inside Reception Hall including vehicle wash water to a sump which is pumped to the pre-storage tanks for reuse in the AD process. There is an underground drainage sump within the secondary containment area which pumps out to the liquid waste tanks within the Reception Building in the case of a spillage.
Air treatment	Collection of air from the reception building and pasteurisation unit and treatment within 2 No. woodchip biofilters.