Devon AD Plant, Raw Materials Inventory

Raw Material	Form	Use	Storage arrangements	Maximum amount stored at any one time	Tonnage or volume used per annum (estimated)
Sulphuric acid (50% H2SO4)	Liquid	Emissions abatement plant (Ammonia scrubber)	Tank with Bund	8000 litres	46.6 m3
Iron oxides/hydroxides	Powder	Control of hydrogen sulphide in digesters	Reception building / chemical store	2 tonnes	10 tonnes
Ferric Chloride (FeCl3 40%)	Liquid	Control of hydrogen sulphide in digesters	Chemical Store (Drum in store)	TBC	Nominal
Diesel	Liquid	Emergency generator	Bunded integral tank with locked valves	950 litres	2,000 litres
Diesel	Liquid	On-site vehicles	Bunded on-site store	5,000 litres	20,000 litres
Ad-Blue	Liquid	On-site vehicles	Bunded on-site store	1,000 litres	Vehicle dependent
Glycol (Ethylene glycol + inhibitor)	Liquid	Heating	Reception building. Drums in store.	TBC	Nominal
Glycol (Ethylene glycol + inhibitor)	Liquid	Upgrading	Reception building. Drums in store.	TBC	Nominal
Anti-foam	Liquid	Preventative anti-foam treatment	Within chemical store	20 Liter drums	Nominal
Nutrient (EDTA, KOH)	Liquid	Preventing scales and deposits in digesters	Within chemical store	20 Liter drums	Nominal

Activated carbon	Solid	CO2 Liquefaction	Storage Vessel (Planned to be exchanged and taken off site simultaneously)	1.3 m3	2.6 tonnes
Activated carbon	Solid	Biogas Upgrade Unit	Storage Vessel (A Planned to be exchanged and taken off site simultaneously)	15 m3	90 m3
Carbon (High grade 60 CTC 4 mm carbon pellets)	Solid	Odour Abatement System	Vessels in containers (Planned to be exchanged and taken off site simultaneously)	25.2 m3	25.2 m3
Desiccant for CO2 dryer	Solid	CO2 Liquefaction	Vessel	TBC	TBC
Calibration Gases (50 ppm oxygen/ carbon dioxide)	Gas	CO2 Liquefaction	Gas Cylinder	50 L	TBC
Calibration Gases (2.6 ppm, benzene)	Gas	CO2 Liquefaction	Gas Cylinder	50 L	TBC
Calibration Gases (Carbon dioxide)	Gas	CO2 Liquefaction	Gas Cylinder	50 L	TBC
Calibration /standard gases (Nitrogen)	Gas	GEU Gas Quality Module	Gas Cylinder	50 L	TBC
Odorant (Mercaptan mixture)	Liquid	GEU Gas Quality Module	Drum in container	40 kg (net weight bottle)	TBC
Calibration/Standard gases (Helium)	Gas	GEU Gas Quality Module	Gas Cylinder	50 L	TBC
Calibration/Standard gases (Argon)	Gas	GEU Gas Quality Module	Gas Cylinder	50 L	TBC
Calibration/Standard gases (Methane)	Gas	GEU Gas Quality Module	Gas Cylinder	50 L	TBC

Calibration/Standard gases (Gas standard 89 %mol Methane, alkanes, H2S, CO2, N2)	Gas	GEU Gas Quality Module	Gas Cylinder	50 L	TBC
Calibration/Standard gases (H2S 3.075 µmol/mol)	Gas	GEU Gas Quality Module	Gas Cylinder	50 L	TBC
Calibration/Standard gases (3 ppm H2S in methane)	Gas	GEU Gas Quality Module	Gas Cylinder	50 L	TBC
Natural gas	Gas	CHP + emergency boiler	Not applicable – used from grid	N/A	TBC
Oils and greases (Synthetic and mineral oils, lubricants)	Liquid	Maintenance	Within chemical store, Workshop	2000 litres	20000 Liters
Fuel oil (Gas Oil)	Liquid	Maintenance	Bunded tank with locked valves	5000 Liters	TBC
Propane (C3H8)	Gas	Raise the calorific value of biomethane to the required level.	Horizontal pressure vessel.	24 Tonnes (nominally 85% full)	875 T
Refrigerant R407C	Gas	CO2 Liquefaction chiller	Piping	TBC	Nominal