

**FORD ENERGY RECOVERY FACILITY AND
WASTE SORTING AND TRANSFER FACILITY,
FORD CIRCULAR TECHNOLOGY PARK**



ENVIRONMENTAL
STATEMENT

G
GLOSSARY

Glossary

A-weighting, dB(A)	The unit of sound level, weighted according to the A-scale, which takes into account the increased sensitivity of the human ear at some frequencies
AAD	Ambient Air Quality Directive (Directive 2008/50/EC) which came into force on 11th June 2008.
AADT	Annual average daily traffic
AAWT	Annual Average Weekday Traffic is the total number of vehicles annually (on Monday – Fridays) divided by the total number of weekdays in this period
AC	Alternating current
ACC	Air cooled condensers - return low-pressure steam from the turbine to water
ACM	Asbestos containing materials
AdBlue	A mix of urea and deionized water that is sprayed into the exhaust system of diesel engines, helping to reduce nitrous oxide emissions
ADC	Arun District Council
ADMS	ADMS 5.2 is an air quality dispersion model
ANA	Archaeological notification area
AOD	Above Ordnance Datum – height above sea level
APIS	Air Pollution Information System
AQAL	Air quality assessment levels
AQAP	Air quality action plan
AQMA	Air quality management area
AQS	National air quality strategy
Ancient woodland	Woodland that has existed continuously since 1600 or before in England, Wales and Northern Ireland (or 1750 in Scotland).
Auxiliary burners	Equipment to supply additional heat, by the combustion of auxiliary fuel, for the purpose of obtaining temperatures sufficiently high (a) to dry and ignite waste material, (b) to maintain ignition thereof, and (c) to promote complete combustion of combustible solids, liquids, and gasses
ASE	Archaeology South East
AST	Above-ground storage tank

B1 hangars	A large type of military repair hangar mainly used on World War II bomber bases, constructed using steel stanchions and clad in corrugated iron. B1 hangars were part of a series of prefabricated buildings intended to supplement existing hangars on bases
Baseline	Existing environmental conditions
BAT	Best Available Technique
BAT-AELs	BAT-associated emissions levels
BGS	British Geological Survey
Biodiversity net gain	Biodiversity net gain (BNG) is an approach to development that leaves biodiversity in a better state than before.
Bioretention / filter swale	Vegetated strips of land designed to accept runoff as overland sheet flow between a hard-surfaced area and a receiving system
BNL	The Basic Noise Level is the road traffic noise at a reference distance of 10 m from the road edge, expressed in terms of the L_{A10} statistical level (18-hour or 1-hour), and calculated according by Calculation of Road Traffic Noise (CRTN) based on the traffic flow
BPM	Best practicable means
BREF	Best Available Technique (BAT) Reference Document – is a publication resulting from a series of exchanges of information between a variety of stakeholders, including regulators, industry and environmental non-governmental organisations
Bronze Age	The early and middle Bronze Ages are now dated to c.2500 and 1600 BC and the late Bronze Age between 1600 and 800BC. This includes a transitional period during which Bronze Age influences declined as new Iron Age techniques and cultures communicated and assimilated
CAD	Computer aided design
C&I	Commercial and industrial waste
CAS	Clean air strategy
Carbon negative	The reduction of an entity's carbon footprint to less than neutral
CCTV	Closed circuit television
CEMP	Construction environmental management plan
CEMS	Continuous emissions monitoring system
CEN	European Committee for Standardisation

CHP	Combined heat and power – or cogeneration is the use of a heat engine or a power station to simultaneously generate both electricity and useful heat. Conventional power plants emit the heat created as a by product of electricity generation into the environment through cooling towers, as flue gas, or by other means. CHP or a bottoming cycle captures the by product heat for domestic or industrial heating purposes
CIEEM	Chartered Institute of Ecology and Environmental Management
CL:AIRE	Contaminated Land: Applications in Real Environments
Combustion zone	Area of the incinerators where the burning of the waste takes place
Commissioning	Relates to the period after construction has been completed when the permitted installation process is being made ready to operate. Cold commissioning will occur before waste is delivered to the ERF. Hot commissioning will involve operating the ERF with waste and verifying that the waste treatment technologies achieve their desired aims.
Conservation area	An area of special architectural or historic interest identified as one where the character and appearance is worthy of preservation
Construction compound	Area used for the storage of construction materials and plant, for site offices and staff car parking and for any ancillary facilities required during the construction phase of a development.
COVID-19	Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus.
Critical level	The concentration of pollutants in the atmosphere above which direct adverse effects on receptors, such as plants and ecosystems, may occur according to present knowledge. It relates to the gaseous concentration of a pollutant in the air
Critical load	A quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge. It relates to the quantity of a pollutant deposited from air to the ground
CRTN	Calculation of Road Traffic Noise
Cumulative impacts	Effects of the proposed development combined with other projects in the area

DAFOR	Species abundance scale: D-Dominant, A-Abundant, F-Frequent, O-Occasional and R-Rarely distributed. Sometimes L-Local is used as a prefix to any of the above.
DAS	Design and access statement
Decibel (dB)	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s_1 and s_2 is given by $20 \log_{10}(s_1/s_2)$. The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is $20\mu\text{Pa}$
Defra	Department of Environment, Food and Rural Affairs
DfT	Department for Transport
Dioxin	Dioxins and dioxin-like compounds are a group of chemical compounds that are persistent environmental pollutants.
DMP	Dust management plan
DMRB	Design Manual for Roads and Bridges
DrWPA	Drinking Water Protection Area - designated areas in which the use of certain substances must be carefully managed to prevent the pollution of raw water sources that are used to provide drinking water
DSM	Digital surface model
DWS	An identify number reference used by West Sussex County Council for their archaeological notification areas
DWV	Drinking water values
EA	Environment Agency
EALs	Environmental assessment levels
EC	European Commission
EfW	Energy from waste - waste treatment that creates energy in the form of electricity and/or heat from a waste source that would have alternatively been disposed of in landfill, also called energy recovery
EIA	Environmental impact assessment – a means of drawing together, in a systematic way, an assessment of a project's likely significant effects. This helps to ensure that the importance of the predicted effects, and the scope for reducing them, are properly understood by the public and the relevant competent authority before it makes a decision
EIA Regulations	Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)

ELV	Emission limit values
Environmental effect	An alteration, positive or negative, to some aspect of the environment that occurs as a result of the proposed development
Environmental lighting zones	Defined by guidance notes for the Reduction of Obtrusive Light by the Institution of Lighting Professionals. Environmental lighting zone E3 is defined as a suburban area with medium district brightness and zone E4 is defined as an urban area with high district brightness
EPA	Environmental Protection Act
EPAQS	The Expert Panel on Air Quality Standards
EPUK	Environmental Protection UK
ERF	Energy recovery facility – a waste treatment facility that uses non-hazardous residual (post-recycling) waste as a fuel to generate energy
ES	Environmental statement – a document setting out the developer’s own assessment of a project’s likely environmental effects, which is prepared and submitted by the developer in conjunction with an application for consent or notice of proposed development
EQS	Environmental quality standards
Findspot	Archaeological term for the place where an object is found
fg/m ³	Femtograms per cubic metre
FGT	Flue gas treatment – the treatment of combustion gases from the furnace before they are released to atmosphere
FIDOL	A scale of exposure to odour - Frequency, Intensity, Duration, Odour unpleasantness and Location
Floodplain	A floodplain is an area of land adjacent to a stream or river which stretches from the banks of its channel to the base of the enclosing valley walls, and which experiences flooding during periods of high discharge
Flood zone 1	Less than 0.1% chance of flooding in any year, this is sometimes known as having a 1:1000 year chance
Flue gas	Gas by-product of the combustion process whose constituents may be polluting
FGT	Glue gas treatment
Fluidised bed	A type of combustion technology used for burning waste
Ford EfW Ltd	A joint venture between Grundon Waste Management Limited and Viridor.

FRA	Flood risk assessment
Furnace	Device used for high-temperature heating
GAC	Generic assessment criteria
Gasification	A process that converts organic or fossil-based carbonaceous materials into carbon monoxide, hydrogen and carbon dioxide. This is achieved by reacting the material at high temperatures (>700 °C) without combustion, with a controlled amount of oxygen and / or steam
Geocellular	Geocellular systems can be used to control and manage rainwater surface water runoff either as a soakaway or as a storage tank. The modular / honeycomb nature of geocellular systems means that they can be tailored to suit the specific requirements of any site.
Glare	The uncomfortable brightness of the light source against a dark background, which results in dazzling the observer and may cause nuisance to residents and a hazard to road users
GPA	Good practice advice (published by Historic England)
Grate	A metal structure that holds /supports the waste while it is being burnt
Greenfield runoff rate	The peak rate of runoff for a specific return period due to rainfall falling on a given area of vegetated land
Groundwater	Water flowing through, or contained beneath, the ground surface
Habitat	The natural environment of animals or plants
Ha	Hectare
HER	Historic Environment Record – a record of all known archaeological sites and finds, historic buildings and other aspects of the historic environment within a county
HGV	Heavy goods vehicle
HHRA	Human health risk assessment
HLC	Historic Landscape Characterisation (HLC) data from West Sussex County Council
HMIP	Her Majesty's Inspectorate for Pollution
HMP	Her Majesty's Prison
HRA	Habitat Regulations Assessment
Hydrogeology	The branch of geology concerned with water occurring underground or on the surface of the earth

IAQM	Institute of Air Quality Management
IBA	Incinerator bottom ash – the ash left after the waste has been combusted
IDF	Induced draft fan
IED	Industrial Emissions Directive
IEEP	Institute for European Environmental Policy
IEMA	Institute of Environmental Management and Assessment
Incineration	Chemical oxidation at high temperatures where organic material is converted into heat energy, flue gas or ash
IPPC	Integrated Pollution Prevention and Control
Iron Age	The Iron Age is the final epoch of the three-age division of the prehistory and protohistory of humanity. It was preceded by the Stone Age and the Bronze Age.
Island mode	Island mode operation relates to power plants that operate in isolation from the national or local electricity distribution network. Generators connected to the electricity grid in parallel mode, meaning they can generate power independently in the event of a grid power outage.
ISO	International Organisation for Standardisation
ISO9001	International quality management system
ISO14001	International environmental management system (EMS)
ISO45001	International health and safety management
ISO50001	International energy management system
JNCC	Joint Nature Conservation Committee
km	Kilometre
kV	Kilovolt - a unit of potential equal to a thousand volts
$L_{eq,T}$ or ambient noise	A noise level index called the equivalent continuous noise level over the time period T. Often described as the average
$L_{90,T}$ or background noise level	A noise level index defined as the noise level exceeded for 90% of the time over the time period T. L_{90} is used to describe the background noise
Landscape character	The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape
LAQM	Local air quality management
LCES	Lindsay Carrington Ecological Services
LDV	Light duty vehicle

LED lighting	Light-emitting diode lighting - is a semiconductor light source that emits light when current flows through it
LEMP	Landscape and ecological management plan
Listed building	A building that has been placed on a statutory list of buildings of special architectural or historic interest, designated under the Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990. There are three grades of listed status for buildings in England and Wales: Grade I: buildings of exceptional interest Grade II*: particularly important buildings of more than special interest Grade II: buildings that are of special interest, warranting every effort to preserve them
LOAEL	Lowest observed adverse effect level
Louvres	A door or window with flat sloping pieces of wood, metal, or glass across it to allow light and air to come in while keeping rain out
LPA	Local planning authority
LUC	Land Use Consultants
LVIA	Landscape and visual impact assessment
LVR	Local validation requirements
M&E	Mechanical and electrical systems
MAGIC	Multi-Agency Geographical Information for the Countryside
mbgl	Metres below ground level
Mesolithic	Middle Stone Age era from c. 10,000 – 6,000 BC. Nomadic hunter-gatherer groups populated the landscape
MDI	Mean daily intake – the typical intake from background sources across the UK
MHCLG	Ministry of Housing, Communities and Local Government
Microclimate	The climate of a very small or restricted area, especially when this differs from the climate of the surrounding area
Mitigation	Any process, activity or entity designed to avoid, reduce or remedy adverse environmental effects likely to be caused by a development project
M-LS	Manufactured LimeStone
MMP	Materials management plan
MORI	Market and Opinion Research International

Moving grate	A type of combustion technology used for burning waste, involving alternating fixed and moving grate rows that stoke the waste and convey it through the combustion chamber
MSW	Municipal solid waste
MW	Megawatts – a unit of power equal to one million watts
MWI	Municipal waste incinerator
MWth	Megawatt thermal
NCA	National character area
NCN	National cycle network
Neolithic	New Stone Age, first settled agrarian communities and monumental structures from c.4300 – 2500BC
NERC	Natural Environment and Rural Communities Act 2006
ng/m ³	Nanograms per cubic metre
NFPA	National Fire Protection Association
NH ₃	Ammonia
NHS	National Health Service
NO ₂	Nitrogen dioxide
NOAEL	No observed adverse effect level
NOEL	No observed effect level
NOx	Nitrogen oxides
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPSE	Noise Policy Statement for England
NSCA	National Society for Clean Air
NSR	A Noise Sensitive Receiver is any receiver that is classed as being sensitive to noise sources, (residential properties, churches, music studios etc.)
NTM	National Transport Model
NTS	Non-technical summary
NVZ	Nitrate vulnerable zone
Olfactory	Relating to the sense of smell
pg/m ³	Picograms per cubic metre
PAC	Powdered activated carbon

PAH	Polycyclic Aromatic Hydrocarbons
Palaeoenvironmental	An environment of a past geological age
Palaeolithic	Relating to or denoting the early phase of the Stone Age, lasting about 2.5 million years, when primitive stone implements were used
Paladin fence	Weldmesh security fence
PCB	Polychlorinated biphenyls
PEC	Predicted environmental concentration
Percentile	The value below which a given percentage of observations in a group of observations falls. For example, for the 99.79 th percentile of hourly mean nitrogen dioxide concentrations, 99.79% of the observations are below the given figure
Phase 1 habitat survey	A standardised system for surveying, classifying and mapping wildlife habitats
PHE	Public Health England
Photomontage	Photomontage is the process and the result of making a composite photograph by cutting, gluing, rearranging and overlapping two or more photographs into a new image. Sometimes the resulting composite image is photographed so that the final image may appear as a seamless physical print.
PM ₁₀	Particulate matter of 10 microns or smaller
PM _{2.5}	Particulate matter of 2.5 microns or smaller
PPG	Planning practice guidance
Principal aquifer	A principal aquifer is defined as a regionally extensive aquifer or aquifer system that has the potential to be used as a source of potable water
PROW	Public rights of way
PSL	Protected species licenses
Pyrolysis	Thermal decomposition of materials at elevated temperatures in an inert atmosphere
RAF	Royal Air Force
Rainwater harvesting	Technique of collection and storage of rainwater into natural reservoirs or tanks, or the infiltration of surface water into subsurface aquifers
Ramsar	The Ramsar Convention on Wetlands of International Importance especially as waterfowl habitat is an international treaty for the conservation and sustainable use

	of wetlands. It is also known as the Convention on Wetlands
Rating level (L_{A,r,T_r})	To BS 4142:2014+A1:2019, the rating level is defined as the equivalent continuous A-weighted sound pressure level produced by the specific sound source over a given reference time interval, T_r plus any adjustment for the characteristic features of the sound (tonality, impulsivity, etc.)
RCV	Refuse collection vehicle
Receptor	A component of the natural or man-made environment, such as water or a building, that is affected by an impact
Registered Parks and Gardens	The Historic England 'Register of Historic Parks and Gardens of special historic interest in England'
Residual effects	The significant environmental effects remaining after mitigation
Rotary kiln	A type of combustion technology used for burning waste, involving a kiln in which a sloping cylinder rotates and agitates the material inside
Runoff	Water flow over the ground to a drainage system
SAC	Special Area of Conservation – an area of international importance for nature conservation
SxBRC	Sussex Biological Record Centre
Scoping	The identification of the range of significant issues likely to arise as a result of a proposed development
SDNP	South Downs National Park
Secondary A aquifer	Secondary A aquifers comprise permeable layers that can support local water supplies, and may form an important source of base flow to rivers
SLR	Southern link road
SOAEL	Significant observed adverse effect level
Soil CN	Soil carbon – nitrogen ratio
SPA	Special Protection Area – an area of international importance for nature conservation designated under the EC Birds Directive
SPD	Supplementary planning document
SPZ	Source protection zone – a zone surrounding an aquifer where the contamination of the groundwater flow, due to surface spills, could pollute the aquifer. There are three zones: SPZ1 (inner zone): The 50-day travel time from any point

	below the water table to the source (minimum radius: 50 m)
	SPZ2 (outer zone): A 400-day travel time from a point below the water table (minimum radius: 250 or 500 m)
	SPZ3 (total catchment): the area around a source within which all groundwater recharge is presumed to be discharged at the source
SSE	Scottish and Southern Electricity
SSSI	Site of Special Scientific Interest – an area of national importance for nature conservation
Stack	Chimney / vertical exhaust pipe
Steam turbine	A turbine in which a high-velocity jet of steam rotates a bladed disc or drum
SuDS	Sustainable drainage systems
SVOC	Semi-volatile organic compounds
TCDD	2,3,7,8-tetrachlorodibenzo para dioxin
Test pits	A trial pit or test pit is an excavation of ground in order to study or sample the composition and structure of the subsurface, usually dug during a site investigation, archaeology survey, a soil survey or a geological survey
TDI	Tolerable daily intake (the amount of contaminant that can be ingested daily over a lifetime without appreciable health risks)
TEQ	Dioxins are usually referred to in terms of the toxic equivalent concentration
TOR	Terence O'Rourke
TPA	Tonnes per annum
TPH	Total petroleum hydrocarbons
$\mu\text{g}/\text{m}^3$	Micrograms per cubic metre
μm	One millionth of a metre
UK BAP	United Kingdom Biodiversity Action Plan
UPS	Uninterruptible power supply
USEPA	United States Environment Protection Agency
UST	Underground storage tank
UXO	Unexploded ordnance
Vibration	The periodic movements of structures transferred by ground and parts of the building, due to events such as train pass-by, piling, blasting or use of heavy machinery

VOC	Volatile organic compounds
VP	Viewpoint
VR	Visual receptor
WFD	Water Framework Directive
WHO	World Health Organisation
WSCC	West Sussex County Council
WSI	Written scheme of investigation
WSTF	Waste sorting and transfer facility
WSWCS	West Sussex Walking and Cycling Strategy
WSWLP	West Sussex Waste Local Plan
WTS	Waste transfer station
WWI and WWII	World War I and World War II
ZTV	Zone of theoretical visibility – the area over which the new development would potentially be visible