



Deephams Sewage Works Upgrade

Environmental Statement

Volume 2 of 3: Environmental Statement



**Deephams
Sewage Works Upgrade**
Creating a cleaner, healthier River Lee

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GLOSSARY OF TERMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	Micrograms per cubic metre - A measure of concentration in terms of mass per unit volume. A concentration of $1\mu\text{g}/\text{m}^3$ means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant.
AADT	Annual Average Daily Traffic
AAI	Area of Archaeological Importance
Accuracy	A measure of how well a set of data fits the true value.
ADMS	Atmospheric Dispersion Modelling System - A model used to predict the behaviour of emissions released into the atmosphere
Air Quality Standard	The concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects on sensitive sub groups (see also air quality objective).
AOD	Above ordnance datum - The unit expressing the altitude at a given spot height relative to a common reference point (datum).
AOSC	Area of Special Character
Ambient Air	Outdoor air in the troposphere, excluding workplace air.
AMP	Asset Management Plan – A plan setting out a water company’s proposed spending plans for the forthcoming 5 year period. AMP6 will start in 2015 and continue to 2020.
Annual Mean	The average (mean) of the concentrations measured for each pollutant for one year. Usually this is for a calendar year, but some are reported for the period April to March, known as a pollution year. This period avoids splitting winter season between 2 years, which is useful for pollutants that have higher concentrations during the winter months.
AQMA	Air Quality Management Area
AQMS	Automated Water Quality Monitoring System
AQO	Air Quality Objective - Policy target generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances within a specific timescale (see also air quality standard).
AQS	Air Quality Strategy
ASP	Activated Sludge Process – Method for treating sewage by aeration and biological activity.
ASPT	Average Score Per Taxon – Calculated by dividing the total number of families by the total number of taxa (each organism is a taxon).
BAP	Biodiversity Action Plan
BGS	British Geological Survey
BOD	Biochemical Oxygen Demand – The amount of oxygen required by aerobic microorganisms to decompose the organic matter in a sample of water, such as that polluted by sewage. Used as an indicator of water quality.
BP	Before Present

CAMS	Catchment Abstraction Management Strategy
CAS	Conventional Activated Sludge – Common secondary sewage treatment process using aeration and biological activity.
CBA	Cost Benefit Analysis
CDA	Critical Drainage Areas – Areas identified in Local Flood Risk Zones (LFRZs) in which houses, businesses and/or infrastructure are at significant risk of flooding.
CEEQUAL	Assessment and Awards Scheme for improving sustainability in civil engineering, infrastructure, landscaping and public realm projects
CFA	Continuous Flight Auger - A low impact piling method
CFMP	Catchment Flood Management Plan
CHP	Combined Heat and Power – Production of usable heat and power in a single process.
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
CLEA	Contaminated Land Exposure Assessment
CLR	Contaminated Land Report
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CRTN	Calculation of Road Traffic Noise
cSAC	Candidate Special Area of Conservation
DCO	Development Consent Order
DEFRA	Department for Environment, Food and Rural Affairs.
DFMA	Design for Manufacturing and Assembly
DfT	Department for Transport
DMD	Development Management Document
DMRB	Design Manual for Roads and Bridges
DSP	Delivery and Servicing Plan
DWF	Dry Weather Flow – Flow of sewage through a treatment works during periods of dry weather. A term used in setting environmental permits for sewage works.
EA	Environment Agency
EAL	Environmental Assessment Levels – UK standards for air quality.
EcIA	Ecological Impact Assessment
Effluent	The final treated sewage which is discharged from a sewage works into a watercourse.
EFT	Emission Factor Toolkit
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan

EPA	Environmental Protection Act
EPAQS	Expert Panel on Air Quality Standards
EPUK	Environmental Protection UK
ES	Environmental Statement
Exceedance	A period of time where the concentrations of a pollutant is greater than, or equal to, the appropriate quality standard.
FALP	Further Alterations to the London Plan
FAS	Flood Alleviation Scheme
FDSP	Framework Delivery and Servicing Plan
FFD	Freshwater Fish Directive
FRA	Flood Risk Assessment
FST	Final Settlement Tank - Tank in which secondary treated sewage is settled to remove solids before discharge or further tertiary treatment.
FTFT	Flows to Full Treatment – The maximum flow that can be fully treated by a sewage works.
Fugitive Emissions	Emissions arising from the passage of vehicles that do not arise from the exhaust system.
GAC	Generic Assessment Criteria or Granular Activated Carbon
GEM	Groundwater Emergence Maps
GiGL	Greenspace Information for Greater London
GLA	Greater London Authority
GLAAS	Greater London Archaeological Advice Service
GLHER	Greater London Heritage Environment Record
GLVIA3	Guidelines for Landscape and Visual Impact Assessment, IEMA (2013) 3rd Edition
GTA	Guidance on Transport Assessment
GSV	Gas Screening Value – A threshold concentrations for a given gas.
HAP	Habitat Action Plan
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment - a tool and procedure for estimating the impact of a proposed programme, policy or project on environmental health issues for a defined population.
HMWB	Heavily Modified Water Body
HRA	Habitats Regulations Assessment
HSE	Health and Safety Executive
HSI	Habitat Suitability Index
HUDU	Healthy Urban Development Unit
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment

IfA	Institute for Archaeologists
IFAS	Integrated Fixed Film Activated Sludge – A secondary sewage treatment process.
iPEG	Increased Potential for Elevated Groundwater
LAQM	Local Air Quality Management
LAQM.TG	Local Air Quality Management Technical Guidance
LAQN	London Air Quality Network
LBE	London Borough of Enfield
LCV	Light Commercial Vehicle/ Car
LDF	Local Development Frameworks
LFRZ	Local Flood Risk Zones
LLFA	Lead Local Flood Authority
LNR	Local Nature Reserve
LVIA	Landscape and Visual Impacts Assessment
LVRP	Lee Valley Regional Park
LVRPA	Lee Valley Regional Park Authority
LWS	Local Wildlife Sites
MBGL	Metres below Ground Level
MBR	Membrane Bio-Reactor – A secondary and tertiary sewage treatment process.
MCC	Motor Control Centre – Enclosed section containing an assembly of motor controls.
NATA	New Approach to Appraisal
NEP	National Environment Programme
NERC Act	Natural Environment and Rural Communities Act 2006
NH ₃ -N	Ammoniacal Nitrogen - A measure of the amount of ammonia available in water. Used as an indicator of water quality.
NLRP	North London Reinforcement Project
NNR	National Nature Reserve
NO	Nitrogen Monoxide (also known as nitric oxide)
NO ₂	Nitrogen Dioxide
NO _x	Nitrous Oxides –One or a combination of different compounds of nitrogen and oxygen (e.g. NO and NO ₂).
NPPF	National Planning Policy Framework
PE	Population Equivalent – pollutant load to a sewage works from all sources expressed as an equivalent pollution load per capita of pollution
PPG	Planning Practice Guidance

NPSE	Noise Policy Statement for England¹
NPS	National Policy Statement for Waste Water²
NSIP	Nationally Significant Infrastructure Project
NSR	Noise Sensitive Receptor
O ₃	Ozone - A molecule consisting of three oxygen atoms
OA	Oxford Archaeology
OCU	Odour Control Unit
OMP	Odour Management Plans
OWMP	Outline Waste Management Plan
PAH	Polycyclic Aromatic Hydrocarbon – Collective term for a group of chemicals containing carbon and hydrogen which are known to be hazardous.
PC	Process Contribution – for air quality.
PE	Population Equivalent – The pollution load to a sewage works from various different sources such as industrial, commercial and residential areas, expressed in terms of the number of people that would generate the same polluting load in household sewage.
PEC	Predicted Environmental Concentration – For air quality, equal to the sum of Process Contribution and Background Concentration.
Percentile	The percentage of results below a given value.
PFRA	Preliminary Flood Risk Assessment
PM	Particulate Matter – Particles in the air, usually discussed in terms of PM10 and PM2.5 (the concentration of particles less than 10 and 2.5 micrometers in diameter respectively)
PM ₁₀	Particulate matter with a diameter of less than 10 micrometres
PM _{2.5}	Particulate matter with a diameter of less than 2.5 micrometres
PPB	Parts Per Billion - The concentration of a pollutant in the air in terms of volume ratio. A concentration of 1 ppb means that for every billion (10 ⁹) units of air, there is one unit of pollutant present.
PPG	Planning Practice Guidance
PPM	Parts Per Million - The concentration of a pollutant in the air in terms of volume ratio. A concentration of 1 ppm means that for every million (10 ⁶) units of air, there is one unit of pollutant present.
PPC	Pollution Prevention and Control
PPF	Planning Policy Framework
PPG	Pollution Prevention Guidelines
PPS	Planning Policy Statement
PRoW	Public Right of Way

¹ DEFRA, (2010) 'Noise Policy Statement for England'

² National Policy Statement for Waste Water: A framework document for planning applications on nationally significant infrastructure projects. Defra, 2012

PS	Pumping Station
PST	Primary Settlement Tank – A tank through which screened sewage passes to remove solids prior to secondary treatment.
PWS	Potential Wildlife Sites
RAS	Return Activated Sludge - A proportion of activated sludge biomass returned from the final settlement tanks back to the aeration lanes.
Ratification	Involves a critical review of all information relating to a data set, in order to amend or reject the data. When the data have been ratified they represent the final data to be used (see also validation).
RBMP	River Basin Management Plan
REMA	Revised Early Minor Alterations (to the London Plan)
RFRA	Regional Flood Risk Appraisal
RIGS	Regionally Important Geological/Geomorphological Sites
SAC	Special Area of Conservation
SAP	Species Action Plan
SAS	Surplus Activated Sludge – The waste activated sludge from the final settlement tanks which is sent to the sludge treatment plant.
SBI	Site of Biodiversity Interest
SBINC	Site of Borough Importance for Nature Conservation
SMINC	Site of Metropolitan Importance for Nature Conservation
SFRA	Strategic Flood Risk Assessment
SGV	Soil Guideline Value - Issued by the Environment Agency
SIL	Strategic Industrial Location
SINC	Sites of Importance for Nature Conservation
SMINC	Site of Metropolitan Importance for Nature Conservation
SO ₂	Sulphur Dioxide
SOM	Soil Organic Matter
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
STP	Staff Travel Plan
SuDS	Sustainable Drainage Systems
SVOC	Semi-Volatile Organic Compounds - Collective term for a group of chemicals which have a high vapour pressure at room temperature causing them to evaporate and enter the surrounding air.
SWMP	Site Waste Management Plan
TAG	Transport Analysis Guidance (online version also referred to as WebTAG)

TfL	Transport for London
THP	Thermal Hydrolysis Plant - A sludge treatment process.
TIS	Transport Implementation Strategy
TP	Travel Plan
TPO	Tree Preservation Order
TS	Transport Statement
TSS	Total Suspended Solids – the organic and inorganic particles suspended in the water column. Used as an indicator of water quality.
TTP	Tertiary Treatment Plant – A plant providing a final polishing stage (for example by fine filtration) before treated effluent is discharged into the environment.
UDP	Unitary Development Plan
UKAS	UK Accreditation Service
Uncertainty	A measure, associated with the result of a measurement, which characterizes the range of values within which the true value is expected to lie. Uncertainty is usually expressed as the range within which the true value is expected to lie with a 95% probability, where standard statistical and other procedures have been used to evaluate this figure. Uncertainty is more clearly defined than the closely related parameter 'accuracy', and has replaced it in recent European legislation.
US EPA	US Environmental Protection Agency
USA	Updating and Screening Assessment
UWWTD	Urban Wastewater Treatment Directive
Validation (modelling)	The general comparison of modelled results against monitoring data carried out by model developers.
Validation (monitoring)	Screening monitoring data by visual examination to check for spurious and unusual measurements (see also ratification).
Verification (modelling)	Comparison of modelled results versus any local monitoring data at relevant locations.
VOC	Volatile Organic Compounds - The collective term for a group of chemicals which have a high vapour pressure at room temperature causing them to evaporate and enter the surrounding air.
WAC	Waste Acceptance Criteria (determined by the Environment Agency)
WebTAG	see TAG
WFD	Water Framework Directive
WHO	World Health Organisation
WLC	Whole Life Cost
WMP	Water Management Plan
ZTV	Zone of Theoretical Visibility - The computer-generated extent of visibility of a development.