Flow Information

Information for preliminary assessment

Basic information we require:

	Please specify information below
• development staging timelines	
• yearly Average Day Demand (ADD) flow profile, and yearly Maximum Day Demand (MDD) flow profile – specifically, the first 10 years	
• wastewater discharge volumes as a ratio of the water demand, and indicative quality of discharge	
• on-site storage (about 2 days capacity) for each stage of the development and/or efficiency measures you've considered	
• number of jobs anticipated and staged uplift per year, where applicable	
• differentiated requirements for drinking water (such as jobs or office use) vs water that could be provided from alternative sources (such as process or cooling water)	

Additional information for detailed assessment

Provide the staging of the development by showing the yearly:

• ADD	
• maximum hour demand (so we understand the impact on our network during peak hours)	
• high demand days (such as 95th percentile, or high-demand 5–10 days per year)	
• MDD (peak day – such as 1 day in 10 years, or some other frequency)	
• wastewater discharge or flows, and quality	

Provide one of the following (for ultimate development as a minimum):

• expected daily average usage over a year	
• expected monthly average daily usage over a year	
• daily daytime usage based on a high-demand day. The preferred usage pattern should reflect how much water the facility draws from our mains and not its internal usage. However, if we understand the facility's internal water usage, we'll have insight into potential draws from the system. You can show us that you've leveraged appropriate water efficiency and recycling opportunities within the operation.	
We also need to see the facility's total or integrated water management plan (all products, considering a range of supply scenarios, including alternative supplies). Please separate requirements for drinking water (such as for jobs or office use) vs water that could be provided from alternative sources (such as process or cooling water), and identify on-site storage capacity.	

Wastewater Discharge Characterisation

Please provide source of data for wastewater discharge and quality

Parameter	Units	Please specify information below Specify concentration of component in discharge
Temperature	°C	
pH	–	
Electrical Conductivity (EC)	µS/cm	
Alkalinity (as $CaCO_3$)	mg/L	
Alumunium (Al)	µg/L	
Ammonia (NH_3 N / NH_4 N)	mg/L	
Biochemical Oxygen Demand (BOD_5)	mg/L	
Cadmium (Cd)	µg/L	
Calcium (Ca^{2+})	mg/L	
Chemical Oxygen Demand (COD)	mg/L	
Chloride (Cl^-)	mg/L	
Chromium (Cr)	µg/L	
Copper (Cu)	µg/L	
Fluoride	mg/L	
Chlorine (total & free)	mg/L	
Hardness (total)	mg/L as $CaCO_3$	
Iron (Fe)	µg/L	
Lead (Pb)	µg/L	
Magnesium (Mg^{2+})	µg/L	
Manganese (Mn)	µg/L	
Mercury (Hg)	µg/L	
Molybdenum	µg/L	
Nickel (Ni)	µg/L	
Nitrate + Nitrite (NO_x^- N)	mg/L	
Non oxidising biocides (type + conc.)	µg/L	
Orthophosphate (PO_4 P)	mg/L	
Phosphonates	mg/L	
Silica (SiO_2)	mg/L	
Sodium (Na^+)	mg/L	
Sulphate (SO_4^{2-})	mg/L	
Total Dissolved Solids (TDS)	mg/L	
Total Kjeldahl Nitrogen (TKN)	mg/L	
Total Nitrogen (TN)	mg/L	
Total Organic Carbon (TOC)	mg/L	
Total Phosphorus (TP)	mg/L	
Total residual oxidants	mg/L	
Total Suspended Solids (TSS)	mg/L	
Zinc (Zn)	µg/L	
SILVER	µg/L	
GREASE	mg/L	
PHENOLIC COMPOUNDS	µg/L	
FILTERABLE SODIUM	mg/L	
FILTERABLE CALCIUM	mg/L	
FILTERABLE MAGNESIUM	mg/L	

On site additives

Chemical Category	Examples (non exhaustive)	Information Required	Please specify information below (add rows as required to ensure full list of additives) Chemical name	Concentration at discharge
Corrosion inhibitors	Phosphates, phosphonates, zinc compounds, molybdate	Chemical name, concentration at discharge		
Scale inhibitors	Phosphonates, polyacrylates	Chemical name, concentration at discharge		
Oxidising biocides	Chlorine, bromine, sodium hypochlorite	Chemical name, concentration at discharge		
Non oxidising biocides	Isothiazolin, glutaraldehyde, DBNPA, quats	Chemical name, concentration at discharge		
Algaecides	Copper based, polymeric algaecides	Chemical name, concentration at discharge, Cu content		
pH control agents	Sulphuric acid, caustic soda	Chemical name, concentration at discharge		
Oxygen scavengers	Sodium bisulphite	Chemical name, concentration at discharge		
Antifoams	Silicone based antifoams	Chemical name, concentration at discharge		
Misc. additives	Surfactants, dispersants	Chemical name, concentration at discharge		