

9. Summary and Conclusions

9.1 Summary

- 9.1.1 Thames Water is proposing a major Upgrade of Deephams Sewage Works within the London Borough of Enfield in north-east London. The Deephams Sewage Works treat sewage collected from a catchment that extends over large parts of north east London and northwards beyond the M25. It is Thames Water's fourth largest Works, serving a population equivalent of 891,000 (as of 2011).
- 9.1.2 The Sewage Works discharges treated effluent into the Salmons Brook, a tributary of the River Lee, in accordance with an environmental permit set by the Environment Agency. The Environment Agency has issued a significantly tighter environmental permit that requires Thames Water to make improvements to the quality of the discharged effluent. The new permit comes into force in March 2017.
- 9.1.3 The new permit is driven by the requirements of European Directives, the strategic need for the project having been confirmed by the inclusion of the Deephams Sewage Upgrade as a named project within the National Policy Statement for Waste Water (2012) and in the Environment Agency's National Environment Programme.

9.2 Conclusions

- 9.2.1 The Upgrade will meet the environmental permit requirements for the quality of effluent (treated wastewater) discharged from Deephams Sewage Works into Salmons Brook. With ageing sewage works infrastructure, much of which is now 50 years old, Thames Water will deliver through the Upgrade sewage treatment for North London that is 'fit for purpose', supports population growth and regeneration proposals in the catchment and is sustainable in the long-term.
- 9.2.2 A key component of the project is that it will deliver a significant reduction in odour emissions from the sewage works. Thames Water has worked closely with London Borough of Enfield on odour as part of preparing this planning application, and it has increased the level of odour reduction and odour mitigation following periods of public consultation in 2012 and 2014. Thames Water is committed to significantly reducing both the number of properties that experience odour and the level of odour that is experienced. All properties in the vicinity of Deephams Sewage Works will experience a significant reduction in odour as a result of the Upgrade, with the number of properties most or moderately affected by odour reducing by 99%.
- 9.2.3 In determining that the Upgrade scheme is the most appropriate means of the Deephams Sewage Works meeting its more stringent consent requirements, Thames Water undertook a comprehensive assessment of alternatives. This determined that the use of the existing Deephams Sewage Works site has significant advantages over other shortlisted sites, being an existing operational site into which all of the sewers within the catchment already drain.
- 9.2.4 The Upgrade is nevertheless a complex project, as it has to be delivered whilst the existing sewage works remains operational and continues to treat the sewage to the existing permit requirements. This requirement to remain operational throughout the Upgrade places significant engineering constraints on the project. This is addressed through the detailed phasing proposed during construction.

- 9.2.5 The impacts of the construction and operation of the Upgrade scheme have been carefully considered in the Environmental Statement, along with a raft of supporting documents that accompany the planning application. The Upgrade is of substantial scale and a number of sensitive resources and receptors are present both within and in proximity of the Site. Through comprehensive mitigation to be employed during the scheme, residual adverse effects are limited, as identified in ES Chapter 19. Any localised residual adverse effects, almost all of which will arise during the construction stage only, must be weighed against the need to meet the new environmental permit and wider benefits that the Upgrade will bring in terms of water quality within the Blue Ribbon Network, facilitating growth and regeneration, and reducing odour.
- 9.2.6 The scheme has been extensively tested against relevant planning policy and guidance. The principle of the development is specifically confirmed by Government through the NPS for Waste Water which outlines a clear statutory driver for the scheme in meeting European and national water quality targets. The Upgrade also meets the requirements and considerations set out in the NPS for Waste Water, which may be a material consideration in decision making on applications under the Town and Country Planning Act (1990) (paragraph 1.1.7).
- 9.2.7 Not delivering the Upgrade of Deephams Sewage Works would result in a failure to improve effluent quality in accordance with the environmental permit. It would threaten to undermine significant regeneration and growth proposals, both in the Upper Lee Valley and the wider catchment. Failure to deliver a modern sewage treatment facility would require the continued reliance upon infrastructure that is coming to the end of its useful life, and require the continuation of the current energy and process inefficient operations at the existing sewage works. Failure to deliver the planned significant reduction in odour emissions would mean that the existing odour from the site would continue, with the number of residential and commercial properties affected remaining at the same level as currently. For all of these reasons, Thames Water considers that there is no option but to meet the identified need through the delivery of an Upgrade to the Deephams Sewage Works.
- 9.2.8 It has been comprehensively demonstrated through the Planning Application supporting documents that the scheme accords with the policy contained within the NPPF and it meets the requirements of the NPPG. The proposed development also meets the relevant development control policy requirements set out in the London Plan and LBE's development plan. Emerging policy has also been accounted for, where relevant. Critically, the proposals are consistent with the regeneration objectives of the area and will support sustainable growth in the Upper Lee Valley.
- 9.2.9 The Upgrade proposals meet a clear statutory need within an existing operational sewage works in a form which is acceptable in terms of development plan policies and other material considerations.
- 9.2.10 In accordance with the statutory test set out in Section 38(6) of the Planning and Compulsory Purchase Act 2004 and as directed by the NPPF, where there is a presumption in favour of sustainable development, it is considered that the Deephams Sewage Works Upgrade accords with development plan policies and that the planning application for the Upgrade should therefore be approved without delay.