

Appendix II ♦ Development plan policy

INTRODUCTION

A2.1 Development plans are produced by regional, county and local planning authorities in accordance with statutory procedures to guide the development and use of land and provide a framework for the determination of individual planning applications. Development plan policy can thus exert an important influence on the design of projects of this nature.

A2.2 The Planning and Compulsory Purchase Act 2004 replaced the established system of structure, local and unitary development plans with a new development plan system comprising regional spatial strategies (RSS) and local development frameworks (LDFs). According to *Planning Policy Statement 12: Local Development Frameworks* (2004):

1.6. Planning decisions on proposals for development or change of use should not be arbitrary. The Government is committed to the well-established principle of a planned system. The statutory development plan will continue to be the starting point in the consideration of planning applications for the development or use of land (Section 38(6) of the Act). The development plan, therefore, provides the essential framework for planning decisions.

1.7 The development plan will consist of:

- i. regional spatial strategies prepared by the regional planning bodies or, in London the spatial development strategy prepared by the Mayor of London; and*
- ii. development plan documents prepared by district councils, unitary authorities, Broads authority, National Park authorities and, in the case of minerals and waste development plan documents, by county councils.*

A2.3 Work on new-style development plan documents in Lewes and East Sussex is at an early stage. In the current context, the development plan thus comprises:

- Regional Planning Guidance for the South East (RPG9), 2001;
- saved policies of the East Sussex and Brighton & Hove Structure Plan, adopted 1999;
- East Sussex and Brighton & Hove Waste Local Plan, adopted 2006;
- saved policies of the Lewes District Local Plan, adopted 2003.

A2.4 The current status of adopted development plans relevant to the Peacehaven project is as follows. On 21 September 2007 the Secretary of State issued her decision with respect to which policies of the **East Sussex and Brighton & Hove Structure Plan** would be saved. This plan was adopted in

December 1999 and was due to expire on 27 September 2007. Many structure plan policies have been saved, although all of the structure plan's waste policies, including policy W18 which addressed wastewater specifically, have expired.

A2.5 The **East Sussex and Brighton & Hove Waste Local Plan** will be 'saved' for three years after adoption. In other words, it will expire in February 2009, having been adopted by the County Council in February 2006.

A2.6 The **Lewes District Local Plan** was also due to expire on 27 September 2007. The majority of its policies have been saved by the Secretary of State, although three Peacehaven and Telscombe policies have expired - PT4 (Telscombe Cliffs Way), PT14 (coast protection works and access to the beach) and PT22 (neighbourhood centres).

A2.7 East Sussex County Council does not intend to undertake consultation on its Waste and Minerals Core Strategy until September 2008, and the programme for producing site-specific waste policies has not been confirmed. Lewes DC consulted on the preferred options for its core strategy late in 2006. However, GOSE has informed the council that this work needs to be reviewed. The 'local development scheme' which sets the programme for plan production in the district is thus being revised, and Lewes DC will undertake further consultation on core strategy issues and options.

RPG9: REGIONAL PLANNING GUIDANCE FOR THE SOUTH EAST

A2.8 RPG 9, published in 2001, provides the regional planning context for the proposal and is now a component of the development plan under the terms of the Planning and Compulsory Purchase Act 2004. In June 2006, the Government Office for the South East published revised waste and minerals chapters for RPG9, following the publication of alterations for consultation. A significant objective of the revised waste guidance is to promote the principles of sustainable development. RPG9 recognises that waste management and energy considerations are important facets of sustainability in the region.

A2.9 Revised policy W2 promotes sustainable design, construction and demolition, and encourages the promotion of *'layouts and designs that provide adequate space to facilitate storage, re-use, recycling and composting'*. As will be explained, the submitted design for the wastewater treatment works at Peacehaven includes a recycling centre for sewage sludge. This would employ an anaerobic digestion process, which is a form of composting that takes place in sealed, oxygen-free, conditions. The treatment works design also provides space for the storage of the sludge granules produced, so that they can be kept on site in sacks until required on farms for use as a soil nutrient. Revised policy W12 of RPG9 encourages 'the development and demonstration of anaerobic digestion . . .'. The policy also encourages the use of combined heat and power systems (CHP).

A2.10 Southern Water's proposed wastewater treatment works design incorporates a CHP plant that would meet approximately a quarter of the works' overall energy demand, using the methane generated during the sewage sludge digestion process as a renewable fuel source. This design approach is consistent also with RPG9's amended policy INF4, which promotes energy efficiency and the use of renewable energy resources, and amended policy

INF5, which supports the use of combined heat and power.

A2.11 Policy INF2 highlights that new development should be located to allow for the *'timely investment in sewage treatment and discharge systems to maintain the appropriate standard of water quality'*. The need for statutory sewage undertakers to invest continually in wastewater treatment in order to enhance the capacity of treatment in the region and to improve water quality is also acknowledged. RPG9 advises that development plans should make provision for the necessary facilities.

A2.12 Southern Water's project is consistent with the objectives of RPG9 with respect to the timely investment in sewage treatment and discharge systems to maintain the appropriate standard of water quality. The project design responds to relevant guidance in the revised waste policies of RPG9.

EAST SUSSEX AND BRIGHTON & HOVE STRUCTURE PLAN

A2.13 The following saved policies are relevant to the current planning application.

Strategy for a more environmentally sustainable future

A2.14 Policy S1 of the structure plan provides 'twenty-one criteria for the 21st century', of which the following are considered relevant in the current context:

S1 In order to meet the needs for development and change in the plan area in a way that is more environmentally sustainable in the longer term, all planning activities and development decisions should take account of the following criteria. Where appropriate, local planning authorities may require proposals for development to demonstrate how far they contribute to the achievement of these criteria. The criteria are . . .

b). minimising impact on the environment, including residential areas, and compensating for the loss of environmental resources where their loss is acceptable and unavoidable in order to achieve other policies in the plan . . .

A2.15 The approach taken by Southern Water with respect to the minimisation of adverse environmental effects is explained in detail in the *Environmental Statement* that accompanies the planning application. The core purpose of the project is to reduce the effects of existing wastewater discharges in the marine environment by improving treatment standards. The project has been designed in a manner sensitive to its surroundings.

d). not creating or perpetuating unacceptable traffic or transport conditions;

A2.16 Chapter 11 of the *Environmental Statement* explains that the treatment works will generate only low volumes of road traffic once in operation. It also identifies mitigating measures to manage construction traffic in the interests of local residential amenity, highway safety and the need to avoid contributing to

local road congestion where possible.

e). efficient and effective renewal and re-use of existing premises and 'brown' sites, particularly in the urban areas to reduce the need for greenfield sites;

A2.17 The *Site Selection Report*, which is appended to the Environmental Statement and updated in the *Site selection review and update* report, describes the lengths to which Southern Water went to identify a brownfield site for the treatment works before concluding that no suitable brownfield option was available.

f). protecting and enhancing the attractiveness and individual character of urban and rural areas for residents, businesses and visitors;

A2.18 The wastewater treatment project is intended to protect and enhance the marine and coastal environments along the Sussex coast. This design and access statement explains how Southern Water has pursued a design strategy that seeks to integrate surface elements of the project into the landscape whilst facilitating the delivery of amenity open space and the creation of new wildlife habitats.

g). protecting and enhancing water quality and maintaining groundwater and river levels for human consumption, industrial and agricultural water supply and to support local biodiversity . . .

A2.19 The fundamental aim of the current project is to ensure cleaner seas off the Sussex coast. The project design takes into account the need to protect groundwater. The landscape strategy for the main treatment works site promotes biodiversity through the creation of new wildlife habitat in the site of what is currently arable farmland.

i). protecting and enhancing air quality, including the reduction of air pollution and the emission of greenhouse gases;

A2.20 The project has been designed in a manner that would ensure that all elements of infrastructure likely to give rise to odour will be covered or enclosed. The treatment works will incorporate an advanced odour control plant to clean air from inside buildings prior to its controlled and monitored release to the external environment.

j). according with the objectives of and not causing damage to the Sussex Downs and High Weald Areas of Outstanding Natural Beauty (AONB), Ashdown Forest, downland, wetland, open heathland, ancient woodlands, undeveloped coast (including Heritage Coast), Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA), Special Areas of Conservation (SAC), Ramsar sites, nature reserves, ancient monuments,

conservation areas, historic parks and gardens, battlefields and other areas of designated or recognised important landscape, archaeological, geological, ecological or historical character and their settings;

A2.21 The project has been designed to avoid, where possible, protected areas. The landscape works proposed to the north of the treatment works north of Peacehaven would include a small area of land within the Sussex Downs AONB. However, the intentions of these landscape measures are to ensure the effective containment of the treatment works in views southward from the AONB and to maintain the area's rural character. The proposed green roof of the main treatment works buildings will also support this objective. Furthermore, this marginal area of the planning application site is outside the proposed boundary of the South Downs national park.

A2.22 The Portobello headworks, including the pumping station site, lies within the Sussex Downs AONB, which extends from downland to the north to the cliff edge in the south, across a corridor of land that includes Telscombe Tye. As explained in Part C of this document, the pumping station design seeks to respect the natural beauty of the downland area. It would be set into the ground within an existing operational headworks site to the south of the A259 South Coast Road, and would have a grassed roof.

A2.23 The proposed boundary for the South Downs national park excludes Southern Water's Portobello headworks site.

k). preventing development which would reduce strategic and other important gaps of valued countryside between settlements . . .

A2.24 The proposed treatment works would not lie within any strategic gap, and would not lead to the coalescence of Peacehaven and adjacent settlements. The proposed pumping station at Portobello would be largely underground with a grass roof design that is intended to maintain the character of the gap between Saltdean and Telscombe Cliffs.

n). protecting agricultural land and preventing development on the best and most versatile (grades 1, 2 & 3a);

A2.25 The proposed treatment works design employs compact process technologies to reduce the footprint of the development. The treatment works development at Peacehaven would take 5.4 ha of grade 2 and 3a farmland irreversibly out of agricultural production. This is not regarded as a strategically significant loss.

o). disposing of waste in an environmentally acceptable and economically practical manner by reducing waste generation, increasing the re-use and treatment of waste, and minimising disposal to land;

A2.26 The disposal of waste in an environmentally acceptable manner, which accords with national policy and guidance, is a central objective of the current proposals. The treatment works design includes provision for sewage sludge recycling, a process that will produce a benign soil enrichment 'bioproduct' for use on farms and elsewhere.

q). making efficient and effective use of existing or planned infrastructure and services;

A2.27 A significant design consideration for the current proposals was the need to make efficient and effective use of existing sewerage infrastructure in the drainage catchment.

r). being energy efficient and taking advantage of ambient sunlight;

s). avoiding and reducing unnecessary noise and artificial lighting;

A2.28 Passive solar design would bring little practical benefit to the treatment works buildings, and the installation of additional glazing to provide enhanced daylighting within the buildings needs to be balanced with the concern to minimise the scope for light pollution from windows and rooflights at night. However, the sludge recycling process would incorporate energy recovery, employing the methane generated during the anaerobic digestion of the sludge as a renewable fuel source for an on-site combined heat and power plant.

A2.29 As chapter seven of the environmental statement explains, noise-generating plant in the treatment works would be contained within buildings, as will the vehicle manoeuvring areas required in connection with the sludge recycling centre.

A2.30 Other than for the loss of high quality agricultural land, the design of Southern Water's proposals responds to, or otherwise complies with, relevant criteria of saved structure plan policy S1.

Infrastructure

S2 Infrastructure providers are expected to plan their investment programmes to meet the provisions set out in this plan. In allocating land for development, local plans and development briefs should identify the necessary additional infrastructure and facilities required as a consequence of the development and the means of providing them.

S3 In all cases development will not be permitted before the relevant planning authorities are satisfied that the infrastructure and facilities required to service the development are available or will be provided. This policy may involve the direct provision of capital works by developers, or commuted payments by landowners or developers towards the cost, in whole or part, of works to be provided by others.

A2.31 The project is an essential infrastructure investment in the Brighton and Hove area. The design is based upon a 'population equivalent' that takes account of planned developments and anticipated future increases in the population of the drainage catchment.

The countryside

S10 Outside defined town and village boundaries agriculture and woodland will remain the main land uses and development and change in the countryside will be strictly controlled.

a). Proposals for new development in the countryside will be required to demonstrate that a countryside location is necessary and that a town or village location would not be suitable.

b). In the countryside, conversions and/or changes of use of existing buildings for employment, recreation, tourist accommodation and facilities, and institutional uses will be supported, without the need to demonstrate that a countryside location is necessary, provided:

i). their form, bulk and general design are in keeping with their surroundings; and

ii). the use is appropriate to the area in terms of scale, type and impact on its surroundings (including traffic impact and impact on the vitality of towns and villages)...

A2.32 The *Site Selection Report*, which is appended to the Environmental Statement and updated in the *Site selection review and update* report, explains that a greenfield site on Peacehaven's urban fringe was selected for the proposed treatment works only after a comprehensive review of site options had determined that no suitable brownfield alternative was available.

A2.33 Later chapters of this design and access statement explain the engineering, architectural and landscape measures proposed by Southern Water to deliver acceptable development in terms of its scale, type and impact. The design of both of the principal above-ground elements of the project – the treatment works and pumping station – incorporates green roofs and other landscape measures to help ensure that the developments are sensitive to their settings.

General environment policy

EN1 Development and change will be required to sustain, conserve and, where possible, enhance the character, local diversity and quality of the landscape and natural and built environment of the plan area including, where appropriate, the creation of new, equally good and distinctive local character. Features contributing to landscape character will be protected. A landscape assessment of the plan area will be carried out and advice provided as supplementary planning guidance for use in local plans.

A2.34 This design and access statement explains how the general environmental considerations set out in policy EN1 with respect to landscape and local character, protection of the natural and built environment and the creation of new landscape character have each influenced the current project.

Areas of Outstanding Natural Beauty (AONB) and downland

EN2 Conserving and enhancing landscape quality and character will be the primary objective in the Sussex Downs and High Weald Areas of Outstanding Natural Beauty. This will be sought through measures including:

- a). careful control of development;***
- b). programmes of countryside management and enhancement, including the restoration of key features such as chalk grassland and heathland;***
- c). promoting local awareness;***
- d). supporting the viability of the local economy in ways which are compatible with the primary objective;***
- e). traffic management and traffic calming; and***
- f). minimising the impact of any development within AONBs, or close to them and affecting their setting, by measures to carefully integrate the development into the AONB landscape and, where appropriate, providing compensating environmental resource for any necessary loss that is accepted.***

EN3. In order to protect and promote the quiet enjoyment of Areas of Outstanding Natural Beauty, development within them will be limited to that derived from the character and qualities of the countryside, having regard to the social and economic well-being of the areas. Development involving change or damage to their character or qualities, including significant increases in noise and/or intrusion from traffic or other activity, or having a significant adverse effect on established views, will not be permitted.

EN4. On open downland . . . stricter criteria . . . will apply. No development will be allowed other than that which provides for the needs of quiet recreation such as walking, cycling or riding, or which specifically enhances the landscape.

A2.35 The proposed treatment works itself would lie wholly outside the Sussex Downs AONB. The associated landscape scheme to the north would cross the southern edge of the AONB boundary, but only in the interest of achieving a design that substantially concealing the treatment works from views southwards from the Downs. These landscape works would comprise gentle earth mounding to achieve a better containment of the treatment works in views southward from the Downs. The proposed green roof and a landscape mound at the eastern end of the treatment works development would assist the integration of the development in views from AONB downland to the north-east. This design approach would thus support the objectives of structure plan policies EN2 and EN3.

A2.36 The *Access Options Report* that accompanies the treatment works planning application explains how Southern Water has selected a western road access to the works site in preference to alternative routes through the AONB. The various design and operational measures proposed to limit noise emissions, in a manner consistent with structure plan policy EN4, are described in the noise chapter of Southern Water's *Environmental Statement*.

A2.37 The proposed pumping station at Portobello would be built largely underground within an existing operational site, and would be finished with a green roof. The design would not conflict with structure plan policies EN2-EN4.

Urban fringe areas

EN7 The landscape character of urban fringe areas - that is, usually areas within 2 km. of the predominantly built up areas of major towns - will be subject to positive measures to improve landscape character whilst encouraging appropriate recreational use and public access. Priority in implementing this policy will apply to the urban fringes of Brighton & Hove, Eastbourne, Bexhill and Hastings.

A2.38 This design and access statement explains the comprehensive landscape strategy Southern Water proposes to render the treatment works a compatible form of development on the urban fringe of Peacehaven. This landscape strategy has regard to the *Brighton, Peacehaven and Newhaven Urban Fringe Landscape Study*, published by the Sussex Downs Conservation Board in June 2000, which promotes a softer and more wooded urban-rural transition on Peacehaven's northern edge.

A2.39 Southern Water's design proposals for the land between Peacehaven and the treatment works incorporate an area suitable for public access, in keeping with the objective of structure plan policy EN7 to encourage recreational use and public access in the urban fringe.

A2.40 As already noted, the proposed pumping station at Portobello would be within an existing operational site, built largely underground and finished with a green roof, such that it would not conflict with the objective of protecting the urban fringe.

Water quality and conservation

EN11 Proposals which would have a significant adverse effect on the quality and quantity of water resources which are important for human consumption and use, and biodiversity (including aquifers, groundwater sources, rivers, lakes, reservoirs, seawater and bathing water) will not be acceptable.

A2.41 Southern Water's project would support the environmental objectives of this policy by reducing substantially the pollutant content of the wastewater effluent that is discharged into the sea off the Sussex coast. This is examined in detail in chapter ten of Southern Water's *Environmental Statement*.

Air quality, light and noise pollution

EN13 Support will be given to the monitoring of air quality and the development of policies and action programmes to maintain air quality and, wherever possible, to improve it.

EN14 Development proposals and transport and replacement lighting schemes will be required, where applicable, to include measures for minimising light pollution, especially in remote and unspoiled landscape.

A2.42 An important design objective for the current proposals has been to ensure that all elements of the project likely to give rise to odour will be enclosed. Air from inside the treatment works would be processed in a sophisticated odour control plant prior to being released to the atmosphere. This approach is examined in detail in chapter eight of the *Environmental Statement*.

A2.43 The comprehensive measures proposed by Southern Water to minimise light pollution are described in the main statement. Similarly, the strategy for minimising noise pollution and maintaining the tranquillity of areas around the treatment works and pumping station is considered in chapter seven of the *Environmental Statement*. The project design is sensitive to both of these concerns.

Nature conservation and biodiversity and archaeological and historical features

A2.44 Structure plan policies EN17-21 are concerned with nature conservation and biodiversity. Southern Water's general response to the concerns highlighted by these policies has been described in paragraphs A1.33-A1.41 above.

Conclusion

A2.45 Structure plan policy provides the following design cues for Southern Water's project:

- a concern for sustainability – policies S1, EN11
- deliverability – policies S2 and S3
- sensitivity to landscape and countryside – policies S10, EN1, EN2, EN3, EN4
- enhanced biodiversity – policies EN11, EN17-21
- the protection of local amenity – policies EN7, EN13, EN14
- the promotion of public access – policy EN7

A2.46 Whereas structure plan policy S10 seeks to restrict development in the countryside, sites outside the defined town boundary for Peacehaven are necessary for the treatment works and pumping station because a comprehensive review of site options has determined that no suitable brownfield or urban alternatives are available. Although 5.4 ha of land would be permanently lost to agricultural use as a consequence of the treatment works development, this is not considered to be of strategic planning importance.

A2.47 Later chapters of this design and access statement will explain how the design of specific built elements of Southern Water's proposals responds to the design requirements set out in structure plan policy.

THE EAST SUSSEX AND BRIGHTON & HOVE WASTE LOCAL PLAN

A2.48 The East Sussex and Brighton & Hove Waste Local Plan was adopted in February 2006. Under the terms of the Planning and Compulsory Purchase Act 2004, the plan will be 'saved' for three years after adoption and will expire in February 2009.

The waste local plan strategy

POLICY WLP 1: The Plan's Strategy

Proposals in the Plan area will aim to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment, and will be assessed against and shall contribute to the achievement of sustainable development, by means of the criteria set out below.

Proposals shall:

- a) represent the best practicable environmental option (BPEO) having regard to the waste hierarchy, the proximity principle and the precautionary principle;***
- b) contribute to the elimination of the disposal of untreated waste to land . . .***
- d) include the co-location of waste facilities, where appropriate;***
- e) contribute to achieving net self-sufficiency in waste management within the Plan area;***
- f) accord with the objectives of and not cause damage to Areas of Outstanding Natural Beauty, Ashdown Forest, downland, wetland, open heathland, ancient woodlands, undeveloped coast (including heritage coast), Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA), Special Areas of Conservation (SAC), Ramsar sites, nature reserves, ancient monuments, conservation areas, historic parks and gardens, battlefields and other areas of designated or recognised important landscape, archaeological, geological, ecological or historical character and their settings.***

A2.49 The promotion of human health and protection of the environment are fundamental objectives of wastewater treatment. Southern Water's project responds to relevant specific provisions of modified policy WLP1 as follows.

- a). As the *Site Selection Report*, which is appended to the Environmental Statement and updated in the *Site selection review and update* report, explains, the BPEO, waste hierarchy and the proximity principle each informed the methodology for the site evaluation process that culminated in the selection of the area north of Peacehaven as the preferred treatment works site.
- b). No untreated waste will be disposed of to land, water or air as a result of the proposed treatment works. In particular, the sewage sludge arising from wastewater treatment will be recycled to provide a highly-refined granular soil enrichment 'bioproduct', suitable for use on farms, golf courses and elsewhere. An integrated approach to wastewater treatment is thus proposed.
- c). (Concerns municipal waste targets not applicable in the current context).
- d). The proposed treatment works will incorporate an on-site sludge recycling centre. The benefits of co-location are explained in chapter two of the *Site Selection Report*.
- e). The project will render the Brighton and Hove drainage catchment, which includes Peacehaven, self-sufficient in terms of its wastewater treatment and sludge recycling requirements.
- f). The proposals would not harm any designated area or compromise the objectives of designation.

A2.50 The design of the proposed wastewater treatment works and associated flow transfer infrastructure thus responds to the requirements of policy WLP1.

Transport strategy

POLICY WLP 2: Transport Strategy

Proposals will be required to demonstrate that:

- a) ***the proposed facility is located as closely as practicable to the sources of waste that will be managed by it;***
- b) ***access and use by modes of transport other than road have been considered and, if not proposed, why it would not be practicable; and***
- c) ***if road transport is to be used, the proposal is located and designed to minimise the length and number of road traffic movements and the proposal will comply with policy WLP36.***

A2.51 In accordance with policy WLP2 and the proximity principle more generally, the proposals would lie within the drainage catchment it would serve.

A2.52 In operation, a low level of road traffic would be generated by the treatment works and associated Portobello pumping station, as chapter eleven of the *Environmental Statement* explains. Wastewater would be conveyed to the works by underground pipeline, and treated effluent would be taken away from the site by the same means.

Areas of Outstanding Natural Beauty

POLICY WLP3: Areas of Outstanding Natural Beauty

Major waste proposals within an Area of Outstanding Natural Beauty will only be permitted in exceptional circumstances. Proposals will be subjected to the most rigorous examination and will only be permitted where:

- a). ***there is an overriding need for the development, in terms of national considerations and the local economy; and***
- b). ***the potential for meeting the need in some other way has been investigated and eliminated and there are no suitable alternative sites outside the Area of Outstanding Natural Beauty, having regard to the cost of and scope for developing elsewhere; and***
- c). ***there will be no detrimental effect on the environment and landscape, having regard to any measures to moderate the effect or to provide a compensating environmental resource for any loss that is acceptable.***

A2.53 In the context of policy WLP3, the treatment works cannot be regarded as a major waste proposal in the AONB. The relationship between the Sussex Downs AONB and the proposed treatment works has been explained earlier in this design and access statement. In summary, the treatment works would be outside the AONB with only limited landscape works within the designated area. The project would not conflict with the AONB designation.

A2.54 Later chapters of this design and access statement explains how the design of the principal above-ground elements of the project – the Peacehaven wastewater treatment works and the Portobello pumping station – seeks to protect views from adjacent areas of the Sussex Downs AONB and the proposed South Downs national park. Both developments would incorporate green roofs and fit within existing terrain to assist their visual containment.

Waste reprocessing

POLICY WLP 17: Reprocessing industries

The WPAs will support development proposals that are designed to reprocess recyclable materials subject to other policies of the Plan where relevant.

A2.55 As already noted, the wastewater treatment works would incorporate a sludge recycling centre that would convert the sludge into a highly-refined granular soil enrichment 'bioproduct', whilst recovering its energy content in the form of methane.

Wastewater and sewage sludge

POLICY WLP 30: Waste Water Wastewater and Sewage Sludge

Proposals for the provision of new or extended facilities for the management, treatment and disposal of waste water and sewage sludge will be permitted subject to other policies of the plan where relevant and where the development is a necessary extension or replacement of existing infrastructure or is well related to existing infrastructure, and where it is demonstrated that they are:

- a) required to meet current or prospective environmental standards or regulatory provisions; or***
- b) required to improve the operational efficiency of waste water and sewage sludge management principally to serve the needs of the plan area.***

A2.56 Policy WLP30 is supportive of the principle of Southern Water's Brighton and Hove treatment works project, and establishes a clear presumption in favour of the proposals unless other development plan policies are breached. As this chapter of the design and access statement explains, overall there is conformity between the wastewater treatment and transfer proposals and relevant development plan policy.

A2.57 The proposed treatment works is a necessary replacement of existing infrastructure required by a European Directive and UK regulations that set clear environmental standards for water companies to meet. The project is thus designed to meet current environmental standards and regulatory provisions, and will improve the operational efficiency of wastewater and sewage sludge management consistent with the needs of the plan area. The treatment works would serve a drainage catchment contained entirely within the waste local plan area.

Wastewater treatment in the Brighton and Hove drainage catchment

A2.58 The proposed modifications to the waste local plan include the following specific provisions for wastewater treatment and sludge recycling in the Brighton and Hove drainage catchment.

7.20 There is an urgent requirement for the provision of enhanced wastewater treatment for Brighton and Hove, which is the largest centre of population in the Plan area. Currently the majority of wastewater from the catchment is discharged into the sea via a 2 km long outfall following preliminary treatment at Portobello. A planning application for the provision of enhanced wastewater treatment on the Portobello site has been refused by the Secretary of State and, given the urgency of the need to fulfil the Urban Wastewater Treatment Directive requirements, it has not been practicable to identify an alternative site through the Waste Local Plan process. However, given that the

catchment area to be served by the treatment works is fixed and there are clear physical and topographical features that contain the catchment area, a reasonable area of search for a site within the plan area could be defined as the area limited by the River Adur to the west, the Downs east of the River Ouse to the east, the A27 trunk road corridor to the north and the sea to the south.

**POLICY WLP 30A: Waste Water and Sewage Sludge
(Brighton & Hove / Peacehaven Catchment)**

The provision of new wastewater treatment facilities for the Brighton and Hove/Peacehaven drainage catchments and to process the sludge arisings will be required to demonstrate that:

- a) the site has been selected from within the area of search which, within the Plan area, is limited by the Plan area boundary to the west, the Downs east of the River Ouse to the east, the A27 trunk road corridor to the north and the sea to the south; and**
- b) the criteria in policy WLP30 have been satisfied.**

A2.59 The proposed wastewater treatment works and associated flow transfer infrastructure lie within the area of search defined in waste local plan policy WLP30A. As noted above, the requirements of policy WLP30 are fully satisfied.

General amenity considerations

POLICY WLP 35: General Amenity Considerations

All proposals shall satisfy the following criteria:

- a) the development is of a scale, form and character appropriate to its location; and**
- b) there is no unacceptable adverse effect on the standard of amenity appropriate to the established, permitted or allocated land uses likely to be affected by the development; and**
- c) adequate means of controlling noise, dust, litter, odours and other emissions are secured; and**
- d) there is no unacceptable adverse effect on the recreational or tourist use of an area, or the use of existing public access or rights of way; and**
- e) there is no unacceptable adverse effect on areas or features of demonstrable landscape, archaeological, architectural, geological, ecological, or historical importance.**

A2.60 The proposed design of the proposed wastewater treatment works and associated flow transfer infrastructure helps to ensure that the project would comply with all of the criteria set out in this policy, for the following reasons.

- a). Though a combination of careful site selection and a commitment to bespoke design and landscape strategies, the company has evolved design solutions that would be appropriate in scale, form and character to the sites at Peacehaven and Portobello.
- b). As the *Environmental Statement* explains, a range of design and mitigation measures is proposed to ensure no unacceptable adverse effect on established, permitted or allocated land uses.
- c). Sources of noise and odour would be fully contained within buildings or other sealed enclosures in the treatment works. Measures would be taken to limit dust arisings during construction.
- d). The effects of the proposals on public access are considered in chapters 7, 11 and 12 of this design and access statement.
- e). No unacceptable adverse effects would result on features of acknowledged natural or cultural importance.

Transport considerations

POLICY WLP 36: Transport Considerations

Proposals will not be permitted where:-

- a) access arrangements are inadequate for the volume and nature of traffic generated by the proposal;***
- b) unacceptable safety hazards for other road users, cyclists or pedestrians would be generated;***
- c) the level of traffic generated would exceed the capacity of the local road network;***
- d) an unacceptable adverse impact upon existing highway conditions in terms of traffic congestion and parking would arise;***
- e) there are inadequate arrangements for on site vehicle manoeuvring, parking and loading/unloading areas;***
- f) adverse traffic impacts that would arise from the proposal cannot be satisfactorily mitigated by routeing controls or other highway improvements.***

A2.61 Chapter eleven of the *Environmental Statement* describes the measures Southern Water proposes to comply with policy WLP36. In summary, the proposals are designed to generate only low levels of road traffic once in operation, without significant implications for the issues identified in the policy. It is proposed that a traffic management plan will be implemented during the construction stage in order to maintain highway safety and protect local amenity.

Design considerations

POLICY WLP 39: Design Considerations

The design, siting and external appearance of proposals shall:

- a) respect the existing site topography and natural cover;***
- b) use materials and colouring appropriate to the location in which the building or plant is to be located;***
- c) incorporate appropriate landscaping as an integral part of the overall development of the site;***
- d) where appropriate, use high quality, innovative designs.***

Proposals which would have an unacceptable adverse visual effect or would have an unacceptable adverse effect on adjoining land uses by virtue of the scale and location of the development, which cannot be satisfactorily mitigated, will not be permitted.

A2.62 As this design and access statement demonstrates, Southern Water's proposed designs comply with policy WLP39. The wastewater treatment works at Peacehaven would be set into a natural valley with surrounding landscape works proposed to contain views. The main treatment works building would feature a green roof, the curve and vegetation of which seek to reflect the downland setting. The Portobello pumping station would be largely underground, and would also feature a green roof.

Environmental improvements and other public benefits

POLICY WLP 40: Environmental improvements and other public benefits

Where appropriate the WPAs will seek environmental improvements and/or other benefits on the site or in the locality, to offset or compensate for any adverse impacts associated with the development.

A2.63 Inherent in the treatment works design is the concept of environmental improvement in terms of cleaner seas. The landscape design strategy for the treatment works would deliver public benefits by facilitating the opening of land to the north of Peacehaven to public access.

Conclusion

A2.64 The project design complies closely with both the general principles and the policies of the adopted waste local plan. In particular, policies WLP30 and WLP30A offer specific support for the proposals forming the subject of Southern Water's planning application.

LEWES DISTRICT LOCAL PLAN

A2.65 The planning application site lies within an area covered by the Lewes District Local Plan, which was adopted in 2003. As explained, the plan was due to expire on 27 September 2007. However, the majority of its policies have been saved by the Secretary of State. This section reviews the relevance of general (i.e. non-site specific) saved local plan policies to the design of Southern Water's project. Site-specific provisions are considered in subsequent chapters.

Local plan aims and principles

A2.66 According to paragraph 3.1 of the adopted local plan, the 'guiding principle' behind the local plan is *'to conserve and enhance the special heritage of the natural and man-made environment of the Lewes District for enjoyment in the present and in the future, whilst providing for controlled development to meet the needs of the residents, the local economy and the wider economic, cultural and tourism roles of the District'*. This guiding principle is carried forward into a series of general aims for the local plan. These aims, and their relevance to the siting and design of Southern Water's current proposals, are as follows.

i). Sustainable development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

A2.67 As paragraph 4 of *Planning Policy Statement 1: Delivering Sustainable Development* (ODPM, 2005) notes, the government's four aims for sustainable development are social progress which recognises the needs of everyone, effective protection of the environment, the prudent use of natural resources, and the maintenance of high and stable levels of economic growth and employment.

A2.68 In these terms, Southern Water's project conforms to sustainable development principles. Its core aim is to provide for the effective protection of the environment by improving the quality of treated wastewater effluent discharged into the sea. By recycling the sewage sludge to provide a refined soil conditioner and by recovering the energy content of sewage sludge by using the methane released from the sludge during the anaerobic digestion process as a fuel source, the treatment works will make prudent use of resources. More generally, Southern Water's proposals represent a significant investment in basic infrastructure in the area between Hove and Peacehaven and a significant building-block in the area's economic regeneration.

ii). The protection and improvement of the natural and built environment of the Lewes District and the safeguarding of the best and the irreplaceable for the future.

iii). Development which makes a positive contribution to the environment in terms of good design and ecologically appropriate landscaping.

A2.69 By setting the treatment works within a valley and containing it in most views through a combination of land-raising, screen planting and the use of a green roof, Southern Water's proposals will afford a high degree of visual containment that responds to local landscape character and which will contribute also to the objective of softening the urban edge of Peacehaven, as specified in the Sussex Downs Conservation Board's *Brighton, Peacehaven and Newhaven Urban Fringe Landscape Study* (2000).

A2.70 The precise siting of the treatment works would avoid harm to a colony of great crested newts that occupies the existing soakaway and reservoir features adjacent to the site, whilst responding to the local landscape, land use and archaeological context. Southern Water's landscape scheme provides for a substantial extension of the wildlife habitat that the scrubby vegetation around the soakaway and reservoir provides, in order to provide a net enhancement of the natural environment. The proposed green roof would provide a secluded habitat for ground-nesting birds, free from ground-based predators and regular human interference.

A2.71 Similarly, the proposed Portobello pumping station would be set into the ground and provided with a green roof to contain its visual prominence.

iv). An adequate supply of housing and housing land to meet the Structure Plan requirements for the Plan period.

v). A housing stock appropriate to the varied preferences, needs, physical and economic abilities of the population.

vi). A broadly based and prosperous urban and rural economy which provides employment and services for the District, and which contributes to the national economy.

vii). A balance between housing and employment needs and provision.

A2.72 With respect to these aims, it is relevant to highlight that Southern Water's proposals have been designed and scaled to cope with envisaged housing growth in Lewes District and Brighton and Hove. As noted in response to aim (i), provision of modern standards of wastewater treatment would contribute also to the environmental and economic regeneration of the locality.

viii). A planning strategy based on the need for sustainable use of natural resources and reduction of greenhouse gas emissions.

A2.73 The benefits of recycling sewage sludge for beneficial use as an agricultural soil conditioner and recovering its energy content have already been described. In the context of the current local plan aim it is relevant also to note that methane is a highly potent 'greenhouse' gas. Once released to the atmosphere, methane is approximately 20 times more effective in preventing surplus heat from escaping from Earth to space than carbon dioxide, the most common greenhouse gas. The capture of methane for use as a fuel in the treatment works thus contributes to strategies to address global warming, both directly and by reducing demand for fossil fuels.

ix). The identification of the needs of residents and visitors for community services and leisure facilities, together with indications of the ways and means by which those needs can be met.

A2.74 The cleaner seas that the proposed treatment works will promote are important to the tourism and leisure economy on the Sussex coast. At the local level, Southern Water's landscape design strategy for the area around the proposed treatment works facilitates public access.

x). A transport strategy which balances choice, safety, efficiency, environmental protection and the reduction of pollution.

A2.75 By processing the sewage sludge arising from wastewater treatment on the same site, the need to convey the sludge to a remote sludge recycling centre by road is removed. Once in operation, the treatment works will thus be a low generator of road traffic, as chapter 11 of the *Environmental Statement* explains.

A2.76 The measures Southern Water proposes to protect local amenity and road safety during the treatment works construction period, when higher traffic volumes will be generated, are also explained in the *Environmental Statement*.

xi). A vibrant, but inherently rural countryside.

A2.77 Southern Water is proposing to build a treatment works on land used currently for agriculture. However, the net loss of 5.4 hectares of productive farmland is not considered to be of strategic significance.

A2.78 In terms of the effects of the project on countryside, chapter 5 of the *Environmental Statement* and later chapters of this design and access statement explain how Southern Water's design proposals would substantially conceal the Peacehaven wastewater treatment works and Portobello pumping station in most views whilst, in the former case, promoting a softer and more sympathetic transition between town and down on the edge of Peacehaven.

A2.79 Overall, Southern Water's design approach is consistent with the stated aims of the adopted Lewes District Local Plan.

A2.80 Chapter four of the adopted Lewes District Local Plan provides contains a range of policies defining the general environmental principles of the plan. Saved policies relevant to Southern Water's project include the following:

ST1	infrastructure provision
ST3	design, form and setting of development
ST11	landscaping of development
ST20, ST21	recycling and re-use of materials
ST30	protection of air and land quality

Infrastructure provision

A2.81 Local plan policy ST1 is concerned with infrastructure provision.

ST1 Development will not be permitted unless the District Council is satisfied that the infrastructure directly required to service the development, including foul drainage, water supply, education facilities, social infrastructure and transportation are available or will be provided in time to serve the development. (See also policy RES20 – Provision of Educational Facilities).

A2.82 Supporting paragraph 4.2 proceeds to explain that ‘*water supply and foul drainage are services which are meeting increasing demands from existing users. Development which overloads demand therefore can create serious problems for existing users, such as water shortages. It can also lead to environmental problems such as pollution of watercourses, reduction in water quality, and pollution or change in natural habitats*’.

A2.83 The principal objectives of Southern Water’s proposals are to meet the current and anticipated wastewater treatment demands of the Brighton and Hove drainage catchment in fulfilment of European and national requirements, and to provide cleaner seas off the coast of Sussex.

Design, form and setting of development

ST3 Development requiring planning permission will be expected to comply with the following criteria, and be supported by justification statements where necessary:

(a) development should respect the overall scale, height, massing, alignment, site coverage, density, landscaping, character, rhythm and layout of neighbouring buildings and the local area more generally . . .

A2.84 These considerations have exerted a significant influence on the proposed architectural design and landscape treatment of the treatment works and pumping station, as explained in later chapters of this design and access statement.

(b) materials should be of a quality, type, colour and design which is appropriate to the character of the local area

A2.85 The green roof designs proposed for the main treatment works buildings and the Portobello pumping station have been specified with a view to ensuring that the buildings blend in with their surroundings unobtrusively.

(c) development, including conversion, should respect the amenities of adjoining properties in terms of noise, privacy, natural daylight, and visual amenities and smell

A2.86 The protection of local amenity has been a significant design influence on the siting, form and content of the proposed development. The treatment works site is well separated from existing and proposed residential property on the edge of Peacehaven. All noisy elements of the treatment process would be enclosed. Buildings would be maintained under reduced internal air pressure to contain odorous air and allow the air to be ducted through an advanced odour control system prior to its release to the external environment. With similar intentions, the Portobello pumping station would be largely underground.

(d) development should not result in detriment to the character or the amenities of the area through increased traffic levels, congestion or hazards, noise levels and other environmental considerations

A2.87 The effects of works traffic on local amenity are examined in detail in the *Environmental Statement*. In summary, the treatment works and pumping station would be a minor generator of road traffic in operation, and movements of construction traffic would be managed carefully with a view to protecting residential amenity and avoiding highway congestion on main routes.

(e) access, circulation and parking to the development shall be provided in accordance with the policies in the Transport and Communications chapter. The site should be capable of accommodating the required parking provision without detriment to the visual amenities of the area through over-intensive parking in a prominent position.

A2.88 The project design includes appropriate provision for the safe manoeuvring and parking of vehicles within operational sites.

(f) development should not result in the loss of significant buildings, public views or spaces between and around buildings, or trees or other landscape features which make an important contribution to the character of the area.

A2.89 No significant buildings or trees would be lost as a consequence of the treatment works development. This design and access statement explains how Southern Water's design approach responds to landscapes and views that contribute to the character of the area.

(g) the design of hard and soft landscaping in spaces around buildings should enhance and complement new development where appropriate and should maximise wildlife potential by the use of native species and appropriate design in accordance with Policies ST11 and ST12 . . .

A2.90 Southern Water's design response to this provision of local plan policy ST3 has been to propose a comprehensive landscape strategy for the wastewater treatment works site, incorporating a substantial extension of the naturally vegetated area around the existing soakaway and reservoir features that provide habitat for great crested newts and a nesting site for a range of

birds. As noted, both the treatment works and pumping station designs incorporate green roofs that should also promote the objectives of this policy criterion.

(j) development should seek to maximise the efficient use of energy, resources and materials through the influence of factors such as design, housing type, orientation, location and construction methods.

A2.91 Proposed arrangements for the recovery of energy during the sludge recycling process have been described.

Landscaping of development

ST11 The District Council will, where appropriate, require applications for development to include a framework for landscaping and maintenance which clearly shows which features are to be retained and all new landscaping measures. Where practicable re-contouring, infilling and top-soiling should use material excavated from the site. Such schemes will be required to be submitted before the application is determined. Provision will be required to be made for the future maintenance of the landscaping scheme. This may be achieved by means of a legal agreement in appropriate circumstances.

A2.92 As already noted, the landscape strategy for the treatment works development is described in chapter five of the *Environmental Statement* and in the *Design Statement*. With respect to the specific provisions of local plan policy ST11, the proposed re-contouring, infilling and top-soiling would achieve a 'cut-fill balance' on the main treatment works site. This cut-fill balance takes account of the spoil that would be generated from the tunnels that would be bored from within the site in the direction of Portobello and the long sea outfall.

A2.93 In accordance with the aspirations of Lewes District Council (local plan paragraph 4.33), Southern Water will seek to ensure that landscaped areas protected or provided as part of the treatment works development are properly maintained in accordance with *BS4428: 1991 Code of Practice for General Landscape Operations*.

Recycling and re-use of materials

ST20 The District Council will require new large scale developments such as supermarkets or industrial units to provide recycling or re-use facilities for waste that they generate, and for use by customers and staff. Establishments which currently do not provide recycling and re-use facilities will be encouraged to do so.

ST21 Hard surfaced and landscaped areas will be required to be provided by developers in safe and convenient locations in substantial new developments within which the Council can locate recycling facilities appropriate for waste generated by those uses, if adequate facilities do not exist in the vicinity.

A2.94 As explained earlier in this report, one of the principal functions of the treatment works will be to recycle sewage sludge arisings into a refined soil conditioner suitable for use on farms, golf courses and elsewhere.

A2.95 It is proposed that the virtually odourless granular 'bioproduct' that arises from sludge recycling will be stored on a hard-surfaced area at the western end of the treatment works compound prior to being taken off-site for delivery to customers.

A2.96 In accordance with Southern Water's corporate sustainability policy, provision will be made for the recycling of waste paper generated in the treatment works site office.

Protection of air and land quality

A2.97 Local plan policy ST30 is concerned with the effects of development on local amenity in the round.

ST30 When considering planning applications for potentially polluting development, the Council will need to be satisfied on the following matters:

a). that the location is appropriate in terms of land use in relation to the uses in the surrounding area . . .

A2.98 The proposed treatment works would give rise to no polluting effects that would prevent land in the vicinity from being used for either its current purpose or future uses proposed in the adopted Lewes District Local Plan.

A2.99 The project and the associated environmental impact assessment have taken account of proposals to construct housing on land to the south of the treatment works, for example. The agricultural use of land to the north and east could continue.

b). that the development will have an acceptable impact on the surrounding area in terms of its effect on health, the natural environment, or general amenity, resulting from releases to water land or air, or noise, dust, vibration, light or heat

A2.100 These measures are all addressed in the *Environmental Statement*. No significant adverse effects are anticipated on health, the natural environment or general amenity resulting from releases from the treatment works to water, land or air, or from arisings of noise, dust, vibration, light or heat.

c). that the development will not have an adverse effect on the use of other land

d). that, where relevant, the appropriate after-use of land can be secured

A2.101 The effects of the scheme design on other land uses and the after-use

of land are considered in subsequent chapters of this design and access statement.

e). that the developer will comply with other relevant policies in the Plan

A2.102 One of the purposes of the current statement is to explain how Southern Water proposes to respond to relevant development plan policy, particularly where these policies influence design and access considerations.

CONCLUSION

A2.104 The overall conclusion of this review of planning policy is that the development would be consistent with a wide range of general strategic and local planning policies concerning issues such as infrastructure provision, architecture and landscape design, lighting, protection of the natural environment, landscape treatment, noise, air quality and the recycling of materials. Significantly, the proposals fulfil the requirement of adopted waste local plan policy WLP30A, which acknowledges the need for enhanced wastewater treatment standards in the Brighton and Hove drainage catchment.

A2.105 Specific design cues arising from this overview of development plan policy include the following.

- i). The all-embracing importance of sustainable development considerations with respect to environmental protection, site selection, the specification of waste processing technologies, construction methods, the potential to produce energy from renewable sources and landscape design.
- ii). The need to move wastewater treatment and sewage sludge recycling up the waste hierarchy whilst protecting the environment and local amenity.
- iii). The need for a comprehensive landscape design approach that responds to the local setting and maintains the integrity of protected landscapes.
- iv). The benefit of incorporating measures to promote biodiversity, where feasible.

A2.106 This design and access statement examines how the design of the Southern Water's project responds both to the general policy requirements thus far considered, and to the design cues arising from site-specific development plan policies, analysis of the development context and the feedback from the company's stakeholder consultations.