Gloucestershire
COUNTY COUNCIL

Waste Core Strategy

Technical Paper WCS-H

Sewage Treatment Facilities

Living Draft

January 2008

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Summary

S1. This report details work carried out by the Waste Planning Authority concerning sewage treatment facilities in Gloucestershire. Three statutory water utility companies have responsibility for sewage in the County:

- Severn Trent Water
- Thames Water
- Wessex Water

S2. In responding to this paper Severn Trent Water stated *"given that the document was prepared in consultation with ourselves, Thames and Wessex Water it would appear that the technical paper is detailed and robust, accurately reflecting sewage treatment requirements for the company."*

Options for Making Provision

S3. 'Provision' for new/extended sewage treatment facilities can be made in three ways:

- By identifying specific sites.
- By identifying broad locations for facilities.
- By setting out criteria based policies against which 'windfall' proposals will be judged.

S4. The WCS is not a **site specific** document. If specific land or facilities are to be identified the appropriate place will be in the Site Allocations Waste development plan document, which is timetabled to begin preparation in 2009.

S5. Additionally, the water utility companies have not identified any major issues with sewage treatment in Gloucestershire. Consequently, until detailed work is undertaken (and adopted) by districts it is not appropriate, or possible, to delineate land for new / upgraded sewage treatment facilities.

S6. The situation with **broad locations** for sewage treatment facilities is substantively the same as the site specific approach.

S7. There is strong industry support for a **criteria based** policy approach to developing sewage facilities. This provides the flexibility required for future investment (which at present is unknown) without being constrained by district LDF preparation (which is behind the Waste Core Strategy timetable).

S8. Two preferred options for making provision for sewage treatment facilities are:

OPTION A
Set out a generic waste water infrastructure topic policy concerning provision of new/existing development, with PPS10 (Annex E) criteria to be referred to in the supporting text.

The development or expansion of water supply or waste water facilities will normally be permitted, either where needed to serve existing or proposed development in accordance with the provisions of the development plan, or in the interests of long term water supply and waste water management, provided that the need for such facilities outweigh any adverse land use or environmental impact and that any such adverse impacts can be satisfactorily mitigated.

OPTION B
Defer preparation of a policy on waste water infrastructure to the development control

development plan document, where specific criteria will be provided for determining proposals.

Buffer Zones & Safeguarding

S9. The delineation of predetermined distances, **buffer zones**, to separate sewage facilities from other development is not considered appropriate without detailed work being undertaken by the water utility companies in respect of each of their sites.

S10. A policy on **safeguarding** in the WCS is considered necessary to prevent incompatible land uses from sterilising or prejudicing future and existing waste development. However it needs to relate to all waste management facilities, not just sewage treatment works.

S11. The use of '**consultation areas**' encompasses the intentions of the safeguarding approach. Its role would be to require local planning authorities (district councils) to consult with the waste planning authority (the County Council) where development is proposed proximate to waste facilities (current or allocated). Additionally, where appropriate it could require applicants to demonstrate they can build closer if they can overcome particular issues.

Options for Safeguarding

S12. Two preferred options are proposed for a safeguarding policy:

1. Roll forward the existing WLP Policy 7 into the WCS (see below).

Existing sites in permanent waste management use (including sewage treatment works) and proposed sites for waste management use will be safeguarded by local planning authorities. The waste planning authority will normally oppose proposals for development within or in proximity to these sites where the proposed development would prevent or prejudice the use of the site for waste management development.

2. Revise the WLP Policy 7 to reflect the outcome of the Javelin Park decision and the notion of 'consultation areas' (see below).

Existing and allocated sites for waste management use will be safeguarded by local planning authorities, who must consult the waste planning authority where there is likely to be incompatibility between land-uses. Proposals that may either adversely affect, or be adversely affected by, waste management uses should not be permitted unless it can be satisfactorily demonstrated by the applicant that there would be no conflict. The waste planning authority will oppose proposals for development that would prejudice the use of the site for waste management.*

*[*this includes sewage treatment works]*

Sludge Disposal

S13. It is neither possible nor practical to identify every parcel of land that could potentially be appropriate for sludge disposal. To do so could entail delineating most of the agricultural land in the County, which would be impossible to safeguard, would reduce flexibility for water utility companies, and ultimately not provide certainty to any party in the process.

Options for Sludge Disposal to Land

S14. A criteria based policy is considered to be the most appropriate way forward on this issue. The preferred option is to retain the Waste Local Plan Policy 22 (which has been 'saved') and to subsequently roll it forward into a Development Control development plan document, scheduled to begin preparation in 2009.

Contents

Section 1 Introduction

1. This report sets out the work carried out by the Waste Planning Authority in respect of the provision of sewage treatment facilities in Gloucestershire.

County Context

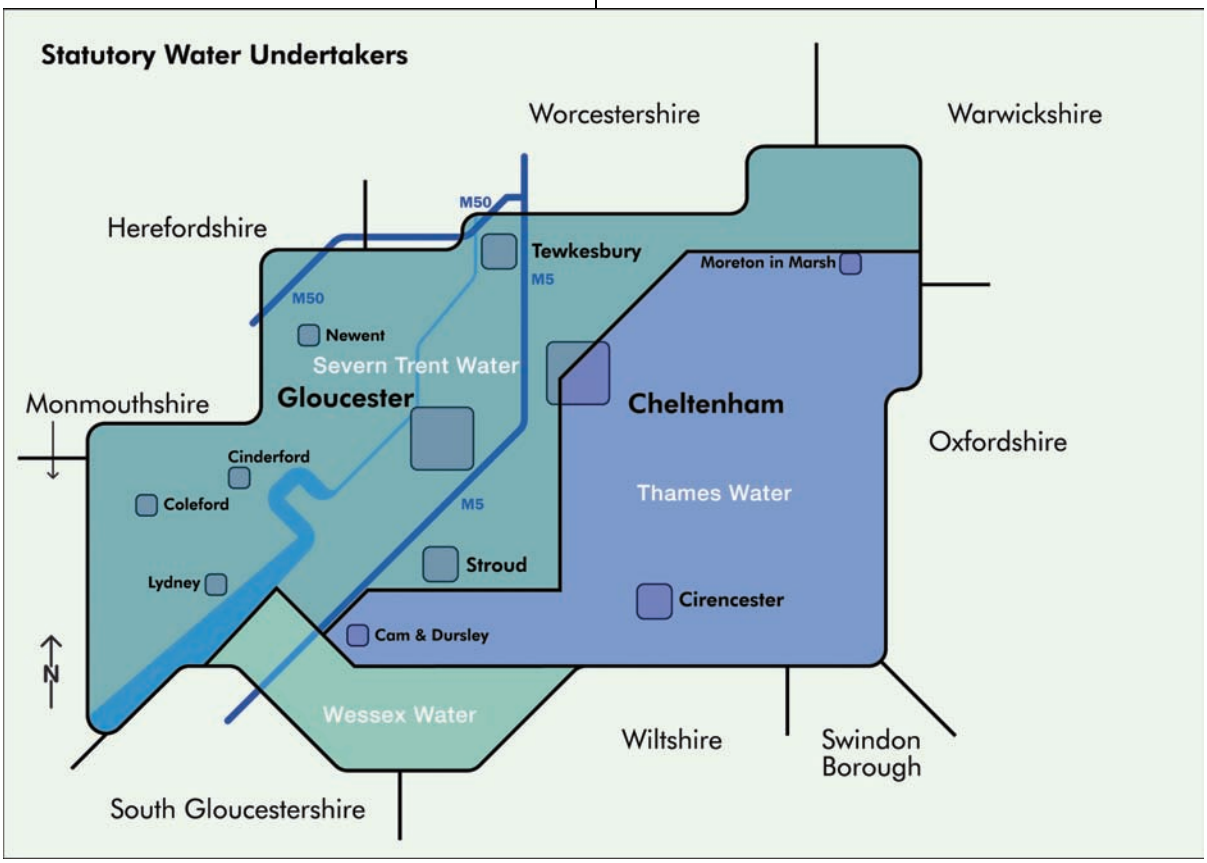
2. The County has a mixture of urban development (residential/ commercial predominantly in and around Gloucester/ Cheltenham) and more isolated communities (residential/small industrial in rural locations). Water utility companies are required to provide recovery, treatment and appropriate disposal of waste water arising from all of these types of communities.

Water Utility Companies

3. There are three statutory sewage undertakers whose area of responsibility covers land within the administrative County of Gloucestershire:
   - Severn Trent Water
   - Thames Water
   - Wessex Water

4. Additionally, Welsh Water's area of responsibility runs along the Wye Valley adjoining the County's western boundary.

5. All four of these bodies were formally consulted as part of issues & options evidence gathering during September 2006. Responses were received from Severn Trent, Wessex Water and Thames Water.



Key Issues Raised

6. In summary the two key issues raised were:

   - Including an appropriate strategy for making provision for sewage treatment facilities in development plan documents.
   - Safeguarding existing facilities.

7. In order to investigate the issues further invitations were sent to Severn Trent, Wessex Water and Thames Water requesting a meeting to discuss the most appropriate way forward.

8. The two key issues (above) were expanded into questions, which formed the basis for discussion during meetings.

   - what, if any, are the capacity issues for current sewage facilities in Gloucestershire - and are there any cross boundary issues that need to be considered;
   - where do you consider it is likely that new development will require additional sewage capacity;
   - what plans/strategy do you have for any future development of sewage facilities that the Waste Planning Authority should take into account;
   - making suitable provision for additional sewage infrastructure (site allocations, areas of search or criteria based approach);
   - the phraseology of a suitable policy to address waste water treatment - flexibility with predictability - (the intention as set out in our approved Development Scheme was to provide a general policy in the Waste Core Strategy [covering a wide spectrum of waste facilities to serve new/existing development] and then to set out a more detailed development control policy in a subsequent development plan document);
   - what is an appropriate 'stand-off distance' (buffer zone) between a sewage facility (or site allocation) and a sensitive receptor (eg. housing)

Outcomes from Meetings

9. The key outcomes from the meetings attended by representatives from Wessex Water and Severn Trent Water were:

   - There are currently no serious capacity issues for sewage treatment in Gloucestershire.
   - The disposal of sludge to agricultural land is the most sustainable and economic form of disposal.
   - It is not possible at the present time to provide site specific details as to which facilities may require modification / expansion / upgrading etc.
   - The next Asset Management Plan which will inform planning authorities will be for the period 2010-2015.
   - Safeguarding of sewage facilities (to create an amenity buffer and for future development) is essential but there are differences of opinion in terms of which is the favoured approach (case by case versus pre-stated distances).

10. In addition discussions have been held with all six District Councils in Gloucestershire.

One particular issue that emerged from these meetings in respect of sewage treatment issues was in relation to development in the Cotswold Water Park and the Cirencester extension at Kingshill. The Water Park in particular is experiencing infrastructure pressures such as sewage management, which may need to be looked at.

Section 2
Policy Context

11. The policy framework for planning for sewage treatment facilities is set out at three levels:

- National
- Regional
- Local

12. Additionally, water utility companies prepare Asset Management Plans to guide their future investment.

National Policy

13. National planning policy for sewage treatment facilities is set out in PPS12 and in the National Waste Strategy 2007 (Annex C6).

14. A key sustainability objective for the preparation of local development documents is for new development to be coordinated with the infrastructure it demands. This requires those involved to take into account the capacity of existing infrastructure.

15. PPS12 (Paragraph 4.9) states that *"LPAs should ensure that delivery of housing and other strategic and regional requirements is not compromised by unrealisitic expectations about the future availability of infrastructure, transportation and resources".*

16. PPS12 (Annex B, Paragraphs B3 to B8) places specific emphasis on the need to take account of infrastructure such as sewerage in preparing local development documents.

17. Paragraph B3 states: *"The provision of infrastructure is important in all major new developments. The capacity of existing infrastructure and the need for additional facilities should be taken into account in the preparation of all local development documents. Infrastructure here includes water supply and sewers, waste facilities..."*

18. Paragraph B6 states that when *"preparing local development documents, authorities should consider the requirements of the utilities for land - both in their own and in other authorities' areas - to enable them to meet the demands that will be placed upon them. They should also consider the wider environmental effects of increased demand, in terms of both the additional need for basic resources and of the associated emissions to air, soil or water, bearing in mind that those effects may extend to other authorities' areas. Consultation with the utility companies and their regulators on such issues at the information gathering stage of the preparation of a local development document is essential."*

19. Paragraph B7 then states, *"in the case of water supply and sewerage, there may be additional needs for infrastructure such as reservoirs, pipelines or treatment works. There will also be implications for the environment both from such land use and from the additional water abstraction or discharge that may be associated with that infrastructure. Those implications may extend beyond the boundaries of the*

authority's own area. It is, therefore, essential that local authorities consult water companies and the Environment Agency at an early stage in the preparation of a local development document." The outcome of the WPAs partnership working with the statutory water undertakers is set out in this Technical Evidence paper.

20. The national policy framework for sewage sludge disposal is outlined in the Waste Strategy 2007 for England (Annex C6). This states that *"sludge is an unavoidable by-product of the sewage treatment process. Production is inevitable and cannot be curtailed. It is important that continuous and appropriate routes for recycling and disposal are maintained to ensure that the environment and public health are not put at risk."*

21. The Environment Agency has produced a Water Services Infrastructure Guide (undated) that sets out (in its Section 3) what needs to be included when local planning authorities prepare their development plan documents. One of the key factors to be taken into account is the inclusion of positive policies to support development by water companies of water and sewerage infrastructure.

22. Thames Water have also published (and circulated in Summer 2004 to all LPAs in their area) a *"Guide for LPAs on Planning Application & Development Plan Consultation with Thames Water Utilities as Statutory Water and Sewerage Undertaker"*. This Guide is currently being updated in light of the new development plan system introduced by the Planning & Compulsory Purchase Act 2004 i.e. Regional Spatial Strategies and Local Development Frameworks and in light of other changes to planning policy. Thames Water state that it will be re-circulated in due course.

23. The Planning White Paper (May 2007) proposes an Independent Planning commission, which would determine planning proposals for major infrastructure projects. It proposes a threshold for waste water treatment plants where the capacity exceeds 150,000 population equivalent, and wastewater collection infrastructure that is associated with such works (Box 5.1).

Test of Soundness

24. In December 2005 The Planning Inspectorate published 'A Guide to the Process of Assessing Soundness of Development Plan Documents'. Test iv (a) on page 16 states: *"It is a spatial plan which has regard to other relevant plans, policies and strategies"*

25. Paragraph A key question under this Test states: *"Has adequate account been taken of the relationship between the proposals in the DPD and other requirements, such as those of utility companies and agencies providing services in the area including their future plans or strategy and any requirements for land and premises, which should be prepared in parallel?"*

26. The evidence base for this states, *"of particular significance, will be representations from bodies that consider that the plan does not have sufficient regard to other relevant strategies for which they are responsible."*

27. If the Waste LDDs are to meet the "soundness" test, then Thames Water

consider it essential that there is a policy in the Waste LDDs to address the development of waste water treatment facilities, although they have not suggested a particular form of wording.

Regional Policy

28. Regional planning policy for sewage treatment facilities is set out in the emerging Regional Spatial Strategy. Section 7.3.12-7.3.14 of the Draft South West Regional Spatial Strategy[3] (June 2006) relates to Sustainable Water Resources and Water Quality Management. The policy that relates to sewage facilities is RE6 'Water Resources'.

29. In respect of this policy, both Severn Trent and Thames Water have reservations about how it would work in practice. The last sentence of RE6 seems to require the water infrastructure to be in place prior to LDD adoption. The phrase *"not exceed the capacity of existing …systems"* implies that if there is no spare capacity then new development cannot be allocated in that location without the water companies putting additional capacity upfront into their facilities.

Draft RSS Policy RE6

The region's network of ground, surface and coastal waters and associated ecosystems will be protected and enhanced, taking account of the Environment Agency *'Regional Water Resources Strategy'*, catchment abstraction management strategies, groundwater vulnerability maps, groundwater source protection zone maps and river basin management plans. Surface and groundwater pollution risks must be minimised so that environmental quality standards are achieved and where possible exceeded. Local Planning Authorities, through their LDDs, must ensure that rates of planned development do not exceed the capacity of existing water supply and wastewater treatment systems and do not proceed ahead of essential planned improvements to these systems.

30. This approach represents a different way of working for water utility companies, who currently operate by being provided with funding based on the review of detailed evidence based reports which assess the level of investment required to respond to key delivery drivers over the Asset Management Plan (AMP) period e.g. AMP4 covers 2005-2010.

31. The regional policy was considered through an Examination in Public during 2007 with adoption likely in 2008.

Local Policy

32. Gloucestershire's planning policy for sewage treatment facilities is set out in Policy 19 of the adopted Gloucestershire Waste Local Plan. The disposal of sludge residues to land is covered by WLP Policy 21. Both of these policies are proposed to be 'saved' for a longer period than the statutory 3 years following enactment of the Planning and Compensation Act in September 2004.

WLP Policy 19 – Sewage and water treatment

Proposals for the treatment and disposal of sewage and sewage sludge will only be permitted when it is demonstrated that the need

[3] At the time of writing, the Regional Spatial Strategy was at 'submission' stage and its policies were in draft format.

for the development cannot be accommodated in an existing site.

WLP Policy 22 – Landspreading

The spreading of untreated or treated liquids, sludge discards, sewage sludge, soils or any derivative thereof will not be permitted unless it can be shown that it will benefit the fertility of the land concerned and will not:

1. Give rise to pollution of water resources, malodorous emissions or unacceptable highway impact (including traffic movements).
2. Endanger human health or cause harm to the environment, in particular without:
   - risk to water, air, soils, plants or animals;
   - causing nuisance through noise or odours;
   - adversely affecting the countryside or places of special interest.

33. Thames Water support in principle Policy 19. They consider that this should strengthened and carried forward into the new Waste Development Framework to address the development of waste water treatment works and facilities to process sewage sludge.

Asset Management Plans

34. Water companies' investment and price setting are regulated by the Office of Water Services (Ofwat) through Asset Management Plans (AMP). These plans are a 5 yearly plan setting out the investment required to maintain, upgrade and make new provision for sewage treatment.

35. AMPs are a rolling 5 years infrastructure development programme, which includes new and tightened environmental and quality obligations and investment to ensure existing water supply and sewerage networks and treatment facilities operate efficiently and effectively. The 5 year capital expenditure programme overseen by the regulator OFWAT also takes account of measures in demand for water and sewerage services.

36. Water Utilities require 3 - 5 years following funding approval for provision of the extra capacity. Where a complete new water or sewage treatment works is required the lead in time can be between five to ten years. Investment programmes are based on development plan allocations, which form the clearest picture of the current and future ‘shape’ of the community (as mentioned in PPS12 paragraph B6).

Section 3
Making Provision for Sewage Treatment Facilities

37. The three water utility companies comments on making provision for sewage treatment facilities are considered below:

38. **Severn Trent Water** (STW) have identified the works at Netheridge as being of strategic importance. This site receives material by both pipeline (sewers) and also by tanker. The facility serves as a treatment centre for sludges, which are stored on open-air concrete pods prior to transportation to disposal locations across the region. STW is currently installing a 'sludge-dryer' at this site to reduce the quantity of sludge stored and to help mitigate odour problems.

39. Gloucester City proposed a *'cordon sanitaire'* around the Netheridge site to protect surrounding land-uses from amenity problems. STW supported this approach as a means of safeguarding their operations from encroachment by incompatible activities.

40. The disposal of sludge to agricultural land is standard operating practice for all water utility companies. However, this activity could be restricted if circumstances change – STW gave the example of supermarkets changing their purchasing criteria to exclude farms where sludge is disposed to land. To protect against such an eventuality (i.e. there will always be a need to dispose of sludges) STW are investigating a suite of disposal options.

41. Currently some sludges are transported out of Gloucestershire to thermal treatment facilities at Coleshill (Warwickshire) and Roundhill (Staffordshire). STW are aware that these sites are not particularly proximate to arisings and are therefore currently investigating the potential of developing smaller localized thermal (pyrolysis) facilities.

42. STW have indicated that where plants do come forward it is most likely that they would be attached to existing treatment works. Consequently the existing facilities at Netheridge and Newent could be identified in their next AMP. However, at present specific locations for advanced thermal treatment plants have not been identified by STW and they are not aware of any incineration proposals for Gloucestershire.

43. The Severn Trent AMP for 2010-2015 is likely to be finalized around 2009. This will set out any additional infrastructure requirements, though until specific site review work is undertaken it is not possible for STW to state the nature of any upgrades.

44. Severn Trent Water undertake ongoing capital maintenance activities to assets as they age and require replacement. Although until specific site work is undertaken to appraise each one it is not possible to state what they may require. To identify every sewage treatment facility in the County as a 'specific site' is not believed to be useful. A

criteria based approach is the most appropriate for Severn Trent due to the flexibility it retains.

45. **Wessex Water** do not currently operate any 'strategic' sewage waste facilities in Gloucestershire. There is also no identified shortfall in capacity. It is unlikely that any new facilities will be proposed in the Wessex Water part of Gloucestershire due to the economics of providing such infrastructure and the relatively small land-area within their responsibility.

46. This is particularly the case in the context of the Draft RSS approach, which centres on development around existing cities and town. The prime strategy is to increase the capacity and expand existing works. However, this is not always appropriate, particularly in relation to rural first time sewerage schemes where it is not possible or economic to discharge to existing treatment works.

47. Due to the continued potential for compliance with new environmental regulations and windfall developments Wessex Water consider that it is not appropriate to provide a list of specific waste water treatment sites affected by proposed levels of development. At the outset they will be unable to identify all of the necessary improvements and extensions for the duration of the development document. Whilst it may be possible to identify some sites to supplement and/or compliment the draft policy, these are only likely to cover the period of their AMP.

48. Wessex Water's current AMP covers the period 2005 to 2010 after which it is inevitable that new environmental requirements will require additional treatment processes at some treatment facilities. The likely scenario of schemes beyond this date will not be identified until 2008/9 and will not be confirmed until 2010. In addition, the exact requirements, including the need for additional land, will only clarified when we undertake the detailed assessment of the works.

49. In terms of actual practice, planning permission for improvements and extensions to existing treatment works are resolved on a scheme by scheme basis. Wessex Water state that they do not automatically presume permission will be granted and therefore engage in considerable up front consultation to ensure amicable resolution of issues.

50. Wessex Water consider that a criteria based strategy is the preferred option as they need flexibility to choose the appropriate approach for a given site at a particular time. For Wessex Water the identification of specific sites would not be useful to them.

51. **Thames Water** do not identify any strategic facilities in Gloucestershire and consider that until the scale and location of growth to emerge in the Cotswold District LDF is known there is little further that they can add to the comments submitted at Issues & options stage (which have been subsumed within this Evidence Paper).

52. Thames Water consider that specific sites for waste water treatment works and

sewage sludge treatment facilities should be identified in the Waste Development Framework. However, Thames Water are unable at the present time to identify any such specific sites. They conclude that a clear need exists for a criteria based policy to supplement a site specific approach.

53. A meeting with Cotswold District Council Planners on this issue noted that the Cotswold Local Plan (April 2006) has recently been adopted. This will be 'saved' to at least April 2009. Three development plan documents are planned: Core Strategy; Site Allocations document; and Generic Development Control Policies document. The current Local Development Scheme for Cotswolds identifies the *"Issues & Options"* consultation stage as taking place during Summer 2007. The adoption of new LDF documents is therefore unlikely to be able to significantly influence site specific matters at the current stage of WCS preparation.

54. Thames Water have prepared a document *'A Water Services Infrastructure Guide for Local Planning Authorities'* (August 2007) to assist planning authorities in preparing development plan documents (DPD) and in determining planning applications. This document suggests a form of wording for DPDs prepared by district level authorities, but it also suggests a form of words that could be applicable to a county (waste planning) authority. This latter policy states:

'Utilities Development'

The development or expansion of water supply or waste water facilities will normally be permitted, either where needed to serve existing or proposed development in accordance with the provisions of the Development Plan, or in the interests of long term water supply and waste water management, provided that the need for such facilities outweighs any adverse land use or environmental impact that any such adverse impact is minimised.

[NB this policy is copied word for word from the Thames document, however it appears that the word "*and*" is missing from the last sentence between the words" …*environmental impact*" and "… *that any*"]

55. No evidence has been provided by **Welsh Water** in respect of facilities in their area adjoining Gloucestershire.

56. In summary, water utility companies cannot plan for all operational development, which may be needed over the plan period. This is because it is not always possible to predict the land use impacts of new European and UK waste water treatment legisation. Consequently, whether or not specific sites are identified, water utility companies consider that there is a clear need for a general criteria based policy for waste treatment facilities in waste development plan documents.

57. The policies of the WCS need to be sufficiently flexible to allow the expansion of existing waste water treatment facilities, increased treatment capacity due to new development, new waste water treatment pumping stations, and new underground network infrastructure so rural communities not currently connected to the network can benefit from mains sewerage connections where appropriate or required.

Cross Boundary Movements

58. Severn Trent, Wessex Water and Thames Water all stated that the nature of sewage management meant that there were cross boundary movements.

59. Waste water catchments do not match up with borough and county boundaries and therefore there needs to be a recognition that waste may need to be transported either in sewers or by lorries in the case of sewage sludge across the boundaries. This is a situation that is likely to continue for environmental, economic and practical reasons.

60. There is no evidence that the WPA are aware of which indicates that cross boundary movement of sewage is a problem issue in the County.

Funding for Sewage Facilities

61. Section 106 Agreements cannot be used to fund water and waste water infrastructure upgrades. However, it is essential to ensure that such infrastructure is in place to avoid unacceptable impacts on the environment such as sewage flooding of residential and commercial property, pollution of land and watercourses plus water shortages with associated low pressure water supply problems.

62. Water and sewerage undertakers also have limited powers under the Water Industry Act to prevent connection ahead of infrastructure upgrades. They therefore rely heavily on the planning system to ensure infrastructure is provided ahead of development either through phasing or the use of Grampian style conditions. This appears to be the intention of the draft regional policy RE6

63. Thames Water consider that it is essential that developers demonstrate that adequate capacity exists both on and off the site to serve the development and that it would not lead to problems for existing users. In some circumstances this may make it necessary for developers to carry out appropriate studies to ascertain whether the proposed development will lead to overloading of existing water and sewerage infrastructure.

64. Where there is a capacity problem and no improvements are programmed by the water company, then the developer needs to contact the water authority to agree what improvements are required and how they will be funded prior to any occupation of the development.

Approaches to Making Provision

65. Local development frameworks can make 'provision' for sewage treatment facilities in three ways:

- By identifying specific sites.
- By identifying broad locations for facilities.
- By setting out criteria based policies against which 'windfall' proposals will be judged.

Site Specific Approach

66. The WCS is **not** a site specific document. If specific land or facilities are to be identified the appropriate place will be in the Site Allocations Waste development plan document, which is timetabled to begin preparation in 2009.

67. Whilst Thames Water have argued that this approach is required they have not provided any information as to which specific sites should be identified. Indeed they state that it is not possible to do so until Cotswold District Council have adopted their core strategy (which is likely to be around 2010). This is clearly too late for the WCS, but should be able to inform the waste site allocations document.

68. Severn Trent Water identified their site at Netheridge as being of strategic importance due to its catchment and volume of inputs. The possibility of highlighting its strategic location on a map was discussed and therefore for illustrative and safeguarding[4] purposes this is considered appropriate.

69. Notwithstanding the site specific debate, the water utility companies have not identified any major issues with sewage treatment in Gloucestershire. Consequently, until detailed work is undertaken (and adopted) by districts it is not appropriate, or possible, to delineate land for new / upgraded sewage treatment facilities.

[4] Gloucester City Council 'Site Allocations and Designations' Preferred Options (Aug 2006) proposes a cordon sanitaire around this site - Policy SAD12

Broad Locations

70. The WCS will seek to identify broad locations for key strategic issues. The main indication as to where new development is likely is set out in the draft Regional Spatial Strategy. Once this is adopted it is through the district local development frameworks that these broad areas will be translated into sites. The situation with broad locations for sewage treatment facilities is therefore substantively the same as the site specific approach.

Criteria Based Approach

71. Following face to face discussions with Severn Trent Water and Wessex Water, both these bodies consider that the criteria based approach provides them with the flexibility that they require for future investment (which at present is unknown). Additionally, Thames Water state there to be a "clear need" for inclusion of such a policy. There is therefore strong industry support for a criteria based policy approach to developing sewage facilities.

72. Criteria for new sewage treatment facilities would be based on national planning policy in PPS10 (Annex E). These include general amenity issues, which would be considered under the development control DPD (to be prepared following adoption of the WCS).

73. In determining an appropriate way forward the WPA is conscious of guidance in PPS12 (paragraph 2.29), which warns authorities against producing a compendium of use-related development control policies. Instead guidance steers policy preparation

towards topic-related policies (such as those relating to amenity protection, landscape conservation and highways/ transport issues). These policies are to be contained in a Development Control Policies DPD (timetabled to begin preparation in 2009).

74. It is therefore not considered appropriate to set out a suite of waste management policies; one for each technology eg. transfer station, waste to energy facility, inert recycling, metal recycling, sewage treatment, landfill etc. This is the approach followed by the adopted Waste Local Plan (see WLP policies 8 – 22).

75. Thames Water stated that they were disappointed that the WPA did not consider it appropriate to provide a specific policy on sewage treatment work development as other waste authorities have included such a policy in their waste LDFs. For example: Wiltshire (Policy WDC27); Surrey (Policy WD6); and West Sussex (Policy CSW6). Consequently, one option put forward is a generic waste water infrastructure policy to cover this issue as its locational needs do not readily fall within the provision context for other waste facilities.

Preferred Options

76. The options for a making provision for sewage treatment facilities are:

OPTION A
Set out a generic waste water infrastructure topic policy concerning provision of new/existing development (based on the wording suggested by Thames Water – see below), with PPS10 (Annex E) criteria to be referred to in the supporting text.

The development or expansion of water supply or waste water facilities will normally be permitted, either where needed to serve existing or proposed development in accordance with the provisions of the development plan, or in the interests of long term water supply and waste water management, provided that the need for such facilities outweigh any adverse land use or environmental impact and that any such adverse impacts can be satisfactorily mitigated.

OPTION B
Defer preparation of a policy on waste water infrastructure to the development control development plan document, where specific criteria will be provided for determining proposals.

77. Additionally it is proposed to identify existing strategic sewage treatment facilities on an illustrative diagram of the County.

Section 4 Safeguarding and Buffer Zones

78. Whilst this section forms part of the technical evidence paper dealing with sewage treatment facilities the discussion and policy options cut across all waste streams and facility types.

79. Safeguarding and delineated buffer zones are different but complementary issues. The former relates to the protection of existing or allocated sites from encroachment or sterilisation by incompatible land-uses. The latter concerns the identification of a stand-off distance between waste facilities and nearby sensitive development to reduce amenity impacts. Safeguarding is therefore reactive whilst buffer zones are pro-active.

National Planning Policy

80. National planning policy set out in Planning Policy Statement 23 (PPS23) promotes the separation of potentially polluting and other land uses.

81. Additionally, PPS10 (paragraph 33) states, *"In determining planning applications, all planning authorities should, where relevant, consider the likely impact of proposed, non-waste related, development on existing waste management facilities, and on sites and areas allocated for waste management. Where proposals would prejudice the implementation of the waste strategy in the development plan, consideration should be given to how they could be amended to make them acceptable or, where this is not practicable, to refusing planning permission."*

Waste Local Plan Approach

82. The Waste Local Plan contains a safeguarding policy (Policy 7) that accords with the PPS23 approach.

83. The aim of the policy is to safeguard important waste facilities from sterilisation by other forms of development and ensure that sensitive development does not encroach into areas where it could be adversely affected by the operation of waste facilities.

84. The allocation of sites forms part of the infrastructure that is essential for delivering waste management services in Gloucestershire.

WLP Policy 7
Safeguarding sites for other waste management facilities

Existing sites in permanent waste management use (including sewage and water treatment works) and proposed sites for waste management use will be safeguarded by local planning authorities. The waste planning authority will normally oppose proposals for development within or in proximity to these sites where the proposed development would prevent or prejudice the use of the site for waste management development.

85. Depending on individual circumstances, existing sites may have the potential to

increase capacity or have potential to diversify to provide additional waste services. As a relatively 'low value' land use these allocated and existing sites are vulnerable to redevelopment for other permanent land uses.

86. Local planning authorities in Gloucestershire, are required to consult the County Council (as waste planning authority) on planning applications that potentially affect existing and proposed waste facilities. Additionally, planning applications within 250 metres of a landfill site should be notified to the waste planning authority (this is consistent with the current General Development Procedure Order consultations with the Environment Agency on landfill gas risks), and on planning applications on or adjacent to proposed facilities.

87. By consulting on planning applications adjacent to proposed/existing sites the waste planning authority will oppose conflicting land uses in order to reduce the potential risk for problems relating to amenity in the future. In many instances issues can be overcome by undertaking early pre-application discussions.

WCS Issues & Options Responses

88. Wessex Water support the safeguarding of existing waste facilities from re-development by other uses or from encroachment from incompatible land uses. Severn Trent Water state that they support the approach in the WLP.

89. Wessex Water consider that the safeguarding policy should be implemented by opposing applications for development which would sterilise land identified for waste management or would bring sensitive development into an area likely to be adversely affected by waste facilities. For the latter, allowance could be made where the applicant could sufficiently demonstrate due consideration of the problems and propose satisfactory engineering and mitigation measures which would alleviate any adverse effects.

90. In respect of specific buffer zone distances Wessex Water have undertaken detailed work to generate 'consultation zones' (see below), whilst Severn Trent are still considering their position as they do not have 'odour modelling' for all sewage works - different inputs create different issues therefore the buffer zone distance would change accordingly. Consequently the use of predetermined distances for buffer zones is not considered to be an appropriate way forward.

Wessex Water Position Statement

Safeguarding of Land

91. Over recent years we have seen an increasing number of planning applications in close proximity to our sewage treatment facilities. In addition to other 'bad neighbour' developments this has included applications for domestic dwellings and commercial properties. In the preparation of the Waste Development Framework, Gloucestershire County Council must ensure that the land-use requirements for sewage treatment facilities can be met. To facilitate the expansion of existing sites in

the future there may be a need to safeguard land. Wessex Water is currently reviewing the operation and capacity of all of our sewage treatment facilities. Based on anticipated levels of development this exercise should identify land required for future expansion. Unfortunately due to the number of sites this information is unlikely to be available until the end of 2007.

Environmental Issues

92. Policy 19 of the Gloucestershire Waste Local Plan recognises that waste treatment facilities can have adverse effects on the environment and quality of life enjoyed by individuals and communities. Where they are permitted they have to comply with stringent tests of the planning system with regard to their emissions and impact on the local environment.

93. However, sites suitable for waste management facilities are scarce and can be difficult to find. Therefore such sites also need to be protected from encroachment of sensitive development which could derogate or prejudice their future use. Creating such a situation is against the advice given in PPS23 which promotes the separation of potentially polluting and other land uses.

94. It should therefore also be the policy of the planning authority to safeguard important waste facilities from sterilisation by other forms of development and ensure that sensitive development does not encroach into areas where it could be adversely affected by the operation of waste facilities. This policy should be implemented by opposing applications for development which would sterilise land identified for waste managements or would bring sensitive development into an area likely to be adversely affected by waste facilities. For the latter, allowance could be made where the applicant could sufficiently demonstrate due consideration of the problems and propose satisfactory engineering and mitigation measures which would alleviate any adverse effects.

Consultation Zones

95. To facilitate this approach Wessex Water recommends the use of consultation zones around its sewage treatment facilities. These zones identify the area in which an odour nuisance is likely to occur. They are based on historical complaint data for the particular facility and other similar sized sites within the Wessex Water region. Should development be proposed within these zones then we would expect the developer to fully justify how their proposal could co-exist with a nuisance neighbour. This could require more detailed surveys or use of computer odour modelling. If the proposal were deemed to be affected and were sensitive to odours then Wessex Water would expect the development to be rejected.

96. The general approach to sizing consultation zones is (wherever possible actual modelled data is used to determine the zone):

- Facility size up to 500 population equivalent (pe) [200 metre contour]
- Between 500 and 10,000pe [300 metre contour]
- More than 10,000pe or sludge treatment [400 metre contour]

Safeguarding - Case Law

97. Since holding meetings with water utility companies a Secretary of State 'call-in' decision for an allocated waste site[5] in the WLP has been received.

98. The Inspector considered that safeguarding of sites was effectively negated by there being an apparent surplus of allocated sites in the WLP (Inspector's Report paragraph 149). The Secretary of State agreed with the Inspector, whilst noting that the site in question was the 'best' of the strategic sites identified (SoS letter paragraph 22).

99. The decision, which permitted an alternative use on the site, reasoned that if the County Council (as waste disposal authority) have serious intentions towards the land they can exercise compulsory purchase powers and are thereby no more disadvantaged than if permission had not been granted – the applicant having a 'fall-back' permission that they could market if desired.

100. This decision has potential implications for the way that Gloucestershire approaches the issue of safeguarding allocated sites in the future.

Options for Safeguarding

101. It is considered necessary to include a policy on **safeguarding** for the reasons set out above. The options in respect of safeguarding relate to all waste management facilities, not just sewage treatment works. To single out this particular type of operation is considered to be too detailed a matter for the strategic WCS.

102. In respect of **buffer zones** the delineation of predetermined distances to create a 'cordon sanitaire' is not considered appropriate without detailed work being undertaken by the water utility companies in respect of each of their sites. But where carried out it could be included in either a district LDF or waste DPD.

103. For example, Gloucester City Council have held discussions with Severn Trent Water concerning such a designation at the Netheridge facility. The outcome of those meetings were that it is appropriate, due to odour problems, to designate a cordon sanitaire around the site (see Gloucester City Council 'Site Allocations and Designations' Preferred Options (Aug 2006) Policy SAD12). Effectively, development likely to be adversely affected by smell from the Netheridge works within the designated cordon sanitaire boundary will not be permitted.

104. The use of '**consultation areas**' is considered to encompass the intentions behind the safeguarding policy. In the interests of preparing a relatively brief core strategy, to include a separate duplicating policy is undesirable. However, an additional clause could be added to the policy or supporting text to reflect the need for local planning authorities (the districts) to consult with the waste planning authority (the County Council) where development is

[5] Inset Map No.4 – Javelin Park Industrial estate, Former Moreton Valence Airfield, Stroud

proposed proximate to waste facilities (current or allocated). Additionally, such text could include a requirement for applicants to demonstrate they can build closer if they can overcome particular issues.

105. Consequently two preferred alternative options are put forward for inclusion of a safeguarding policy:

A. Roll forward the existing WLP Policy 7 into the WCS (see wording of text above).

B. Revise the WLP Policy 7 to reflect the outcome of the Javelin Park decision and the notion of 'consultation areas'. Possible wording is set out below:

Existing and allocated sites for waste management use will be safeguarded by local planning authorities, who must consult the waste planning authority where there is likely to be incompatibility between land-uses. Proposals that may either adversely affect, or be adversely affected by, waste management uses should not be permitted unless it can be satisfactorily demonstrated by the applicant that there would be no conflict. The waste planning authority will oppose proposals for development that would prejudice the use of the site for waste management.*

*[*this includes sewage treatment works]*

Severn Trent Water Statement

106. STW have stated that they welcome the amended wording to WLP Policy 7, as set out in Option B. They go on to state that it is difficult to establish a buffer or safeguarding zone around existing or proposed works. As a responsible utility operator, STW seeks on all its operational sites to manage the impact of odour on surrounding uses.

107. It is not always the case that odour issues can be fully resolved, this may be because the technology does not exist to address the issue or the solution is not reasonable given the level of impact. It may also be the case that the type and volume of flows received at the works from a specific industry may, by their nature, be particularly odorous and there is a technical limit to how far these odours can be controlled. Location of the works and public perception as to what is acceptable in certain locations also affects the perceived odour from sewage treatment works, along with the age of the assets being used. This considerable variation in factors explains why some works receive odour complaints whilst others do not.

108. As a result of the very variable nature of odour and how it is perceived, STW does not have a rigid cordon sanitaire policy that would apply to all sewage treatment works. Instead STW seeks to work with local planning authorities to establish the most appropriate type of development adjacent to a sewage treatment works on a case by case basis. This can either be through responding to third party planning applications where appropriate or through local plan policies. In light of this, the suggested change to the wording of policy is therefore supported.

Thames Water Statement

109. Thames Water object to the identification of any of its operational sewage treatment works as "safeguarded" sites for alternative waste treatment facilities. It is considered that the safeguarding of such sites does not

accord with Government guidance as there is no certainty that the sites would be available for alternative waste facility redevelopment.

110. In response, the WPA believes that Thames Water have misunderstood the purpose and operation of this policy, which was discussed during meetings with Severn Trent and Wessex Water. The policy does not seek to use operational sewage treatment facilities for alternative waste activities, instead it seeks to ensure that the continued operation of such sites for waste management is not compromised by permitting other development in the vicinity.

Section 5
Sludge Disposal

111. Spreading and injecting wastes on and into agricultural land is a long established method of disposing of many organic agricultural wastes such as manure, slurry, silage effluent and crop residues. There is also potential for the disposal of sewage sludge and certain industrial wastes such as paper sludge, food processing waste and non-food wastes such as lime and gypsum.

112. National Waste Strategy 2007 (Annex C6, paragraph 8) states that, *"there is a ban on the disposal of untreated sewage sludge to agricultural land. Sewage sludge may be recovered to non-agricultural land under the European Council Directive on Waste. The permitting requirements of the Directive are mainly implemented in the UK through the Waste Management Licensing Regulations 1994 (as amended). In this context non-agricultural land can include non-food crops that are not grown in short rotation with food crops."*

Waste Local Plan

113. Landspreading and mulching are normally outside the scope of planning control. Where such operations are carried out in connection with normal agricultural or forestry operations, the practice is subject to the regulation of pollution control bodies. It is therefore the role of the Environment Agency to enforce such issues.

114. However, rates of application above the limit of 250 tonnes of waste per hectare per annum [5000 tonnes in the case of dredgings from waterways] as contained in the exemptions for landspreading under the Waste Management Licensing Regulations 1994, would require a waste management licence, which requires a planning permission prior to obtaining a licence.

115. There may be a requirement for storage facilities for large volumes of waste that does not arise on an agricultural holding. These too may require planning permission and will be dealt with according to the criteria and policies contained within the development plan.

116. Consequently the WLP Policy 22 sets out a criteria based approach for landspreading (see policy set out earlier in section 2).

Environmental Impacts

117. If not properly managed and controlled there can be environmental problems such as pollution of water resources and complaints over odours. Water resources include groundwater, surface water and water courses.

118. Landspreading can nevertheless be an economic and environmentally acceptable method of disposing of some organic wastes, subject to appropriate controls. These wastes can contain valuable nutrients, act as a soil improver and reduce the need for artificial fertilisers on cropped land. In the future, pre-treatment by biological degradation would increase the

range of wastes that could be finally disposed of in this way.

119. The spreading of waste to agricultural land should be carried out with great care, as it is easy to spread toxins and allow build up of heavy metals. Reference should be made to 'The Soil Code' published by the Ministry of Agriculture, Fisheries and Food, which provides guidance to farmers and waste operators on matters to consider before spreading onto land.

120. The practice of landspreading is subject to a wide range of guidance and legislation which governs the quantity of waste spread on any particular piece of land and its nutrient content to protect soil and crop quality, human and animal health and water quality. Research is continuing in this area and may be used to refine present controls.

121. There needs to be careful monitoring and control over the application of sludge products to land to ensure heavy metals, pathogens and nitrogen are within acceptable levels. This is regulated and controlled by the Environment Agency, with whom all landspreading activity must be registered.

122. In Gloucestershire special care needs to be taken when dealing with sewage sludge disposal within the immediate catchment of the Severn Estuary Site of Special Scientific Interest (SSSI), Ramsar Site and Special Protection Area (SPA).

Water Utility Company Comments

123. Wessex Water state that whilst our waste water treatment plants generally service the local town or catchment, by products such as sewage sludge are transferred to a smaller number of sludge treatment centres across the Wessex Water region. This is in order to provide efficient and effective treatment centres, prevent the proliferation of sludge treatment sites, and to reduce the costs of treatment. Locations of these centres are not defined by the waste arising in the individual plan area.

124. With regard to sludge treatment our current primary method of disposal is to treat to an appropriate standard and dispose to agricultural land. At present we do not anticipate any change in this disposal route. However, it could be possible during the life of the Waste LDD that changes to environmental legislation increase sludge production or that our ability to dispose to land is reduced. In these instances we will have to review our sludge policy and may require further treatment facilities such as incineration.

125. Thames water state that sewage sludge (biosolids) is applied to a range of agricultural and other lands acting not only as a fertiliser, but also as a soil improver. The recycling of biosolids to land is an excellent way to return nutrients to soils. It avoids the use of landfill, is sustainable and the Best Practicable Environmental Option (BPEO) in most cases.

126. However, if a situation arose where such a use option was lost or became unsustainable then more sewage sludge would need to be disposed by other means such as incineration and this should be recognised in the Waste Development Framework.

Options for Sludge Disposal to Land

127. Severn Trent Water and Wessex Water both agreed that it is neither possible nor practical to identify every parcel of land that could potentially be appropriate for sludge disposal. To do so could entail delineating most of the agricultural land in the County, it would be impossible to safeguard (as per the Inspector's/Secretary of State's decision for javelin Park), reduce flexibility for water utility companies, and ultimately not provide certainty to any party in the process.

128. A criteria based policy is considered to be the most appropriate way forward on this issue. The preferred option is to retain the Waste Local Plan Policy 22 (which has been 'saved') and to subsequently roll it forward into a Development Control development plan document, scheduled to begin preparation in 2009.

Annex A
Notes from Meetings with Statutory Sewage Undertakers

Wessex Water

12th March 2007

1. Waste Core Strategy Update
(GCC) We have been through Issues & Option stage of the WCS. We are currently engaged in evidence gathering / preparatory work feeding into the Preferred Options stage (Consultation programmed for January 2008). The reason for these evidence gathering meetings is following advice from GOSW that we ensure that we are 'joined up' and 'spatial' in our approach. We have considered the comments from relevant Statutory Water Undertakers from the consultation, but we need to check that we have considered the implications of e.g. your Asset Management Plans.
Just looking at Core Strategies at the moment – DC Policies DPD will follow.

2. Water Undertakers' strategies (Asset Management Plans)
(WW) [Provided maps of the areas of Gloucestershire in which Wessex Water had STWs]. Quite a small area in the south of the County, with no major urban areas included.
(WW) Asset Management Plans are produced on a 5 yearly basis. 2005 –2010 is the current plan period, but they are currently looking at requirements and projected levels of development (with implications on capacity) for the 2010 – 2015 period. Provision of adequate capacity at Sewage Treatment Works to accommodate growth is generally paid for by the customer base; developers pay for the necessary pipe infrastructure, generally through the system of requisitioning. In terms of the areas of Gloucestershire in which Wessex Water operates there is currently no major cause for concern in terms of levels of proposed development and providing capacity. There are more significant issues for Wessex Water in South Gloucestershire and Bristol. But in terms of providing capacity there is an obligation under the Water Industry Act to provide for domestic development. Not so straight forward in terms of commercial development.
(GCC) How do you obtain money from the commercial sector?
The Act gives a number of options. Generally commercial development is welcomed in terms of providing higher income generation.
(GCC) Are Asset Management Plans your key documents in terms of future planning? Are they key in terms of the documents we as WPA need to be considering.
(WW) Yes but there is some flexibility within these plans.
(WW) In terms of the building of new STWs – this is very unlikely, it is not economic, particularly in the context of the Draft RSS approach of centering development around existing cities and town. The prime strategy is to increase the capacity and expand existing works. However, this is not always appropriate, particularly in relation to rural first time sewerage schemes where it is not possible or economic to discharge to existing treatment works.

Planning permission for improvements and extensions to existing treatment works are resolved on a scheme by scheme basis. Wessex Water do not automatically presume permission will be granted and therefore engage in considerable up front consultation to ensure amicable resolution of issues.

3. Geographic area of responsibility – Cross boundary issues

(WW) As shown on maps. Small parts of the south west of Gloucestershire.
(GCC) Is the movement of sludges potentially a cross boundary issue?
(WW) Yes potentially but we will take sludges to the most economical/sustainable location for disposal. Additionally, in some instances catchment areas for sewage treatment works traverse county boundaries.

4. Existing capacity issues

(WW) At the moment we do not have any shortfall capacity issues in Gloucestershire.
(WW) Requirements for additional capacity in the sewerage network are generally funded by new development through a mixture of requisitions and infrastructure charges.

5. New capacity issues

(WW) As a commercial enterprise Wessex Water do not operate with excessive amounts of spare capacity. However, by reviewing future development plans and with good relations with developers we are able to plan for development and provide capacity where necessary. In addition to new development we also plan and implement improvements in accordance with new environmental legislation.
(WW) In terms of new housing development, the larger sites tend to progress slowly – so there is a certain amount of time to get the infrastructure in place. Wessex Water is not a Statutory consultee for planning applications but there is very good communication with Councils. Generally developers come to us before they apply for planning permission. There is good dialogue with the development industry.
(GCC) Sites for STW are not allocated in the WLP as preferred sites. There was a site in Cinderford but this was removed at pre-inquiry stage. We have got c.30 sites but no STW. We have a got a policy (Policy 19) that deals with Sewage and Water Treatment and the issue of the disposal of sludges by landfill, landspreading and injection is covered in policies 20, 21 & 22. In looking at which policies we were going to save (or not save) we had intended to drop Policy 19 because it does not add very much. But given representations from Statutory Water Undertakers it is on the list of policies to be saved that will be considered by the SoS via GOSW.
(WW) The general thrust of the plan seems to address the management and disposal of solid wastes. Where we might have a problem is with policies such as the Proximity Principle that are not well related or easily applied to the operation of STWs and the related infrastructure.
(GCC) Effectively Proximity Principle has gone in PPS10.
(GCC) It is an interesting question as to whether STW processes are classed as 'disposal' or 'treatment'.
(WW) The basic process involves the separation of solids and liquids. Liquids are treated and discharged to rivers, solids come in the form of sludges which need to be rendered harmless and either go to a plant (e.g. at Avonmouth) or be disposed of to land e.g. sprayed on farm land. It is becoming increasingly difficult to dispose of sludges to land.

(GCC) National policy, which aims to prevent waste travelling long distances could be an issue in this respect. Do you need a waste management licence or is it classed as re-use (as a consequence of it being an agricultural improvement)?
(WW) Not sure – not an area I deal with.

6. How should the WPA make provision – sites/areas of search/criteria?
(GCC) Do we (the WPA) need to identify sites for the spraying / injecting of sludges i.e. disposal? Would a criteria based approach be more useful?
(WW) A criteria based approach would be better from our point of view. We need flexibility and so the identification of specific sites would not be useful to us.
(GCC) If you had to build a new facility or greatly expand a current one, would you want to safeguard land?
(WW) Yes, but it is not clear at the moment where development is going.
(WW) For Wessex Water Avonmouth is very important, we need to make sure that it remains viable for many years. So we are looking to identify if we are likely to be compromised around these sites. To some extent we are looking 50 – 100 years hence. We are looking at the gradual expansion of current facilities, so we need to safeguard this land around STWs. The problem is this land often attracts waste operators – all 'bad neighbour' type operation in one location.

7. Gaining flexibility in the development plan
(GCC) So from your comments it seems clear that you need flexibility from the development plan.
(WW) There are often policies in plans that do not do very much.
(GCC) Have you come across a generic policy that covers all sorts of waste? The government seem to be recommending that we create policy by themes. Would a theme on odour cover it?
(WW) PPS23 is clearly a major consideration.
(GCC) In our WCS Thames Water wanted us to include:
A criteria based policy; and
A site specific policy.
(WW) In terms of sites this is not the line we would take.

8. Buffer zones and safeguarding issues – suitable distances
(GCC) In terms of buffer zones do you have particular distances you would like to see. What is your stance on this?
(WW) Initially 400m was the buffer zone but improvements in odour modelling have meant that these zones can be classed instead as 'consultation zones' We have 400 to 420 works – only a small proportion of these are affected by odour problems requiring surveys.
The consultation zones are as follows: Small STW = 200m, Medium = 300m, Large (serving 10,000 + pop) with sludge treatment on site = 400m. The reason for the large radius is that you can't tell in which direction the odours will travel. The modelling is complex, we look at complaint records etc and the modelling is normally at the expense of the developer.
(GCC) Can you send us through some documentation detailing your distance policies etc?
(WW) Yes I will do that.

9. Future partnership working
(GCC) Useful meeting, we will keep you on the database and you will be consulted on the Preferred Option in January 2008. All representations welcome.

10. Other issues
(WW) The safeguarding issue is key.
(GCC) We have the adopted WLP policy 7, which is proposed to be rolled forward.

Severn Trent Water

26th March 2007

GCC provided Waste Core Strategy (WCS) update

2006 - Issues and options
Jan 2008 - Preferred options
2009 - Evaluation and adoption

GCC – the WCS is a strategic doc not site specific

ST - will provide plan of Severn Trent (ST) area
there are cross border movements of sewage

ST Asset Mgt Plan (AMP)

ST - AMP - only ST strategy GCC need to take into account
5 yr plan current submission requirement by OFWAT
but now being encouraged to develop 20 yr strategy to help formulate the 5 year AMP

GCC - anything in AMP we need to be aware of?

ST - 2004 final determination of 2005-2010 AMP
identifies bulk work for 5 yr period
takes into account new legislative requirement
also contains financial aspects
'named outputs' eg Netheridge (odour issue – need a dryer on site)
detailed works (which would indicate for example location and/or nature of development requirements not clear in AMP until specific site work undertaken – ie may be able to revise operations to meet requirements – 1 year lead in – therefore would be v difficult to include specific sites in a DPD due to preparation time
flexibility in AMP to find alternative solutions

PRO9 – period review 2009 – just begun preparation
will turn into AMP5 for 2010-2015
it will look at asset life, growth requirements and new EU/UK environmental requirements

GCC - AMP5 – main strategy for implementation during WCS life (up to 2020)?

ST - housing figures taken from LPs/SPs to gauge demand
don't hold demand info by County currently
not easy to deliver as not proactively forecast
previously LPAs have stated what they want to provide housing nos. and ST would then make sure sufficient capacity – make bid to OFWAT

GCC- is there sufficient existing capacity in Glos?

ST - not clear but ST to provide list of sites requiring some form of investment up to 2010 aware of currently

new type of operation (change from filter bed to ASP is an example of recent developments on sewage treatment works, also development of combined heat and power plants which use methane to generate electricity)

GCC - buffer zone (BZ) issue?

ST - Wessex looking at BZ similar to ST
ST don't have "odour modelling' for all sewage works
different inputs create different issues therefore the BZ distance would change accordingly – try to approach on a case by case basis.

GCC - could we put policy forward that gives a set distance BZ but with applicants to demonstrate they can build closer if they can overcome issues?

ST - yes, is one approach but difficult to set a set zone applicable to all circumstances.

- Currently ST investigating if can secure S.106 money
  legal implications for developers unilateral undertaking to reduce odour issues
- sent letter to Glos City re Netheridge odour and BZ – look on a case by case basis, but support the cordon sanitare in that instance
- sludge disposal to land – most sustainable option
  Nitrate vulnerable zones – regulates disposal in those areas
  Vulnerable to have only one option of sludge disposal – therefore looking at suite of options
  - incineration – 2 current facilities
    Coleshill – Warks
    Roundhill – Staffs
  currently looking at smaller scale localised facilities
    + WTE options
    ash goes to landfill
  some sludge cannot go to land because of content (brown sludge)
  green sludge – could go to land
- most only deposit sludge in summer – storage issue in winter (Netheridge is a strategic storage facility – could identify it in DPD)
  stored on a 'sludge pad' concrete slab in open area – forms crust on top so no odour until broken for movement off-site
  dryer helps to manage odour
- starting to look at pyrolyis units – include CHP and WTE – next 5-10 years direction – nothing in current plans
  Netheridge and Newent could be looked at
  next 1-2 years schemes may start coming forward
- looking to make Coleshill incinerator a WTE facility – take Glos sludge to this facility for disposal – but not proximate to arisings
- not aware of any incineration proposals for Glos County

GCC - how should we make provision?

ST - ST will identify strategic sites

almost every sewage unit will require pl perm in some form due to asset renewal, growth or new discharge requirements over next few years. This could range from new kiosk up to complete rebuild

Currently got buffer zones around sites in Chelt, but these seem to follow ST land ownership
- therefore could be arbitrary measure
ST to find out which sites could be under pressure for having land release

Not recommended to identify all sites in DPD as potentially needing pl perm
Criteria based approach most appropriate – retains flexibility

GCC - unlikely to set out a specific sewage policy in the WCS (as per the WLP policy 19)

ST - ST have not suffered from lack of policies on this issue

GCC - could use a general strategic 'infrastructure' policy which covers a variety of facilities

ST - yes
But need certain criteria eg needs to be near a river for discharge, and near to source of arisings
- cannot plan for small windfall requirements
impossible to write policy criteria as each instance is different
- not pragmatic to cover all eventualities and best not to try to – not in accordance with aim to reduce number of policies

GCC – what would ST like to see in WCS?

ST – make a recognition that sewage infrastructure is a necessity (not necessarily in a policy) – link to District LDFs – "where District LDF identifies significant new growth there will be a presumption that sewage infrastructure will be required to support that dev" – issue of a 'network' of facilities could list 'Drivers':
- housing growth
- tightening env standards (Nat and EU legislation)
- pollution issues (odour)
- asset life expiry

GCC - link to protected species/biodiversity and liability type policy?

ST - yes, good idea
especially with Netheridge and River Severn SPA designations

- Netheridge is a key strategic site for Glos County and needs to be protected – GB to provide input figure, about 50-50% tankered/piped into site
- look to use existing sites wherever possible rather than build new facilities
- trying to use renewable energy on sites eg wind power for small local sites
- include in WCS statement that these renewables are likely to come forward in future

GCC - safeguarding?

ST to provide further info on strategic site safeguarding and likely future capacity issues

ST - Water Framework Directive
- need to look at water cycle – what gets taken out (abstracted) needs to go back in (discharge)
Env Agency mapping discharge areas and what might be required in future

ST - cannot give an answer on BZ distances at moment – currently working on a strategy. It depends on age of facility, inputs, topography etc
Although ST cannot agree with Wessex detailed distances at moment, we don't necessarily disagree either
ST to get back to GCC by July 07 on BZ issues

GCC - strategic site identification in WCS – Netheridge?
ST - yes, but ST to provide list of main strategic sites in Glos
- made obj to SW RSS
need to recognise extensions to existing sites
RE6 – requirement is the 'wrong way round'. ST are not geared up to provide info that way.

GCC and ST agreed to keep in touch regarding future WCS preparation.