

‘LOOKING AFTER DERBYSHIRE’S WASTE’

STRATEGIC ENVIRONMENTAL ASSESSMENT OF THE WASTE MANAGEMENT STRATEGY



July 2006

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NON TECHNICAL SUMMARY

Strategic Environmental Assessment (SEA) is a process of environmental assessment which is consistent with the SEA Directive (European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment). It is designed to ensure a high level of protection to the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.

The role of the Environment Report is to set out the following information:

- The baseline situation
- The predicted effects of the Municipal Waste Management Strategy (MWMS) and how they were evaluated
- How the preferred options were chosen
- How environmental considerations were taken in to account and how mitigation measures have been incorporated in to the MWMS
- The proposed monitoring arrangements

THE CONSULTATION PROCESS

The Scoping Report

The Scoping Report for this Environment Report was produced in August 2005 and was sent out for a six week consultation period to the Environment Agency, the Countryside Agency, English Nature and English Heritage. These being the bodies identified by Government as the “authorities with environmental responsibilities” who must be consulted on the content of the Environment Report.

The Environment Report

The Environment Report has been prepared having regard to the comments received from the above bodies. The report was subject to the wider consultation with the draft MWMS. This report has been finalised having regard to the comments received in the consultation process.

ENVIRONMENTAL ISSUES

Background to Municipal Waste Management in Derbyshire

In 2004/5, Derbyshire produced more than 500,000 tonnes of municipal solid waste (MSW). Of this total, Derbyshire County accounted for about 390,000 tonnes whilst Derby City produced about 125,000 tonnes. Recycling and composting accounted for approximately 23% of MSW arisings but within Derbyshire there is a heavy reliance on landfill as the principal disposal route for the remaining 77%. Based on current and forecast growth levels it is predicted that waste arisings in Derbyshire and Derby will reach 620,000 tonnes per annum by 2020.

Review of Relevant Plans and Programmes

This section reviews the plans and programmes that were identified in the Scoping Report and consultation process as being relevant to the MWMS and sets out the potential implications for the MWMS

This review identifies the following issues:

- The need for those implementing the MWMS to be aware of the environmental constraints that exist in Derbyshire, which the environmental baseline section of this report will assist in identifying. It is recommended that the waste management departments establish communication with the Environment Agency and the waste planning authorities to ensure that relevant environmental information is shared on an ongoing basis; and
- The need for those implementing the MWMS to be aware of the relevant national, regional and local planning policies that provide guidance on the appropriate locations for waste management facilities. It is recommended that there is regular communication between the waste management and waste planning authorities regarding progress on their strategies and development plans.

Review of Baseline Environmental Information

The county of Derbyshire covers a total land area of 263,000 hectares and is home to the first National Park in Britain, the Peak

District National Park which lies at the southern end of the Pennines between Sheffield and Manchester. Its boundaries spread into several other neighbouring counties and cover over 129,500 hectares but over three quarters of it lies within Derbyshire. The status of the Park in planning policy terms and the restrictive nature of its waste planning policies have been identified in the review of relevant plans and programmes.

The population of the County is 961,233 averaging approximately 2.2 inhabitants per household. Derbyshire has 15 towns and cities with a population over 10,000 including Derby city (223,249) and Chesterfield (98,845). Nearly three quarters of the population are concentrated in the eastern part of the County on only a quarter of the total land area.

This divide is mirrored by the transport network where there are generally good road and rail links serving the eastern side of the County whereas towards the western side the transport links are more limited with no motorways and few trunk roads serving the area.

The current contracted delivery points for Derbyshire's waste are as follows:

- Staveley Landfill, Chesterfield
- Erin Landfill, Chesterfield
- Alfreton Materials Recycling Facility, Alfreton
- Raynesway Waste Transfer Station, Derby
- Chesterfield Recycling Centre, Chesterfield
- Glossop Transfer Station, Glossop

The information on current waste management facilities and movement within and beyond Derbyshire highlights the following issues:

- A lack of landfill capacity in the County as a whole; and
- Insufficient recovery capacity in the County to achieve the required landfill diversion targets.

If the new facilities required to implement the MWMS are going to be provided within the County the waste management authorities are

going to have to locate suitable sites. This is a major exercise but will be key to the successful implementation of the MWMS. It is therefore recommended that work on site identification is commenced as soon as possible.

Regarding the availability of baseline environmental information identified in the Scoping Report, much of this is already held by the relevant Councils and the Environment Agency. The MWMS itself is not locationally specific so the direct effects of the strategy on any environmental designations cannot be assessed at this stage. However the MWMS identifies the need for new facilities in order to implement the strategy so the information on environmental designations will be necessary for the implementation stage of the MWMS. It is recommended that the waste management authorities put in place mechanisms to enable them to access this information to assist in implementing and monitoring the effects of the MWMS.

Review of SEA Objectives against the Objectives of the MWMS

The preferred strategy of the draft MWMS is follows:

- Expansion of recycling and composting schemes to achieve up to a 55% recycling level;
- All residual waste, in the absence of a suitable regional facility, will be treated at in county treatment facilities; and
- The combination of recycling and recovery will ensure that the Landfill Directive targets for each of the key years are met and in fact exceeded.

Key issues arising from this assessment are:

- The MWMS objectives of partnership working; waste minimisation; green procurement and the continued introduction and expansion of kerbside collection schemes all score as potentially beneficial when considered against the SEA objectives and are therefore supported.
- The MWMS objectives which are aimed at providing the facilities required to implement the strategy have been scored as having potentially beneficial and negative effects. This is because the provision of these facilities will enable the implementation of an integrated waste management strategy which will achieve the required Landfill Directive targets which

is considered beneficial. Whilst locating these facilities has the potential to have negative effects on the environment although this will be dependent on the sites selected. Therefore in order to mitigate against any potential negative effects of providing these facilities it is considered that the MWMS should have an additional objective which will be to provide for the management of Derby's and Derbyshire's municipal waste without having an unacceptable impact on the communities and environment of Derby and Derbyshire.

ASSESSMENT OF OPTIONS

The SEA process has considered the following seven options.

The assessment of the options against the SEA objectives identifies Option 6 as the highest scoring option, followed by Option 1. Options 4 and 5 come out equal but Option 4 scores the lowest in moving the treatment of waste up the hierarchy which is a key European, national and local policy driver in the review of relevant plans and programmes. Option 5, on the other hand, scores the highest in this category and it is proposed that Option 5 goes forward with Options 1 and 6 into the MWMS.

Comparison of the MWMS and SEA option selection process identifies that Option 6 is the highest scoring option in both cases. However the two processes score differently on Options 1 and 5. The MWMS selection process scores Option 5 highly on objectives such as minimising costs, reliability of delivery and creating employment opportunities which is why the MWMS places it second. However these objectives are not environmental ones and are therefore not included in the SEA objectives which is why Option 1 performs better through the SEA process.

Because of the above, the carrying forward of a number of options into the MWMS is considered a prudent approach as the final selection of the preferred strategy will involve the consideration of social and economic criteria as well as environmental ones. Whilst the SEA process can provide guidance on the preferred strategy from an environmental point of view, which in this case would be Option 6, it can also provide guidance on where additional mitigation may be required if another option is eventually selected but this

would require a further review of this Environment Report once the preferred strategy is selected.

The do nothing option is rejected because it would fail to provide Derbyshire with an integrated waste management strategy to meet landfill diversion targets. Options 2, 3 and 4 are rejected as they perform less well against the SEA objectives than Options 1, 5 and 6 particularly with regard to moving the treatment of waste up the waste hierarchy which is a key policy driver.

Size and Pattern of Facilities

It is considered that there are environmental advantages and disadvantages attached to an approach which would favour either smaller or larger facilities, having regard to the environmental constraints that exist in different parts of the County.

Discussion of Environmental Effects

The successful implementation of the MWMS is considered to be beneficial to the environment in the medium to long term and any short term negative impacts could be successfully mitigated by following the recommendations in this report; particularly the objective proposing that the waste should be managed in such a way that it does not have an unacceptable impact on the communities and environment of Derby and Derbyshire

MONITORING

SEA objectives provide a methodological yardstick against which the environmental effects of the MWMS can be monitored. The achievement of the objectives is established through measurement of the indicators using the targets set out in the Environment Report. Monitoring the effects of the MWMS is important as the results can then be used to inform subsequent reviews of the Strategy.

RECOMMENDATIONS

The following recommendations should be taken into account when finalising the MWMS:

- The waste disposal authorities should improve mechanisms for accessing the environmental information held by the Environment Agency, the waste planning authorities, the local authorities and others to assist in the implementation and ongoing monitoring of the MWMS, including use of the Derbyshire Mapping Portal as it is developed further;
- The waste disposal authorities should establish a regular forum of communication with the waste planning authorities regarding the development of strategies and policies by both parties. The Planning Policy Officers Group in Derbyshire should be asked how best to improve liaison between itself and the waste disposal authorities to consider the impact of new development and waste;
- The waste disposal authorities should conclude a site identification exercise for the facilities required to implement the MWMS as soon as possible. Such an exercise needs to be undertaken within the context of the policies in the adopted Waste Local Plan and the emerging Waste Sites Development Plan Document and PPS10;
- The MWMS objectives of partnership working, waste minimisation, green procurement and the continued introduction and expansion of kerbside collection schemes are strongly supported;
- The MWMS objectives for providing additional facilities should:
“provide for the management of Derby’s and Derbyshire’s municipal waste without having an unacceptable impact on the communities and environment of Derby and Derbyshire”

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1.0 INTRODUCTION

- 1.1 The Joint Municipal Waste Management Strategy for the Derbyshire area provides a framework for strategic decisions to be taken on the management of municipal solid waste in Derbyshire and Derby City over the next twenty years and has been jointly prepared by Derbyshire County Council, Derby City Council and the eight Derbyshire Borough/District Councils.
- 1.2 Strategic Environmental Assessment (SEA) is a process of environmental assessment which is consistent with the SEA Directive (European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment). It is designed to ensure a high level of protection to the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.
- 1.3 The role of the Environment Report is to set out the following information:
 - The baseline situation
 - The predicted effects of the Plan and how they were evaluated
 - How the preferred options were chosen
 - How environmental considerations were taken in to account and how mitigation measures have been incorporated in to the Plan
 - The proposed monitoring arrangements
- 1.4 The aim of this report is therefore to demonstrate the effects on the environment have been taken into account in the preparation of the Derbyshire area Municipal Waste Management Strategy (MWMS). We therefore recommend the MWMS is read in conjunction with this report.
- 1.5 Section 2 sets out the stages of the SEA process.
- 1.6 Section 3 reports on the consultation process for the Scoping Report which preceded this document.
- 1.7 Section 4 then considers the environmental issues in relation the implications of other plans and programmes for the MWMS; the

- current baseline information for municipal waste management within Derbyshire and reviews the objectives of the MWMS against the SEA objectives.
- 1.8 Section 5 assesses the six options outlined in the Scoping Report against the SEA objectives and identifies the preferred alternatives and the reasons for rejecting the others.
 - 1.9 Section 6 sets out the proposed indicators and targets for the ongoing monitoring of the MWMS.
 - 1.10 Section 7 then sets out a number of recommendations as to how the final MWMS could be modified to better provide for the protection of the environment.

2.0 METHODOLOGY

The SEA Process

- 2.1 The SEA process goes through several stages which are set out below:

Stage A – this sets the context and establishes the baseline by identifying other relevant plans and programmes; proposing SEA objectives and indicators and collecting baseline information.

Stage B – This leads on to the production of the Scoping Report which precedes the Environment Report. The scoping report is then sent out to a period of consultation with authorities with environmental responsibilities. For the Derbyshire MWMS a Scoping Report has been completed and was issued in August 2005.

Stage C – looks at actually assessing the effects the draft MWMS may have on the environment and proposing measures to offset any adverse effects. It is at this stage that the draft Environment Report is produced which records the effects of the MWMS, the list of preferred alternatives and why these are preferred; any proposed mitigation measures and how they will be implemented including proposing a monitoring framework; and what methods have been used to analyse data and any limitations this may have.

Stage D – this involves going out to consultation with the draft MWMS and the Environment Report so that the results of the SEA process to date can be considered along side the draft strategy. The consultation responses and the Environment Report will then be taken into account in finalising the MWMS, which should show how they were taken in to account.

Stage E – is monitoring the implementation of the MWMS.

3.0 THE CONSULTATION PROCESS

The Scoping Report

- 3.1 The Scoping Report for this Environment Report was produced in August 2005 and was sent out for a six week consultation period to the Environment Agency, the Countryside Agency, English Nature and English Heritage. These being the bodies identified by Government as the “authorities with environmental responsibilities” who must be consulted on the content of the Environment Report.
- 3.2 A full copy of the consultation responses received is included in Appendix 1 of this Report but a summary and proposed response is provided below.

English Heritage

- 3.3 Considers it important to also refer to non designated archaeological sites as well as listed buildings, scheduled monuments, registered historic parks and gardens and conservation areas. Also refer to a Historic Landscape Characterisation of Derbyshire carried out by the County Council.
- 3.4 No reference to setting.
- 3.5 No reference to Derwent Valley Mills world heritage site.
- 3.6 *Our proposed response: reference to the world heritage site, listed buildings, registered historic parks and gardens and conservation areas has been added to the Cultural Heritage and Landscape topic area, along with a reference to their setting. Non designated archaeological sites have not been included because the SEA is strategic and is looking at significant effects not all effects, however the site identification stage will have to take into account effects on all aspects of the natural and built heritage, reflecting their relative importance.*
- 3.7 *Reference to the Historic Landscape report has been included in the review of relevant plans and programmes.*

The Countryside Agency

- 3.8 Recommend that reference is made to the Derbyshire Landscape Character Assessment in the review of relevant plans and programmes.
- 3.9 Propose an additional indicator in the Cultural Heritage and Landscape section.
- 3.10 Recommend that the restoration of municipal waste sites should be covered to ensure compatibility with the landscape character of the area.
- 3.11 *Our proposed response: reference to the Derbyshire Landscape Character Assessment has been included and the additional indicator incorporated.*
- 3.12 *Restoration has not been identified as a significant issue particularly as the majority of the new facilities required will be permanent.*

The Environment Agency

- 3.13 Recommend that the impact on any water course or relevant water body is considered rather than just Main Rivers.
- 3.14 Need to balance the risk to the environment against the need to reduce/re-use/recycle waste.
- 3.15 Should take into account the dispersed activity of waste management away from facilities.
- 3.16 Identify problems with collecting some of the baseline information.
- 3.17 Confirm that the Agency have a complaints database; data on the impact of facilities on people and the water environment and information on sanctions taken by the EA against sites.
- 3.18 The Water Framework Directive should be added to the list of relevant plans and programmes.
- 3.19 Need a section on protected species.
- 3.20 *Our proposed response: in order of the comments made above*

- 3.21 *Reference to Main River has been retained as the SEA process is strategic and looks at significant effects, not all effects.*
- 3.22 *Agree, the review of the SEA objectives against the MWMS objectives highlights this.*
- 3.23 *Noted, but the SEA is strategic and is to look at significant effects not all effects.*
- 3.24 *Where there are problems with collecting baseline information these will be highlighted in the report.*
- 3.25 *Noted and it is hoped that this information can be incorporated in to this report.*
- 3.26 *Agreed.*
- 3.27 *Protected species are already referred to in the Biodiversity topic area and a separate section is not considered necessary.*

Next Stage

- 3.28 This Environment Report has been prepared having regard to the comments received from the above bodies and is now out to consultation with the draft MWMS. Following the consultation period the MWMS will be finalised having regard to the comments received on it and the Environment Report.

4.0 ENVIRONMENTAL ISSUES

Background to Municipal Waste Management in Derbyshire

- 4.1 In 2004/5, Derbyshire produced more than 500,000 tonnes of municipal solid waste (MSW). Of this total, Derbyshire County accounted for about 390,000 tonnes whilst Derby City produced about 125,000 tonnes. Recycling and composting accounted for approximately 23% of MSW arisings but within Derbyshire there is a heavy reliance on landfill as the principal disposal route for the remaining 77%. Based on current and forecast growth levels it is predicted that waste arisings in Derbyshire and Derby will reach 620,000 tonnes per annum by 2020.
- 4.2 All the local authorities are working together to develop a high profile county wide waste awareness campaign linked to the National Waste Awareness Initiative "Recycle Now" and all are promoting and supporting waste minimisation and re-use initiatives.
- 4.3 In order to meet their Landfill Allowance Trading Scheme (LATS) allowances for 2020 the County and City will need to divert over 330,000 tonnes of biodegradable municipal waste away from landfill through a combination of recycling, composting and residual waste treatment.

Table 4.1: Municipal Waste Arisings (2004/05)

| | | AVBC | BDC | CBC | DDDC | EBC | HPBC | NEDDC | SDDC | District | DCC HWRC | DCC | Derby City | City HWRC | City | County Total |
|---|--|-----------|--------|--------|--------|--------|--------|--------|--------|-----------|----------|---------|------------|-----------|---------|--------------|
| | | Sub Total | | | | | | | | Sub Total | | | Sub Total | | | |
| A | Waste to landfill/Clinical Treatment/Input to HWRC. | 51,181 | 32,058 | 42,981 | 27,526 | 44,227 | 41,223 | 40,778 | 32,277 | 312,251 | 52,878 | 365,129 | 97,395 | 21,411 | 118,806 | 483,935 |
| | Household Landfill Included in A | 43,528 | 31,058 | 32,706 | 23,072 | 33,214 | 38,619 | 32,990 | 29,954 | 265,141 | | 265,141 | 78,579 | 7,707 | 86,286 | 351,427 |
| | Bulky Waste Included in A | 168 | 505 | 1,284 | 162 | 413 | 408 | 1,468 | 148 | 4,556 | | 4,556 | 784 | | 784 | 5,340 |
| | Segregated Commercial Waste Included in A | 3,137 | 17 | 2,308 | 1,654 | 18 | 16 | 2,213 | 26 | 9,387 | | 9,387 | | | | 9,387 |
| | Commercial Waste included in A | 4,079 | 1,291 | 3,985 | 2,369 | 534 | 3,945 | 1,993 | 1,246 | 19,442 | | 19,442 | 7,283 | | 7,283 | 26,725 |
| | Clinical A and B included in A | 1 | 2 | 7 | 8 | 5 | 9 | 17 | 13 | 62 | | 62 | 131 | | 131 | 193 |
| | Clinical Landfill included in A | 15 | 103 | 99 | 0 | 80 | 0 | 0 | 62 | 359 | | 359 | | | | 359 |
| | Greenwaste collected included in A | 2,677 | 4 | 4,583 | 502 | 8,400 | 0 | 1,412 | 0 | 17,577 | 8,568 | 26,145 | 5,193 | 2,594 | 7,787 | 33,932 |
| | Flytipped Waste included in A | 135 | 63 | 9 | 175 | 88 | 17 | 204 | 468 | 1,160 | | 1,160 | | | | 1,160 |
| | Gully Waste included in A | 0 | 83 | 297 | 404 | 0 | 361 | 290 | 385 | 1,820 | | 1,820 | 611 | | 611 | 2,431 |
| | Street Sweepings included in A | 1,511 | 191 | 1,382 | 1,541 | 1,999 | 1,790 | 1,690 | 1,201 | 11,305 | | 11,305 | 4,814 | | 4,814 | 16,119 |
| | Street Sweepings Leaves included in A | 0 | 0 | 303 | 0 | 0 | 0 | 483 | 0 | 785 | | 785 | | | | 785 |
| | Other included in A | 10 | 32 | 3 | 8 | 10 | 5 | 11 | 21 | 99 | | 99 | | | | 99 |
| | Fridges separately collected for recycling | 95 | 128 | 108 | 134 | 92 | 92 | 105 | 56 | 810 | | 810 | | | | 810 |
| B | Recycled Waste from Bring sites Kerbside Collections and HWRC. | 4,704 | 3,948 | 5,518 | 5,658 | 5,613 | 4,219 | 4,450 | 9,633 | 43,744 | 16,146 | 59,890 | 11,334 | 6,653 | 17,987 | 77,877 |
| | Reused element of B | 66 | 88 | 130 | 189 | 93 | 260 | 56 | 32 | 913 | 928 | 1,841 | 391 | 188 | 579 | 2,420 |
| | Green element of B | | | | | | 170 | | 5,149 | 5,319 | | 5,319 | | | | 5,319 |
| C | Third Party Recycling | 67 | 0 | 135 | 21 | 39 | 237 | 57 | 0 | 556 | | 556 | | | | 556 |
| | Reused element of C | 0 | 0 | 135 | 0 | 0 | 87 | 0 | 0 | 221 | | 221 | | | | 221 |
| | Rubble | | | | | | | | | | 8,394 | 8,394 | | 4,353 | 4,353 | 12,746 |
| | Total MSW | 56,048 | 36,135 | 48,741 | 33,339 | 49,971 | 45,771 | 45,390 | 41,966 | 357,361 | 52,878 | 410,239 | 108,729 | 21,411 | 130,140 | 540,379 |
| | Total H Hold | 51,768 | 34,694 | 44,482 | 30,606 | 49,257 | 41,464 | 43,136 | 40,220 | 335,625 | 43,557 | 379,182 | 101,054 | 16,871 | 117,925 | 497,107 |
| | Household Regular collection | 42,754 | 30,289 | 32,312 | 22,518 | 33,112 | 35,098 | 34,678 | 28,881 | 259,643 | | 259,643 | 79,363 | | 79,363 | 339,006 |

Notes:

1. For DCC MSW= A +B+C + CA input.
Hhold = MSW - Commercial Recharge-Rubble-Flytipped-Reused Credits-
Household Regular collection = Household Lanfill + Bulky + Commercial declared at site - Commercial Recharge

2. For City MSW= A+ B

3. City Commercial includes 327 tons recycled paper.

Review of Relevant Plans and Programmes

- 4.4 This section reviews the plans and programmes that were identified in the Scoping Report and consultation process as being relevant to the MWMS and sets out the potential implications for the MWMS, see Table 4.2 below.
- 4.5 This review identifies the following issues:
- The need for those implementing the MWMS to be aware of the environmental constraints that exist in Derbyshire, which the environmental baseline section of this report will assist in identifying. It is recommended that the waste management departments establish communication with the Environment Agency and the waste planning authorities to ensure that relevant environmental information is shared on an ongoing basis to enable monitoring of the environmental effects of the MWMS to take place; and
 - The need for those implementing the MWMS to be aware of the relevant national, regional and local planning policies that provide guidance on the appropriate locations for waste management facilities. It is recommended that a regular forum of communication between the waste management and waste planning authorities is established to discuss progress on their respective strategies and development plans.

Table 4.2 – Review of Relevant Plans and Programmes

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|---------------------------|--|--|
| Kyoto Protocol | This commits the UK to cutting its greenhouse gas emissions by 12.5% below 1990 levels between 2008-12. | CO2 emissions have been taken into account in the assessment of options through the life cycle assessment of greenhouse gas emissions. All options seek to minimise waste arisings and increase recycling which will reduce CO2 emissions from waste management activities in Derbyshire |
| Habitats Directive | This Directive aims to conserve fauna, flora and natural habitats of European importance and establish a network of protected areas. | The MWMS is not locationally specific so there are no direct effects at this stage. However those implementing the strategy should be aware of the locations of the protected areas, (SPAs and SACs). |
| Water Framework Directive | This will establish a common framework for managing the water environment. It establishes a common approach to protecting and setting environmental objectives for all ground and surface waters. The Water Framework Directive established a river basin district structure, and objectives will be implemented through River Basin Management Plans. | The MWMS is not locationally specific so there are no direct effects at this stage. However those implementing the strategy should be aware of the requirements of the Directive. In addition an assessment using life cycle techniques of eutrophication (for surface waters) and leachate discharges (for groundwater) has been undertaken as a proxy indicator for levels of water contamination. River Basin Management Plans will have to be assessed against waste development as they emerge. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|------------------------------|---|---|
| Landfill Directive | The Directive seeks to prevent or reduce negative environmental effects from the landfilling of waste by ensuring that waste is recovered or disposed of without harming the environment or endangering human health. The Directive also proposes a strict timetable for reductions in landfilling biodegradable waste. | The requirements of the Landfill Directive are noted in the MWMS (Section 2.1.5). The mandatory targets for reducing the landfilling of biodegradable municipal waste in the Directive are the key policy drivers changing the way our waste is managed. All options considered in the MWMS either meet or exceed the targets set out in the Directive. |
| Waste Incineration Directive | Sets new standards for the incineration of waste. | The requirements of the WID Directive are noted in the MWMS (Section 2.1.17). The MWMS has a range of options not all that include incineration. However if incineration is finally chosen those implementing the strategy will need to be aware of the requirements of the Directive to ensure full compliance. |
| Packaging Waste Directive | Primarily concerned with the minimisation of waste and the amount of packaging waste that should be recycled. | The requirements of the Packaging and Packaging Waste Directive are noted in the MWMS (Section 2.1.11). The MWMS has a series of waste minimisation initiatives incorporated into implementing the strategy. These initiatives will result in greater waste re-use and reduction at source which will assist in reducing packaging wastes requiring management. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|---|--|---|
| Waste Electrical and Electronic Equipment Directive | Aims to reduce waste arisings from electrical and electronic equipment and improve the environmental performance of those involved in the life cycle of such equipment | The requirements of the WEEE Directive are noted in the MWMS (Section 2.1.12). It is understood that some WEEE is currently managed at CA sites. This service will need to be further strengthened together with other producer initiatives (eg, retailer take back schemes) to ensure compliance with existing legislation. Reducing this waste and improving its ability to be recycled should assist waste minimisation and recycling schemes in the future. |
| IPPC Directive | Sets out the regulatory framework for waste management | Improved regulatory scheme should better safeguard the environment and human health. The requirements of the IPPC Directive are noted in the MWMS (Section 2.1.10). Any existing and future waste management facility shall be developed to ensure full compliance with these requirements. |
| End of Life Vehicles Directive | Sets targets for the recycling of ELVs | The requirements of the ELV Directive are noted in the MWMS (Section 2.1.16). Any existing and future waste management facility shall be developed to ensure full compliance with these requirements. Improved recycling should reduce quantities of waste requiring disposal in the long term. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--------------------------------------|--|---|
| Proposed Batteries Directive | Likely to provide for collection and recycling targets for spent batteries. | The requirements of the proposed Directive are noted in the MWMS (Section 2.1.13). Any existing and future waste management facility shall be developed to ensure full compliance with these requirements. Will assist in removing a potentially hazardous element from the MSW stream. |
| Waste Strategy 2000 | <p>This is the principal UK waste management policy document and it sets the following targets:</p> <ul style="list-style-type: none"> • To recover 40% of MSW, including a minimum 25% recycling/composting of household waste by 2005; • To recover 45% of MSW, including a minimum of 30% recycling/composting of household waste by 2010; • To recover 67% of MSW, including a minimum of 33% recycling/composting of household waste by 2015 | The MWMS has been prepared and the options selected to fully comply with these targets. |
| Waste and Emissions Trading Act 2003 | This Act introduces a system of tradable allowances to help the UK meet its commitments under the | The MWMS has been prepared and the options selected to ensure full compliance with the LATS scheme. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--|--|---|
| | Landfill Directive. Councils will be fined £150 a tonne if they do not have sufficient landfill allowances for the amount of waste they need to landfill. The Local Authority Trading Scheme (LATS) is a key measure in meeting landfill reduction targets. | |
| Household Waste Recycling Act 2003 | Requires all English local authorities to provide kerbside collections for householders for a minimum of two materials by 2010. | All authorities in Derbyshire have kerbside collection schemes in place, although not all have 100% coverage. Continued expansion of such schemes is a key part of the MWMS to ensure full compliance with this Act. |
| PPS 1 Creating Sustainable Communities | Sets out the government's four aims of sustainable development: <ul style="list-style-type: none"> • Social progress which recognises the needs of every one • Effective protection of the environment • Prudent use of natural resources • Maintenance of high and stable levels of employment and economic growth. | In order to implement the MWMS planning permission will be required for the additional facilities needed it is therefore important that the strategy proposed can comply with the Government's aims of sustainable development. |
| PPG 2 Green Belts | There is a presumption against inappropriate development in the Green Belt except in very special circumstances. | Whilst the MWMS is not locationally specific it will be necessary for those implementing the strategy to be aware of the location of any Green Belts. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--|--|--|
| PPG 4 Industrial, Commercial Development and Small Firms | Government policy is to encourage continued economic development in a way that is compatible with its environmental objectives. | Existing or proposed industrial land could offer potential locations for the new facilities that will be required to implement the MWMS. Indeed for those implementing the strategy all possible synergies between waste recovery and other industrial processes should be considered wherever possible. |
| PPS 7 Sustainable Development in Rural Areas | Sets out Government policy for rural areas including: <ul style="list-style-type: none"> • New development in the open countryside away from existing settlements will be strictly controlled; • Priority will be given to the re-use of previously developed land in preference to green field sites • The presence of the best and most versatile agricultural land should be taken into account along with other sustainability criteria • Nationally designated areas such as national parks have the highest status of protection in relation to landscape and scenic beauty. Major development should not take | The MWMS is not locationally specific at this stage, but those implementing the strategy should be aware of Government policy on development in the countryside and the presence of designated landscape areas. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--|---|---|
| | place in these areas except in exceptional circumstances. | |
| PPS 9 Biodiversity and geological Conservation | The aim of development should be to prevent harm to biodiversity and geological conservation interests and in taking decisions appropriate weight should be attached to designated sites of international, national and local importance; protected species and biodiversity and geological interests within the wider environment. | The MWMS is not locationally specific at this stage, but those implementing the strategy will need to aware of nature conservation interests. |
| PPS 10 Planning for Sustainable Waste Management | The Government's key planning objectives for waste are: <ul style="list-style-type: none"> • Help deliver sustainable development by driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option but one that must be | These are key objectives which the MWMS addresses to ensure successful implementation. Although the need to ensure the strategy is implemented without having an unacceptable impact on the environment and communities of derby and Derbyshire should be more explicitly acknowledged. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|-------------------|---|---------------------------|
| | <p>adequately catered for;</p> <ul style="list-style-type: none"> • Provide a framework in which communities take more responsibility for their own waste and enable sufficient and timely provision of waste management facilities to meet the needs of their communities; • Help implement the national waste strategy and supporting targets are consistent with obligations required under European legislation and support and compliment other guidance and legal controls; • Help secure the recovery or disposal of waste without endangering human health and without harming the environment and enable waste to be disposed of in one of the nearest appropriate installations; • Reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business and encourage competitiveness; | |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|------------------------------------|--|---|
| | <ul style="list-style-type: none"> Protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission; and Ensure the design and layout of new development supports sustainable waste management | |
| PPG 13 Transport | Promotes more sustainable transport choices for people and freight in order to reduce the need to travel | MWMS considers the issue of waste miles for each of the options assessed as part of the options review process. |
| PPG14 Development on Unstable Land | Guidance aims to: <ul style="list-style-type: none"> Minimise the risks and effects of land instability on property, infrastructure and the public; Help ensure development is not | Whilst the MWMS is not locationally specific, those implementing the strategy will need to be aware of this particularly in areas of the county affected by mining. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--|--|---|
| | <p>placed in unstable locations without appropriate precautions;</p> <ul style="list-style-type: none"> • Bring unstable land wherever possible back into productive use; • Assist in safeguarding private and public investment by a proper appreciation of site conditions and necessary precautionary measures. | |
| PPG 15 Planning and the Historic Environment | Sets out the importance of protection of the historic environment including: World Heritage Sites, listed buildings, conservation areas and registered historic parks and gardens. | Whilst the MWMS is not locationally specific those implementing the strategy will need to aware of these designations. |
| PPG 16 Archaeology and Planning | Where nationally important archaeological remains and their settings are affected there should be a presumption in favour of their physical preservation. In cases involving remains of lesser importance it will be necessary to weigh the importance of the remains against other factors such as the need for the development. | Whilst the MWMS is not locationally specific, those implementing the strategy will need to aware of these designations. |
| PPS 22 Renewable Energy | Renewable energy developments should be capable of being accommodated throughout England in | Only certain kinds of waste recovery technologies qualify as renewable energy. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|---------------------------------------|---|--|
| | locations where technology is viable and environmental, economic and social impacts can be satisfactorily addressed. | |
| PPS 23 Planning and Pollution Control | <p>Pollution control issues include:</p> <ul style="list-style-type: none"> • The risk of pollution from the normal operation of the process; • The potential impacts and the extent to which risks are addressed; • The generation of additional pollution from traffic; • The demand on natural resources; and • Discharges to the environment | This is considered as part of the technology proposed in the options considered in the MWMS. A series of environmental impacts have been modeled as part of the options evaluation process developed within the MWMS. |
| PPG 24 Planning and Noise | Noise impact can be a material consideration and the planning system should guide development to the most appropriate locations. | Whilst the MWMS is not locationally specific those implementing the strategy will need to be aware the potential impacts of waste development. A generic assessment of noise impacts for each option considered has been undertaken in preparing the MWMS. |
| PPG 25 Planning and Flood Risk | Government policy is to discourage inappropriate development in areas at risk from flooding | Whilst the MWMS is not locationally specific those implementing the strategy will need to be aware of those parts of the County at risk from flooding. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--|--|--|
| RSS8 - East Midlands Regional Spatial Strategy | <p>This aims for:</p> <ul style="list-style-type: none"> • Zero waste growth by 2016 • Minimum recycling/composting rate of 50% by 2015 | <p>The MWMS is also seeking to achieve zero growth in waste arisings by 2016.</p> <p>Options 1, 5 and 6 would achieve the 50% recycling/composting rate. Options 2, 3 and 4 would not. Options 1, 5 and 6 have been used to develop the MWMS.</p> |
| Draft Regional Waste Strategy | <p>This aims for:</p> <ul style="list-style-type: none"> • Working towards zero growth in waste at the regional level by 2016 • Reducing the amount of waste sent to landfill in accordance with the EU Landfill Directive • Exceeding Government targets for recycling and composting with the objective of bringing all parts of the region up to current best practice. Seeks to achieve a minimum recycling/composting rate of 50% by 2015 • Taking a flexible approach to other forms of waste recovery technology on the basis that technology in this area is developing very quickly | <p>The MWMS is also seeking to achieve zero growth in waste arisings by 2016.</p> <p>The MWMS aims to meet the EU landfill diversion targets</p> <p>Options 1, 5 and 6 would achieve the recycling/composting rate sought by the draft regional strategy</p> <p>The MWMS maintains a flexible approach to waste recovery technology by recommending a range of options at this stage</p> |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|---------------------------------|--|--|
| Regional Environmental Strategy | <p>Policy Statement ENV 16 for Waste: To promote and support sustainable waste management practices and minimise the impact of waste on the environment. Outlines principles of Waste Strategy 2000 as foundation.</p> <p>Policy Statement ENV8 for Energy:</p> <ul style="list-style-type: none"> • any waste incineration should be on a scale allowing waste heat to be used, as well as generating electricity; • implications for other policies section notes that no waste should be incinerated that could be reused, recycled or composted; and • policy refers to the Regional Energy Strategy (see below). | <p>The MWMS takes into account guidance and principles in Waste Strategy 2000 and other reports.</p> <p>The MWMS is based on moving waste up the hierarchy, improving recycling and composting performance and delivering more sustainable waste management practices within the Region.</p> <p>Technologies assessed, and the resulting preferred options from the MWMS process include the use of heat and electricity recovery.</p> <p>The aims of high recycling and re-use of materials, and recovering maximum value prior to energy recovery are supported by the MWMS.</p> |
| Regional Energy Strategy | <p>Recognition that some waste materials are considered renewable.</p> <p>Utilisation of waste gases from organic waste through anaerobic digestion and other processes.</p> | <p>The MWMS assesses a range of technologies, the preferred options are to include, energy from waste, anaerobic digestion or autoclaving. The MWMS covers energy producing technologies.</p> |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--|---|--|
| The Derby and Derbyshire Joint Structure Plan 2001 | <p>Contains waste management policies which:</p> <ul style="list-style-type: none"> • Make provision for waste management sites and facilities sufficient for Derbyshire's needs in accordance with a framework established in national, regional and local waste strategies • Enable Derbyshire to make an appropriate contribution to the achievement of the Government's objectives for sustainable waste management • Provide for the use of waste materials to assist in the reclamation of derelict land and mineral workings and for the generation of renewable energy • Ensure that waste developments will not have an unacceptable impact on the environment, including the impact on neighbouring communities and land uses and the cumulative impact of development • Ensure that the environmental | <p>Many of these are covered by the SEA objectives which have been used to consider the effects of the draft MWMS on the environment. The strategy also provides an estimate of the typical number type and landtake requirements for a range of possible options and many of these objectives are also site specific and therefore will need to be a consideration during the implementation stage.</p> |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--|---|--|
| | <p>impact of waste developments is minimised and where appropriate sites are satisfactorily reclaimed</p> <ul style="list-style-type: none"> • Prevent the irreversible loss of the best and most versatile agricultural land through waste disposal • Ensure that the treatment of potentially hazardous waste will take place only in suitable locations. | |
| Derby and Derbyshire Waste Local Plan 2005 | <p>The role of this Plan is to:</p> <ul style="list-style-type: none"> • Help set the agenda for waste reduction, re-use and recycling in Derbyshire • Set the framework for the most sustainable approach at the present time, and over the plan period, for dealing with waste in Derbyshire • Provide criteria and standards by which planning applications for waste management developments, including applications arising from the proposals of the waste management strategy, can be judged. | <p>The aims of reduce, re-use and recycle are supported by the MWMS which has similar objectives.</p> <p>Whilst the MWMS is not locationally specific it will require sites for the new facilities that are required to implement the strategy so it is important to be aware of the criteria and standards contained in the Waste Local Plan.</p> |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|---|--|---|
| Peak District National Park Local Plan | In recognition of the valued characteristics of the National Park, the Plan sets stringent criteria for the consideration of applications for waste management facilities. New landfill sites for non inert waste should be outside the Park other than in exceptional circumstances | The MWMS recognises and the SEA objectives cover the effect of the National Park designation on municipal waste management within Derbyshire. |
| District wide Local Plans | These plans do not contain waste planning policies but they will contain general development control policies to control the effects of development on the environment and local communities. | Need to be aware of Local Plan policies when seeking to implement the MWMS as these issues are locationally specific. |
| Derbyshire Landscape Character Assessment | Assesses the landscape character of Derbyshire | Needs to be taken into account when implementing the MWMS as these issues are locationally specific |
| Derbyshire Historic Landscape Character Assessment | Assesses the historic landscape character of Derbyshire | Needs to be taken into account when implementing the MWMS as these issues are locationally specific |
| Derbyshire Partnership Forum, countywide Community Strategy | Seeks to minimise waste and increase awareness of recycling and re-use | The MWMS is committed to achieving this in the Derbyshire area |

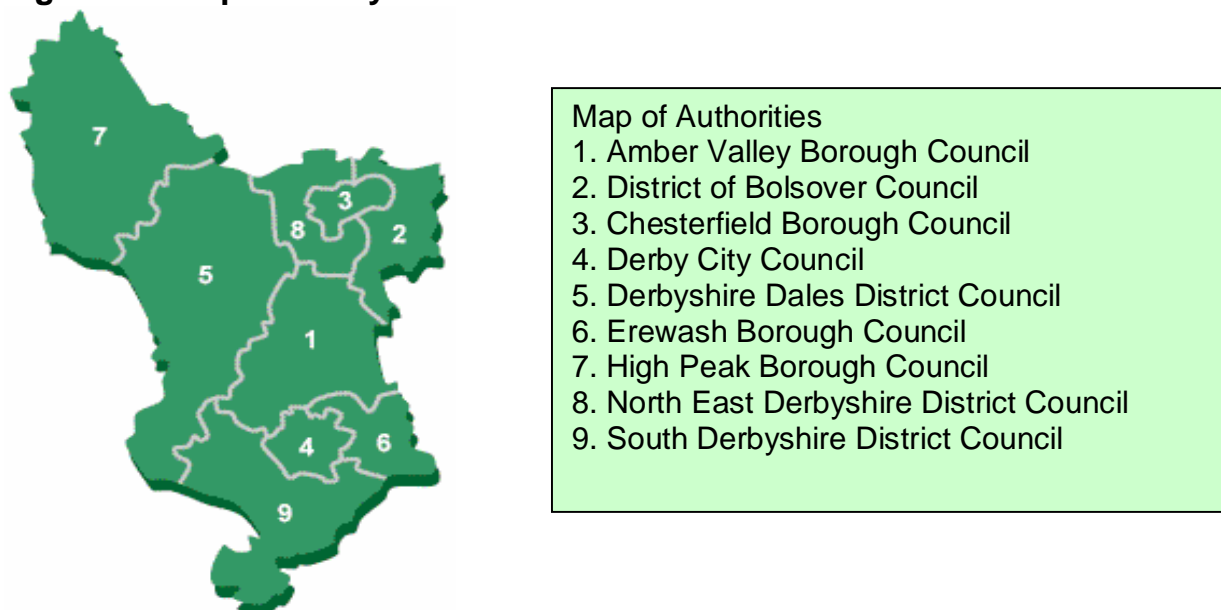
| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|---|---|--|
| 2020 Vision – Derby's Community Strategy | Encourages local people to recycle more of their waste and hopefully exceed Government targets | The MWMS is committed to achieving this in the Derbyshire area |
| Bolsover – A Community Strategy for the Future | Looks to increase household waste recycling and composting rate to 18% by 2006 | The MWMS will assist in achieving this |
| Community Strategy for Chesterfield and North East Derbyshire | Aims to achieve recycling rates of 16% for Chesterfield and 10% for NE Derbyshire by 2003/4. Targets for 2005/6 are 24% and 18% respectively. | The MWMS will assist in achieving these rates. |
| Derbyshire Dales and High Peak Local Strategic Partnership | Contains no targets for waste reduction and recycling | No implications for the MWMS |
| Erewash Community Strategy | Aims to minimise waste and increase awareness on recycling and re-use | The MWMS will assist in achieving this |
| South Derbyshire draft Community Strategy | Aims to do more to reduce, re-use and recycle waste | The MWMS will assist in achieving this |
| Amber Valley Community Strategy | Aims for sustainable wealth creation recycling and effective waste management | The MWMS will assist in achieving this |
| The Derbyshire Local Transport Plan | Aims to achieve: <ul style="list-style-type: none"> • Better travel choice • Safer healthier communities • Successful local economies • A better managed road network | Vehicle mileage has been included in the assessment of options for the MWMS and the SEA considers the number and capacity of new facilities required which will influence travel patterns. |

| Title of Document | Objectives, requirements and guidance | Implications for the MWMS |
|--------------------------------------|---|--|
| | <ul style="list-style-type: none"> • Low impact leisure • Protected rural areas | |
| The Derby Joint Local Transport Plan | <p>Has the following objectives:</p> <ul style="list-style-type: none"> • To protect and improve the quality of the environment and minimise damage to health and air quality by reducing the adverse effects of road traffic. • Improve road safety and to make people feel safer and more secure when using all modes of transport • To promote the development of an integrated transport system that is well maintained and supports the economy of the LTP area whilst managing demand for travel and reducing reliance on car use • To improve accessibility for all sections of society throughout the LTP area and the broader transport network • To promote sustainable travel and sustainable travel patterns which manage the demand for travel, reduce car use and make the best use of resources | Vehicle mileage has been included in the assessment of options for the MWMS and the SEA considers the number and capacity of new facilities required which will influence travel patterns. |

Review of Baseline Environmental Information

- 4.6 The county of Derbyshire covers a total land area of 263,000 hectares and is home to the first National Park in Britain, the Peak District National Park which lies at the southern end of the Pennines between Sheffield and Manchester. Its boundaries spread into several other neighbouring counties and cover over 129,500 hectares but over threequarters of it lies within Derbyshire. The status of the Park in planning policy terms and the restrictive nature of its waste planning policies have been identified in the review of relevant plans and programmes. Figure 4.1 is a map of Derbyshire, showing the locations of Derby City Council and the eight Borough and District Councils. The national park falls within the Derbyshire Dales and High Peak areas.

Figure 4.1 Map of Derbyshire



- 4.7 The population of the County is 961,233 averaging approximately 2.2 inhabitants per household. Derbyshire has 15 towns and cities with a population over 10,000 including Derby city (223,249) and Chesterfield (98,845). Nearly threequarters of the population are concentrated in the eastern part of the County on only a quarter of the total land area.
- 4.8 This divide is mirrored by the transport network where there are generally good road and rail links serving the eastern side of the

County whereas towards the western side the transport links are more limited with no motorways and few trunk roads serving the area.

- 4.9 Having regard to the location of the National Park, the location of the population and transport links in the County the MWMS splits the County into three sub areas, as follows (see Figure 4.2):

The Western Sub Area (Derbyshire Dales and High Peak)

- 4.10 Despite being the largest in terms of land area, the western sub area gives rise to less than 20% of the municipal waste in the county. Much of the area lies within the Peak District National Park and is therefore subject to particular environmental constraints. Additionally due to the isolated nature of many of the towns and villages both the collection and transportation of waste and recyclables proves costly and problematic. Currently municipal waste and recyclables are transported to sites outside of the area because of the shortfall in local disposal and recycling facilities.

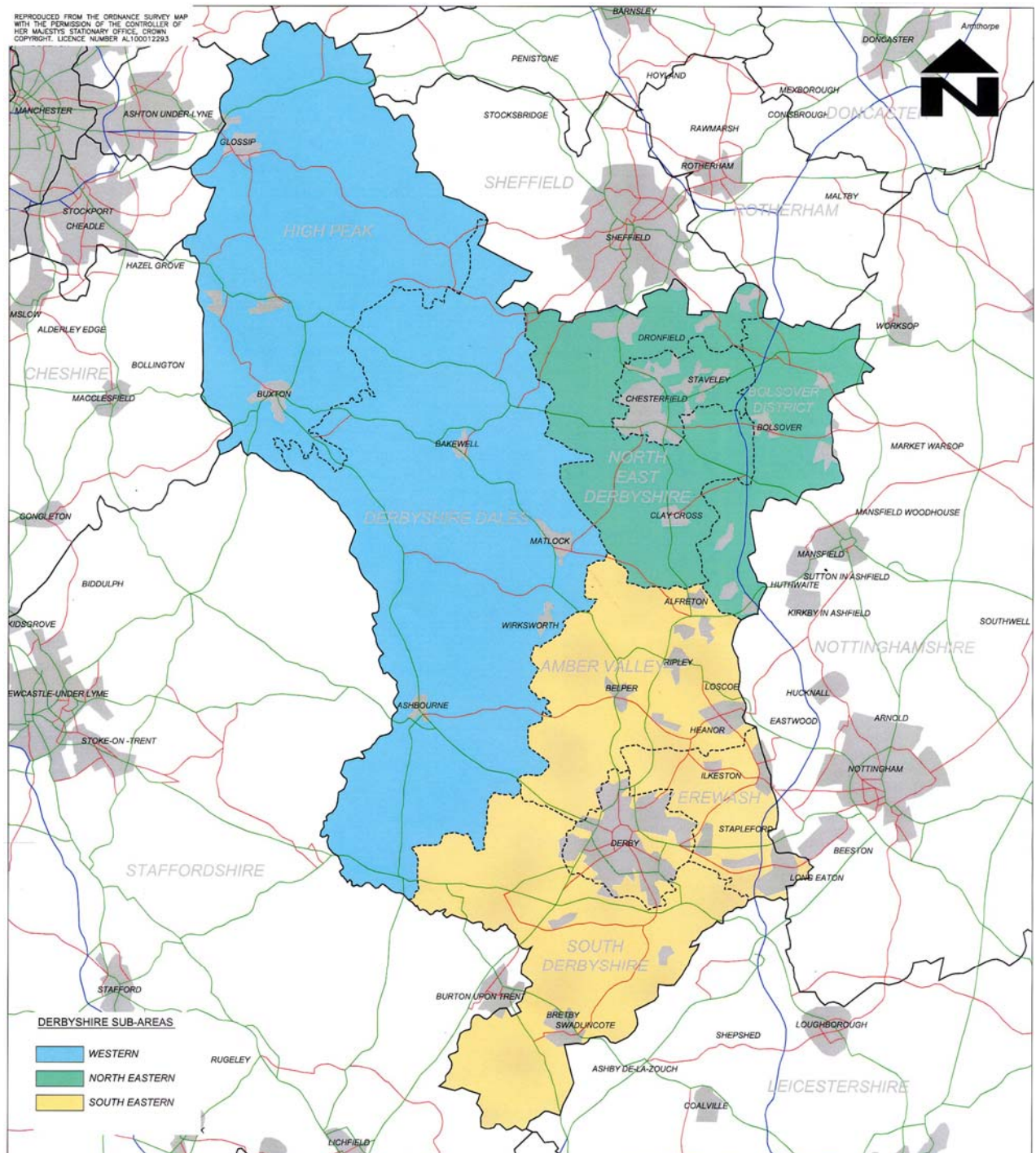
The North Eastern Sub Area (Bolsover, Chesterfield, North East Derbyshire)

- 4.11 The north eastern sub area is centred on Chesterfield and is largely urban in character. Most of the area lies on geologically exposed coalfield, which has historically been exploited for the landfill opportunities it provides. This together with good local infrastructure and local industry has meant almost all the municipal waste arising in the sub area (27% of the waste produced in the county) has been disposed of within the sub area.

The South Eastern Sub Area (Amber Valley, Derby City, Erewash, South Derbyshire)

- 4.12 Derby City forms the centre of the south eastern sub area surrounded by three partly rural districts, which collectively produce more than half of the County's municipal waste (around 55%). Road transport links in the area are very good radially but accessibility across the area can be difficult. Most of the municipal waste and recyclables are currently transferred out of the area for disposal and processing, although proposed recycling and composting plans should improve this situation by 2006.

Figure 4.2 Map of Derbyshire showing Sub-Areas, District Boundaries and Main Centres of Population and Transportation Routes



4.13 The current contracted delivery points for Derbyshire's municipal waste are as follows:

- Staveley Landfill, Chesterfield
- Erin Landfill, Chesterfield
- Alfreton Materials Recycling Facility, Alfreton
- Raynesway Waste Transfer Station, Derby
- Chesterfield Recycling Centre, Chesterfield
- Glossop Transfer Station, Glossop

4.14 In addition any of the following sites may be used as disposal points for the Transfer Stations:

- Sutton Landfill, Nottingham (closes August 2006)
- Bradgate Landfill, Markfield, Leicestershire (closes 2006, extension of time awaited)
- Barnstone Landfill, Langar, Nottinghamshire (closes August 2005)
- Welbeck Landfill, Wakefield
- Arpley Landfill, Warrington

4.15 The County Council also currently has five Household Waste Recycling Centres (HWRC) available to the public at Glossop, Chesterfield, Loscoe, Ilkeston and Bretby with three further sites being developed at Ashbourne, Buxton and Bolsover. Derby City has one HWRC at Raynesway in Derby.

4.16 A number of composting facilities that will accept kitchen waste, cardboard and green waste are also being developed across the County which should ensure adequate composting capacity across the county. These are as follows:

- A 40,000 tonnes per annum capacity in-vessel composting facility in the north east of the County that will accept kitchen, green waste and card from Bolsover, Chesterfield and NE Derbyshire;
- A 15,000 tonnes per annum capacity facility near Buxton to take kitchen, green waste and card from High Peak;
- A 60,000 tonnes per annum capacity Vital Earth facility in Ashbourne, receiving green and kitchen waste from Derby

City and possibly Amber Valley, Derbyshire Dales, Erewash and South Derbyshire; and

- Biffa have planning permission to upgrade their existing facility at Etwall, South Derbyshire to enable them to accept food waste.

4.17 The information on current waste management facilities and movement within and beyond Derbyshire highlights the following issues:

- A lack of landfill capacity in the County as a whole because municipal waste has to be exported for disposal; and
- Insufficient recovery capacity in the County to achieve the required landfill diversion targets because there are no current recovery facilities in the County.

4.18 If the new facilities required to implement the MWMS are going to be provided within the County the waste management authorities are going to have to locate suitable sites. This is a major exercise but will be key to the successful implementation of the MWMS. It is therefore recommended that work on site identification is concluded as soon as possible.

4.19 Regarding the availability of baseline environmental information identified in the Scoping Report, much of this is already held by the relevant Councils and the Environment Agency. The MWMS itself is not locationally specific so the direct effects of the strategy on any environmental designations cannot be assessed at this stage. However the MWMS identifies the need for new facilities in order to implement the strategy so the information on environmental designations will be necessary for the implementation stage of the MWMS. It is recommended that the waste management authorities put in place mechanisms to enable them to access this information to assist in implementing and monitoring the effects of the MWMS.

4.20 Although from information gathered to date in Table 4.3 municipal waste management within Derbyshire does not appear to be having any significant adverse effects on the environment, other than still being heavily dependent on landfill, but this will continue to be monitored.

Table 4.3: Baseline Information for Waste Specific Objectives and Indicators

| SEA Topic | SEA Objective | Indicator | Situation in 2004/5 |
|-----------------------------|--|--|---|
| Population and human health | <p>To prevent the management of municipal waste management having an unacceptable impact on the amenity of residents.</p> <p>To ensure that the management of municipal waste does not adversely affect the health of the population</p> | <ul style="list-style-type: none"> Numbers of complaints received by the City and County Council from the general public. Numbers of enforcement notices served by planning authorities. Numbers of enforcement notices served by the Environment Agency in any given year. | <p>1 complaint regarding litter was received regarding facilities in Derby City and 2 complaints in Derbyshire regarding odour and nature of waste received.</p> <p>No enforcement notices have been served at facilities in Derby City or Derbyshire.</p> <p>Pollution incidents have been reported over the last 12 months at the following locations: 2 incidents regarding odour at Staveley Landfill 1 incident regarding a hot load at Chesterfield</p> |

| SEA Topic | SEA Objective | Indicator | Situation in 2004/5 |
|-------------------------------|---|---|---|
| | | <ul style="list-style-type: none"> Number of fly tipping incidents per annum Publication of environmental emissions from municipal waste management facilities | <p>recycling centre 3 incidents regarding waste not permitted at the site at Erin Landfill</p> <p>Information held by individual waste collection authorities, but the East Midlands region has the second lowest number of recorded flytipping incidents in England</p> <p>No information is currently published</p> |
| Biodiversity, fauna and flora | To prevent the management of municipal waste management having an unacceptable impact on designated nature conservation | <ul style="list-style-type: none"> Numbers of designated nature conservation sites (SSSIs) and protected species damaged by municipal waste management activities in any given year. Impact of sites managing | <p>Information on SSSIs held by English Nature. Data on protected species requires monitoring.</p> <p>Information illustrating</p> |

| SEA Topic | SEA Objective | Indicator | Situation in 2004/5 |
|-----------------|--|--|---|
| | sites, geological diversity and protected species. | municipal waste within or adjacent to designated nature conservation sites and sites of geological heritage | the location of existing municipal waste management facilities in relation to designated nature and geological conservation sites is held on Derbyshire's GIS system |
| Material Assets | To move the treatment of municipal waste up the waste hierarchy. | <ul style="list-style-type: none"> Numbers of waste minimisation and re-use initiatives and participation rates. Number of properties home composting/home composters sold Recycling and composting rates in 2004/5 | <p>Real nappy and education campaigns and re-use and repair schemes are in operation</p> <p>Home composting campaign had distributed 18,000 compost bins by September 2005</p> <p>Amber Valley - 14.6%</p> <p>Chesterfield – 23.8%</p> <p>Derby City – 21.4%</p> <p>D'shire Dales – 22.5%</p> <p>Bolsover – 10.8%</p> <p>Erewash – 28.3%</p> <p>High Peak – 10.7%</p> <p>NE D'shire – 15.6%</p> |

| SEA Topic | SEA Objective | Indicator | Situation in 2004/5 |
|-----------|--|---|---|
| | | <ul style="list-style-type: none"> Recovery rates. Quantity of municipal waste generated per head | <p>South D'shire – 24.3% D'shire County – 22.8% No waste is currently recovered in Derbyshire</p> <p>0.52 tonnes per head</p> |
| Soil | <p>To encourage the use of previously developed land by municipal waste management facilities.</p> <p>To prevent the permanent loss of the best and most versatile agricultural land</p> | <ul style="list-style-type: none"> Percentage of land take from green and brownfield sites for facilities managing municipal waste. Amount of best and most versatile land lost to municipal waste management development | <p>No information currently held, requires monitoring for any new facilities</p> <p>As above</p> |
| Water | To prevent the management of municipal waste having an unacceptable impact on main rivers, | <ul style="list-style-type: none"> Number of floodplains, main rivers or GSPAs damaged by municipal waste management activities in any given year. Impact of sites managing | Information held by the Environment Agency but no pollution control notices have been served |

| SEA Topic | SEA Objective | Indicator | Situation in 2004/5 |
|---------------------------------|---|---|--|
| | floodplains and groundwater source protection areas (GSPAs) | municipal waste within floodplains or GSPAs | Information illustrating the location of municipal waste management facilities in relation to these designations is held on Derbyshire's GIS system |
| Climatic Factors | <p>To reduce CO₂ emissions.</p> <p>To increase the contribution of energy recovered from waste to renewable energy targets.</p> <p>To reduce methane emissions</p> | <ul style="list-style-type: none"> • Number of waste miles travelled. • Number of facilities recovering energy from waste and the amount of energy generated • Tonnage of waste recovered through energy from waste • Diversion of biodegradable municipal waste from landfill – diversion requirements outlined in Landfill Allowance Trading Scheme (LATS). | <p>Requires monitoring</p> <p>There are currently no facilities generating renewable energy from waste in Derbyshire.</p> <p>Requires monitoring. First scheme year of LATS in 2005/06 will provide required performance data.</p> |
| Cultural Heritage and Landscape | To prevent the management of municipal waste | <ul style="list-style-type: none"> • Number of these designations damaged by municipal waste management activities in any | Information not available requires monitoring |

| SEA Topic | SEA Objective | Indicator | Situation in 2004/5 |
|-----------|---|--|--|
| | having an unacceptable impact on the Peak District National Park, Derwent Valley Mills World Heritage Site, important features of landscape character, designated archaeological sites, the historic environment including listed buildings, conservation areas and registered historic parks and gardens and their settings. | <p>given year.</p> <ul style="list-style-type: none"> • Impact of sites managing municipal waste located within or adjacent to these designations. • Percentage of countryside character areas where significant changes inconsistent with character assessments have occurred as a result of municipal waste management activities. | <p>Information illustrating the location of existing municipal waste management facilities in relation to these designations is held on Derbyshire's GIS system.</p> <p>No information is currently held on this, requires monitoring.</p> |

Review of SEA Objectives against the Objectives of the MWMS

4.21 The preferred strategy of the draft MWMS seeks to achieve the following:

- Expansion of recycling and composting schemes to achieve up to a 55% recycling level;
- All residual waste, in the absence of a suitable regional facility, will be treated at in county treatment facilities; and
- The combination of recycling and recovery will ensure that the Landfill Directive targets for each of the key years are met and in fact exceeded.

4.22 The strategy comprises of a number of key objectives:

- A partnership approach between all Councils to achieve the visions of the municipal waste strategy;
- Introduction of waste minimisation measures to reduce the growth in waste arisings, ultimately it is intended that zero growth in waste arisings will be achieved;
- Councils will implement greener procurement systems that encourage the purchase of materials with recycled content;
- Continued support to and promotion of the benefits of home composting and other waste minimisation schemes;
- Support to local and regional schemes that encourage and develop local recycling and reprocessing capacity;
- Introduction of schemes to manage those elements of municipal waste considered to be hazardous;
- Where possible involvement of the community and voluntary sector in recycling and composting will be encouraged;
- Continued introduction/expansion of the kerbside collection of dry recyclables and organic (compostable) materials, it will be necessary to extend the schemes over the period up to 2009/10 in order to achieve the level of diversion required to meet the targets;
- Enhancement of the Household Waste Recycling Centre (HWRC) provision across the county to facilitate improved access to the principal population centres and increased diversion of materials for recycling and re-use.

- Provision of Materials Recycling Facilities (MRFs) to deal with recyclable materials diverted via bring sites, at the kerbside and at HWRCs;
- Development of in vessel composting facilities for the treatment of kerbside segregated organic materials (including green waste and organic kitchen waste);
- The continued use of open windrow composting for green waste, open windrow techniques will also be required for further maturation of the product from in vessel facilities;
- Providing sufficient residual waste handling capacity to treat residual waste; and
- Providing sufficient landfill capacity for residues and wastes that cannot be recycled, composted or recovered.

4.23 These objectives have been assessed against the SEA objectives and the results are set out in Table 4.4 below. This identifies the potential for conflict between the SEA objective of moving the treatment of waste up the hierarchy and the other SEA objectives which seek to protect communities and the environment from the potentially negative effects of the facilities required to do this. This identifies the need for a new objective which will aim to prevent the management of municipal waste in Derbyshire having an unacceptable impact on the environment and local communities. Other objectives will compliment each other such as encouraging the use of brownfield land should assist in protecting the best and most versatile agricultural land. However as the MWMS is not locationally specific it is difficult to explore these potential relationships in detail so this will be an issue to be monitored during the implementation of the MWMS. However the cumulative, effect of implementing the overall strategy should become increasingly positive as the benefits of waste minimisation, partnership working and improved kerbside recycling result in reduced quantities of waste, more value being obtained from the waste that is generated and less residual waste requiring disposal.

4.24 Key issues arising from this assessment are:

- The MWMS objectives of partnership working; waste minimisation; green procurement and the continued introduction and expansion of kerbside collection schemes all score as potentially beneficial when considered against the SEA objectives and are therefore supported.

- The MWMS objectives which are aimed at providing the facilities required to implement the strategy have been scored as having potentially both beneficial and negative effects. This is because the provision of these facilities will enable the implementation of an integrated waste management strategy which will achieve the required Landfill Directive targets which is considered beneficial. However, locating these facilities in any one place has the potential to have negative effects on the environment although, this will be dependent on the sites selected. Therefore in order to mitigate against any potential negative effects of providing these facilities it is considered that the MWMS should have an additional objective which will be to provide for the management of Derby's and Derbyshire's municipal waste without having an unacceptable impact on the communities and environment of Derby and Derbyshire.

Table 4.4 - Review of SEA and MWMS Objectives

| | Partnership between Councils and involvement of voluntary sector where possible | Waste Minimisation, including the continued promotion of home composting | Green Procurement | Continued introduction and expansion of kerbside collection schemes | Developing recycling and reprocessing capacity | Enhance existing HWRCs | Provide MRFs | Develop In vessel Composting facilities | Continue with open windrow facilities for green waste | Provide sufficient residual waste handling capacity | Provide sufficient landfill capacity for residual waste |
|---|---|--|-------------------|---|--|------------------------|--------------|---|---|---|---|
| Protect residential amenity | ✓ | ✓ | - | ✓ | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x |
| Protect human health | ✓ | ✓ | - | ✓ | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x |
| Protect biodiversity | ✓ | ✓ | - | ✓ | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x |
| Move waste up the Waste Hierarchy | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | x |
| Encourage the use of previously developed land | ✓ | - | - | - | ✓ | ✓ | ✓ | ✓ x | ✓ x | ✓ | x |
| Prevent the loss of the best and most versatile agricultural land | ✓ | ✓ | - | ✓ | - | - | - | x | x | - | x |
| Protect ground and surface water interests | ✓ | ✓ | - | ✓ | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x | ✓ x |

| | | | | | | | | | | | |
|---|---|---|---|---|----|----|----|----|----|----|----|
| Prevent emissions having an unacceptable impact | ✓ | ✓ | - | ✓ | ✓x | ✓x | ✓x | ✓x | ✓x | ✓x | ✓x |
| Reduce CO2 emissions | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | x |
| Increase contribution to renewable energy targets | ✓ | - | - | - | - | - | - | - | - | ✓ | - |
| Protect the landscape and historic environment | ✓ | ✓ | - | ✓ | ✓x | ✓x | ✓x | ✓x | ✓x | ✓x | ✓x |

Key: ✓ potential beneficial effect; x potential conflict; - neither benefit nor conflict

5.0 ASSESSMENT OF OPTIONS

- 5.1 This section assesses the options for Derbyshire's MWMS against the SEA objectives.
- 5.2 The SEA process has considered the following seven options:

Do nothing – this was not pursued for the preparation of the MWMS as the Waste Management Strategy Working group (representing all 10 authorities in Derbyshire) was unanimous in deciding that this was not a realistic option, however it must be included for the purposes of SEA to ensure that the option(s) eventually selected represent an improvement upon the existing situation.

Option 1 – the basis of this option is to achieve a 45% source segregated recycling and composting effort, with residual waste processed through an autoclave Mechanical Treatment (MBT) plant. The autoclave MBT plant is based on steam sterilisation of waste, followed by recovery of recyclable materials, production of a refuse derived fuel (RDF) for offsite combustion and disposal of the non recoverable fraction to landfill.

Option 2 – this option looks to achieve a 45% source segregated recycling and composting effort, with just enough residual waste sent to a MBT plant to meet LATS targets. The MBT plant comprises a combination of biological drying, recovery of recyclable materials, generation of a RDF and disposal of the non recoverable fraction to landfill.

Option 3 – 45% source segregated recycling and composting with residual waste processed in an anaerobic digestion plant. This technology allows the recovery of recyclables, anaerobic production of the biodegradable component together with composting of the resulting digestate, production of RDF for off site combustion and disposal of the non recoverable fraction to landfill.

Option 4 – this replicates the levels of source segregated composting and recycling achieved in options 1, 2 and 3, with all residual waste being treated through an energy from waste plant.

- Option 5 – the basis of this option is to achieve a 55% source segregated and recycling rate, with all residual waste being treated through an anaerobic digestion plant.
- Option 6 – this replicates the levels of source segregated composting and recycling achieved in option 5, with all residual waste being treated through an energy from waste plant.
- 5.3 A detailed appraisal of these options against Best Practicable Environmental Option (BPEO) criteria and the Sustainable Waste Management Option (SWMO) is set out in Chapter 8 of the MWMS, which identifies Options 5 and 6 as the highest scoring options, with Option 1 the third highest. However the SEA objectives are based on environmental criteria and do not include the other social and economic factors that are included in the BPEO and SWMO appraisals.
- 5.4 The assessment of the options against the SEA objectives is set out in Table 5.1. This identifies Option 6 as the highest scoring option, followed by Option 1. Options 4 and 5 come out equal but Option 4 scores the lowest in moving the treatment of waste up the hierarchy which is a key European, national and local policy driver in the review of relevant plans and programmes. Option 5, on the other hand, scores the highest in this category and it is proposed that Option 5 goes forward with Options 1 and 6 into the MWMS.
- 5.5 Comparison of the MWMS and SEA option selection process identifies that Option 6 is the highest scoring option in both cases. However the two processes score differently on Options 1 and 5. The MWMS selection process scores Option 5 highly on objectives such as minimising costs, reliability of delivery and creating employment opportunities which is why the MWMS places it second. However these objectives are not environmental ones and are therefore not included in the SEA objectives which is why Option 1 performs better through the SEA process.
- 5.6 Because of the above, the carrying forward of a number of options into the MWMS is considered a prudent approach as the final selection of the preferred strategy will involve the consideration of social and economic criteria as well as environmental ones. Whilst the SEA process can provide guidance on the preferred strategy from an environmental point of view, which in this case would be

Option 6, it can also provide guidance on where additional mitigation may be required if another option is eventually selected but this would require a further review of this Environment Report once the preferred strategy is selected.

- 5.7 The do nothing option is rejected because it would fail to provide Derbyshire with an integrated waste management strategy to meet landfill diversion targets. Options 2, 3 and 4 are rejected as they perform less well against the SEA objectives than Options 1, 5 and 6 particularly with regard to moving the treatment of waste up the waste hierarchy which is a key policy driver.

Table 5.1 Assessment of Waste Management Options against SEA Objectives

| | Do Nothing | Option 1 | Option 2 | Option 3 | Option 4 | Option 5 | Option 6 |
|---|------------|----------|----------|----------|----------|----------|----------|
| Prevent unacceptable impact on the amenity of residents | ○ | ✓ | ○ | ✗ | ✓ | ○ | ✓✓ |
| Ensure does not adversely affect the health of the population | ○ | ✓✓ | ○ | ✓ | ✗ | ✓ | ○ |
| Prevent unacceptable impacts on nature conservation interests | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Move the treatment of waste up the waste hierarchy | ✗✗ | ✓ | ○ | ○ | ✗ | ✓✓ | ✓ |
| Encourage the use of previously developed land | ✗ | ○ | ○ | ✗ | ✓ | ○ | ✓✓ |
| Prevent the permanent loss of the best and most versatile agricultural land | ✗ | ○ | ○ | ✗ | ✓ | ○ | ✓✓ |
| Prevent unacceptable impacts on ground and | ○ | ✓ | ○ | ✗ | ✓✓ | ○ | ✓ |

| | | | | | | | |
|---|---|----|---|---|---|----|----|
| surface water sources | | | | | | | |
| Prevent emissions having an unacceptable impact | ○ | ✓ | ○ | ✖ | ○ | ✓ | ✓✓ |
| Reduce CO2 emissions | ○ | ✓✓ | ✓ | ✓ | ○ | ○ | ✖ |
| Increase contribution to renewable energy targets | ○ | ○ | ○ | ✓ | ○ | ✓✓ | ○ |
| Prevent unacceptable impacts on landscape and historic designations | ○ | ✓ | ○ | ✖ | ✓ | ○ | ✓✓ |

✓✓ Major positive effect

✓ Positive effect

○ Neutral effect

✖ Negative effect

✖✖ Major negative effect

The rankings given in table 5.1 relate to the environmental aspects of the rigorous options appraisal process carried out as part of the preparation of the Joint Municipal Waste Management Strategy and recorded in Chapter 8 and Appendix 5 of the document.

Size and Pattern of Facilities

- 5.8 The likely number of facilities required to implement Options 1, 5 or 6 has been considered and is set out in Table 5.2 below having regard to whether they are small, medium or large scale facilities. The pattern of facilities is likely to vary between a larger number of smaller facilities spread around the County and a smaller number of larger facilities concentrated on centres of population.

Table 5.2 – Likely number of waste facilities for Options 1, 5 and 6

| Facility size category | Option | MRF | Composting | Residual Treatment (incl. EfW) | Landfill | HWRC sites and Transfer Facilities | Total Number of facilities |
|------------------------|----------|-----|------------|--------------------------------|----------|------------------------------------|----------------------------|
| Small facilities | Option 1 | 13 | 6 | 7 | 2 | 11 | 39 |
| | Option 5 | 17 | 7 | 6 | 2 | 11 | 43 |
| | Option 6 | 17 | 7 | 6 | 1 | 11 | 42 |
| Medium facilities | Option 1 | 5 | 4 | 3 | 2 | 11 | 25 |
| | Option 5 | 7 | 5 | 3 | 2 | 11 | 28 |
| | Option 6 | 7 | 5 | 3 | 1 | 11 | 27 |
| Large facilities | Option 1 | 3 | 2 | 2 | 2 | 11 | 20 |
| | Option 5 | 3 | 3 | 2 | 2 | 11 | 21 |
| | Option 6 | 3 | 3 | 2 | 1 | 11 | 20 |

Note:

Landtake estimates for small, medium and large facilities range between 68-100ha, 62-93 & 59-90, respectively

- 5.9 Table 5.3 below, considers the three options (1, 5 and 6) put forward in the MWMS with regard to the information provided on size of facilities in Table 5.2 and assesses them against the SEA objectives. Table 5.3 uses the assessment set out in Table 5.1 which was based on medium size facilities to identify if using smaller or larger facilities offers any significant environmental benefits. As such where larger or smaller facilities are judged to offer improved environmental benefits they are scored more highly, if no benefits are identified then the score remains the same and if the potential for greater negative effects is identified they are scored lower. Although as pointed out in paragraph 5.6 of the SEA is only considering environmental effects and social and economic considerations will also play a part in the final selection process.

- 5.10 The key differentiation identified in this assessment is that a greater number of smaller facilities score more highly with the objective of reducing CO₂ emissions because they would reduce the distance waste has to travel to an appropriate treatment facility. In addition smaller facilities are assessed as offering greater potential benefits to objectives linked to population, such as residential amenity and human health, because it is considered that smaller facilities spread around the county would impact less on the population than larger facilities concentrated on the centres of population. However locating a larger number of smaller facilities across the county as a whole has the potential to adversely impact on a greater number of the environmental designations that have been identified and which are covered by SEA objectives on protecting biodiversity, best and most versatile land, ground and surface water, emissions, landscape and the historic environment. It is therefore considered that there are environmental advantages and disadvantages attached to an approach which would favour either smaller or larger facilities, having regard to the environmental constraints that exist in different parts of the County.

Table 5.3 – Assessment of Preferred Options having regard to size of facility against SEA objectives

| SEA Objective | Option 1 | | | Option 5 | | | Option 6 | | | Comment |
|--|----------|----|---|----------|----|----|----------|----|----|--|
| | s | m | l | s | m | l | s | m | l | |
| Protect residential amenity | ✓✓ | ✓ | × | ✓ | ○ | × | ✓✓✓ | ✓✓ | ✓ | Larger facilities concentrated on centres of population are assessed as having greater potential to have negative effects on residential amenity because of their location close to large concentrations of population |
| Protect human health | ✓✓✓ | ✓✓ | ✓ | ✓ | ✓ | × | ✓ | ○ | × | Larger facilities concentrated on centres of population are assessed as having greater potential to have negative effects on human health because of their location close to large concentrations of population |
| Protect biodiversity | × | ○ | ✓ | × | ○ | ✓ | × | ○ | ✓ | Smaller facilities spread across the County are assessed as having greater potential to have negative impacts on biodiversity because more sites would have to be found |
| Move waste up the Waste Hierarchy | ✓ | ✓ | ✓ | ✓✓ | ✓✓ | ✓✓ | ✓ | ✓ | ✓ | Size of facility is not considered to impact on the ability to move the treatment of waste up the hierarchy. All options would achieve this |
| Encourage use of previously developed land | ○ | ○ | ○ | ○ | ○ | ○ | ✓✓ | ✓✓ | ✓✓ | Size of facility is not considered to affect the ability to use previously developed land |

| | | | | | | | | | | |
|--|-----|----|----|----|----|----|---|----|-----|---|
| Protect best and most versatile land | x | ○ | ✓ | x | ○ | ✓ | ✓ | ✓✓ | ✓✓✓ | Smaller facilities spread across the County are assessed as having greater potential to have negative impacts on agricultural land because more sites would have to be found |
| Protect ground and surface water | x | ✓ | ✓✓ | x | ○ | ✓ | x | ✓ | ✓✓ | As above |
| Prevent unacceptable emissions | x | ✓ | ✓✓ | x | ✓ | ✓✓ | ✓ | ✓✓ | ✓✓✓ | As above |
| Reduce CO2 emissions | ✓✓✓ | ✓✓ | ✓ | ✓ | ○ | x | ○ | x | xx | Smaller facilities spread across the County are assessed as enabling waste to travel shorter distances to an appropriate treatment facility |
| Contribute to renewable energy targets | ○ | ○ | ○ | ✓✓ | ✓✓ | ✓✓ | ○ | ○ | ○ | Size of facility is not considered to impact on ability to contribute to renewable energy targets. Choice of technology is the main influence |
| Protect the landscape and historic environment | x | ✓ | ✓✓ | x | ○ | ✓ | ✓ | ✓✓ | ✓✓✓ | Smaller facilities spread across the County are assessed as having greater potential to have negative impacts on the landscape and historic environment because more sites would have to be found |

Key : ✓✓✓ Extremely positive effect
 ○ Neutral effect

 ✓✓ Major positive effect
 x Negative effect

 ✓ Positive effect
 xx Major negative effect

Discussion of Environmental Effects

- 5.11 In the short term all the three options put forward in the MWMS (1, 5 and 6) have the potential to have negative effects on the environment because they require the provision of additional waste management facilities within Derbyshire and these have the potential to have negative impacts. These impacts could range from relatively common minor impacts on amenity or local designations through to the potential for proposals to impact on the National Park. Although for a proposal which would have a significant adverse impact on a National Park to obtain planning permission would be extremely rare. The potential for these impacts is recognised in section 4 of this Report and Table 4.4 and is why a new objective of ensuring that there are no unacceptable impacts on the environment or local communities is recommended. This combined with earlier recommendations regarding regular liaison with the waste planning authorities and accessing the environmental information held by planning authorities and other statutory bodies should help to minimise any negative effects providing these new facilities may have. In the medium to long term once the facilities are established the positive effects of the MWMS including waste minimisation, partnership working and increased kerbside recycling will, if successfully implemented, contribute to an improving environmental situation whereby less waste is generated in the first place, greater quantities are recycled or have energy recovered and less is sent to landfill.
- 5.12 The implementation of the MWMS should also ensure that Derby and Derbyshire are providing facilities for dealing with the municipal waste that they generate within the County, thereby reducing the need to export waste for treatment and ensuring the impacts that do occur are kept within the County. However the need to export waste for landfill may continue all be it at a reduced level. Also finding acceptable sites for the recycling and recovery facilities will be important as these facilities will be required permanently as the need to divert waste from landfill will be an ongoing one, whereas landfill has traditionally been a temporary operation. The assessment also identifies that there are both positive and negative effects in fulfilling the SEA objectives. For instance the provision of new facilities has positive aspects such as providing the new treatment capacity that is required and negative effects such as the potential impacts these facilities may have. However there are also complimentary

objectives such as encouraging the use of previously developed land, which should reduce the need to use agricultural land for example. Finally the year on year increases in diverting waste from landfill and reducing growth in waste generation will contribute to ongoing, cumulative improvements to the environment caused by implementing the strategy.

- 5.13 Therefore successful implementation of the MWMS will be beneficial to the environment in the medium to long term and any short term negative impacts could be successfully mitigated by following the recommendations in this Report.

6.0 MONITORING

- 6.1 SEA objectives provide a methodological yardstick against which the environmental effects of the MWMS can be monitored. The achievement of the objectives is established through measurement of the indicators using the targets set out in Table 6.1 below.
- 6.2 Monitoring the effects of the MWMS is important as the results can then be used to inform subsequent reviews of the Strategy.

Table 6.1: Waste Specific Objectives, Indicators and Targets for the Derbyshire MWMS

| SEA Topic | SEA Objective | Indicator | Target |
|-------------------------------|--|--|---|
| Population and human health | <p>To prevent the management of municipal waste management having an unacceptable impact on the amenity of residents.</p> <p>To ensure that the management of municipal waste does not adversely affect the health of the population</p> | <ul style="list-style-type: none"> Numbers of complaints received by the partner authorities from the general public. Numbers of enforcement actions served by partner authorities. Numbers of enforcement actions served by the Environment Agency in any given year. Number of fly tipping incidents per annum Number of actions taken against the operators of municipal waste management facilities | To reduce the number of complaints, incidents and enforcement notices year on year or maintain at zero. |
| Biodiversity, fauna and flora | To prevent the management of municipal waste management having an unacceptable | <ul style="list-style-type: none"> Numbers of designated nature and geological conservation sites (SSSIs) damaged by municipal waste management activities in a given year | To reduce number of incidents year on year or maintain at zero. |

| SEA Topic | SEA Objective | Indicator | Target |
|-----------------|---|--|---|
| | impact on designated nature and geological conservation sites (SSSIs). | <ul style="list-style-type: none"> Impact of sites managing municipal waste within or adjacent to designated nature and geological conservation sites (SSSIs) | |
| Material Assets | To move the treatment of municipal waste up the waste hierarchy. | <ul style="list-style-type: none"> Numbers of waste minimisation and re-use initiatives and participation rates. Number of properties home composting/home composters sold Recycling and composting rates. Recovery rates. Quantity of municipal waste generated per head | To increase BVPIs year on year. |
| Soil | To encourage the use of previously developed land by municipal waste management facilities. | <ul style="list-style-type: none"> Percentage of land take from green and brownfield sites for facilities managing municipal waste. | To increase the percentage of brownfield year on year |

| SEA Topic | SEA Objective | Indicator | Target |
|------------------|--|---|---|
| | To prevent the permanent loss of the best and most versatile agricultural land | <ul style="list-style-type: none"> Amount of best and most versatile land lost to municipal waste management development | To reduce the permanent loss of best and versatile land or maintain at zero. |
| Water | To prevent the management of municipal waste having an unacceptable impact on main rivers, floodplains and groundwater source protection areas (GSPAs) | <ul style="list-style-type: none"> Number of floodplains, main rivers or GSPAs damaged by municipal waste management activities in any given year. Impact of sites managing municipal waste within floodplains or GSPAs | To reduce number of incidents year on year or maintain zero. |
| Climatic Factors | <p>To reduce CO₂ emissions.</p> <p>To increase the contribution of energy recovered from waste</p> | <ul style="list-style-type: none"> Number of waste miles travelled. Number of facilities recovering energy from waste and the amount of energy generated | <p>Use or locate facilities which minimise the distances waste have to travel.</p> <p>To increase the</p> |

| SEA Topic | SEA Objective | Indicator | Target |
|---------------------------------|---|---|--|
| | to renewable energy targets. | <ul style="list-style-type: none"> Tonnage of waste recovered through energy from waste. | contribution to renewable energy targets year on year. |
| | To reduce methane emissions. | <ul style="list-style-type: none"> Diversion of biodegradable municipal waste from landfill. | Meet or exceed required BMW landfill diversion. |
| Cultural Heritage and Landscape | To prevent the management of municipal waste having an unacceptable impact on the Peak District National Park, Derwent Valley Mills World heritage site, countryside character areas, designated archaeological sites, the historic environment including listed buildings, conservation areas and registered | <ul style="list-style-type: none"> Number of these designations damaged by municipal waste management activities in any given year. Impact of sites managing municipal waste located within or adjacent to these designations. Percentage of countryside character areas where significant changes inconsistent with character assessments have occurred as a result of municipal waste management activities. | To reduce number of incidents year on year to a minimum or maintain at zero. |

| SEA Topic | SEA Objective | Indicator | Target |
|-----------|--|-----------|--------|
| | historic parks and gardens and their settings. | | |

7.0 RECOMMENDATIONS

7.1 The following recommendations should be taken into account when finalising the MWMS:

- The waste disposal authorities should improve mechanisms for accessing the environmental information held by the Environment Agency, the waste planning authorities, the local authorities and others to assist in the implementation and ongoing monitoring of the MWMS, including use of the Derbyshire Mapping Portal as it is developed further;
- The waste disposal authorities should establish a regular forum of communication with the waste planning authorities regarding the development of strategies and policies by both parties. The Planning Policy Officers Group in Derbyshire should be asked how best to improve liaison between itself and the waste disposal authorities to consider the impact of new development and waste;
- The waste disposal authorities should conclude a site identification exercise for the facilities required to implement the MWMS as soon as possible. Such an exercise needs to be undertaken within the context of the policies in the adopted Waste Local Plan and the emerging Waste Sites Development Plan Document and PPS10;
- The MWMS objectives of partnership working, waste minimisation, green procurement and the continued introduction and expansion of kerbside collection schemes are strongly supported;
- The MWMS objectives for providing additional facilities should:

“provide for the management of Derby’s and Derbyshire’s municipal waste without having an unacceptable impact on the communities and environment of Derby and Derbyshire”

APPENDICES

APPENDIX ONE – Consultation responses received on the Scoping Report

Mr D Botterill
HD/P/5050/01
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Date: 26 September

2005

Dear Mr Botterill

**SCOPING REPORT FOR THE STRATEGIC ENVIRONMENTAL
ASSESSMENT OF THE DERBYSHIRE MUNICIPAL WASTE
MANAGEMENT STRATEGY**

Thank you for your letter of 17 August 2005 requesting comments on scoping report.

My comments on the parts of the report dealing with the historic environment are as follows:

Pages 12 and 17

Reference is made to 'Designated archaeological sites' and 'The historic environment'. The former is an aspect of the historic environment. Also, it is important to consider the potential impact on non-designated archaeological sites, some of which may also be nationally important, as well as listed buildings, scheduled monuments, registered historic parks and gardens and conservation areas. PPG 16 deals with both designated and un-designated archaeological sites. All the relevant information is held on the County Sites and Monuments Record and by the Peak Park. In addition, the County Council has undertaken an Historic Landscape Characterisation of Derbyshire, which provides the time-depth to the

Landscape Character Areas and can be used to identify areas of historic landscape that are sensitive to change.

There is no reference to 'setting' (see PPG 15) or the potential impact of development on townscape, particularly conservation areas, on page 17. This includes the wider setting of 'iconic' national assets such as Hardwick Hall and Bolsover Castle. The National Trust has commissioned consultants to carry out a landscape setting study of Hardwick, which includes the Old Hall, which is managed by English Heritage. It is hoped that this will be adopted as planning policy by the relevant district councils. Barry Joyce at the County Council can provide more information, if required.

Finally, there seems to be no reference to the Derwent Valley Mills World Heritage Site and its Management Plan that should be taken into account at the appraisal stage.

Please do not hesitate to contact me if you have any queries.

Yours sincerely

Miss Ann Plackett
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SCOPING REPORT FOR THE STRATEGIC ENVIRONMENTAL ASSESSMENT OF THE DERBYSHIRE MUNICIPAL WASTE MANAGEMENT STRATEGY

Thank you for consulting the Landscape, Access and Recreation (LAR) division of the Countryside Agency on the above document.

In general LAR considers that the Scoping Report is logical in its approach and covers a comprehensive range of issues. LAR has the following comments that we trust addresses some of the questions that you pose in section 8 of the document:

- LAR would suggest that reference is made to the Derbyshire Landscape Character Assessment in section 2.26 *Local Planning Framework*. This document would provide advice on where municipal waste sites could most appropriately be located with the least damage to the landscape character of the area.
- LAR welcomes the inclusion of the SEA topic "Cultural heritage and landscape" and supports the indicators and targets that have been given. We would however suggest that a further indicator could be included on landscape character, for example *"Percentage of countryside character areas where marked*

changes or significant changes inconsistent with character have occurred as a result of municipal waste management activities”

- It is suggested that the restoration of municipal waste sites should also be covered. The target should be that they are restored to be compatible with the landscape character of the area. In addition it should also be ensured that any public rights of way that may have been present on the site should be restored, where there is no public health risk, to ensure the continued access to the countryside.

I trust this information is of assistance to you and please do not hesitate to contact me if you need

to discuss this issue in further detail.

Yours sincerely

Karen Devonport
Regional Planner – Positive Planning

23 SEP 2005



ENVIRONMENT
AGENCY

Daniel Botterill
SLR Consulting Ltd.
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Our Ref: CS19718/EI/HS

Date: September 21, 2005

Dear Sir,

Request for information – Scoping report - Derbyshire Municipal Waste Management Strategy

I refer to your letter requesting information relating to the above, following are our comments.

Q1.

Development control comments - It is recommended that the impact on any watercourse, rather than just "Main River", is considered by the SEA. The Environment Agency has regulatory powers over certain works in "ordinary watercourses", including the culverting of them for example, as well as "Main Rivers". The Agency resists culverting on environmental grounds however a number of waste sites in Derbyshire have proposed the culverting of adjacent/on-site "ordinary watercourses" rather than considering other options.

Environment Management Water comments - It should not just be the location of municipal waste management facilities in relation to main rivers that is considered. Their location in relation to all relevant water bodies should be considered. In the case of Derbyshire this would be all surface freshwater bodies (including lakes, streams and rivers) and groundwaters. This links with the Water Framework Directive (see response to Q5).

Environment Management Waste comments - Reference is made within Section 3 to the environmental baseline and a number of items of information to be sought. What it is difficult to discern, is how risk to the environment, potential harm to human health and impact on local amenity of MW facilities is to be assessed and weighed against the broader need to reduce/reuse/recycle waste and the attendant problems if we don't.

The list is made in relation to MW facilities. If this is a strategy for the management of waste within Derbyshire it must include and take into account the dispersed activity of waste management away from facilities e.g. kerbside / community activities.

The environmental information identified as being required for the environmental baseline must include items from the 'additional information sought' list such as waste

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miles (which will also need clearer definition) as this is an indicator of environmental, not to mention economic, impact. Waste miles are not defined here, but do they include for instance the miles traveled to a CA site by a householder, or is it just the easily accounted for miles under the control directly, or indirectly, of the CC or LA.

Also overall assessment of the relative energy use of the options must surely be included.

Q2.

Environment Management Water comments - The additional indicators that could be used are:

Population and Human Health - Number of complaints received by the Environment Agency from the general public. This is available from the Agency's National Incident recording system (NIRS). The Agency's Operator Risk Assessment scoring system (OPRA) and Compliance Classification System (CCS) contains data on the risk of municipal waste management facilities impacting on population and human health as well as details of compliance with waste management licence conditions.

Water - Prevention of unacceptable impact from operation of municipal waste management facilities on all relevant water bodies (not just main rivers), as defined by the Water Framework Directive, should be the objective. These water bodies should be used as indicators, not just main rivers. Once again the Environment Agency has data on the impact of municipal waste management facilities on the water environment in its OPRA, NIRS and CCS databases. In addition, the Agency carries out routine monitoring of the water environment and publishes water quality reports.

Q3.

Environment Management Waste comments - Table 3.1 Population & Human Health refers to the indicator being complaints to DCC - this might also include complaints to EA or LAs. In this part, reference is also made to numbers of EA Enforcement Notices - the EA has a number of sanctions extra to notices such as outright prosecution, formal caution and formal warning which might also be included.

Table 3.1 Climatic factors such include energy output from EFW

Table 3.1 Cultural Heritage Landscape could refer to issues of impacts of kerbside and community activities on Peak Park and World Heritage Sites.

Development control comments - As above, the words "Main River" should be substituted with "watercourses" in Table 3.1.

Technical team comments - We note that in chapter 3 of the report, both in the text and in the table 3.1, where the topic is "water", it seems to suggest that only source protection areas would be a consideration as objectives and indicators. Although we can all agree that these are obviously the most sensitive in terms of resource (and our policy backs this up) I think that the indicators and objectives should acknowledge all controlled waters in some way.

Similarly the report refer to **Main River**. Again all controlled waters should be acknowledged.

If indicators, objectives etc are left as source protection areas and main water only then the success of the MWMS could be misleading.

Q5.

Development control comments - PPG25 Development and Flood Risk covers wider scope than just considering development in flood risk areas, it also considers flood risk to and from any development. This includes ensuring that surface water is dealt with adequately at sites, rather than being directly discharged into catchments, which can increase the flood risk to neighbouring properties. Sustainable drainage systems (SuDS), including source-control, infiltration and attenuation, must be considered. This is applicable to proposed waste sites that may not be within floodplain areas but whose footprint could impact on flood risk if not managed

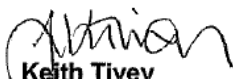
Environment Management Water comments - The Water Framework Directive (2000/60/EC) should be added to section 2 of the report. This will establish a strategic framework for managing the water environment. It establishes a common approach to protecting, and setting environmental objectives for, all groundwaters and surface waters. The Directive also requires that statutory strategic management plans be produced for each river basin district. These plans will set out how the objectives for all the water bodies within each river basin are to be achieved. These plans will be based upon a detailed analysis of the pressures on water bodies within each river basin and an assessment of their impacts. Clearly, the operation of municipal waste management facilities will be one of the pressures that will need to be assessed and, if necessary, dealt with through the management plans. There are strong links between the Water Framework Directive and the Habitats Directive. Conservation sites identified under the Habitats Directive and Birds Directive (with water related interest features) will be designated as Protected Areas under the Water Framework Directive.

Our Biodiversity team would like to see the report include a section on 'Protected species' in the area, please contact Alison Reed, Biodiversity team for further details.

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A site investigation has not been carried out in relation to your request for information. This information is provided subject to the enclosed notice.

Yours sincerely,



Keith Tivey

Team Leader, External Relations

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