

**IMPLEMENTATION EXECUTIVE
29 OCTOBER 2008**

MUNICIPAL WASTE DISPOSAL: WILTSHIRE/SWINDON PROJECT**Purpose of Report**

1. To update Members on progress made towards dealing with the implications of the Landfill Allowance Trading Scheme (LATS) for the disposal of Municipal Solid Waste (MSW), and to recommend a joint project between Swindon Borough Council and Wiltshire County Council to develop an Outline Business Case (OBC) for minimising the costs of compliance.

Background

2. The decomposition of biodegradable waste, in the conditions of a landfill, produces methane, which has been identified as a powerful contributor towards global warming¹. Reduction of methane emissions from landfill has been identified as a key part of EU and national strategies to control global warming.
3. The 1993 EU Landfill Directive, which has been accepted by the UK Government, requires progressively diminishing limits on the landfill of biodegradable municipal waste (BMW). The UK, along with other countries with a high dependence on landfill, was granted a four-year derogation to meet the target imposed by the Directive. Implementation of these targets, assuming the four-year derogation period, is by:

2010 to reduce biodegradable municipal waste to 75% of that produced in 1995
2013 to reduce biodegradable municipal waste to 50% of that produced in 1995
2020 to reduce biodegradable municipal waste to 35% of that produced in 1995
4. Some EU Member States have invested heavily in non-landfill processes and capacity over recent years (such as recycling and incineration) and are meeting these targets without the four-year derogation granted to the UK. Failure by the UK to meet the Directive in 2010 brings the prospect of EU fines, currently reported as £½ million per day.
5. Corporate Plans in each authority have responded to these issues by identifying growth in waste and carbon footprint as key issues and proposing investment in sustainable waste management.
6. Local Authorities pay landfill tax on every tonne disposed of to landfill. In recent years this tax has been subject to an escalator of £8 per year, to further discourage disposal to landfill. The current rate of landfill tax (2008-09) is £32 per tonne. By 2010-11 the rate will be £48 per tonne.
7. Also, since 2005/06 the use of landfill by Waste Disposal Authorities for biodegradable municipal waste has been discouraged by the Landfill Allowance Trading Scheme (LATS). LATS was introduced by the Waste and Emissions Trading Act 2003.

¹ Data from the National Atmospheric Emissions Inventory published in 2005 shows that management of solid wastes contributed some 2.82% of UK emissions of Global Warming Gases (GWGs). This is the 11th largest source of GWGs. However, the capture of landfill gases at many sites and, more recently, the reduction in waste sent to landfill due to recycling, composting and Energy from Waste projects, have reduced that share from over 6% (5th largest source) in 1990.

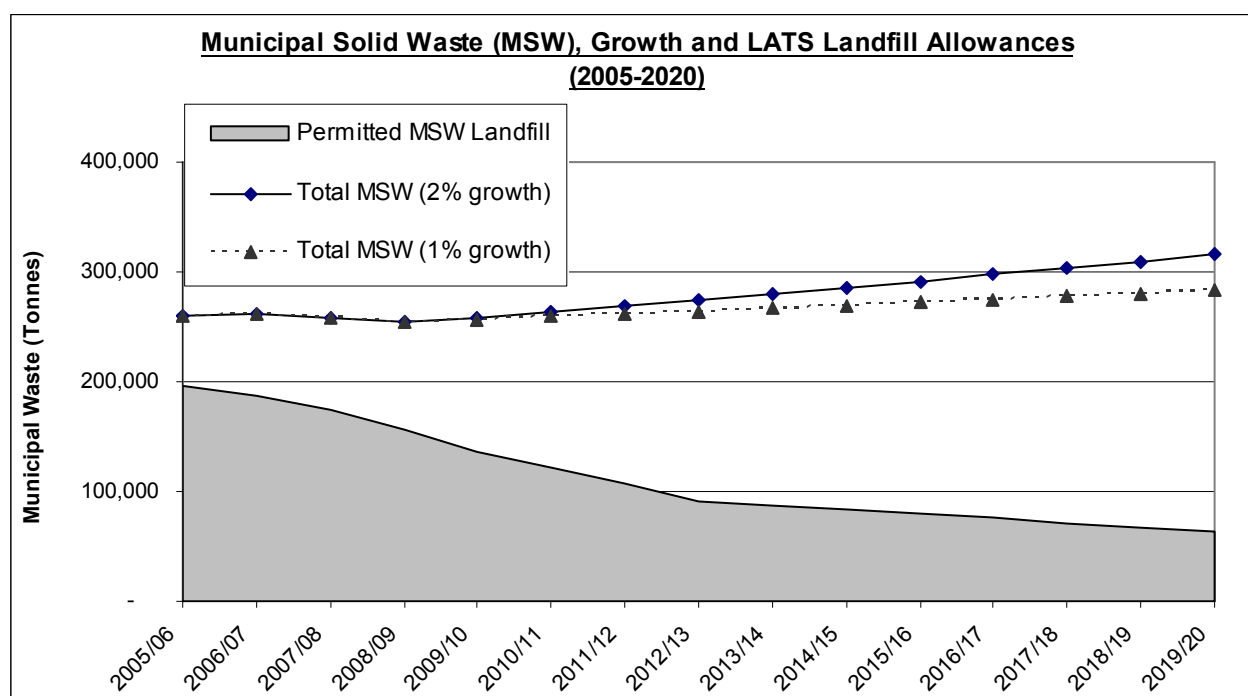
8. Under LATs, each Waste Disposal Authority is allocated an annual tonnage allowance for the amount of biodegradable municipal waste that it may send to landfill, commencing in 2005/06. Each year, the allowance is reduced to achieve convergence with EU targets². Waste Disposal Authorities have been advised of potentially heavy financial penalties (identified by DEFRA at £150 per tonne) if they landfill biodegradable municipal waste in any year in excess of the allowances they hold. In addition, DEFRA has advised that recalcitrant authorities will also be fined a proportion of the EU fines which will be levied against the UK Government in “scheme years” of 2010, 2013 and 2020 when compliance with EU targets is required (see paragraph 3).
9. Alongside the permitted tonnage the LATs scheme also provides for banking unused allowances and a market in tradable disposal allowances. Waste Disposal Authorities will be able to increase their landfill allowances by buying allowances from other Waste Disposal Authorities with a surplus of allowances. However, they will not be able to use banked allowances in the EU scheme years shown in paragraph 3.
10. Trading in allowances has so far been limited and prices have been well below the level of LATs penalties. However, as every authority’s annual allowance falls, spare capacity will become rarer and more expensive. It therefore follows that a “landfill and trade” strategy carries with it the risk of high prices or even non-availability in the longer term.

Main Considerations for the Councils

What do the Directive Targets, LATs and Landfill Tax mean for Swindon and Wiltshire?

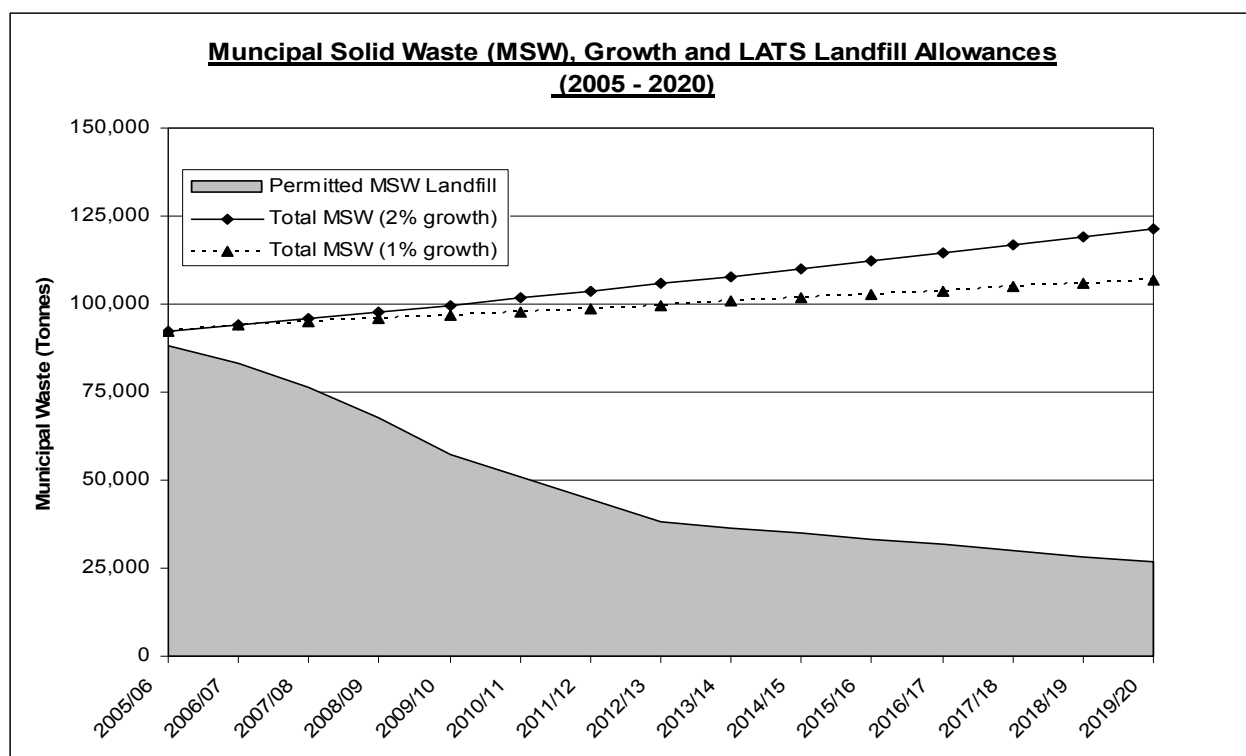
11. LATs allowance positions for Swindon and Wiltshire are illustrated in **Graphs 1a and 1b**, which also illustrate the effect of projected waste growth for each Council over the same period. The lower waste growth projections are based on recent trends and the higher waste growth projections are based on more cautious scenarios. The growing gap between the waste growth projections and the allowances represents the tonnage of waste which has to be diverted away from landfill in order to avoid the imposition of fines.

Graph 1a: Waste Growth Forecasts 2008 (Wiltshire)



² Wiltshire’s LATs allocation will decline from about 134,000 tonnes biodegradable municipal waste in 2005/06 to about 43,000 tonnes biodegradable municipal waste by 2019/20. Biodegradable municipal waste is about 68% of total Municipal Solid Waste.

Graph 1b: Waste Growth Forecasts 2008 (Swindon)



12. In Swindon and Wiltshire measures have already been taken to reduce the impact of LATS. **Table 1a** shows the forecast effects of landfill diversion for the two MSW growth scenarios for Wiltshire. **Table 1b** illustrates the similar position for Swindon.
13. The Wiltshire Table includes the expected diversion from landfill due to the contract with Hills to deliver residual waste to the Lakeside Energy from Waste (EfW) plant, which is now due to start taking waste from Wiltshire in July 2009. The potential effect of the proposed MBT (Mechanical, Biological Treatment) plant at Westbury is also shown for the more optimistic scenario. However, the contract negotiations for the MBT project have not yet been concluded and a decision has still to be made on the planning application which has been submitted for the site.

Table 1a: Effect of Forecast Waste Growth and Treatment Scenarios on LATS Allowances (Wiltshire)

Year	1% Growth Scenario		2% Growth Scenario	
Current and EU/ LATS scheme years only	Total MSW	Net Variance from LATS Allowance after recycling and other diversion	Total MSW	Net Variance from LATS Allowance after recycling and other diversion
2008/09	254,000	-900	254,000	-4,400
2009/10	256,500	11,300	259,100	2,700
2012/13	264,300	16,500	274,900	-21,300
2019/20	283,400	0	315,800	-57,800

Notes (Wiltshire):

Forecasts are rounded

Negative figures in the 'Net Variance from LATS Allowance' column mean that the Council would have to purchase additional allowances or pay fines.

Main assumptions (Wiltshire):

For 1% growth scenario – biodegradable municipal waste grows at 1% per year, contract recycling increases to 50% by 2020, Lakeside contract commences July 2009, wood waste diverted from landfill until MBT diversion commences 2012/13.

For 2% growth scenario – biodegradable municipal waste grows at 2% per year, contract recycling maintained at current rate of 41%, Lakeside contract commences July 2009, wood waste and MBT diversion does not proceed.

Table 1b: Effect of Forecast Waste Growth and Treatment Scenarios on LATs Allowances (Swindon)

Year	1% Growth Scenario		2% Growth scenario	
Current and EU/ LATs scheme years only	Total MSW	Net Variance from LATs Allowance after recycling and other diversion	Total MSW	Net Variance from LATs Allowance after recycling and other diversion
2008/09	97,885	13,690	98,854	13,167
2009/10	98,864	4,994	100,831	3,921
2012/13	101,860	-13,395	107,003	-15,967
2019/20	109,207	-28,399	122,913	-35,192

Notes (Swindon):

Negative figures in the 'Net Variance from LATs Allowance' column mean that the Council would have to purchase additional allowance or pay fines.

Main assumptions (Swindon):

For 1% growth scenario – biodegradable municipal waste grows at 1% per year, contract recycling increases to 50% by 2020.

For 2% growth scenario – biodegradable municipal waste grows at 2% per year, contract recycling maintained at current rate of 47%.

14. **Table 1a (Wiltshire)** shows that if biodegradable municipal waste growth continues to be low and all current plans to divert waste from landfill are realised Wiltshire could remain LATs compliant throughout the period to 2020. However, if biodegradable municipal waste growth accelerates, or diversion projects not yet committed do not go ahead, the County Council will have a significant and increasing shortage of LATs allowances by 2012/13, which will further increase by 2019/20.

15. **Table 1b (Swindon)** indicates that the Council will not be LATs compliant for either waste growth scenario beyond 2012/13.

What would this mean in potential fines for the two authorities?

16. Using the scenarios set out above, **Tables 2a and 2b** indicate the scale of magnitude of the fines which may be imposed upon the two Councils:

**Table 2a:
Forecasts of Potential LATs fines
(Wiltshire)**

Year	Pessimistic Scenario (2% growth) Fines (£m)	Optimistic Scenario (1% growth) Fines (£m)
2009-10	0	0
2010-11	0	0
2011-12	0.65	0
2012-13	3.19	0
2013-14	3.95	0
2014-15	4.72	0
2015-16	5.49	0
2016-17	6.27	0
2017-18	7.06	0
2018-18	7.86	0
2019-20	8.67	0
11 year total	47.86	0

**Table 2b:
Forecasts of Potential LATs fines
(Swindon)**

Year	Pessimistic Scenario (2% growth) Fines (£m)	Optimistic Scenario (1% growth) Fines (£m)
2009-10	0	0
2010-11	0.11	0
2011-12	1.21	0.98
2012-13	2.30	2.00
2013-14	2.70	2.32
2014-15	3.11	2.63
2015-16	3.52	2.95
2016-17	3.92	3.27
2017-18	4.34	3.59
2018-18	4.75	3.92
2019-20	5.18	4.24
11 year total	31.15	25.91

Notes:

Fines are based on current rate of £150 tonne for biodegradable municipal waste landfilled in excess of allowance and exclude any forecast of fines that may be imposed by the EU.

17. For Wiltshire **Table 2a** shows a contrast between the optimistic scenario, in which low waste growth and success with all current diversion ventures would enable Wiltshire to stay within LATS allowances, and the more pessimistic scenario in which allowances would be exceeded and fines could total some £48 million by 2020.
18. Swindon will exceed their LATS allowances under both scenarios due to the fact that even the optimistic forecast does not have the benefit of any additional waste diversion ventures. Fines for Swindon could range between £26 and £31 million by 2020.
19. In addition to potential fines, both Councils would also incur the costs of landfill disposal together with the escalating costs of landfill tax which will rise from the current level of £32 per tonne to £40 per tonne during 2009-10 and £48 per tonne during 2010-11.

Other Key Issues

20. Whatever each Council does, the current costs of waste disposal are set to increase dramatically. **Table 3** illustrates the scale of magnitude of costs of waste management.

Table 3: Indicative Costs (£/tonne) for different Forms of Waste Treatment

LANDFILL OPTIONS		
1.	Existing composite costs of achieving current household waste recycling, composting and landfilling residual waste	£40 - £70
2.	Landfill Tax 2008-09 to 2010-11	£32 rising to £48
3.	LATS penalties on excess biodegradable municipal waste landfill (excluding EU fines)	£150
4.	Landfill potential total cost including landfill tax escalator to 2010-11 (higher figure includes LATS penalty, payable on excess tonnage)	£90 - £240
ENERGY FROM WASTE OPTIONS		
5.	Typical costs of Energy from Waste disposal ¹	£65 - £136
RECYCLING OPTIONS		
6.	Estimated cost per tonne of additional recycling collection focusing on food waste, and second recycle (e.g. cardboard), plus treatment costs for food waste ² .	£425

Notes:

¹ WRAP Gate Fees Report, 2008 "Comparing the cost of alternative waste treatment options."

² Based on work carried out for the Wiltshire Waste Partnership in 2006.

21. A further consideration is that it will become increasingly difficult to secure additional landfill capacity in Wiltshire. Hills Waste has significant reserves of capacity with planning permission, but planning applications for new landfill sites will be as controversial as other publicly unpopular waste facilities. Planning processes will be lengthy and protracted with a five to ten-year typical 'lead in' time.
22. Government has advised that Waste Disposal Authorities that fail to meet targets will have solutions imposed on them. Government has taken powers to put waste managers into failing authorities to direct solutions at each authority's expense.³

³ Extract from Section 15 of the Local Government Act 1999
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The Costs of a “Do Nothing” Approach

23. **Tables 4a and 4b** give total indicative costs over a 10 year period for both Councils which include current costs of recycling, other diversion ventures (Lakeside Contract in Wiltshire), landfill tax increases and potential fines based on the pessimistic scenario.

Table 4a: Wiltshire

Year	Costs to Maintain Service (£m)
2008/09	14.79
2009/10	20.77
2010/11	25.39
2011/12	27.73
2012/13	30.76
2013/14	32.63
2014/15	34.55
2015/16	36.53
2016/17	36.67
2017/18	38.70
10 Year Total	298.53

Table 4b: Swindon

Year	Costs to Maintain Service (£m)
2008/09	10.60
2009/10	11.70
2010/11	12.90
2011/12	14.10
2012/13	15.30
2013/14	15.80
2014/15	16.30
2015/16	16.80
2016/17	17.30
2017/18	17.80
10 Year Total	148.60

24. Members should note the significant year-on-year increases that would continue to be required in the Waste Disposal budget if the Councils do not divert higher quantities of waste from landfill.

Previous Cabinet Decisions (Wiltshire)

25. In November 2004, Wiltshire County Council Cabinet considered a paper which set out the costs and benefits of taking action to divert waste from landfill, or alternatively relying upon the then current level of recycling (27%) and purchase of additional allowances to cover excess landfilling. Cabinet endorsed the procurement of additional landfill diversion capacity, which has been partly secured. The updated financial analysis set out above, plus the issue of landfill capacity continue to indicate that further diversion capacity should be sought, as a precautionary measure and to enable the Council to achieve its corporate objective of achieving more sustainable waste management.

Previous Cabinet Decisions (Swindon)

26. In November 2006 Swindon Borough Council Cabinet adopted its Municipal Waste Management Strategy which includes Policy WS3 – *‘That the options for waste treatment be kept under consideration’*. One of the actions in the Action Plan for this policy was to: *Engage in negotiations with other Local Authorities on the options for joint procurement of treatment capacity*. The proposal contained in this paper meets this policy objective.

Summary of Background and Key Issues

- (i) The Landfill Directive requires progressively less waste to be disposed of to landfill.
- (ii) The costs of landfill are increasing sharply, due to landfill taxes and potential LATs fines.
- (iii) The quantity of municipal waste is forecast to increase, although at a slower rate than previously assumed.

- (iv) Both Councils are likely to experience increasing problems in securing landfill space in the medium to longer term.
- (v) Both Councils continue to seek more sustainable methods of waste treatment and to reduce their carbon footprint.
- (vi) The current costs of the service will increase significantly each year over the next few years and hence budgets will have to increase simply to 'stand still'.
- (vii) Alternatives to landfill can be more expensive in the short-term but diversion by such processes can be less expensive when landfill taxes and fines are taken into account.
- (viii) Failure to meet statutory targets exposes both Councils to fines.
- (ix) Failure to meet targets could lead to imposed solutions at the Councils' expense.

Contract Arrangements

- 27. Swindon and Wiltshire use the same contractor (Hills Waste) to dispose of municipal waste. The contract was awarded after a competitive tendering exercise in 1995. This contract expires on the 30th June 2016. The contractor is also responsible for recycling operations in Wiltshire, but not in Swindon.
- 28. Diversion of residual waste from the Hills contract in Wiltshire and Swindon will require a variation to the contract, through negotiation and agreement. This may have cost implications which will need to be reviewed in due course. Re-tendering of the landfill contract in 2016 is likely to result in increased costs compared with the current position.
- 29. The two Councils have signed a Memorandum of Understanding (MoU) which defines and regulates how the authorities will work together to achieve the aims and objectives for the project. The MoU specifically sets out arrangements for the following:-
 - Objectives
 - Representation
 - Funding
 - Meetings
 - Officer support
 - Dispute and exit arrangements.

Future Options

- 30. Since 2006 Swindon and Wiltshire have been working much more closely on waste issues. This follows the adoption of Swindon Borough Council's Municipal Waste Management Strategy and Swindon joining the Wiltshire Waste Partnership.
- 31. Both authorities have recognised that they will need access to new waste disposal facilities in the future and that they will be unable to rely on landfill for this. The needs of both authorities for facilities are relatively modest compared to many Waste Disposal Authorities, so joint working should provide better value for money for both Councils.

32. At the request of the Leaders and Chief Executives of both authorities a number of workshops have been held to explore the opportunities to develop a business case to procure a waste treatment solution to meet the future needs of both Councils. The workshops, along with advice received from legal and technical consultants, have enabled officers to conclude that there would be advantages for both authorities in continuing with this work. The main advantages identified include:
- (i) Shared procurement costs
 - (ii) Greater choice of sites
 - (iii) Combined waste tonnages from both authorities would increase the viability of any solution leading to a reduced 'gate' fee.
33. Approval is sought therefore to continue this work by appointing external consultancy support so that a business case, known as an Outline Business Case (OBC) can be developed and brought back to both authorities in the autumn of 2009.

Environmental Impact of the Proposal

34. The LATs scheme is intended by Government to fundamentally change the way that municipal waste is managed in order to reduce greenhouse gas emissions. The business case will need to assess the environmental impact of the likely solution to be procured.

Equalities Impact of the Proposal

35. No known implications at this stage.

Risk Assessment and Options Considered

36. The report considers a 'do nothing' option together with the impact of the LATs scheme on various growth scenarios. The key financial driver is fines which both authorities will incur in the future if alternatives to landfill for waste disposal are not found.
37. The Government might change its current approach to the LATs scheme thereby affecting the financial risks that both Councils face.
38. Projections of waste growth and assumptions about LATs fines and landfill tax costs are based purely on current information. The situation beyond 2012/13, although unclear, is likely to be more stringent and is likely to result in an upward, rather than a downward, trend in costs.
39. The proposal to develop an OBC does not commit either authority to proceed with any procurement proposal. There will be further consideration of risks before any decisions are taken to commence a procurement exercise.
40. Swindon's waste volumes are relatively low, which is likely to make a procurement based solely on Swindon's needs more expensive.
41. Working together is likely to produce a more affordable solution for both authorities.

Financial Implications

42. The financial implications of the LATs scheme are addressed within the body of the report.

43. The cost of appointing consultants to develop the OBC has been estimated at £100,000 to be shared equally between both authorities. The external costs of preparing tender documentation have been estimated at £200,000. The decision to commence this work would be sought from both Councils following completion of the OBC. The detailed financial implications for each Council are dealt with in Council specific reports which cover this report and which incorporate the proposal set out below.

Legal Implications

44. The proposed preparation of a business case will include identification of legal considerations. The Memorandum of Understanding deals with the current legal obligations of the two authorities.

Reason for Proposal

45. To meet the requirements of the Landfill Directive and to minimise exposure to fines.

Proposal

46. That both Councils be asked to:
- (i) Approve the appointment of specialist consultants to develop a joint Outline Business Case to procure a waste disposal solution for all of Swindon Borough Council's residual municipal waste and the residual municipal waste from mainly the North of Wiltshire County Council's administrative area.
 - (ii) Approve the allocation of £50,000 per Council for the preparation of the Outline Business Case and approve the allocation of £100,000 per Council for the preparation of tender documentation during 2009-10.
 - (iii) Note the future financial risks which the Landfill Allowance Trading Scheme represents for their respective authority.
 - (iv) Note the risk which the lack of certainty on waste disposal arrangements beyond June 2016 represents for their respective authority.

GEORGE BATTEN
Corporate Director (Designate)
Transport, Environment and Leisure
Wiltshire County Council

STEVE HARCOURT
Director of Environment & Street Scene
Swindon Borough Council

The following unpublished documents have been relied on in the preparation of this Report:

Forecasts by the two Authorities.