

Peterborough City Council
Air Quality Progress Report 2004
May 2004



**Growing the right way for
a bigger, better Peterborough**

Abstract

The Progress Report 2004 forms an integral part of Peterborough City Council's air quality management. The overall aim is to report progress on implementing local air quality management; and progress in achieving, or maintaining, concentrations below air quality objectives. Progress reports also help ensure continuity in resourcing air quality within Local Authorities, and provide a means for communicating air quality information to members of the public.

The Progress Report 2004 focuses on information that might affect the air quality of Peterborough and provides information that will assist in other policy areas such as transport and land use planning. This will allow the City Council to be able to require the potential impacts on air quality to be investigated and to identify areas to focus upon when the next round of updating and screening assessments are due.

The Progress Report 2004 shows the latest figures for air quality monitoring in Peterborough, along with the estimated figures for 2005 and 2010. This report shows that the only area where monitoring indicates that there may be an exceedence is the Thorney area. Information from the Transportation department indicates that the A47 Thorney bypass will be started in June 2004. The latest information indicates that it may be finished ahead of its schedule finish of January 2006. Once complete the removal of through traffic from this area should reduce the levels to below the statutory limits within the prescribed timescales.

Contents

Abstract

Section	Page
Contents	3
1 Introduction	4
2 Monitoring results	4
3 New Local Developments	9
4 Action Plans	9
5 Air Quality Strategy	10
6 Planning and Policies	11
7 Local Transport Plans and Strategies	12
8 Summary	13
Appendices	14

Tables	Page
Table 1 How progress reports can assist local authorities	4
Table 2 NO ₂ Diffusion Tube Monitoring Sites in Peterborough	5
Table 3 NO ₂ in ug/m ³ figures for 2003 and estimated figures for 2005 & 2010	6
Table 4 Breakdown of Peterborough City Council's air quality nuisance investigations	8
Table 5 New developments	9
Table 6 Summary section of Peterborough's Air Quality Strategy 2004	10
Table 7 Planning applications which air quality has been considered	11
Table 8 Policies designed to help improve air quality	11
Table 9 Progress with traffic schemes beneficial to air quality	12

Charts	Page
Chart 1 Yearly trends of NO ₂ at Peterborough's Urban Background Sites	7
Chart 2 Yearly trends of NO ₂ at Peterborough's Roadside Background Sites	7
Chart 3 Yearly trends of NO ₂ at Peterborough's Kerbside Sites	8

Appendices	Page
Appendix 1 NO ₂ Diffusion Tube Locations (Peterborough)	14
Appendix 2 NO ₂ Diffusion Tube Locations (Thorney)	15

1 Introduction.

The progress report forms part of the local air quality management system (LAQM) introduced in the Environment Act 1995 and subsequent regulations. The progress report was conceived as the old system was seen to be too 'stop-start' especially for authorities that did not have any exceedences of air quality. The progress report would help ensure continuity in resourcing air quality within local authorities so as to maintain the capacity and skills required to manage LAQM.

Table 1 shows the different ways that progress reports will assist the local authorities with the LAQM process

Table 1: How progress reports can assist local authorities.

By helping retain a profile for LAQM within the authority, including the retention of staff with knowledge of air quality issues.
By providing a means for communicating air quality information to members and the public.
By maximising the usefulness and interpretation of the monitoring effort being carried out by the local authority.
By maximising the value of the investment in monitoring equipment.
By making the next round of review and assessment that much easier, as there will be a ready available up-to-date source of information.
By helping authorities respond to requests for up-to-date information on air quality.
By providing information to assist in other policy areas, such as transport and land use planning.
By providing a ready source of information on air quality for developers carrying out environmental assessments for new schemes.
By demonstrating progress with implementation of air quality Action Plans and/or air quality strategies.
By providing a timely indication of the need for further measures to improve air quality, rather than delaying until the next full round of review and assessment.

Source: Progress Report Guidance LAQM.PRG(03)

The overall aims of the progress report are to report progress on implementing local air quality management and report progress in achieving or maintaining concentrations below the air quality objectives. It is considered that these aims can be best achieved by addressing new monitoring results and new local developments that might affect local air quality.

The last round of Review and Assessment was in May 2003. The Review and assessment concluded that there was not any air quality exceedences in Peterborough for all seven pollutants. As a result there has not been any Air Quality Management Areas declared in Peterborough.

2 Monitoring Results.

Peterborough City Council currently monitors Nitrogen Dioxide (NO₂) at 16 sites within the Local Authority Area. Other sites have been monitored around Peterborough in previous years but only the current locations have been considered for this report. These sites are a mixture of urban background, roadside and

kerbside. Table 2 shows the different site types and a brief description. The location plans for the different tubes can be found in Annex 1.

Table 2. NO₂ Diffusion Tube Monitoring Sites in Peterborough.

Site Location	Site type	Relevant exposure	Description
Copeland*	Urban Background	Yes.	An urban location distanced from sources and therefore broadly representative of city-wide background concentrations
Lythmere*	Urban Background	Yes	
Stanground	Urban Background	No	
Walton*	Roadside	No	Site sampling within 5m of the kerbside of a busy road and the back of the pavement.
Bourges Boulevard*	Roadside	No	
Fletton Parkway (1)	Roadside	No	
Fletton Parkway (2)	Roadside	No	
Thorney S1(b)	Kerbside	Yes	
Thorney 2TA (1)	Kerbside	Yes	
Thorney 2TA (2)	Kerbside	Yes	
Thorney S7	Kerbside	Yes	
Thorney S3	Kerbside	Yes	
Thorney S4	Kerbside	Yes	
Thorney S5	Kerbside	Yes	
Thorney S6	Kerbside	Yes	
Thorney S2	Kerbside	Yes	

*Monitoring Sites for the National Nitrogen Dioxide Diffusion Tube Survey

Table 3 shows the nitrogen dioxide levels in micrograms per cubic metre (ug/m³) for Peterborough's sites for the year 2003 as well as the estimated values for 2005 and 2010 using the conversion factor supplied in the technical guidance (LAQM.TG (03)). The UK objectives give the annual mean for nitrogen dioxide to be at 40 ug/m³ at relevant locations. Out of the 16 sites monitored in Peterborough in 2003 the only relevant sites that exceeded the objectives for both 2005 and 2010 were the locations in Thorney (Thorney S4, Thorney S7 and the two Thorney 2TA sites). A detailed assessment has not been prepared for the area of Thorney. A by-pass for the village is currently under development that should reduce the nitrogen dioxide levels, since traffic will be diverted away from the village. See section Local Transport Plans and Strategies for an update on the by-pass.

Charts 1, 2 and 3 show the annual mean for nitrogen dioxide diffusion tube monitoring in ug/m³. There is only enough data to show trends for 7 of the 16 sites. The urban background sites show a gradual decline since levels were started being monitored in 1994. The two roadside sites with sufficient monitoring data to show any trend has one site (Walton) showing a decrease in levels while the other site (Bourges Boulevard) showing an increase in levels. The two kerbside sites show an increase in levels. Once the by-pass has been completed it is expected that the levels of nitrogen dioxide will be reduced.

Table 3. NO₂ in ug/m³ Levels for 2003 and Estimated Levels for 2005 & 2010.

Site Location	2003 ug/m ³	Estimated 2005 ug/m ³	Estimated 2010 ug/m ³
Copeland*	23	22	18
Lythmere*	21	20	16
Stanground	28	26	22
Walton*	32	31	25
Bourges Boulevard*	47	45	37
Fletton Parkway	35	34	27
Fletton Parkway	36	34	28
Thorney S1(b)	45	43	35
Thorney 2TA	66	62	51
Thorney 2TA	63	60	49
Thorney S7	55	53	43
Thorney S3	39	37	30
Thorney S4	68	64	53
Thorney S5	43	40	33
Thorney S6	32	30	25
Thorney S2	39	37	30

*Monitoring Sites for the National Nitrogen Dioxide Diffusion Tube Survey

Laboratory bias must be determined and allowed for when using diffusion tubes, as there is considerable difference nationally in the performance of tubes prepared by different laboratories. The bias adjustment factor used by Huntingdon District Council, which is based on the collocation of tubes with a chemiluminescence monitor, has been used by Peterborough City Council and other surrounding authorities. The bias adjustment factor is 0.81.

This bias adjustment factor has been used because:

- a) The method of tube preparation used by Huntingdon District Council is the same as that used by Peterborough City Council.
- b) Peterborough City Council does not have a collocated chemiluminescence monitor.
- c) Cambridge City Council has derived a very similar value from their urban site.

Nitrogen Dioxide Diffusion Tubes are provided and analysed by Harwell Scientifics Limited. The samples are analysed in accordance with Harwell Scientifics standard operating procedure HS/GW1/1015 issue 7. The tubes are prepared by spiking acetone: triethanolamine (50:50) onto the grids prior to the tubes being assembled. The tubes are desorbed with distilled water and the extract analysed using a segmented flow autoanalyser with ultraviolet detection.

The techniques involved in the preparation and analysis of nitrogen dioxide are covered by methods listed in Harwell's UKAS schedule. In the WASP inter comparison scheme for comparing spiked Nitrogen Dioxide diffusion tubes, Harwell Scientifics is currently ranked as a Category Good laboratory.

Chart 1. Yearly trends of NO₂ at Peterborough's Urban Background Sites

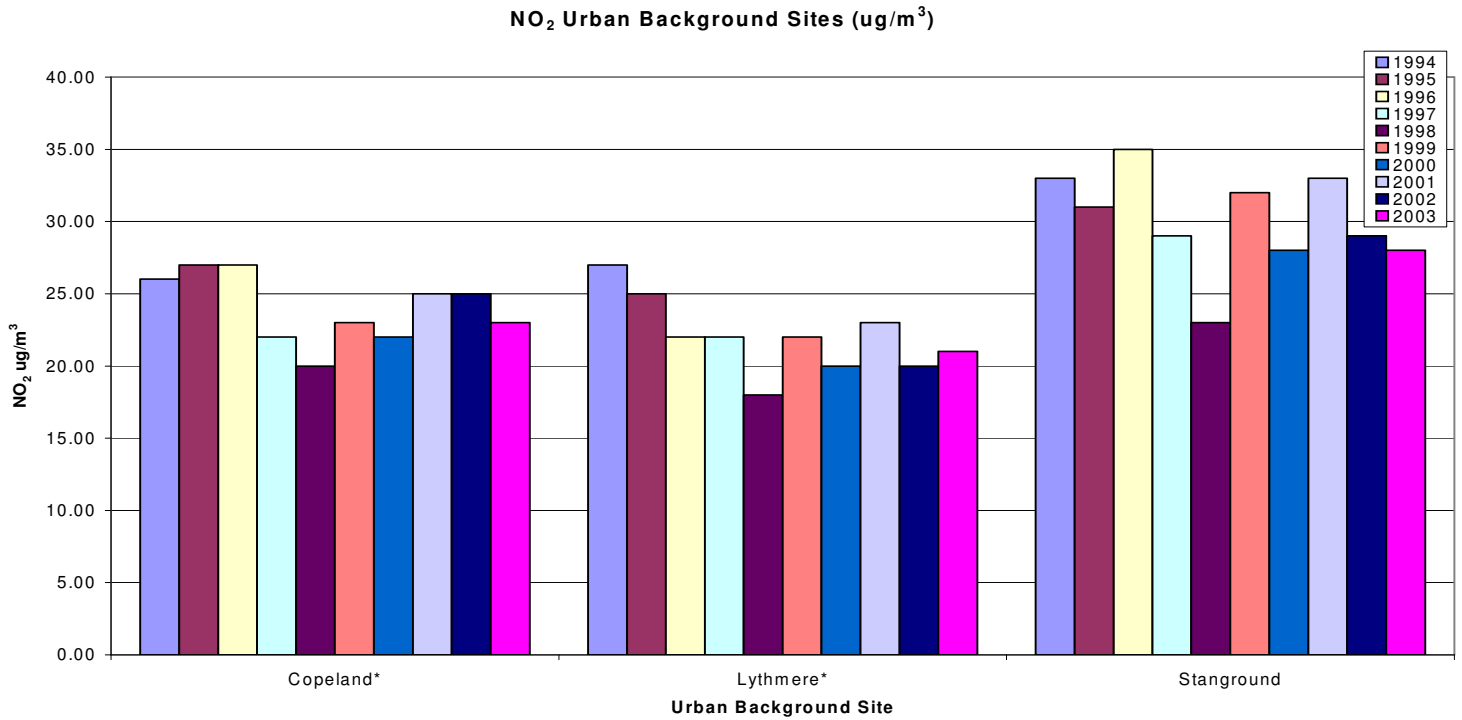


Chart 2. Yearly trends of NO₂ at Peterborough's Roadside Background Sites

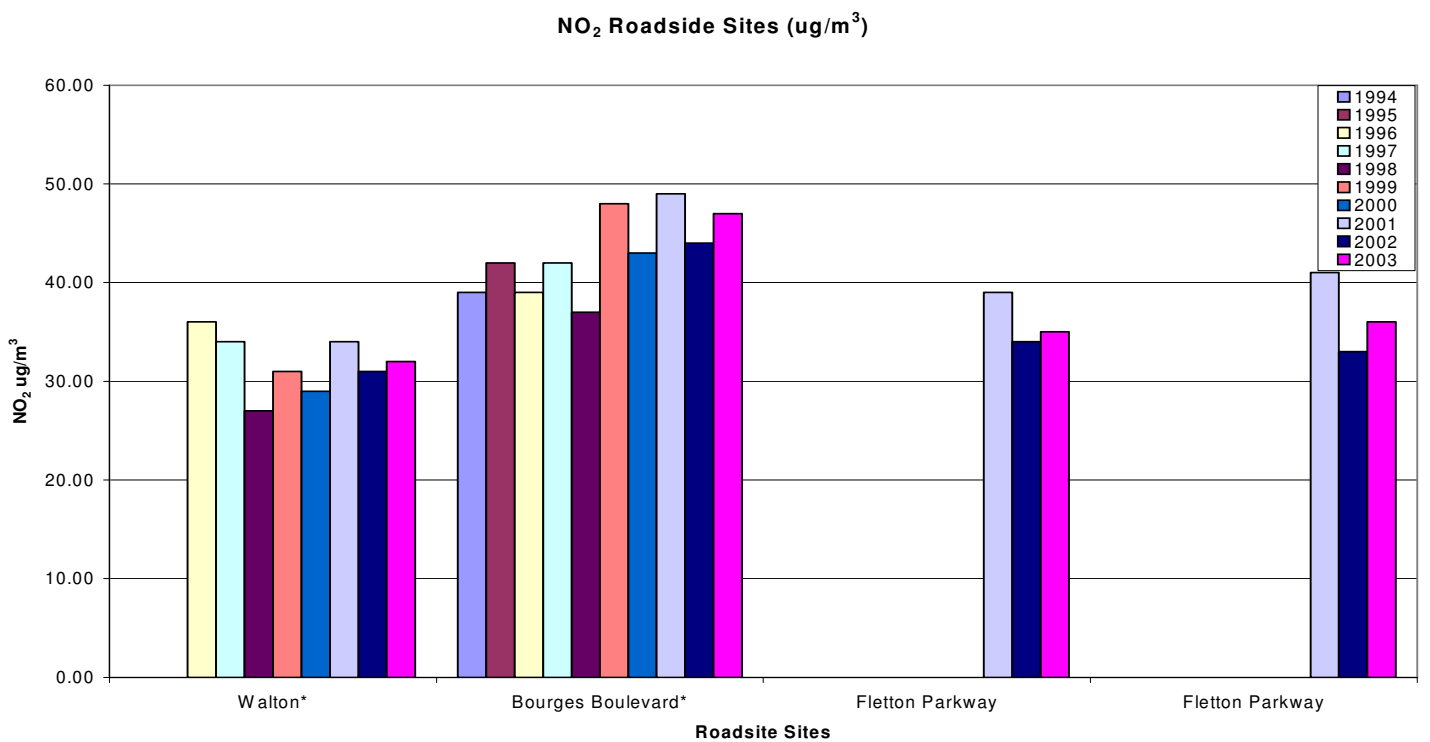
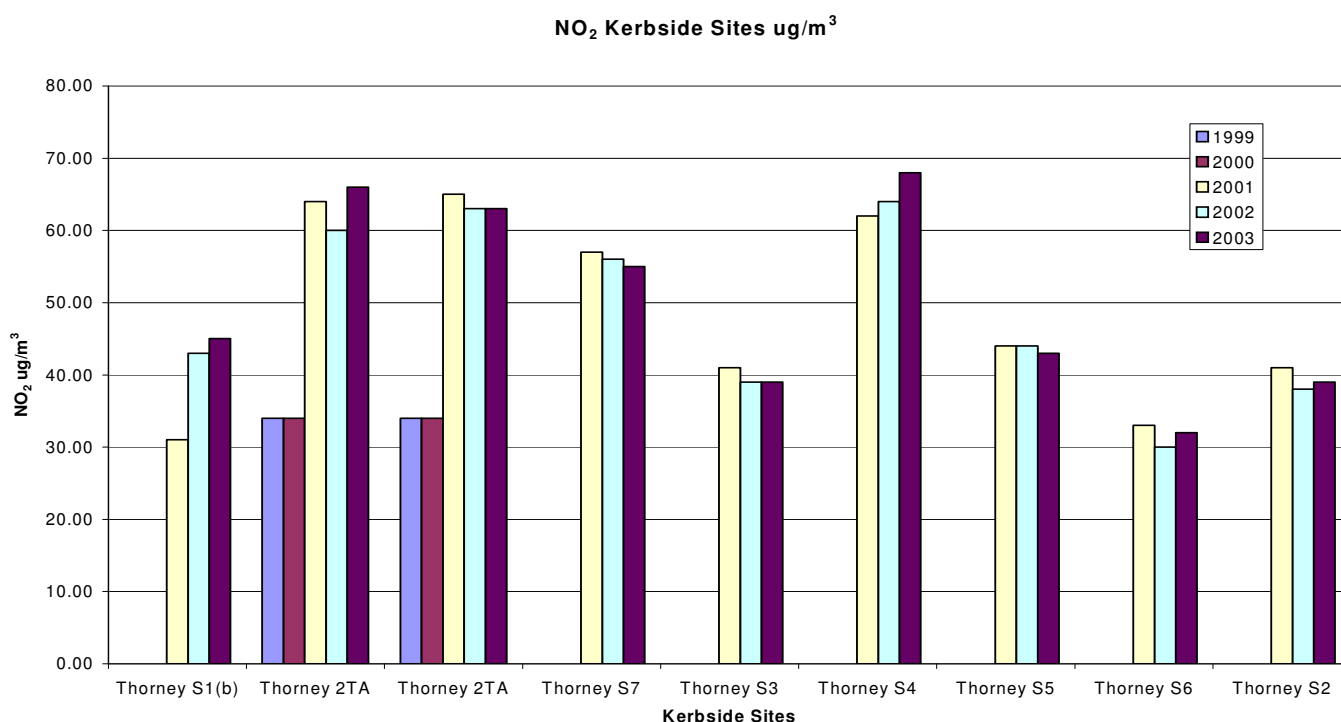


Chart 3. Yearly trends of NO₂ at Peterborough's Kerbside Sites



There has not been any new monitoring sites set up in Peterborough in the past three years. The last round of screening assessment for Peterborough was in 2003. This report can be viewed at <http://www.peterborough.gov.uk/subsites/envhealth/pollution/>. This report identified that no new monitoring stations were needed at that present time. The brick pits at Whittlesey have applied for their IPPC permit and their application has indicated that sulphur dioxide exceedences might result and as a consequence sulphur dioxide monitoring stations may be established. Peterborough City Council, Fenland District Council (the authority where the brick pits are located), the Environment Agency and Hanson Building Products Limited (the site owners) are currently in discussion regarding the need, location and ownership of any monitoring stations.

Other air quality data

Table 4 shows a list of air quality complaints that Peterborough City Council's Environmental Health team investigated in 2003, along with the number of abatement notices served.

Table 4. Breakdown of Peterborough City Council's air quality nuisance investigations.

Type	No of complaints	Notices served
Domestic Smoke Complaints	115	0
Commercial Smoke Complaints	46	0
Dust Complaints	10	0
Odour Industrial/ Commercial	85	0
Odour Domestic	29	0
Odour Agricultural	10	0
Odour cause unknown	25	0
Total	320	0

3 New Local Developments.

There are certain new developments that may affect the local air quality. Table 5 shows a list of these developments. Some of these new sites are previously operational sites that have either moved into the new PPC permitting regime or have recently been discovered.

Table 5: New developments with the potential to affect air quality.

New developments	Site Location	Other Information
Part A(1) processes		
Landfill sites	Dogsthorpe & Eye	Sites already operating but require a Integrated Pollution Prevention Control (IPPC) Permit
Brick pits	Whittlesey	Site requires an IPPC permit. Initial modelling suggests that this process may cause an exceedence in SO2 15-minute means. Discussions are in place with the regulator (Environment Agency), the Operator and the relevant local authorities.
Part A(2) processes		
Print works	Fengate	Moved from Part B Process
Part B Process		
Small Waste Oil Burners	Thorney, Millfield x2, Peakirk	
Mobile Plant	Fengate	
Petrol Filling Stations	Fengate	
New retail development		
None		
New road developments		
Distributor road	Eagle Way/ Silver Hill, Hampton	Part of the Hampton township development.
Junction 3a	A1139	Part of IKEA application to improve traffic.
Roads with a significant traffic increase		
None		
New mineral developments		
None		
New landfill developments		
One	Thornhaugh	Previously inactive landfill that started to re-accept waste in 2003
New mix use developments		
Hampton & British Sugar	Hampton & Woodston	Old industrial works

4 Action Plans.

There are currently no action plans in Peterborough.

5 Local Air Quality Strategy.

Peterborough's Air Quality Strategy is currently going through its final draft and will be formally released during the summer of 2004. Table 6 shows the summary section.

As the strategy is a working document for Peterborough City Council consultation has been limited to departments in Peterborough City Council whose duties can affect air quality and the elected members. The final version will be available on the Internet and will be advertised in the City Council's own newspaper.

Table 6. Summary section of Peterborough's Air Quality Strategy 2004.

Peterborough's air quality is currently within its target limits set by central government in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland published in January 2000. Therefore there have been no Air Quality Management Areas designated in Peterborough.

The aim of the Air Quality Strategy aim is therefore to keep air quality in Peterborough below these levels and to try to reduce the levels even further, whenever this is reasonably practical.

The main aspects of the air quality strategy are

- The industrial processes authorised by either the local authority or the Environment Agency will continue to be inspected regularly and their authorisations/ permits will be reviewed and varied as necessary. These activities will ensure that the operations will continue to operate within the limits set by their authorisation/ permit and that the authorisations/ permits are in line with current Best Available Techniques (BAT).
- The monitoring of nitrogen dioxide by diffusion tubes will continue to be used in Peterborough. The sites that are currently monitored will be reviewed periodically. Should any of the areas currently monitored show that monitoring is no longer required then the diffusion tube will be relocated to an area where further monitoring will be beneficial.
- Traffic and transport planning will continue to consider air quality in its decisions regarding traffic management schemes. The City Council will also continue to develop ways to reduce the amount of traffic borne pollution by encouraging other forms of transport including public transport and walking/ cycling.
- Peterborough City Council's Planning departments will continue to consult with other departments and external agencies with regards to planning applications for potentially pollution processes. It is from these consultations that decisions will be made with regards to granting or refusing the application and what conditions will be included.
- Peterborough City Council's Environmental Health Department's Pollution Control Team will continue to investigate complaints of smoke nuisances from both domestic and commercial properties. Should they witness any smoke nuisances they will serve an abatement notice.
- Peterborough City Council will periodically review and update its smoke control zones should this prove necessary.
- Peterborough City Council will continue to promote and encourage people to reduce the amount of waste they burn and increase composting and recycling.
- Peterborough City Council will continue to be involved in partnerships with other local authorities. Should any areas in Peterborough require to be designated an Air Quality

Management Area then a partnership shall be set up to include relevant local business, industry and the community.

- A multi-disciplinary forum will be developed for the routine consideration of current and potential air quality issues.
- Peterborough City Council will continue to educate its citizens and businesses about air quality issues and the services the City Council runs which can reduce air pollution. This will be done by different means including campaigns, leaflets and the Internet.

6 Planning and Policies.

Certain planning applications require further information supplied to the City Council in relation to their potential effect on the air quality before a decision is made. Table 7 shows a list of recent applications that have had some air quality issues addressed in the application.

Table 7 Planning applications for which air quality assessment is required.

Planning Applications	Locations
Ikea	Hampton
Prologis	Hampton
Dogsthorpe Landfill gas compound	Dogsthorpe
Peterborough Prison	Westwood
North Westgate	City Centre
City centre masterplan	City Centre
Thorney bypass	Thorney
Stanground bypass	Stanground
A1073 improvements	Kingston Park

The City Council has various policies, which all include ways to help improve air quality. Table 8 shows a list of these policies and a brief description of how they can improve air quality.

Table 8 Policies designed to help improve air quality.

Planning Policy	Description of ideas
Local Transport Plan	To investigate road traffic and ways to reduce traffic congestion and growth.
Local Agenda 21	To promote sustainable development. Currently it may be integrated into the Community Strategy.
Peterborough Local Plan	To minimise adverse impacts of development on the amenity of existing and future neighbours.
Cambridgeshire and Peterborough Structure Plan	New development will be located and designed to minimize and where possible avoid air pollution. Individual and cumulative impacts of development will be taken into account in the consideration of proposals and developers will be expected to take appropriate avoidance and mitigation measures. Local Planning Authorities should resist proposals that will adversely affect air quality
Regional Planning Guidance 14 (currently in draft form)	Local Development Documents and Local Transport Plans, having regard to the increased levels of development and associated infrastructure proposed across the region, will include objectives, proposals and policies that seek to: <ul style="list-style-type: none"> • reduce or reverse the growth of motor traffic;

	<ul style="list-style-type: none"> • encourage infrastructure for cleaner transport fuels such as liquefied petroleum gas (LPG) and compressed natural gas (CNG); • ensure that new development does not exacerbate air quality in existing and potential Air Quality Management Areas (AQMAs); • pay particular attention to any potential effects on wildlife, where potentially polluting development, increased motor traffic or intensive agricultural facilities producing ammonia, are expected close to sensitive habitats such as Special Sites of Scientific Interest (SSSIs); <p>and</p> <ul style="list-style-type: none"> • Seek to mitigate existing and potential air quality pollution problems.
Environment Strategy	To reduce to a minimum, emissions to air, water and land and reduce noise within the district.
Air Quality Strategy	See section 5 for the summary.

7 Local Transport Plans and Strategies.

Peterborough City Council's Local Transport Plan has a direct bearing on air quality as it has targets for CO₂ and greenhouse gases as well as the seven UK air quality objectives (Benzene, 1,3 Butadiene, Carbon Monoxide, Lead, Nitrogen Dioxide, Particles in the form of PM₁₀ and Sulphur Dioxide).

The Local Transport Plan aims to reduce traffic congestion and traffic growth by providing a greater travel choice through improvements to public transport and promoting cycling and walking.

Table 9 shows the current progress with transport schemes that will have a direct bearing on the air quality in Peterborough.

Table 9 Progress with traffic schemes beneficial to air quality.

Key measures likely to affect traffic and air quality	Progress with implementation
Primary Public Transport Corridor	Approximately 30% complete. On hold pending outcome of City Centre Masterplan public consultation. Currently commissioning a study into "Real Time Passenger Information (RTPI)".
Park and Ride	Feasibility study to be completed end May 2004.
Walking and cycling schemes, Safer Journeys to School	On going numerous projects. Please refer to our 3 rd Annual Progress report (PCC web page under Local Transport Plan) for details.
Local Safety Schemes Home Zones/ Traffic Management in Residential areas	On going numerous projects. Please refer to our 3 rd Annual Progress report (PCC web page under Local Transport Plan) for details.
A1073 major scheme	Draft Compulsory Purchase Orders & side road orders published. Public enquiry in September 2004. Scheme start is anticipated June 2005 for Nov 2006 completion.
A47/ Thorney bypass	Scheme scheduled to start June 2004 to be completed by January 2006

8 Summary.

The monitoring of nitrogen dioxide (NO₂) in Peterborough show that the levels of NO₂ are estimated that they will be below the limits set by Government for both 2005 and 2010. The only area that it is estimated that these limits will fail their targets will be in the Thorney area. A by-pass of Thorney is scheduled to start in 2004, which once complete will take the traffic away from these areas and consequently will reduce the levels of NO₂ to below the statutory limits.

Peterborough City Councils Air Quality Strategy is currently under draft form and is programmed for release in the summer of 2004. While this strategy is only in draft form most of the strategies aims are in progress. A multi-disciplined forum for air quality is currently being developed as part of the strategy.

There has been no new industrial processes opened in Peterborough that may effect the air quality. There has been some minor processes for example waste oil burners that have been discovered and are in the processes of obtaining permits. There are some processes that are moving into the Pollution Prevention Control regime and one of those (The Brick Pits in Whittlesey) has indicated in its Permit application that it may exceed the statutory limit for sulphur dioxide. Discussions are in place with the regulator (Environment Agency), the operator and the local authorities. There has not been any significant increase in road traffic or any major new roads proposed.

Planning applications are consulted and if deemed necessary an air quality assessment is produced. Applications where air quality has been considered all showed that air quality standards would not be exceeded.

There are various policies and strategies that have varying impacts on air quality. These policies and strategies are updated periodically. Part of the multi-disciplined forum will be to help prepare information for these reports.

Local transport schemes can greatly improve the air quality of an area. Within the Local Transport Plan there are various measures which should have beneficial effects on air quality. The most noticeable of these schemes is the A47 Thorney bypass, which will reduce the levels of nitrogen dioxide to below the 2005 limit values.

Appendix 1
NO₂ Diffusion Tube Locations
(Peterborough)



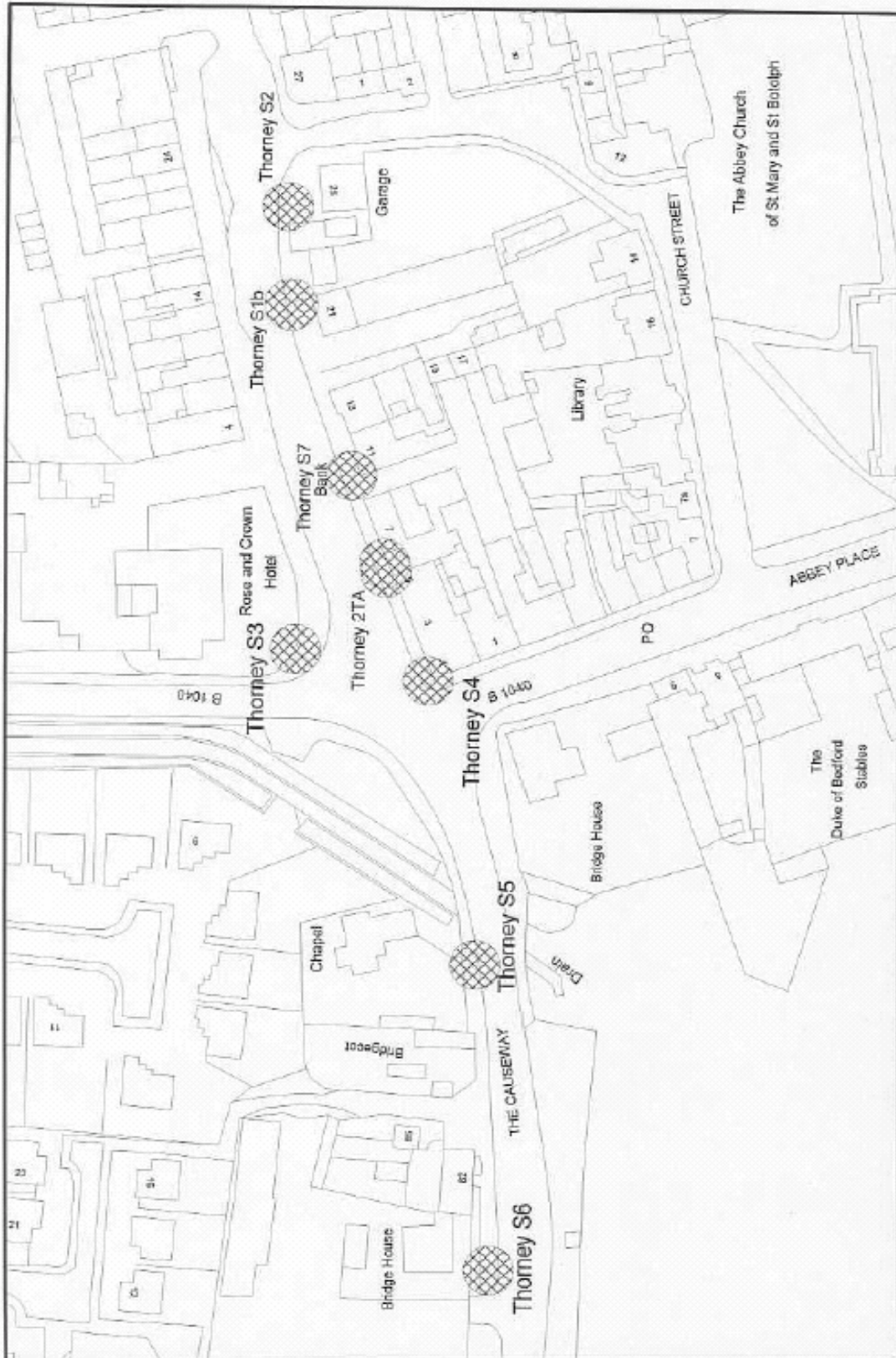
Title NO₂ Diffusion Tube Locations (Peterborough)

Department Environmental Health	Drg. No.	PCC GIS
Scale 1:30000	Date 10th May 2004	Name DB

This map is reproduced from or based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Peterborough City Council, LA 07/05/04 2004.



Appendix 2
NO₂ Diffusion Tube Locations (Thorney)



PETERBOROUGH CITY COUNCIL

Title NO₂ Diffusion Tube Locations (Thorney) **DRG. No.** **Date** 10th May 2004

Department Environmental Health **Name** DB

Scale 1:1000

The sheets reproduced here or based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. Crown Copyright. Unauthorised reproduction prohibited. Ordnance Survey 2004. OS 1000N 1000E 1000M 1000P 1000Q 1000R 1000S 1000T 1000U 1000V 1000W 1000X 1000Y 1000Z 1000AA 1000AB 1000AC 1000AD 1000AE 1000AF 1000AG 1000AH 1000AI 1000AJ 1000AK 1000AL 1000AM 1000AN 1000AO 1000AP 1000AQ 1000AR 1000AS 1000AT 1000AU 1000AV 1000AW 1000AX 1000AY 1000AZ 1000BA 1000BB 1000BC 1000BD 1000BE 1000BF 1000BG 1000BH 1000BI 1000BJ 1000BK 1000BL 1000BM 1000BN 1000BO 1000BP 1000BQ 1000BR 1000BS 1000BT 1000BU 1000BV 1000BW 1000BX 1000BY 1000BZ 1000CA 1000CB 1000CC 1000CD 1000CE 1000CF 1000CG 1000CH 1000CI 1000CJ 1000CK 1000CL 1000CM 1000CN 1000CO 1000CP 1000CQ 1000CR 1000CS 1000CT 1000CU 1000CV 1000CW 1000CX 1000CY 1000CZ 1000DA 1000DB 1000DC 1000DD 1000DE 1000DF 1000DG 1000DH 1000DI 1000DJ 1000DK 1000DL 1000DM 1000DN 1000DO 1000DP 1000DQ 1000DR 1000DS 1000DT 1000DU 1000DV 1000DW 1000DX 1000DY 1000DZ 1000EA 1000EB 1000EC 1000ED 1000EE 1000EF 1000EG 1000EH 1000EI 1000EJ 1000EK 1000EL 1000EM 1000EN 1000EO 1000EP 1000EQ 1000ER 1000ES 1000ET 1000EU 1000EV 1000EW 1000EX 1000EY 1000EZ 1000FA 1000FB 1000FC 1000FD 1000FE 1000FF 1000FG 1000FH 1000FI 1000FJ 1000FK 1000FL 1000FM 1000FN 1000FO 1000FP 1000FQ 1000FR 1000FS 1000FT 1000FU 1000FV 1000FW 1000FX 1000FY 1000FZ 1000GA 1000GB 1000GC 1000GD 1000GE 1000GF 1000GG 1000GH 1000GI 1000GJ 1000GK 1000GL 1000GM 1000GN 1000GO 1000GP 1000GQ 1000GR 1000GS 1000GT 1000GU 1000GV 1000GW 1000GX 1000GY 1000GZ 1000HA 1000HB 1000HC 1000HD 1000HE 1000HF 1000HG 1000HH 1000HI 1000HJ 1000HK 1000HL 1000HM 1000HN 1000HO 1000HP 1000HQ 1000HR 1000HS 1000HT 1000HU 1000HV 1000HW 1000HX 1000HY 1000HZ 1000IA 1000IB 1000IC 1000ID 1000IE 1000IF 1000IG 1000IH 1000IJ 1000IK 1000IL 1000IM 1000IN 1000IO 1000IP 1000IQ 1000IR 1000IS 1000IT 1000IU 1000IV 1000IW 1000IX 1000IY 1000IZ 1000JA 1000JB 1000JC 1000JD 1000JE 1000JF 1000JG 1000JH 1000JI 1000JJ 1000JK 1000JL 1000JM 1000JN 1000JO 1000JP 1000JQ 1000JR 1000JS 1000JT 1000JU 1000JV 1000JW 1000JX 1000JY 1000JZ 1000KA 1000KB 1000KC 1000KD 1000KE 1000KF 1000KG 1000KH 1000KI 1000KJ 1000KK 1000KL 1000KM 1000KN 1000KO 1000KP 1000KQ 1000KR 1000KS 1000KT 1000KU 1000KV 1000KW 1000KX 1000KY 1000KZ 1000LA 1000LB 1000LC 1000LD 1000LE 1000LF 1000LG 1000LH 1000LI 1000LJ 1000LK 1000LL 1000LM 1000LN 1000LO 1000LP 1000LQ 1000LR 1000LS 1000LT 1000LU 1000LV 1000LW 1000LX 1000LY 1000LZ 1000MA 1000MB 1000MC 1000MD 1000ME 1000MF 1000MG 1000MH 1000MI 1000MJ 1000MK 1000ML 1000MN 1000MO 1000MP 1000MQ 1000MR 1000MS 1000MT 1000MU 1000MV 1000MW 1000MX 1000MY 1000MZ 1000NA 1000NB 1000NC 1000ND 1000NE 1000NF 1000NG 1000NH 1000NI 1000NJ 1000NK 1000NL 1000NM 1000NO 1000NP 1000NQ 1000NR 1000NS 1000NT 1000NU 1000NV 1000NW 1000NX 1000NY 1000NZ 1000OA 1000OB 1000OC 1000OD 1000OE 1000OF 1000OG 1000OH 1000OI 1000OJ 1000OK 1000OL 1000OM 1000ON 1000OO 1000OP 1000OQ 1000OR 1000OS 1000OT 1000OU 1000OV 1000OW 1000OX 1000OY 1000OZ 1000PA 1000PB 1000PC 1000PD 1000PE 1000PF 1000PG 1000PH 1000PI 1000PJ 1000PK 1000PL 1000PM 1000PN 1000PO 1000PP 1000PQ 1000PR 1000PS 1000PT 1000PU 1000PV 1000PW 1000PX 1000PY 1000PZ 1000QA 1000QB 1000QC 1000QD 1000QE 1000QF 1000QG 1000QH 1000QI 1000QJ 1000QK 1000QL 1000QM 1000QN 1000QO 1000QP 1000QQ 1000QR 1000QS 1000QT 1000QU 1000QV 1000QW 1000QX 1000QY 1000QZ 1000RA 1000RB 1000RC 1000RD 1000RE 1000RF 1000RG 1000RH 1000RI 1000RJ 1000RK 1000RL 1000RM 1000RN 1000RO 1000RP 1000RQ 1000RR 1000RS 1000RT 1000RU 1000RV 1000RW 1000RX 1000RY 1000RZ 1000SA 1000SB 1000SC 1000SD 1000SE 1000SF 1000SG 1000SH 1000SI 1000SJ 1000SK 1000SL 1000SM 1000SN 1000SO 1000SP 1000SQ 1000SR 1000SS 1000ST 1000SU 1000SV 1000SW 1000SX 1000SY 1000SZ 1000TA 1000TB 1000TC 1000TD 1000TE 1000TF 1000TG 1000TH 1000TI 1000TJ 1000TK 1000TL 1000TM 1000TN 1000TO 1000TP 1000TQ 1000TR 1000TS 1000TT 1000TU 1000TV 1000TW 1000TX 1000TY 1000TZ 1000UA 1000UB 1000UC 1000UD 1000UE 1000UF 1000UG 1000UH 1000UI 1000UJ 1000UK 1000UL 1000UM 1000UN 1000UO 1000UP 1000UQ 1000UR 1000US 1000UT 1000UU 1000UV 1000UW 1000UX 1000UY 1000UZ 1000VA 1000VB 1000VC 1000VD 1000VE 1000VF 1000VG 1000VH 1000VI 1000VJ 1000VK 1000VL 1000VM 1000VN 1000VO 1000VP 1000VQ 1000VR 1000VS 1000VT 1000VU 1000VV 1000VW 1000VX 1000VY 1000VZ 1000WA 1000WB 1000WC 1000WD 1000WE 1000WF 1000WG 1000WH 1000WI 1000WJ 1000WK 1000WL 1000WM 1000WN 1000WO 1000WP 1000WQ 1000WR 1000WS 1000WT 1000WU 1000WV 1000WW 1000WX 1000WY 1000WZ 1000XA 1000XB 1000XC 1000XD 1000XE 1000XF 1000XG 1000XH 1000XI 1000XJ 1000XK 1000XL 1000XM 1000XN 1000XO 1000XP 1000XQ 1000XR 1000XS 1000XT 1000XU 1000XV 1000XW 1000XX 1000XY 1000XZ 1000YA 1000YB 1000YC 1000YD 1000YE 1000YF 1000YG 1000YH 1000YI 1000YJ 1000YK 1000YL 1000YM 1000YN 1000YO 1000YP 1000YQ 1000YR 1000YS 1000YT 1000YU 1000YV 1000YW 1000YX 1000YY 1000YZ 1000ZA 1000ZB 1000ZC 1000ZD 1000ZE 1000ZF 1000ZG 1000ZH 1000ZI 1000ZJ 1000ZK 1000ZL 1000ZM 1000ZN 1000ZO 1000ZP 1000ZQ 1000ZR 1000ZS 1000ZT 1000ZU 1000ZV 1000ZW 1000ZX 1000ZY 1000ZZ