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Date: 10 July 2006

FAO Andrew G Taylor
Air, Noise & Nuisance Team

Dear Sir

LOCAL AIR QUALITY MANAGEMENT
UPDATING AND SCREENING ASSESSMENT 2006

I refer to your letter of 3 July regarding the above, querying Inverclyde Council's progress in compiling this report.

I have enclosed our completed report with this letter, and apologise for the delay in completing this submission.

As you are already aware we had some difficulties in obtaining traffic flow data, and only received them from your colleagues in the transport section after the deadline had passed. It then took me longer than expected to get the raw data sent to me into a form which we could use in our DMRB model.

Further to this I did spend longer than expected in looking through our district for possible junctions which may have required investigation in terms of Nitrogen Dioxide and Particulate Matter.

I understand the necessity of adhering to the tight deadlines we have been set, and can safely predict that the progress reports for 2007 and 2008 will be completed by the end of April each year.

It may for future reference be useful if traffic counts carried out on trunk roads are sent to the transport section of each local authority. This would allow transport services within each authority to provide those details required for LAQM purposes to Environmental Health, in a form which is easier to understand, and on a timescale which would help us submit our U.S.A's on time.

Yours faithfully

Stewart D MacKenzie

Stewart MacKenzie
Environmental Health Officer

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Updating & Screening Assessment 2006

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EXECUTIVE SUMMARY

The Environment Act 1995 requires Local Authorities to review and assess air quality in their areas with a view to determining whether the National Air quality objectives for 7 key pollutants are likely to be met.

A first stage review and assessment was carried out in December 1998 with the second stage being carried out in March 2000, which concluded that the then National Objectives would be met.

Since then, however, the Air Quality (Scotland) Amendment Regulations 2002 have tightened the air quality objectives. As part of the phased approach to the review and assessment process an updating and screening assessment has been carried out to identify any areas where there is a risk of exceedance of the new objectives.

The findings are as follows: -

Pollutant	Air Quality Objectives
Benzene	Will be met
1,3 Butadiene	Will be met
Lead	Will be met
Sulphur Dioxide	Will be met
Carbon Monoxide	Will be met
PM ₁₀	Will be met
Nitrogen Dioxide	Will be met

Description of Area

Topography and Population

Inverclyde Council was formed from merging the duties and functions of the former Strathclyde Regional Council and Inverclyde District Council at the re-organisation of Scottish Local Government in 1996. It covers roughly 61 square miles and had a population in 2001 of 84,203.

The population is projected to fall to 81,410 by 2005 and 78,143 by 2010.

Approximately two thirds of the population live in the highly developed coastal strip comprising Port Glasgow, Greenock and Gourock. This built up area contrasts with the undeveloped rural hinterland and upland moors which make up the majority of the Authority's area.

Both Greenock and Port Glasgow have significant historical associations with maritime trade and the associated industries of shipbuilding, rope making and sugar refining. More recently, however, these historical sources of employment have been replaced by high technology firms.

Gourock contains little manufacturing industry and is recognised as a residential town and popular tourist destination with ferry terminals connecting Inverclyde with Argyll and Bute.

The three rural villages of Kilmacolm including Quarrier's Village, Inverkip and Wemyss Bay are growing rapidly as residential areas.

Road Network

Inverclyde is served by three main routes from outwith the areas. The A8 (M8) from Glasgow and the Central Belt, the A78 which leads to Ayrshire and the West Coast and A761 from the rural areas of Kilmacolm and Bridge of Weir.

The busiest areas of road within the area are all along the A8 corridor which can become very congested during the rush hour (see Annex 1, Map 1).

SUMMARY OF PREVIOUS ROUND REVIEW AND ASSESSMENT OF LOCAL AIR QUALITY (MARCH 2000)

The previous round of Review and Assessment of Local Air Quality in Inverclyde involved a 2 stage assessment process.

The 1st stage was a process of rough screening to eliminate pollutants that would not be a concern in meeting the National Air Quality Objectives.

As part of this work it was identified that there was no industrial or domestic sources in Inverclyde or in neighbouring local authorities which would have a significant impact on the air quality of Inverclyde. The principal source of pollutants in Inverclyde is from traffic.

It was of no great surprise that a 2nd stage assessment was required for nitrogen dioxide and fine particles (PM₁₀) the principal pollutants from traffic.

The 2nd stage review and assessment examined these pollutants in more detail. Monitoring was extended and results assessed, a simple traffic pollution model was used to predict current and future pollutant levels from our busiest roads.

As a direct result of these calculations and assessment it was concluded that the then national Air Quality Objectives would be met in Inverclyde in the prescribed time.

SUMMARY OF NATIONAL AIR QUALITY STRATEGY (NAQS) AND LOCAL AIR QUALITY MANAGEMENT (LAQM)

The Environment Act 1995 required the UK Government and the devolved administrations for Scotland and Wales to produce a national air quality strategy containing standards and objectives for improving ambient air quality.

The Act also laid the foundations for a system of local air quality management (LAQM). As a result, local authorities are required periodically to review and assess the current and future quality of air in their areas against those objectives in the Strategy, which have been prescribed in regulations i.e. Air Quality Regulations 2000 as Amended.

Where a local authority considers that one or more of the air quality objectives are unlikely to be met by the due dates, the authority must declare an air quality management area (AQMA), covering the area where the problem has been identified. It must then draw up an action plan setting out measures it intends to take in pursuit of the air quality objectives in the area.

The Scottish Executive has issued a National Guidance document which local authorities are required to take into account when carrying out their review and assessment process of local air quality.

The guidance continues to build on a phased approach to review and assessment that was established in the first round, but commensurate with the risk of an air quality objective being exceeded.

A 2-step approach to review and assessment has been introduced and is described below: -

The phased approach to review and assessment

Level of Assessment	Objective	Approach
Updating and Screening Assessment	To identify those matters that have changed since the last review and assessment, which might lead to a risk of an air quality objective being exceeded.	Use a checklist to identify significant changes that require further consideration. Where such changes are identified, and then apply simple screening tools to decide whether there is sufficient risk of an objective to justify a Detailed Assessment.
Detailed Assessment	To provide an accurate assessment of the likelihood of an air quality objective being exceeded at locations with relevant	Use quality-assured monitoring and validated modelling methods to determine current and future pollutant

	exposure. This should be sufficiently detailed to allow the designation or amendment of any necessary AQMAs.	concentrations in areas where there is a significant risk of exceeding an air quality objective.
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Not every authority will need to proceed beyond the first step in this second round of review and assessment.

Only where the updating and screening assessment has identified a risk that an air quality objective will be exceeded, at a location where there is relevant public exposure, will the authority be required to take the next step and carry out a detailed assessment.

Local authorities are obliged to frequently review and assess their local air quality by the preparation of progress reports and further assessments.

A programme for this is laid out in the National Guidance and is as follows.

Timescales for submission of reviews and assessments and Progress Reports

LAQM activity	Completion Date	Which authorities?
Updating and Screening Assessment	End of May 2003	All authorities.
Detailed Assessment	End of April 2004	Those authorities which have identified the need for a detailed Assessment in their May 2003 Updating and Screening Assessment.
Progress Report	End of April 2004	Those authorities which have identified no need for a Detailed Assessment in their May 2003 Updating and Screening Assessment.
Progress Report	End of April 2005	All authorities.
Updating and Screening Assessment	End of April 2006	All authorities.

Detailed Assessment	End of April 2007	Those authorities which have identified the need for a Detailed Assessment in their April 2006 Updating and Screening Assessment.
Progress Report	End of April 2007	Those authorities which have identified no need for a Detailed Assessment in their April 2006 Updating and Screening Assessment.
Progress Report	End of April 2008	All authorities.
Updating and Screening Assessment	End of April 2009	All authorities.
Detailed Assessment	End of April 2010	Those authorities which have identified the need for a Detailed Assessment in their April 2009 Updating and Screening Assessment.
Progress Report	End of April 2010	Those authorities which have identified no need for a Detailed Assessment in their April 2009 Updating and Screening Assessment.

AIR QUALITY OBJECTIVES

Shown below is a table of the air quality objectives under the Air Quality Regulations 2000 and as detailed in the Air Quality (Scotland) Amendment Regulations 2002.

Pollutant	Applies..	Concentration	Measured at	Compliance
*Benzene	All UK	16.25µg/m ³ (5ppb)	Running annual mean.	31 Dec 2003
	Eng & Wales Scotland	5µg/m ³ (1.5ppb) 3.25µg/m ³ (1ppb)	Annual mean	31 Dec 2010 31 Dec 2010
*1,3 Butadiene	All UK	2.25µg/m ³ (1ppb)	Running annual mean	31 Dec 2003
Carbon monoxide	All UK	10mg/m ³ (8.6ppm)	Maximum daily running eight hour mean	31 Dec 2003
*Lead	All UK	0.5µg/m ³	Annual mean	31 Dec 2004
		0.25µg/m ³	Annual mean	31 Dec 2008
*Nitrogen dioxide (prov)	All UK	200µg/m ³ (105ppb)	1 hour mean, 18 exceedences	31 Dec 2005
		40µg/m ³ (21ppb)	annual mean	31 Dec 2005
*Particles (PM10) (gravimetric)	UK	50µg/m ³	24hr mean, 35 exceedences	31 Dec 2004
	Scotland	40µg/m ³	annual mean	31 Dec 2004
		50µg/m ³	24hr mean, 7 exceedences	31 Dec 2010
		18µg/m ³	annual mean	31 Dec 2010
Sulphur dioxide	All UK	350µg/m ³ (132ppb)	1 hr mean not to be exceeded more than 24 times a year	31 Dec 2004
		125µg/m ³ (47ppb)	24 hr mean not to be exceeded more than 3 times a year	31 Dec 2004
		266µg/m ³ (100ppb)	15min mean not to be exceeded more than 35 times a year	31 Dec 2005

* The air quality objectives have been tightened either in terms of concentrations or compliance date since the previous review and assessment was carried out.

Introduction to Pollutant Assessments

This report details the review and assessment process carried out to identify the risk of the national air quality objectives being exceeded.

The updating and screening assessment strictly follows the National Guidance to identify those circumstances, which had changed since the last review, assessment was carried out and to identify areas where the air quality objectives are, or are at risk of being exceeded.

A number of air quality objectives have been tightened since the last review and assessment. An updating and screening assessment of each pollutant has been carried out to identify if a detailed assessment is required for any of the pollutants.

A copy of the checklist can be seen in appendix 4.

1,3 – Butadiene

The national objective for 1,3 – butadiene is 2.25 ug/m^3 as a running annual mean, by 31 December 2003.

Previous assessment had concluded that within Inverclyde, levels of 1,3 - butadiene were likely to meet the national objectives. For the purposes of this Updating and Screening Assessment we have used the methodology as laid out in LAQM TG(03) and subsequent amendments.

Sources, locations or data that needs to be assessed for 1,3 – butadiene are:-

1. Monitoring Data – There is no current monitoring data available in Inverclyde.
2. New industrial sources – There are no new industrial sources
3. Industrial sources with substantially increased emissions, or new relevant exposure.
– There are no such sources within Inverclyde.

Taking into account the above information, it is concluded that Inverclyde as no need to undertake a detailed assessment for 1,3 – butadiene.

Benzene

The national objectives for Benzene are 16.25 ug/m³ as a running annual mean, by 31 December 2003, and 3.25 ug/m³ as a running annual mean, by 31 December 2010.

Previous assessment had concluded that within Inverclyde, levels of Benzene were likely to meet the national objectives. For the purposes of this Updating and Screening Assessment we have used the methodology as laid out in LAQM TG(03) and subsequent amendments.

Sources, locations or data that needs to be assessed for Benzene are:-

1. Monitoring data outside an Air Quality Management Area (AQMA). – Inverclyde has been undertaking Benzene monitoring since 1997 using diffusion tubes. The results for 2005 are shown below. It can be seen that in the previous year the averages of the 2 sites are, 1.66 ug/m³ at Dellingburn Street, and 1.2 ug/m³ at Nelson Street.
2. Monitoring data within an AQMA – Inverclyde has never declared an AQMA.
3. Very busy roads or junctions in built up areas. – There are no single carriageway roads within Inverclyde with an AADT greater than 80,000. There are no dual carriageway roads with an AADT greater than 120,000, and there are no motorways within Inverclyde. There are also no areas within Inverclyde with 2010 backgrounds expected to be above 2ug/m³.
4. New Industrial sources. – There are no new industrial sources of Benzene within Inverclyde.
5. Industrial sources with substantially increased emissions, or new relevant exposure. – There are no such sources within Inverclyde.
6. Petrol Stations. – No petrol stations in Inverclyde with a throughput of more than 2000m³, which a busy road nearby with any relevant exposure within 10m.
7. Major fuel storage depots (petrol only). – There are no major fuel depots in Inverclyde.

Taking into account the above information, there is no need for Inverclyde to undertake a detailed assessment for Benzene. We will be continuing with our monitoring programme, and have recently added a third diffusion tube on Inverkip Road, Greenock.

BENZENE RESULTS 2005

ppb2005	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Average	ug/m3	2010 projection
SITE															
Dellingburn St	0.53	0.76	0.58	0.3	0.35	0.35	0.25	0.59	0.38	XX	0.8	0.68	0.51	1.66	1.393
Nelson St	0.54	0.53	0.41	0.48	0.2	0.18	0.16	0.16	0.17	XX	0.61	0.6	0.37	1.2	1.007

Carbon Monoxide

The national objective for Carbon Monoxide is 10 mg/m^3 as a running 8-hour mean concentration, by 31 December 2003.

Previous reviews and assessments by Inverclyde Council, have concluded that this objective will be met. For the purposes of this Updating and Screening Assessment we have used the methodology as laid out in LAQM TG(03) and subsequent amendments.

The sources, locations or data that needs to be assessed for Carbon Monoxide are:-

1. Monitoring Data. – There has been no monitoring undertaken by Inverclyde Council.
2. Very busy roads or junctions in built-up areas. – There are no roads with an Annual Average Daily Traffic Flow (AADT) of greater than 80,000. And there are no areas within Inverclyde where the background concentration is expected to be above 1 mg/m^3 .

Taking into account the above information, it is concluded that Inverclyde Council have no reason to undertake a detailed assessment for Carbon Monoxide.

Lead

The national objective for lead is 0.5 ug/m^3 as an annual mean, by 31 December 2004, and 0.25 ug/m^3 as an annual mean, by 31 December 2008.

Previous reviews and assessments by Inverclyde Council, have concluded that this objective will be met. For the purposes of this Updating and Screening Assessment we have used the methodology as laid out in LAQM TG(03) and subsequent amendments.

The sources, locations or data that needs to be assessed for Lead are:-

1. Monitoring data – There has been no monitoring undertaken in Inverclyde for Lead.
2. New Industrial Sources – There are no such sources in Inverclyde.
3. Industrial sources with substantially increased emissions, or new relevant exposure. – There are no such sources within Inverclyde.

Taking into account the above information, there is no need for Inverclyde to undertake a detailed assessment for lead.

Nitrogen Dioxide

The national objective for nitrogen dioxide is 200ug/m³ as a 1 – hour mean, not to be exceeded more than 18 times a year, by 31 December 2005. And 40ug/m³ as an annual mean, by 31 December 2005.

Previous assessment had concluded that within Inverclyde, levels of Nitrogen Dioxide were likely to meet the national objectives. For the purposes of this Updating and Screening Assessment we have used the methodology as laid out in LAQM TG (03) and subsequent amendments.

Sources, locations or data that needs to be assessed for Nitrogen Dioxide are: -

1. Monitoring Data outside an AQMA – Details of our Nitrogen dioxide monitoring are shown in the following sheet. It can be seen that there is no location, which is above the national objective.
2. Monitoring Data within an AQMA – Inverclyde has not declared an AQMA.
3. Narrow congested streets with residential properties close to the kerb – There are no streets within Inverclyde, which have a carriageway less than 10m wide, with a flow of 10,000 vehicles or more.
4. Junctions – We have looked at all junctions within Inverclyde, and have noted that most junctions with more than 10,000 vehicles a day, either do not have any relevant exposure or were looked at in the previous Updating and Screening Assessment. (See appendix 1). We have however noted that there is housing being built near the A8 and its junction with Ratho Street (see map in appendix 2). These houses will be finished by the next USA, and it is our intention to monitor by diffusion tubes over the following years to assess. In the meantime I have put the best figures available to me into the DMRB and it can be noted that no pollutant is predicted to be above the objectives.(See appendix 3)
5. Busy streets where people may spend 1-hour or more close to traffic – Any streets in Inverclyde where people could be expected to spend 1- hour or more have less than 10,000 vehicles per day.
6. Roads with high flow of buses and/or HGVs – These locations were assessed during the previous USA. There has been no significant increase in vehicle flow in these areas, and no new relevant exposure at them.
7. New roads constructed or proposed since the previous USA – There are no new or proposed roads in Inverclyde.
8. Roads with significantly changed traffic flows, or new relevant exposure – No roads in Inverclyde have had an increase of 25% in their AADT. There is no new relevant exposure at any roads with greater than 10,000 vehicles.
9. Bus stations – No relevant exposure within 10m of bus stations.
10. New industrial sources – There are no such sources within Inverclyde.
11. Industrial sources with substantially increased emissions, or new relevant exposure – There are no such sources within Inverclyde.
12. Aircraft – There are no airports or airfields within Inverclyde.

NITROGEN DIOXIDE RESULTS 2005

2005	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	Average
Carwood St	16	14	13	lost	10	9	9	7	11	14	18	24	13.18
Scarlow St				lost	20	18	15	12	14	27	26	33	20.62
Kilmacolm Cross				lost	18	14	7	11	16	24	25	31	18.25
MacDougall St				lost	25	19	18	15	17	26	26	32	22.25
Dellingburn st	40	35	40	lost	38	40	24	29	28	44	47	50	37.73
Dalrymple Street				lost	27	24	17	17	23	35	36	40	27.38
Inverkip St	29	34	32	lost	28	21	17	23	28	37	37	47	30.28
Broomhill St				lost	10	10	7	8	13	24	23	29	15.50
Nelson St				lost	25	19	15	15	22	30	33	42	25.12
Dunlop St				lost	14	16	14	9	12	21	22	28	17.00
Mercury Lane				lost	lost	17	15	17	19	22	32	38	22.86
Wemyss Bay				lost	16	14	15	14	18	23	18	lost	16.86
Cardwell Rd	35	32	32	lost	33	27	21	20	35	30	35	39	30.82
Newark St				lost	18	14	8	15	19	25	26	34	19.88
Brougham St				lost	27	22	18	31	26	37	28	39	28.50
Kempock St	22	19	19	lost	20	18	13	21	22	27	28	38	22.45

At present, therefore, there is no need for Inverclyde to undertake a Detailed Assessment for Nitrogen Dioxide. We will, however, start monitoring close to the new housing at the A8/Ratho Street junction, and we will have a full years data from our automatic monitor at Dellingburn Street to comment on in the 2007 progress report.

Particular Matter – PM₁₀

The National objectives for Particular Matter are 50ug/m³ as a 24 – hour mean not to be exceeded more than 35 times a year, by 31 December 2004.

40 ug/m³ as an annual mean, by 31 December 2004,

50 ug/m³ as a 24 – hour mean not to be exceeded more than 7 times a year, by 31 December 2010, and

18 ug/m³ as an annual mean, by 31 December 2010.

Previous assessment had concluded that within Inverclyde, levels of Particular Matter met the national objectives. For the purposes of this Updating and Screening Assessment we have used the methodology as laid out in LAQM TG (03) and subsequent amendments.

Sources, locations or data that needs to be assessed for Particular Matter are: -

1. Monitoring data outside an AQMA. – Inverclyde carried out no monitoring during the previous year. We have access to a continuous monitor, which will begin taking readings on 1 June for a year.
2. Monitoring data within an AQMA. – Inverclyde has not declared an AQMA
3. Busy roads and junctions in Scotland – There are no roads with an AADT of more than 5,000, where the annual mean background in 2010 is expected to be above 15ug/m³. There are roads with an AADT of 10,000 vehicles where the annual mean background in 2010 is expected to be below 15ug/m³. These roads however have been considered in previous review and assessment, and there are no roads with a >10% increase in AADT.
4. Junctions – The junctions looked at during the previous Updating and Screening Assessment have not had any significant change in traffic flow. Other junctions which we considered did not have any relevant exposure, with the exception of the junction between A8 and Ratho Street. There are new houses currently being built here. In view of this we used the DMRB model to predict the PM₁₀ for 2010, which as can be seen over, is below the current objective.
5. Roads with high flow of buses and/or HGVs – There are no roads within Inverclyde with an unusually high proportion of heavy-duty vehicles, where there is any relevant exposure within 10m.
6. New roads constructed or proposed since last round of Review and Assessment. – There are no such new roads within Inverclyde.
7. Roads with significantly changed traffic flows, or new relevant exposure. – There are no roads within Inverclyde with an increase in AADT of 25%, and no roads of more than 10,000 AADT with any new relevant exposure.
8. Roads close to the objective during the second round of Review and Assessment. – There were no roads in Inverclyde where either a) between 25 and 35 days exceedence of the 24 hour objective were predicted. Or b) the predicted annual mean concentration in 2010 was above 16ug/m³.
9. New industrial sources. – There is no such source in Inverclyde.
10. Industrial sources with substantially increased emissions, or new relevant exposure. – There are no such sources within Inverclyde.

11. Areas of domestic solid fuel burning – There are no 500m by 500m areas in Inverclyde with more than 50 houses burning solid fuel as their primary source of heating.
12. Quarries/ landfill sites/opencast coal/handling of dusty cargoes at ports etc. – There are currently no operating quarries, landfill sites or opencast mines in Inverclyde. There is an operator where there is handling of cement, however in the past 3 years we have not received any complaints about dust emissions from this facility. At the moment the nearest residential properties are 435m away.
13. Aircraft – There are no airports or airfields within Inverclyde.

Taking into account the above information, there is no need for Inverclyde to undertake a detailed assessment for Particular Matter. We will be continuing with our monitoring of particular matter at Dellingburn Street, every second year, and will report on our findings in the Progress Report on May 2007.

SULPHUR DIOXIDE

The national objectives for sulphur dioxide are, 350ug/m³ as a 1 – hour mean, not to be exceeded more than 24 times a year, by 31 December 2004.

125ug/m³ as a 24 – hour mean, not to be exceeded more than 3 times a year, by 31 December 2004, and

266 ug/m³ as a 15 – minute mean, not to be exceeded more than 35 times a year, by 31 December 2005.

Previous assessment had concluded that within Inverclyde, levels of Sulphur Dioxide were likely to meet the national objectives. For the purposes of this Updating and Screening Assessment we have used the methodology as laid out in LAQM TG(03) and subsequent amendments.

Sources, locations or data that needs to be assessed for Sulphur Dioxide are:-

1. Monitoring Data outside an AQMA – There has been no monitoring of Sulphur Dioxide undertaken by Inverclyde since the last Updating and Screening Assessment.
2. Monitoring Data within an AQMA – There has been no AQMA declared within Inverclyde
3. New Industrial Sources – There are no such sources within Inverclyde.
4. Industrial sources with substantially increased emissions, or new relevant exposure. – There are no such sources within Inverclyde.
5. Areas of domestic coal burning – There are no areas within Inverclyde with 100 houses or more in a 500m by 500m area that have solid fuel as their primary source of heating.
6. Small boilers >5MW(thermal) – There are no new plant in Inverclyde since they were last assessed in 2003.
7. Shipping – There are less than 5,000 movements per year, of large ships within Inverclyde.
8. Railway Locomotives – There are no areas within Inverclyde where Diesel or steam locomotives are regularly stationary for periods of 15 minutes or more.

Taking into account the above information, there is no need for Inverclyde to undertake a detailed assessment for Benzene. We will be continuing with our monitoring programme, and have recently added a third diffusion tube on Inverkip Road, Greenock.

Conclusions

From the above information it can be concluded that Inverclyde has no requirement to produce a detailed assessment for any of the pollutants.

We will be undertaking new monitoring at 2 locations; Inverkip Road, we started in February of this year, and at Ratho Street in August. The initial results from these sites will be available in the progress report in 2007. Along with the full years results from the automatic air quality monitor at Dellingburn Street, which reports on Carbon Monoxide, Nitrogen Dioxide and Particular Matter.

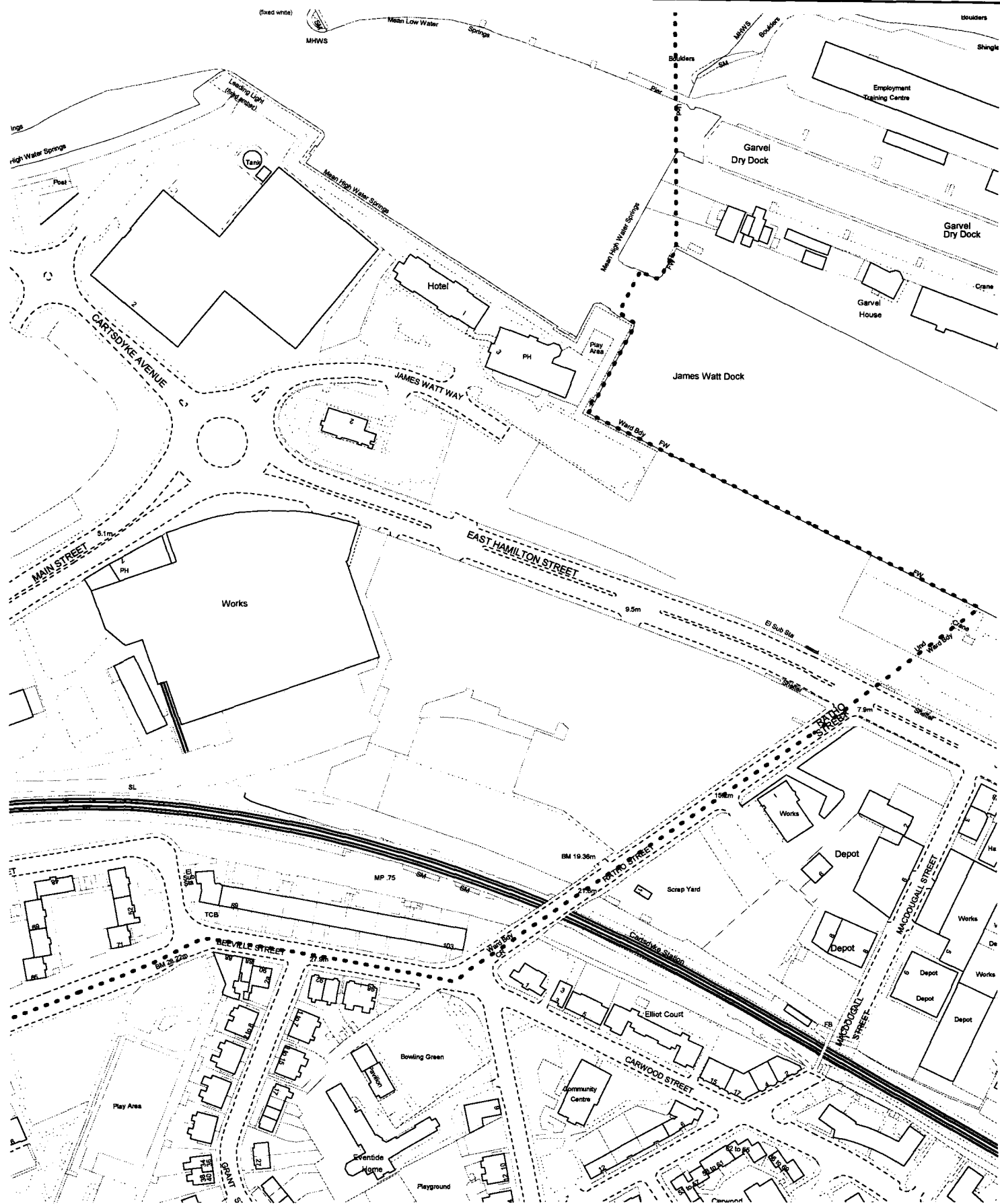
We will also be seeking to purchase further equipment if capital funds are available, to allow us to do further particulate monitoring in preparation for the objective for this pollutant being further changed.

APPENDIX 1

Roads and Junctions Assessed 2003

Location	Class	Receptor distance (m)
High St	A	9
Roxburgh St	C	6.6
Brougham St	A	9.4
Sir Michael St	A	8.7
Nelson St	A	9
Clune Brae	A	7.2
Cardwell Rd	A	10.4
Shore St	A	8.2
Dellingburn St	B	7.2
Baker St	B	50
Ingleston St	B	19.4
Regent St	C	6.1
Drumfrochar Rd	B	9.3
Dunlop St	B	13.6
A8 Finlaystone	A	295
A8 Port Glasgow Rd	A	163
A8 Woodhall	A	28.5
A78 Chriswell	A	68
A78 Inverkip Rd	A	6.3
A78 Branchton	A	19
Grey Pl/ Patrick St	A	12
Patrick St/ Union St	B	13
Sir Michael St/ Regent St	A	16
Kilblain St bus station	N/A	10.9
Port Glasgow bus station	N/A	9

APPENDIX 2 - MAP SHOWING JUNCTION OF A8/RATHO ST.



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INPUT SHEET

DMRB: Assessment of Local Air Quality

Step 1	Regression points	A8/Ratho Street	Weighted average	Step 6
Step 2	Step 3	2010		Step 7

Age (years)	Expense (pence)	0.131	0.0584	9.95	7.8	12.6
25-30	100	13.1	5.84	99.5	78	126
31-35	150	19.65	8.76	149.25	117	190.8
36-40	200	26.2	11.68	199	156	251.6
41-45	250	32.75	14.6	248.75	195	312.4
46-50	300	39.3	17.52	298.5	234	373.2
51-55	350	45.85	20.44	348.25	273	434
56-60	400	52.4	23.36	398	312	494.8
61-65	450	58.95	26.28	447.75	351	555.6
66-70	500	65.5	29.2	497.5	390	616.4
71-75	550	72.05	32.12	547.25	429	677.2
76-80	600	78.6	35.04	597	468	738
81-85	650	85.15	37.96	646.75	507	798.8
86-90	700	91.7	40.88	696.5	546	859.6
91-95	750	98.25	43.8	746.25	585	920.4
96-100	800	104.8	46.72	796	624	981.2

[illegible]

OUTPUT SHEET

Current receptor

A8/Ratho Street

1

2010

Results

Contribution of each link to annual mean

0.17	0.09	0.26	0.28
0.13	0.15	0.28	0.28
0.06	0.18	0.24	0.24
10.0	25.9	35.9	
7.8	7.4	15.2	15.2
12.8	2.52	15.12	15.1
			0

[illegible]

All receptors

Pollutant concentrations at receptor

[illegible]

Updating and Screening Assessment Summary Checklist for **Carbon Monoxide**

Item	Response
A) Monitoring data	None
B) Very busy roads or junctions in built-up areas	None

Updating and Screening Assessment Summary Checklist for **Benzene**

Item	Response
A) Monitoring data outside an AQMA	Monitoring shows results below objective
B) Monitoring data within an AQMA	No AQMA
C) Very busy roads or junctions in built up areas	None
D) New industrial sources.	None
E) Industrial sources with substantially increased emissions, or new relevant exposure	None
F) Petrol stations	See results at Dellingburn Street
G) Major fuel storage depots (petrol only)	None

Updating and Screening Assessment Summary Checklist for **1,3-butadiene**

Item	Response
H) Monitoring data	None
I) New industrial sources.	None
J) Industrial sources with substantially increased emissions, or new relevant exposure	None

Updating and Screening Assessment Summary Checklist for **Lead**

Item	Response
K) Monitoring data	None
L) New industrial sources.	None
M) Industrial sources with substantially increased emissions, or new relevant exposure	None

Updating and Screening Assessment Summary Checklist for **Nitrogen Dioxide**

Item	Response
N) Monitoring data outside an AQMA	See results
O) Monitoring data within an AQMA	No AQMA
P) Narrow congested streets with residential properties close to the kerb	No Change
Q) Junctions.	No Change
R) Busy streets where people may spend 1-hour or more close to traffic	No Change
S) Roads with high flow of buses and/or HGVs.	No Change
T) New roads constructed or proposed since the previous round of R&A	No Change
U) Roads with significantly changed traffic flows, or new relevant exposure	No Change
V) Bus Stations	No Change
W) New industrial sources.	None

X) Industrial sources with substantially increased emissions, or new relevant exposure	None
Y) Aircraft	None

Updating and Screening Assessment Summary Checklist for **Sulphur Dioxide**

Item	Response
Z) Monitoring data outside an AQMA	None
AA) Monitoring data within an AQMA	No AQMA
BB) New industrial sources.	None
CC) Industrial sources with substantially increased emissions, or new relevant exposure	None
DD) Areas of domestic coal burning	None
EE) Small Boilers > 5 MW (thermal).	No Change
FF) Shipping	
GG) Railway Locomotives	None

Updating and Screening Assessment Summary Checklist for **PM₁₀**

Item	Response
HH) Monitoring data outside an AQMA	None
II) Monitoring data within an AQMA	No AQMA
JJ) Busy roads and junctions in Scotland	No change
KK) Junctions.	No Change
LL) Roads with high flow of buses and/or HGVs.	No Change

MM) New roads constructed or proposed since last round of R&A	None
NN) Roads with significantly changed traffic flows, or new relevant exposure.	None
OO) Roads close to the objective during the second round of Review and Assessment	None
PP) New industrial sources.	None
QQ) Industrial sources with substantially increased emissions, or new relevant exposure	None
RR) Areas of domestic solid fuel burning	None
SS) Quarries / landfill sites / opencast coal / handling of dusty cargoes at ports etc.	None, which were not checked out in previous assessments
TT) Aircraft	None

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Scottish Executive

Scottish Environmental Protection Agency

North Ayrshire Council

Renfrewshire Council

Argyll and Bute Council

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