Appendix 7(a)

PM₁₀
Junctions with Significant Traffic Flows

PM10 - Junctions with over 10,000 vehicles per day and relevant exposure within 10m of the kerb.

Site Town	Site Name	Year	Junction Traffic	Junction HV	% HV
SCUNTHORPE	ASHBY ROAD ROUNDABOUT	2004	27036	1945	7.2
SCUNTHORPE	FERRY ROAD ROUNDABOUT	2004	19708	392	2.0
SCUNTHORPE	MESSINGHAM ROAD/ BURRINGHAM ROAD	2004	13577	511	3.8
SCUNTHORPE	BURRINGHAM ROAD ROUNDABOUT (ASDA)	2004	12741	684	5.4
SCUNTHORPE	ASHBY HIGH STREET/ GRANGE LANE SOUTH	2004	12338	658	5.3
SCUNTHORPE	MESSINGHAM ROAD/ CHANCEL ROAD/ WILLOUGHBY ROAD	2004	12254	529	4.3
BARTON UPON HUMBER	FERRIBY ROAD/ HOLYDYKE	2004	12064	853	7.1
SCUNTHORPE	ASHBY ROAD/ LLOYDS AVENUE	2004	10649	579	5.4

 PM_{10}

Roads with Significant Flows of HDVs

PM10 - Roads with over 2,000 HDVs per day and relevant exposure within 10m of the kerb.

Town	Road Number	Name	Year	Predicted traffic	Predicted HV	% HV
South Killingholme	A160T/A160	HUMBER ROAD	2004	12290	5093	41.4

Appendix 8(a)
Industrial Sources of Pollution within North Lincolnshire
Part A Processes

					1		ı		
	Process	Process Guidanc e No.	Benzene	1,3 Butadien e	Lead	Carbon Monoxid e	Sulphur Dioxide	Nitrogen Dioxide	PM10
Brigg Power Station	CCGT Power Station	1.3 (b)					х	х	
Powergen North Killingholme	CCGT Power Station	1.3 (b)					Х	х	
National Power Plc North Killingholme	CCGT Power Station	1.3 (b)					x	x	
Keadby Power Station	CCGT Power Station	1.3 (b)					Х	х	
Fibrogen Flixborough	Power Station	1.3 (a)						X	X
British Steel Scunthorpe	Boiler Plant	1.3 (a)						х	х
Edinburgh Oil & Gas Scunthorpe	Crude Oil Handling	1.4 (a)	Х	Х	х		Х	Х	Х
British Steel Coke Ovens	Coke Production	1.2	Х	х			Х	x	x
British Steel Plc	Iron & Steelmaking	2.1				Х	Х	х	х
British Steel Rod Mill	Steel Mill	2.1				х	Х	х	х
Short Brothers Scunthorpe	Steel Slab Splitting	2.1				Х	Х	х	Х
Rugby Group South Ferriby	Cement Manufacturer	3.1					Х	х	х
Singleton Birch	Lime Works	3.1					Х	х	х
Conoco Humber Refinery South Killingholme	Crude Oil Handling	1.4	x	х	х		х	х	х
Lindsey Oil Refinery South Killingholme	Crude Oil Handling	1.4	X	х	Х		Х	х	х
Crystal Polymers Flixborough	Plastics Manufacture	4.2					Х	х	х
Bitmac	Tar & Oil Processing	6.3	Х				Х	х	х

Appendix 8(a) continued

	Process	Process Guidanc e No.	Benzene	1,3 Butadien e	Lead	Carbon Monoxid e	Sulphur Dioxide	Nitrogen Dioxide	PM10
Immingham Bulk Terminal Immingham Dock	Bulk Iron Ore Handling & Storage	2.1 (a)							х
Crown Timber	Timber Process	6.7							
Howarth Timber & Doors	Timber Process	6.7							

Appendix 8(b) Industrial Sources of Pollution within North Lincolnshire

Part B Processes

	Process	Process Guidance No	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10	Stack or Fugitive
TotalfinaElf UK Ltd Killingholme	Storage of Petrol at Terminals	1.13	X							
Wbb Minerals Messingham	Minerals Handling & Processing	3/8					Х		Х	
JHP Storage LTD Goxhill	Handling and Storage of Petroleum coke	3.5							X	Fugitive
JHP Storage LTD Elsham (Store 7 & 8)	Handling and Storage of Petroleum coke	3.5							X	Fugitive
North Killingholme Storage	Handling and Storage of Petroleum coke	3.5							Х	Fugitive
North Killingholme Storage (Warehouse 6 & 8)	Handling and Storage of Petroleum coke	3.5							X	Fugitive
North Killingholme Storage	Handling and Storage of Petroleum coke	3.5							X	Fugitive
Simon Distribution North Killingholme (Warehouse C&D)	Handling & Storage of Petroleum Coke	3.5							X	Fugitive
Simon Distribution North Killingholme (Warehouse	Handling & Storage of Petroleum Coke	3.5							Х	Fugitive

A)							
Simon Distribution North Killingholme (Warehouse B)	Handling & Storage of Petroleum Coke	3.5				х	Fugitive
Simon Distribution North Kilingholme (Warehouse J)	Handling & Storage of Petroleum Coke	3.5				х	Fugitive

Appendix 8(b) continued

	Process	Process Guidance No.	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10	Stack or Fugitive
Simon Distribution North Killingholme (Warehouse K)	Handling & Storage of Petroleum Coke	3.5							х	Fugitive
Simon Distribution North Killingholme (Budmo Warehouse)	Handling & Storage of Petroleum Coke	3.5							х	Fugitive
JHP Storage Elsham	Handling & Storage of Petroleum Coke	3.5							х	Fugitive
British Steel Immingham Bulk Terminal South Killingholme	Storage of Petroleum Coke	3.5							х	Fugitive
Waterway Services Keadby (No storage at present)	Storage of Petroleum Coke	3.5							х	Fugitive
Gunness Wharf Ltd Gunness Whart Althorpe	Storage of Coal & Coke Products	3.5							х	Fugitive
PMC Carbon Scunthorpe	Processing Graphite Petroleum & Metallurgical Coke	3.5							X	Stack

Scangrit South	Minerals Handling &	3.8								Stack
Killingholme	Processing								X	
Steetley Bentonite & Absorbents Ltd Flixborough	Handling & Processing of Minerals	3.8							х	
Quay Minerals Flixborough	Handling & Processing of Minerals	3.8							х	
Quay Minerals Bagmore Works Flixborough	Screening and Drying of Materials	3.8							x	
Appleby Group Scunthorpe	Processing of Blast Furnace Slag	3.8							х	Stack
	Process	Process Guidance No.	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10	Stack or Fugitive
Appleby Slag Reduction Limited Yarborough Quarry Santon	Screening & Crushing of Slag Products	3.8							х	
Tarmac Northern Ltd Dawes Lane	Crushing & Screening of Slag	3.8 3.15					X		х	
Ductile Castings Scunthorpe	Melting of ferrous metals	2.1			Х					Fugitive
Firth Rixson Castings Scunthorpe	Melting of ferrous metals	2.1			х					Fugitive
Waterway Services Keadby	Storage and handling Petroleum Coke	3.5							х	Fugitive
Anglo Coal Gunness	Coal Handling	3.5							Х	Fugitive

Associated British Ports	Coal Handling	3.5				Х	Fugitive
New Holland Bulk Terminal New Holland	Coal Handling	3.8				Х	Fugitive
Humber Sea Terminal	Coal Handling	3.5				X	Fugitive
North Killingholme Cargo Terminal	Coal Handling	3.5				Х	Fugitive
J. Wharton Shipping Ltd Grove Wharf	Coal Handling	3.5				Х	Fugitive
Humber Sea Terminal	Coal Handling	3.5				Х	Fugitive
RMS Europe Ltd Flixborough Wharf	Coal Handling					X	Fugitive
RMS Europe Ltd Gunness Wharf	Coal Handling	3.5				Х	Fugitive
Coastal Fuels Ltd	Coal Handling	3.5				Х	Fugitive
Jotun Powder Coatings Flixborough	Manufacture of Coating Powder	6.9				Х	Stack
Caparo Merchant Bar Scunthorpe	Reheat & Retreatment Furnace	1.11			Х	Х	

Appendix 8(c)
Industrial Sources of Pollution in
Neighbouring Authorities
Part A(1) Processes

	T	1		1			1	ı
	Process	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10
Acordis UK Ltd. Grimsby	Combustion Process					Х	Х	
Acordis UK Ltd. Grimsby	Manufacture and use of organic chemicals	Х						
Acordis UK Ltd. Grimsby	Paper and pulp manufacturing process							
Acordis UK Ltd. Grimsby	Inorganic chemical process					Х	Х	
Associated Petroleum Terminal Immingham	Petroleum process	X	X					
BOC Gases Stallingborough	Incineration						Χ	Х
Coal Products Ltd Immingham	Carbonisation Process				Х	Х	Х	Х
Synthomer Ltd Stallingborough	Manufacture and use of organic chemicals							
Synthomer Ltd Stallingborough	Petrochemical processes		Х					
Synthomer Ltd Stallingborough	Petrochemical processes		Х		Х	Х	Х	Х
Cray Valley Stallingborough	Manufacture and use of organic chemicals				Х			
Tioxide Europe Ltd, Grimsby	Acid processes				Х	Х	Х	Х

Appendix 8(c) continued

Humber Power Ltd	Combustion plant				Х	Х	Х	Х
Stallingborough	-							
Stallingborough CHP, Grimsby	Combustion plant						X	Χ
Immingham Storage Co Immingham	Petroleum process							
Millennium Inorganic Chemicals Stallingborough	Process involving halogens				X	X	X	X
Novartis Grimsby Ltd	Manufacture and use of organic chemicals				X	x	X	X
Ciba Speciality Chemicals Ltd	Inorganic chemical process					Х	Х	Х
	Process	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10
Technical Absorbents Ltd Great Coates	Manufacture and use of organic chemicals							
Tioxide Europe Ltd, Grimsby	Acid processes						X	
Croda Chemicals Rawcliffe Bridge Goole	Manufacture and use of organic chemicals							
Croda Chemicals Rawcliffe Bridge Goole	Manufacture and use of organic chemicals							
Scotts Co (UK) Ltd Howdendyke	Chemical fertiliser production							
Kemira Chemicals Ltd Goole	Acid processes							
BP Chemicals, Saltend	Manufacture and use of				X	X	X	

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Saltend	and use of							
	organic							
	chemicals	<u> </u>			<u> </u>			
BP Chemicals,	Manufacture							
Saltend	and use of							
	organic							
	chemicals							
BP Chemicals,	Manufacture							
Saltend	and use of							
Calteria	organic							
	chemicals							
DD Chaminala								
BP Chemicals,	Manufacture							
Saltend	and use of							
	organic							
	chemicals							
BP Chemicals	Manufacture	1			Х			
Saltend	and use of				^			
	organic							
	chemicals							
BP Chemicals	Organic							V
Saltend	Chemical	X			X	X	X	X
	processes							
BP Chemicals	Inorganic							
Saltend	processes				Χ	Χ	X	X
L&M Engineers,	Ship cleaning							
Goole	Ship dealing							Χ
Goole								
Croda	Petroleum							
Chemicals								
	process							
Wheatley								
Doncaster	Manuelanton	!			!			
John L Seaton	Manufacture							
and Co Ltd	and use of							
	organic							
	chemicals							
Vesuvius	Tar and	1			Х	Х	Х	
Premier	Bitaman	1			^	^	_ ^	
Refractories	process	1			1			
Bawtry		1			1			
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	es S	Zer	dķ		٥٪	로형	ide	0
	Process	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10
	- Ā	B	—, <u> </u>	Le l	ΰ∑	ĭ i⊡	ΞÖ	ᆸ
		1	l	l	1	l	l	

Smith and	Manufacture							
Nephew	and use of							
Medical Ltd,	organic							
Hessle Road	chemicals							
M and J	Manufacture							
Polymers Ltd	and use of							
	organic							
	chemicals							
Holliday	Processes							
Pigments Ltd	involving							
g	halogens							
Clariant Life	Manufacture							
Science	and use of							
Molecules (UK)	organic							
Ltd,	chemicals							
Vesuvius	Carbonisation	 		+				
Premier	and					X	X	
Refractories	associated							
Bawtry	processes							
Premier Profiles				+				
	Inorganic			Χ				
Ltd Doncaster	Chemical							
5	Process							
Peglers Ltd	Non-ferrous			Χ	X			
Balby	metals			'`	/ `			
Doncaster								
Croda Leek Ltd	Inorganic				Х	X		
Hull	chemical				^			
	process							
Holliday	Acid Process				Х	Х	X	X
Pigments Ltd					^	^	^	^
Hull								
Smith and	Di-isocyanate							Х
Nephew	processes							^
Medical Ltd,								
Hessle Road								
Dunston (Ship	Coating							
Repairers) Ltd	process							
Pentex Oil and	Petroleum							
Gas Ltd.	process			1				
Gainsborough	'							
Pentex Oil and	Petroleum							
Gas Ltd.	process							
Glentworth	F. 30000							
Pentex Oil and	Petroleum							
Gas Ltd.	process							
Corringham	p. 30000							
Johngham	1	1	1	1				

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Pentex Oil and Gas Ltd,	Petroleum process				Х	
Ramper Road						
Tullow	Petroleum		v	V	v	
Exploration Ltd,	process		^	^	^	
West Firsby						

Appendix 8(d)
Industrial Sources of Pollution in
Neighbouring Authorities
Part A(2) Processes

	Process	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10
Guardian Industries UK Ltd, Rawcliffe Road, Goole	Glass Manufacturing (>20 tonnes day ⁻¹)					X	X	

Appendix 8(e) Industrial Sources of Pollution in Neighbouring Authorities Part B Processes

	Process	Process Guidance No.	Benzene	1,3 Butadiene	Lead	Carbon Monoxide	Sulphur Dioxide	Nitrogen Dioxide	PM10
Shipham & Co Ltd Hull	Melting of non-ferrous metal	2/4			X	X	X	X	X
MFI (UK) Ltd Hull	Melting of non-ferrous metal	2/7			Х		Х		
T H Dick & Co Hull	Iron and Steel	2/4			Х	х	Χ	Х	Х
Caradon Ideal Hull	Iron and steel	2/4			Х	Х	Х	х	Х
Starkeys Technicast Ltd Hull	Iron and steel	2/3			Х	Х	Х	Х	Х
Fabricast Ltd, Hull	Non-ferrous metals	2/4			Х	Х	Х	Х	Х
Kingston Metals and Alloys, Hull	Non-ferrous metals	2/1			Х				
Tarmac Topmix Ltd	Other minerals	3/8							Х
Conoco Ltd Immingham Dock	Coal Handling	3/5							Х
Humberside Sea and Land Immingham	Coal Handling	3/5							Х
Hargreaves Industrial Services, Immingham	Coal Handling	3/5							Х
Hargreaves Industrial Services, Immingham	Coal Handling	3/5							X

SSM, Immingham Docks	Coal Handling	3/5				Х
Swallow Stevedores, Immingham Docks	Coal Handling	3/5				Х
MG Carbon (UK), Immingham	Coal Handling	3/5				Х
Selvic Shipping, Stallingboro ugh	Coal Handling	3/5				Х
Immingham Storage	Petrol Storage	1/13	Х			
Immingham Storage	Manufacture of coating powder	6/9				X
Simon Distribution, Immingham	Coal Handling	3/5				X
Agro Energy, Immingham	Coal Handling	3/5				X
Grimsby and Immingham Stevedores	Petrol Storage	1/13	X			
Sandtoft Roof Tiles Broomfleet	Heavy Clay Goods	3/2			х	
RMC Roadstone Melton	Roadstone Coating	3/15			Х	Х
Appleby Abrasives Ltd Melton	Mineral process	3/15			х	Х
Omya UK Ltd, Melton	Mineral Process	3/5			Х	Х
W Clifford Watts Ltd Swinescaif Quarry South Cave	Quarry Process	3/8				X

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Vesuvius UK Ltd, Goole	Heavy Clay Goods	3/2			X	
Electro Furnace Products, Saltend	Mineral Process	3.4			X	
Global Shipping Immingham	Petrol Storage	1/13	Х			

Appendix 9
Significant Industrial Fugitive
Sources of PM₁₀

Name	Description of Process	Distance from relevant receptor	Background PM10 concentration in 2004 (ug/m3)	Dust Complaints?	Detailed Assessment Required?	Reason
JHP Storage Ltd Goxhill	Storage of petroleum coke	N/A	N/A	No	No	Stopped processing - authorisation revoked
JHP Storage Ltd Elsham (Store 7 & 8)	Storage of petroleum coke	340m	19.2	No	No	Below background concentration threshold of 26 ug/m3
North Killingholme Storage	Storage of petroleum coke	480m	19.4	No	No	Below background concentration threshold of 27 ug/m3
North Killingholme Storage (Warehouse 6 & 8)	Storage of petroleum coke	830m	19.2	No	No	Below background concentration threshold of 27 ug/m3
North Killingholme Storage	Storage of petroleum coke	580m	19.2	No	No	Below background concentration threshold of 27 ug/m3
Simon Distribution/North Killingholme Storage (Warehouse C & D)	Storage of petroleum coke	830m	19.2	No	No	Below background concentration threshold of 27 ug/m3
Simon Distribution/North Killingholme Storage (Warehouse A)	Storage of petroleum coke	650m	18.5	No	No	Below background concentration threshold of 27 ug/m3
Simon Distribution/North Killingholme Storage (Warehouse B)	Storage of petroleum coke	650m	18.5	No	No	Below background concentration threshold of 27 ug/m3
Simon Distribution/North Killingholme Storage (Warehouse J)	Storage of petroleum coke	510m	18.6	No	No	Below background concentration threshold of 27 ug/m3
Simon Distribution/North Killingholme Storage (Warehouse K)	Storage of petroleum coke	630m	19.4	No	No	Below background concentration threshold of 27 ug/m3
Simon Distribution/North Killingholme Storage (Budmo Warehouse)	Storage of petroleum coke	380m	19.4	No	No	Below background concentration threshold of 26 ug/m3

Appendix 9 continued

JHP Storage Elsham	Storage of petroleum coke	180m	19.1	No		
Name	Description of Process	Distance from relevant receptor	Background PM10 concentration in 2004 (ug/m3)	Dust Complaints?	Detailed Assessment Required?	Reason
British Steel Immingham Bulk Terminal	Storage of petroleum coke	400m	20.2	Yes	No	Below background concentration threshold of 26 ug/m3
Waterway Services Keadby	Storage of petroleum coke	72m	17.2	No	No	No storage at present and hasn't been any for some years
Waterway Services Keadby	Storage of petroleum coke	100m	17.2	No		
Associated British Ports	Coal handling	1300m			No	Nearest receptor over 1km away from source
New Holland Bulk Terminal	Coal handling	300m	18.1	No	No	Below background concentration threshold of 26 ug/m3
Humber Sea Terminal	Coal handling	1400m			No	Nearest receptor over 1km away from source
J Wharton Shipping Ltd	Coal handling	600m	17.7	No	No	Below background concentration threshold of 27 ug/m3
RMS Europe Ltd Flixborough	Coal handling	300m	17.7	No	No	Below background concentration threshold of 26 ug/m3
RMS Europe Ltd Gunness Wharf	Coal handling	200m	17.1	No	No	Below background concentration threshold of 26 ug/m3
Coastal Fuels Ltd	Coal handling	1200m			No	Nearest receptor over 1km away from source
Appleby Slag Reduction	Minerals Handling and Processing	600m	19.3	No	No	Below background concentration threshold of 27 ug/m3
Middlegate Quarry	Quarry	510m	17.5	No	No	Below background concentration threshold of 27 ug/m3
Ulceby Vale Quarry	Quarry	170m	18.9	No	No	There are no dust complaints/problems associated with the source

Appendix 9 continued

Name	Description of Process	Distance from relevant receptor	Background PM10 concentration in 2004 (ug/m3)	Dust Complaints?	Detailed Assessment Required?	Reason
Melton Ross Quarries	Quarry/Landfill/Part A Process	Within 100m	26.3	Yes	Yes	Background concentration above threshold of 26 ug/m3, known to be dust problems/complaints, 3 significant sources in close proximity
Far Ings Road Quarry	Quarry	290m	17.9	No	No	Below background concentration threshold of 26 ug/m3
Pasture Road Quarry	Quarry	400m	17.8	No	No	Below background concentration threshold of 26 ug/m3
Low Melwood Quarry	Quarry	160m	16.9	No	No	There are no dust complaints/problems associated with the source
Conesby Quarry	Quarry	480m	18	No	No	Below background concentration threshold of 27 ug/m3
Kirton Stone Quarry	Quarry	70m	17.4	No	No	There are no dust complaints/problems associated with the source
Manton Stone Quarry	Quarry	160m	17.4	No	No	There are no dust complaints/problems associated with the source
Crowle Moor Extraction	Quarry	Over 1 km		No	No	Nearest receptor over 1km away from source
Crowle Moor Extraction	Quarry	Over 1 km		No	No	Nearest receptor over 1km away from source
Flixborough Quarry	Quarry	560m	18.1	No	No	Below background concentration threshold of 27 ug/m3
Eastfield Farm Quarry	Quarry	70m	17.3	No	No	There are no dust complaints/problems associated with the source

Appendix 9 continued

Kettleby Quarry	Quarry	50m	25.7	No	No	There are no dust complaints/problems associated with the source
Name	Description of Process	Distance from relevant receptor	Background PM10 concentration in 2004 (ug/m3)	Dust Complaints?	Detailed Assessment Required?	Reason
North Morr Road Quarry	Quarry	360m	16.7	No	No	Below background concentration threshold of 26 ug/m3
Brigg Road Quarry (North)	Quarry	420m	17.3	No	No	Below background concentration threshold of 27 ug/m3
Brigg Road Quarry (South)	Quarry	590m	17.4	No	No	Below background concentration threshold of 27 ug/m3
Black Bank Quarry	Quarry	320m	17.1	No	No	Below background concentration threshold of 26 ug/m3
Langholme Farm Quarry	Quarry	150m	17.7	No	No	There are no dust complaints/problems associated with the source
Cove Farm Quarry	Quarry	280m	17.1	No	No	Below background concentration threshold of 26 ug/m3
Tarmac Northern	Roadstone Coating	470m	17.5	No	No	Below background concentration threshold of 27 ug/m3

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