SECTION E – EMISSIONS

Sub-Section	Title	Location of Information
E.1	Emissions to Atmosphere	WLA p.25 and Attachment E.1 EIS Vol.1, Section 9.0
E.2	Emissions to Surface Waters	WLA p.25 and Attachment E.2 EIS Vol.1, Section 7.0
E.3	Emissions to Sewers	WLA p.25 and Attachment E.3 EIS Vol.1, Section 2.5
E.4	Emissions to Groundwater	WLA p.25 and Attachment E.4 EIS Vol.1, Section 7.0
E.5	Noise Emissions	WLA p.25 and Attachment E.5 EIS Vol.1, Section 10.4
E.6	Environmental Nuisances	WLA p.26 and Attachment E.6

Figure No.	Tit	Oth	Scale	Size
E.1	Emissions Points	A. 12	1:6,000	A3
E.2	Emissions Points	ses dior	1:800	A3
	For it	ESPECTION PHILOSOPHIC POLITICAL PROPERTY CONTROL PROPERTY		

ATTACHMENT E.1 ofter use.

EMISSIONS TO ATMOSPHERE

Entry of convenience of the convenien

E.1 EMISSIONS TO ATMOSPHERE

This Attachment contains the appropriate documentation related to emissions to atmosphere and operation of the proposed Facility. Refer to Figures E.1 and Figure E.2 attached for further details.

E.1.a Composting Emissions

Composting will not take place at the Facility; therefore this section is not applicable.

E.1.b Particulates – Waste Storage/Treatment/Handling

All incoming waste will be stored in stockpiles near the processing area or on the surface of the wastes if processing is not required on passing inspection. A dust suppression system will be in installed at the Facility to reduce particulate emissions. Stockpiles will be watered during dry periods to prevent wind blow of particulates. Refer to Section 9.0 of the EIS (Volume 1) for further information.

E.1.c Landfill Gas Emissions

There will be no emissions to air from the existing landfill. Nearly all of the incoming wastes

are expected to be inert Construction, Demolition and Excavation Wastes that will be held in temporary stockpiles prior to processing. Landfill gas production is unlikely.

E.1.d Landfill Leachate Emissions

There will be no emissions to air from landfill leachate.

E.1.e Infectious organisms/pathogens (clinical waste handling)

No hazardous waste will be accepted at the Facility. Any waste deemed unfit for processing will turned away from the Facility or stored in the waste quarantine area on failing the second inspection. Removal of waste from this area will be undertaken by an appropriate contractor.

E.1.f Thermal oxidizer Emissions

No thermal treatment of waste will take place at the Facility.

E.1.g Other Emissions

All plant operating at the Facility will emit fumes from the combustion of fuel. All plant and machinery at the Facility will be kept in good working order and serviced regularly in order to avoid abnormal levels of emissions.

E.1.h Fugitive Emissions

All equipment, plant and services will be maintained and checked regularly to prevent fugitive emissions leaving the Facility. Refer to Section 9.0 of the EIS (Volume 1) for further information.

E.1.8.1 Dust emissions from solids stored in the open

All incoming waste will be stored in stockpiles by the processing area or on the surface of the wastes, if processing is not required on passing inspection. During dry periods the potential of dust emission to the atmosphere may be increased. To tackle this, a dust suppression system will be in installed at the C,D&E Waste Recovery Facility. Stockpiles will be watered during dry periods to prevent wind blow of particulates. Residence time of waste in stockpiles will be kept to a minimum to reduce dust emissions. Dust emissions may occur during earthworks and capping operation on the waste cells. These emissions will be controlled by water bowsers, spray mitigation systems and causing earthworks during particularly windy conditions. Refer to Section 9.0 of the EIS Volume 1) for further information.

E.1.8.2 Loading and unloading operations

Waste will be tipped at a specific stockpile near the processing area or on the surface of the wastes if processing is not required subsequent to passing inspection at the weigh bridge. Wheel loaders and excavators will be used to load the processing equipment. The graded material produced by the process will be either stockpiled or removed for the capping and restoration of the lagoon/pond areas. Wheel loaders will be used for this process. This material will be wetted during dry periods to reduce dust and particulate emissions. Refer to Section 9.0 of the EIS (volume 1) for further information.

E.1.8.3 Cleaning operations

The processing area and haul roads will be swept and watered regularly to reduce particulates and dust blow during dry periods. It is not anticipated that any detergents will be used during cleaning. Any use of detergents will be communicated to the relevant authority.

E.1.8.4 Emissions from wastewater/leachate treatment (e.g. volatile organics)

No leachate will be treated at the Facility.

E.1.8.5 Emissions from any pressure release valves on waste liquid tanks

A foul water holding tank will collect and store foul from office buildings at the Facility. This will be emptied by an appropriate contractor when required.

E.1.8.6 Emissions from composting, including odour and bioaerosols

No composting shall take place at the facility.



TABLE E.1(i) LANDFILL GAS FLARE EMISSIONS TO ATMOSPHERE Emission Point:

Emission Point Ref. Nº:	
Location:	
Grid Ref. (12 digit, 6E,6N):	
Vent Details Diameter:	OT APPLICABLE
Height above Ground(m):	
Date of commencement of emission:	

Characteristics of Emission:

со		in ^{et}	15 ²	mg/m³
Total organic carbon (TOC)		व्याप्त व्याप्त वर्ष		mg/m³
NOx	itto	es of for		mg/Nm³
	ion purie	°C. 3% O₂	(Liquid or Gas), 6	6% O₂(Solid Fuel)
Maximum volume of emission	inspect owne			m³/hr
Temperature	of cobline oC	(max)	°C(min)	°C(avg)

(i) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (start-up/shutdown to be included):

Periods of Emission (avg)	min/hr	hr/day	day/yr

TABLE E.1(ii) MAIN EMISSIONS TO ATMOSPHERE (1 Page for each emission point)

Emission Point Ref. Nº:							
Source of Emission:							
Location :							
Grid Ref. (12 digit, 6E,6N	1):						
Vent Details							
Diame	ter:						
Height above Ground(m	า):						
Date of commencement:							
Characteristics of Emission :							
(i) Volume to be en	nitted:		ay ay other c				
Average/day		m ³ /d	Maximum/day	m³/d			
Maximum rate/hour		m ³ /h	Min efflux velocity	m.sec ⁻¹			
(ii) Other factors		Cot itisped on	5				
Temperature		°C (max)	°C(min)	°C(avg)			
For Combustion Sources	s: Count	25					
Volume terms expressed	d as :	□ wet.	□ dry	%O ₂			
(iii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (start-up /shutdown to be included):							
Periods of Emission (av	g)		hr	/dayday/yr			

TABLE E.1(iii): MAIN EMISSIONS TO ATMOSPHERE - Chemical characteristics of the emission (1 table per emission point)

Emission Point Reference Number:_____

Parameter	Prior to treatment ⁽¹⁾		Brief		Α	s disch	narged	(1)	(1)		
	mg/	Nm³	kg	ı/h	description	mg/	Nm³	kg/h.		kg/year	
	Avg	Max	Avg	Max	of treatment	Avg	Max	Avg	Max	Avg	Max
		NIC	T	Λ	PPLIC	ΛE	21				
		146		A	FLIC	AL					
							se.				
						other	~				
					10 15 15 15 15 15 15 15 15 15 15 15 15 15	any					
					Ses 94						

1. Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C,101.3kPa). Wet/dry should be the same as given in Table E.1(ii) unless clearly stated otherwise.

TABLE E.1(iv): EMISSIONS TO ATMOSPHERE -Minor /Fugitive

Emission point	Description		Emission	Abatement system employed		
Reference Numbers		material	mg/Nm ³⁽²⁾	kg/h.	kg/year	
A2-1	Dust blow from processing area.	Dust particles	unknown	unknown	unknown	Sprinkler system and spraying of stockpiles
			section purp	wifed for any off	g Use.	

ATTACHMENT E.2 one tree tree.

EMISSIONS TO SURFACE WATERS

Consent of conviction on the conviction of the conviction of

E.2 EMISSIONS TO SURFACE WATERS

Surface water run-off from the capped surface will be collected in perforated piped French drains running along the Southern boundary. These will flow into a Surface Water Management Pond where solids will be allowed to settle out before discharge into the IDA Sewer or Lough Mahon depending on its quality as discussed in Attachment D.4 Leachate Management. Refer to Figures E.1 and E.2 attached for details of locations.

Consent of copyright owner reduced for any other use.

TABLE E.2(i): EMISSIONS TO SURFACE WATERS

Emission Point:

Emission Point Ref. Nº:	SW1				
Source of Emission:	Run-off from capped surface/restored site				
Location :	Southern tip of Facility				
Grid Ref. (10 digit, 5E,5N):	174520 , 71293				
Name of receiving waters:	Lough Mahon				
Flow rate in receiving waters:	Not Applicablem³.sec ⁻¹ Dry Weather Flow				
	Not Applicable m³.sec ⁻¹ 95%ile flow				
Available waste assimilative capacity:	kg/day				

Emission Details:

(i) Volume to be emitted Unknown – Runoff from capped surface/restored site (weather dependent)							
Normal/day (estimated)	1,000m ³	Maximum/day *	*15,000m ³				
Maximum rate/hour * 5,000m ³							

^{*} Assumed rainfall return period = 10 years

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up*/*shutdown to be included*):

Periods of Emission (avg)	min/hr	hr/day	<u>200_</u> day/yr
· · · · · · · · · · · · · · · · · · ·		,,	<u>=00</u> uay, y.

TABLE E.2(ii): EMISSIONS TO SURFACE WATERS -

Characteristics of the emission

Emission point reference number : SW1

Assumed 1000 m³/day at 200 days/year

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)		kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
COD						25	25	5,000	
TSS						35	35	7,000	
Manganese						100	100	20,000	
Iron						10	10	2,000	
Zinc						0.5	0.5	100	
Copper						100.1	0.1	20	
Arsenic					न्त्रीं अर्थ	0.1	0.1	20	
Lead					uttoses outh and	0.1	0.1	20	

ATTACHMENT E.3 offer lies.

EMISSIONS TO SEWERS

EMISSIONS TO SEWERS

Consent of Confidence in the Local Properties.

E.3 EMISSIONS TO SEWERS

Emissions to sewers will include discharge to the existing IPPC Licence No. P0389-01 discharge emission point SE1 (IDA sewer) which runs adjacent to the C,D&E Facility. This effluent will originate from the bunded fuel and Waste Quarantine and Storage areas. It not envisaged that these areas will generate large quantities of effluent. It is also proposed to discharge surface water currently in ponds and lagoons on-site into the IPPC emission discharge point SE1 (IDA sewer) as permitted by the IPPC Licence No. P0389-01. The proposed rate of discharge is 1,000 m³/day.

Surface water from the macadam area at the entrance will be discharged to the stormwater sewer running adjacent to the Site. Details of all emissions to sewers are listed below. Refer to Figures E.1and E.2 for details of emission points.

E.3.a On-site or Off-Site treatment envisaged

An oil interceptor will be used to treat run-off from the bunded fuel storage and loading area before entering the IDA sewer. Surface water run-off from the macadam area will pass through a silt box and oil interceptor before discharge to the stormwater sewer. Refer to Section 2.5 of the EIS (Volume 1)

E.3.b If for Off-site: The name of the sewage / WWTP undertaker and a copy of any agreement or permission by the undertaker to accept effluent

Foul water will be collected in an underground storage tank. This will be emptied when required by an appropriately licensed contactor. A contractor will be appointed on granting of planning permission and Waste Licence. The contractor will use a Cork County Council WWTP.

E.3.c Any further treatment by the undertaker, existing or proposed

No further treatment is envisaged at the Facility.

E.3.d Any problems of sewage treatment associated with the proposed emissions

No problems are envisaged with sewerage treatment from the proposed emission. The surface water have a very low BOD and COD. Elevated levels of dissolved manganese and sulphate are present in the waters.

E.3.e Likely effects of the emissions on sewer or sewerage treatment maintenance operations

It is not envisaged that the emission will effect the sewer or sewerage treatment maintenance operation.

E.3.f Capacity, quality and integrity of the sewer

The capacity, quality and integrity of the stormwater and IDA sewers are not known.

E.3.g Likely effects of the emissions on sewer integrity

It is not envisaged that the emissions from the Facility which operated for the past thirty years will not have any adverse effect on the integrity of the receiving IDA sewer.

E.3.h Possible reactions of the emission with other effluent likely to be in the sewerage system

No reactions are expected between the emission and the sewerage system.

E.3.i Nature of final emission to the receiving water and the estimated volumetric contribution of the site emissions to the total wastewater treatment plant Dry Weather Flow expressed as a percentage

The proposed Emission Limit Values for discharges to the IDA sewer at 1,000m³/day with no more than 100m³/hour are as follows.

Parameter	Units	Concentration
Temperature		Ambient Temperature
рН		6-9
Toxicity		10
COD	mg/l	25
Suspended Solids	mg/l	35
Manganese	mg/l	100
Iron	mg/l	10
Zinc	mg/l	0.5
Copper	mg/l	0.1
Arsenic	mg/l	0.1
Lead	mg/l	0.1

TABLE E.3(A): EMISSIONS TO SEWER

Emission Point:

Emission Point Ref. Nº:	SE 1
Location of connection to sewer :	IDA Sewer
Grid Ref. (10 digit, 5E,5N):	174050 , 71654
Name of sewage undertaker:	Cork County Council (IDA Sewer)

Emission Details:

(i) Volume to be emitted:							
Normal/day	1,000 m ³	Maximum/day	* 15,000 m ³				
Maximum rate/hour	* 5,000 m ³	es ofth. and					

^{*} If run-off from capped surface is pumped to IDA sewer and assumed rainfall return period =10 years

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (start-up /shutdown to be included):

Cot litely	<u> </u>
Periods of Emission (avg)	min/hrhr/day <u>300</u> day/yr
Carigo	

TABLE E.3(B): EMISSIONS TO SEWER

Emission Point:

Emission Point Ref. Nº:	SE 2
Location of connection to sewer :	Stormwater Sewer
Grid Ref. (10 digit, 5E,5N):	174206 , 71689
Name of sewage undertaker:	Cork County Council

Emission Details:

(i) Volume to be emitted: Surface water run-off from macadam surface								
Normal/day	Normal/day 10 m ³ Maximum/day 110 m ³							
Maximum rate/hour * 40 m³								

^{*} Assumed return period = 10 years

Period or periods during which emissions are made, or are to be made, including (ii) daily or seasonal variations (start-up) shutdown to be included):

Periods of Emission (avg)	For install	min/hr	hr/day	<u>200</u> day/yr
	200			

TABLE E.3(C): EMISSIONS TO SEWER

Emission Point:

Emission Point Ref. Nº:	SE 3
Location of connection to sewer :	Discharge to foul water holding tank
Grid Ref. (10 digit, 5E,5N):	174117 , 71655
Name of sewage undertaker:	Unknown at this time

Emission Details:

(i) Volume to be emitted							
Normal/day	0.40 m ³	Maximum/day	0.80 m ³				
Maximum rate/hour	0.08 m ³	doller its					

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (start-up) shutdown to be included):

Periods of Emission (avg)	Forinsky	min/hr	<u>10_</u> hr/day	<u>300</u> day/yr
	200			

TABLE E.3(i): EMISSIONS TO SEWER - Characteristics of the Emission

Emission point reference number : SE1 (IDA Sewer)

Assumed 1,000m³/day at 300 days/year

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	daily		kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
COD						25	25	7,500	
Suspended Solids					uttoses only art	35	35	10,500	
Manganese					es only and	100	100	30,000	
Iron				ctions	attoserited f	10	10	3,000	
Zinc			Çoʻ	inspect on		0.5	0.5	150	
Copper		۱۸	onsent of C			0.1	0.1	30	
Arsenic						0.1	0.1	30	
Lead						0.1	0.1	30	

TABLE E.3(ii): EMISSIONS TO SEWER - Characteristics of the Emission

Emission point reference number : SE2 (Stormwater From Macadam Surface)

Assumed 1,800 m³/year (on average)

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	daily		kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
COD						25		45	
Suspended Solids					see only in	35 Other use.		65	

ATTACHMENT E.4 of the trace of

E.4 EMISSIONS TO GROUNDWATER

It is anticipated that there will be no direct emissions of List I/II substances or any other direct emissions to groundwater from the proposed C,D&E Waste Recovery Facility. Details of groundwater emissions at the C,D&E Waste Recovery Facility are listed below. There are emissions from the existing landfill that is licensed by the EPA. List II substances have been detected in the groundwater underlying the Application Site. However, based on reports previously submitted to the EPA these emissions are not likely having a significant effect on the bedrock aquifer or Lough Mahon (see O' Callaghan Moran and Associates Report September 2003. Refer to Figures E.1 and E.2 for locations.

E.4.1 Percolation Areas

No percolation areas will be used at the Facility.

E.4.2 Soakaways

All surface water from the hardcore turning area will divert to a soakaway pit located near the weighbridge station. Water collected in French drains along the boundary of the Site will be directed towards a silt box and subsequently to a soakaway. Refer to Section 2.0 and Section 7.0 of the EIS (Volume 1) for further details. The test of the tes

TABLE E.4(i): **EMISSIONS TO GROUNDWATER**

Emission Point or Area:

Emission Point/Area Ref. Nº:	GW1
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	Soakaway
Location:	Adjacent to weighbridge Station
Grid Ref. (10 digit, 5E,5N):	174165 , 71643
Elevation of discharge: (relative to Ordnance Datum)	Ca. 5mAOD
Aquifer classification for receiving groundwater body:	Regionally Important Aquifer – Karstified (Diffuse)
Groundwater vulnerability assessment (including vulnerability rating):	Extreme
Identity and proximity of groundwater sources at risk (wells, springs, etc):	Not within or near a source protection zone
Identity and proximity of surface water bodies at risk:	Not within the area a source protection zone Cork Harbour ca. 100m
Emission Details:	

Emission Details:

(i) Volume to be emitted: Surface water run-off from hardcore surface (weather dependent)							
Normal/day	80 m ³	Maximum/day	* 1,000 m ³				
Maximum rate/hour	* 1,300 m ³						

Assuming rainfall return period = 10 years and 100% run-off

Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up/shutdown to be included*): (ii)

Periods of Emission (avg)	min/hrhr/day	<u>200</u> day/yr
---------------------------	--------------	-------------------

ATTACHMENT E.5 of the trace.

NOISE EMISSIONS

Consent of congright owner required.

Consent of congright owner required.

E.5 NOISE EMISSIONS

The main sources of noise emissions at the Facility are identified and supplied in Table E.5(i) of this WLA. Table E.5(ii) gives details of the noise emission emanating from the processing area. The main sources of noise will be concentrated around the processing area. Other areas of noise emissions would be from the movement of vehicles into, within and out of the Facility. Some of the plant will be involved in earthworks within the Facility from time to time. All calculations of noise levels emanating from the C,D&E Facility at the nearest dwelling and industrial property are tabulated in Section 10.0 of the EIS (Volume 1). Refer to Figures E.1 and E.2 attached for details of locations.

Consent of copyright owner required for any other use.

Table E.5(i): NOISE EMISSIONS - Noise sources summary sheet

Source	Emission point Ref. No	Equipmen t Ref. No	Sound Pressure 1 dBA at referenc e distance	Octave bands (Hz) Sound Pressure ¹ Levels dB(unweighted) per band					Impulsive or tonal qualities	Periods of Emission				
			@ 10m	31. 5	6 3	12 5	25 0	50 0	1K	2K	4K	8K		
Wheel Loader	N1		82											Operating Hours
JCB	N1		80											Operating Hours
JCB	N1		80											Operating Hours
Grader/ Screener	N1		86											Operating Hours
Compactor /Crusher	N1		90*					20 0	inse.					Operating Hours
							only.	My Oth						

^{1.} For items of plant sound power levels may be used.

	ally and						
1. For items of plant sound power levels may be used. * Measured at 5m from the noise source * Table E.5(ii) Noise Emission * Operating Equipment (wheel leaders)							
* Measured at 5m from the noise source	put chili						
action	et Commence of the Commence of						
instant of							
Forpytile							
Table F. C. Marian Francisco							
Table E.5(ii) Noise Emission	On another Ferrimment (wheel leaders						
Source	Operating Equipment (wheel loaders,						
	crusher, screener etc)						
Location	Facility processing Area						
Nature	Unknown						
Composition	Not Applicable						
Quantity	Not Applicable						
Level	92.5dB (This is based on the Combined						
	levels of plant and is a worse case scenario						
	with all plant operating at the one time)						
Rate	Not Applicable						
Period or Periods	Operating Hours						

ATTACHMENT E.6

ENVIRONMENTAL NUISANCES

Froi inspection purposes of the rand of convertible of the rest of the convertible of the random of the

E.6 ENVIRONMENTAL NUISANCES

The following section describes the relevant emissions not dealt with in the preceding sections of Section E which may cause or contribute to nuisances in the area, where relevant.

E.6.1 Bird Control

It is unlikely that birds will be attracted at the Facility as putrescible waste will be not accepted. However if it becomes an issue measures will be put in place deal with the problem.

E.6.2 Dust Control

In order to ensure that no dust nuisance occurs at the facility a series of mitigation measures and good working practices will be implemented as part of a dust minimisation plan. These measures are outlined below:

- Site roads will be regularly cleaned and maintained as appropriate. Hard surface roads will be swept to remove mud and aggregate materials from their surface.
- Any un-surfaced roads will be restricted to essential site traffic only. Furthermore, any road that has the potential to give rise to fugitive dust will be regularly watered, as appropriate, during dry and/or windy conditions.
- A speed restriction will be adhered to at the facility.
- All vehicles exiting the site will make use of a wheel wash facility, prior to entering onto public roads, to ensure mud and other wastes are not tracked onto public roads.
- Public roads outside the site will be regularly inspected for cleanliness, and cleaned as necessary.
- Water misting or sprays will be used as required if particularly dusty activities, such as capping, are necessary during dry or windy periods.
- In partially dry windy conditions giving rise to dust blow, activities will be suspended if other measures are not effective in controlling dust.

E.6.3 Fire Control

Measures for fire prevention and control will include the following:

• Emergency response contact numbers will be posted on prominent positions on site (fire service, police, ambulance and other agencies).

- A telephone system on site will ensure instant contact with the emergency services.
- A water supply will be available on site.
- Fire hoses and extinguishers will be available on site.
- No burning of waste will be permitted on site.

E.6.4 Litter Control

Litter is a management responsibility and procedures will be put in place to deal specifically with this issue. All vehicles transporting waste on public roads are required to be covered. It is not expected that that this will be an issue at the facility.

E.6.5 Traffic Control

The entrance will allow movement of traffic into and out of the Facility. Traffic signs and white lines will be used at the site entrance and throughout the site to control traffic. Speed limits will be imposed within the Facility.

E.6.6 Vermin Control

Vermin control is a management responsibility and will be put in to practice. This will involve placing of abatement at locations around the Facility and regular monitoring. Consent of coop

E.6.7 Road Cleaning

Road cleansing is a management responsibility and procedures will be put in place to deal specifically with this issue. All lorries will go through a wheel-wash prior to exiting the Facility. Road cleansing and sweeping will be carried out as required.

Co-ordinates for Emissions & Monitoring Points

E.1/E.2/F.1 E.1/E.2/F.1 E.1/E.2/F.1 E.1/E.2/F.1 E.1/E.2 F.1 F.1 F.1 F.1 F.1 F.1 F.1 F.1	174050 174206 174117 174165 174065 174313 174465 174574	71654 71689 71655 71643 71669 71673 71689
E.1/E.2/F.1 E.1/E.2/F.1 E.1/E.2 F.1 F.1 F.1 F.1 F.1 F.1 F.1	174206 174117 174165 174065 174313 174465	71689 71655 71643 71669 71673
E.1/E.2/F.1 E.1/E.2 F.1 F.1 F.1 F.1 F.1 F.1	174117 174165 174065 174313 174465	71655 71643 71669 71673
E.1/E.2 F.1 F.1 F.1 F.1 F.1 F.1	174165 174065 174313 174465	71643 71669 71673
F.1 F.1 F.1 F.1 F.1	174065 174313 174465	71669 71673
F.1 F.1 F.1 F.1	174313 174465	71673
F.1 F.1 F.1 F.1	174313 174465	71673
F.1 F.1 F.1	174465	
F.1 F.1		71689
F.1	174574	
		71395
F.1	174340	71327
	174767	71731
E.1	174520	71293
F.1	174390	71393
F.1	174231	71517
F.1	174779	71681
F.1	174880	71425
	ase.	
F.1	174537	71322
F.1	174186	71461
F.1	7,4566	71726
Г1	× 74000	71571
	174537 174186	
F.1	174537	71322
Γ 1	N' 17/10C	71461
F.1 F.1	174070	71663
F.1	174455	71679
F.1	174763	71716
F.1 eff	174900	71571
Cos		•
I.1	174521	71245
I.1	174819	71537
I.1	174759	71827
		71894
		71722
I.1	174195	71490
11	174548	71508
		71557
		71212
		71716
		71716
	I.1 I.1	I.1 174540 I.1 174242 I.1 174195 I.1 174548 I.1 174819 I.1 174533 I.1 174221



