

E.1 Emissions to Atmosphere

The impacts on air quality are associated with the potential emissions to air from the waste activities, which include odours, particulates and exhaust gases from vehicle movements. The odours are associated with the types of wastes accepted, the type of processing carried out and the time the wastes are retained on site. Particulates are associated primarily with the location and nature of the waste processing and vehicle movements. Vehicle exhausts contain a range of compounds that affect air quality, for example nitrous oxide, carbon monoxide, methane, carbon dioxide, benzene and particulates.

E1.A Point Emissions to Atmosphere

There are no boilers at the facility and no other point emission sources.

E1.B Fugitive and Potential Emissions.

The primary source of dust emissions are vehicle movements on the paved yards during dry periods and the processing of wastes. Greenstar cleans the yards twice weekly using a road sweeper and regularly damps down the yards during dry periods. All waste processing is and will be carried out inside the buildings.

The diesel fuelled heavy goods vehicles based at the facility are fitted with Selective Catalytic Reduction (SCR) systems. A diesel fuel additive (AdBlue) is used in the SCR to reduce the nitrous oxide levels in the exhaust gases.

The only wastes handled at the facility that are a source of malodours is the MSW waste. Facility activities are not a source of odour nuisance outside the site boundary and Greenstar has never received a complaint about odour nuisance.

The results of the dust deposition monitoring carried out in 2012 and 2013 are presented in the Tables below.

Dust Monitoring Results 2012

Dust Emission (mg/m²/day)	July	July-August	January	Emission Limit
Sample Location	30 Days	30 Days	30 days	(mg/m²/day)
DM1	24.3	62.6	17.0	350
DM2	20.6	47.9	11.6	350
DM3	42.5	60.1	4.03	350

Dust Monitoring Results 2013

Dust Emission (mg/m ² /day)	May 2013	June 2013	Oct 2013	Emission Limit
Sample Location	30 Days	30 Days	29 Days	(mg/m ² /day)
DM-1	28.1	3.0	66.2	350
DM-2	22.2	5.9	82.5	350
DM-3	35.7	4.5	59.5	350

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E.2 Emissions to Surface Water

Surface water run-off is generated by rainfall on the roof of the offices and workshop building, the waste handling buildings and the paved open yard areas. The run-off from the paved yards is collected and discharged to a man-made drain at the north eastern site boundary via a three chamber oil interceptor (40m³ capacity). Run-off from the roof of the main buildings discharges to manmade perimeter drain along the western boundary. The perimeter drains also receive run-off from other occupants of the industrial estate up stream of the Greenstar facility. The existing drainage layout is shown on Drawing No 002.

The perimeter drains discharge to Bunlickey Lake. There is a shut off valve at the outlet from the interceptor that can be closed in the event of an incident that has the potential to impact on surface water quality and contain the surface water within the site boundary

The emission does not contain any substances listed in the Schedule of EPA (Industrial Emissions) (Licensing) Regulations 2013 S.I. No. 137 of 2013, are emitted.

As the emission includes run-off from the paved yards where vehicles are manoeuvred and wastes are stored there is the potential for small amounts of hydrocarbons and suspended solids to be present. The Waste Licence requires monitoring at the outlet from the interceptors (FE 1A) and in the perimeter drain up (WS-9) and downstream (WS-10) of the discharge point. The parameters include pH, electrical conductivity, total suspended solids (TSS), ammonia, biochemical oxygen demand (BOD), Fats Oils and Grease (FOG), Mineral Oil, Total Organic Carbon (TOC) and dissolved metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc).

The Licence specifies emission limit values (ELVs) for Mineral Oils and TSS, and the Agency requested Greenstar to propose trigger levels for ammonia, TOC and TSS, however these have not yet been agreed by the EPA. The monitoring results for 2012 and 2013 are in Tables 1 to 7.

Table 1 Surface Water Monitoring Results – February 2012

Parameter	Units	MH-5	WS9 - UP	FE1A Discharge	WS10-DOWN	ELV*	EQS
pH	pH units	7.55	8.28	7.76	8.21	-	
BOD	mg/l	42	1	44	2	25	
Total Suspended Solids	mg/l	37	12	86	<10	60	
Ammonia Nitrogen	mg/l	3.15	0.45	3.64	0.93	4	
Fats Oils Grease	mg/l	<0.01	<0.01	0.52	<0.01	-	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	<0.01	5	0.01
TOC	mg/l	40	6	48	15	-	-
Arsenic - dissolved	ug/l	<0.9	<0.9	<0.9	2		25
Cadmium - dissolved	ug/l	<0.03	<0.03	<0.03	<0.03	-	5
Chromium - dissolved	ug/l	0.5	<0.2	0.5	<0.2	-	30
Copper - dissolved	ug/l	10	3	<3	<3	-	30
Mercury - dissolved	ug/l	<0.5	<0.5	<0.5	<0.5	-	1
Nickel - dissolved	ug/l	14	1.2	14.1	<0.2	-	20
Lead - dissolved	ug/l	3	1.9	1.2	0.7	-	10
Zinc - dissolved	ug/l	117.8	1.7	47.5	<1.5	-	100

* ELV applies to discharges – FE1A & B only.

No flow at monitoring location

Table 2 Surface Water Monitoring Results – April 2012

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	ELV*	EQS
pH	pH units	8.16	7.79	8.24	-	
BOD	mg/l	1	37	4	25	
Total Suspended Solids	mg/l	40	12	<10	60	
Ammonia Nitrogen	mg/l	0.20	1.99	0.27	4	
Fats Oils Grease	mg/l	<0.01	<0.01	<0.01	-	-
Mineral Oils	mg/l	<0.01	<0.01	<0.01	5	0.01
TOC	mg/l	18	40	20	-	-
Arsenic - dissolved	ug/l	<2.5	<2.5	<2.5		25
Cadmium - dissolved	ug/l	<0.5	<0.5	<0.5	-	5
Chromium - dissolved	ug/l	<1.5	2.4	<1.5	-	30
Copper - dissolved	ug/l	<7	<7	<7	-	30
Mercury - dissolved	ug/l	<1	<1	<1	-	1
Nickel - dissolved	ug/l	<2	6	<2	-	20
Lead - dissolved	ug/l	<5	<5	<5	-	10
Zinc - dissolved	ug/l	8	24	5	-	100

* ELV applies to discharges – FE1A & B only.

Table 3 Surface Water Monitoring Results – 3rd July 2012

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	ELV*	EQS
pH	pH units	7.44	7.15	7.50	-	
BOD	mg/l	2	72	2	25	
Total Suspended Solids	mg/l	<2	130	2	60	
Ammonia Nitrogen	mg/l	<1	<1	<1	4	
Fats Oils Grease	mg/l	<1	17.2	<1	-	-
Mineral Oils	mg/l	<0.001	0.013	<0.001	5	0.01
TOC	mg/l	<7	33	<7	-	-
Arsenic - dissolved	mg/l	3	5	3		25
Cadmium - dissolved	mg/l	<0.2	<0.2	<0.2	-	5
Chromium - dissolved	mg/kg	<1	<1	<1	-	30
Copper - dissolved	mg/l	<0.2	<0.2	<0.2	-	30
Mercury - dissolved	mg/l	0.1	0.2	<0.01	-	1
Nickel - dissolved	mg/l	<0.2	<0.2	<0.2	-	20
Lead - dissolved	mg/l	<0.2	<0.2	<0.2	-	10
Zinc - dissolved	mg/l	<0.2	<0.2	<0.2	-	100

* ELV applies to discharges – FE1A & B only

Table 4 Surface Water Monitoring Results – 5th October 2012

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	Trigger *	ELV*	EQS
pH	pH units	7.24	6.41	6.82		-	
BOD	mg/l	7	176	89	25		
Total Suspended Solids	mg/l	9	70	51	60	60	
Ammonia Nitrogen	mg/l	0.51	0.29	0.04		4	
Fats Oils Grease	mg/l	<1	11.1	3.3		-	-
Mineral Oils	ug/l	<1	2.03	<1		5	0.01
TOC	mg/l	4	39.32	19.27		-	-
Arsenic - dissolved	ug/l	1	1	1			25
Cadmium - dissolved	ug/l	0.2	0.2	0.2		-	5
Chromium - dissolved	ug/l	<0.6	2	1		-	30
Copper - dissolved	ug/l	13	16	13		-	30
Mercury - dissolved	ug/l	0.1	0.1	0.1		-	1
Nickel - dissolved	ug/l	<2	4.4	2.4		-	20
Lead - dissolved	ug/l	<0.8	1.10	1.4		-	10
Zinc - dissolved	ug/l	11	22	13		-	100

* ELV & Trigger applies to discharges – FE1A only.

Table 5 Surface Water Monitoring Results – March 2013

Parameter	Units	WS9 - UP	FE1A Discharge	WS10-DOWN	Trigger *	ELV*	EQS
pH	pH units	7.39	6.93	7.26		-	
BOD	mg/l	11	12	29	25		
Total Suspended Solids	mg/l	13	80	60	60	60	
Ammonia Nitrogen	mg/l	0.16	2.40	1.55		4	
Fats Oils Grease	mg/l	<1	<1	<1		-	-
Mineral Oils	ug/l	<1	<1	<1		5	0.01
TOC	mg/l	7.48	35.78	14.02		-	-
Arsenic - dissolved	ug/l	0.002	0.002	0.002			25
Cadmium - dissolved	ug/l	0.7	0.6	0.6		-	5
Chromium - dissolved	ug/l	1	2	1		-	30
Copper - dissolved	ug/l	2	2	<2		-	30
Mercury - dissolved	ug/l	<0.015	<0.015	<0.015		-	1
Nickel - dissolved	ug/l	<2	4.8	3.0		-	20
Lead - dissolved	ug/l	<0.8	<0.8	<0.8		-	10
Zinc - dissolved	ug/l	32	14	4		-	100

Table 6. Surface Water Monitoring Results-August 2013

Parameter	Units	WS9 UP	FE1A Discharge	WS10- DOWN	Trigger *	ELV*	EQS
pH	pH units	7.68	7.01	7.31		-	
BOD	mg/l	<2	29	6	25		
Total Suspended Solids	mg/l	13	50	21	60	60	
Ammonia Nitrogen	mg/l	0.14	2.41	0.31		4	
Fats Oils Grease	mg/l	<1	1.59	1.17		-	-
Mineral Oils	ug/l	<1	<1	<1		5	0.01
TOC	mg/l	<5	9.87	<5		-	-
Arsenic - dissolved	ug/l	0.92	1	1.7			25
Cadmium - dissolved	ug/l	0.3	1	0.4		-	5
Chromium - dissolved	ug/l	<0.6	2	<0.6		-	30
Copper - dissolved	ug/l	4	5	4		-	30
Mercury - dissolved	ug/l	<0.013	<0.013	0.014		-	1
Nickel - dissolved	ug/l	<2	5.4	<2		-	20
Lead - dissolved	ug/l	<0.8	1	<0.8		-	10
Zinc - dissolved	ug/l	16	72	15		-	100

Table 7 Surface Water Monitoring Results -November 2013

Parameter	Units	WS9 - UP	FE1A Discharge	WS10- DOWN	Trigger *	ELV*	EQS
pH	pH units	7.36	7.00	7.45		-	
BOD	mg/l	4	14	6	25		
Total Suspended Solids	mg/l	3	13	8	60	60	
Ammonia Nitrogen	mg/l	0.62	0.62	0.48		4	
Fats Oils Grease	mg/l	<1	<1	<1		-	-
Mineral Oils	ug/l	<1	<1	<1		5	0.01
TOC	mg/l	5.29	10.9	6.51		-	-
Arsenic - dissolved	ug/l	1	1	1			25
Cadmium - dissolved	ug/l	0.2	<0.12	<0.12		-	5
Chromium - dissolved	ug/l	1	2	1		-	30
Copper - dissolved	ug/l	23	31	22		-	30
Mercury - dissolved	ug/l	<0.01	<0.01	<0.01		-	1
Nickel - dissolved	ug/l	2.5	2.2	2.1		-	20
Lead - dissolved	ug/l	<0.8	<0.8	1		-	10
Zinc - dissolved	ug/l	14	37	11		-	100

The Tables include for comparative purposes the proposed trigger levels and ELVs. For those parameters for which ELVs have not been established the Environmental Quality Standards (EQS) specified for 'Good Status' in the Environmental Objectives (Surface Water) Regulations 2009 (S.I. No.272 of 2009) are provided. The EQS are not emission limit values, but are the concentrations that must be achieved in a water body if it is to meet the objectives set for the water body.

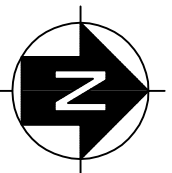
The monitoring data indicates that, with the exception of BOD and TSS, all of the parameters are below the proposed ELV and significantly below the EQS. The elevated BOD and TSS levels are considered to be associated with run-off from the paved open yards that are accessed by the heavy goods vehicles. It is noted that the BOD and ammonia levels upstream of the discharge point exceed the EQS.

To address the BOD and TSS issue, it is proposed to divide the site into 'clean' and 'dirty' areas in terms of surface water run-off management. The 'clean' area will comprise the building roofs and the yard in the south east of the site (8,195m²), while the 'dirty' area will comprise the yard between the processing buildings and the northern and north eastern boundaries (8,499m²). The areas are shown in the figure in the IE Consulting Report in Attachment D1.

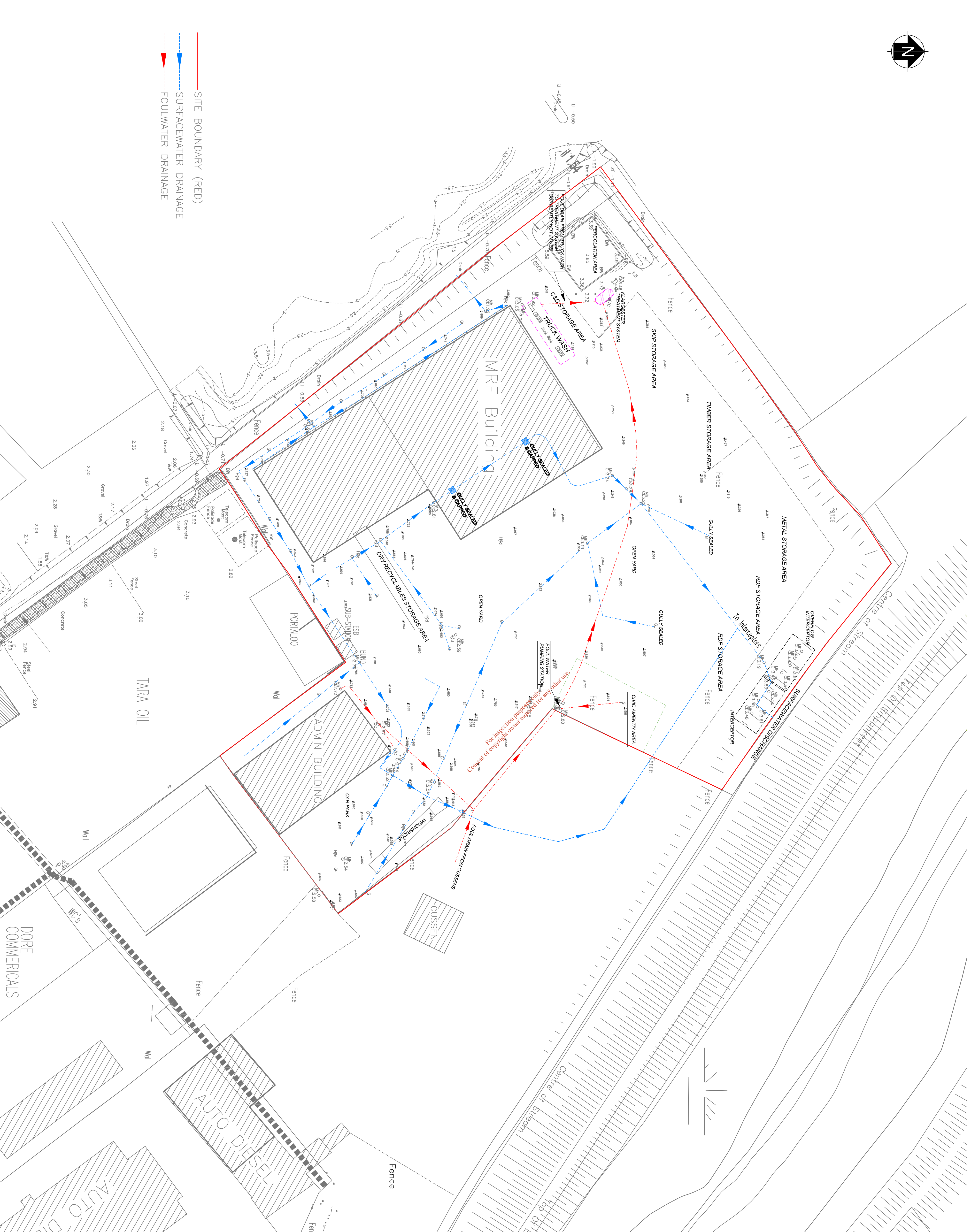
The 'dirty' area is defined by area trafficked by the heavy goods vehicles, refuse collection vehicles and articulated trucks leaving Main Building, which require a large turning area. The division of the site into 'clean' and 'dirty' areas will involve re-routing the existing drainage system. The run-off from the southern yard and building roofs will continue to be directed to the interceptors and will outfall to the drain at the existing discharge point. The run-off from the 'dirty' area will pass through a new grit trap and oil interceptor before connecting to the new foul sewer.

While the emissions to the drains are rainfall dependent, based on an annual average rainfall amount of 950mm, the estimated average daily discharge of surface water to the drain is from 18.1m³ per day.

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— SITE BOUNDARY (RED)
 - - - SURFACEWATER DRAINAGE
 - - - FOUWATER DRAINAGE



REV	DATE	DESCRIPTION	DRN	CHKD	APP
A	01/05/13	PRELIMINARY ISSUE	MW	JOC	**

Client: **GES Limerick**

Title: **SITE LAYOUT & DRAINAGE**

Scale: **1:500 A**

Drawing No: **002**

Rev: **A**

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O'Callaghan Moran & Associates
 Gentry House, Rutland Street,
 Cork, Ireland.
 Tel: (021) 4321521 Fax: (021) 4321522
 email: info@ocollaghnmoran.com

E.3 Emission to Sewer

Currently, there is no discharge to sewer. The only waste water emission is sanitary wastewater to the on-site Klargestar Biodisc wastewater treatment plant.

It is a condition of the current Waste Licence that discharge foul water and sewage from the site must be to the Council's foul sewer, following the completion of the Limerick Main Drainage Scheme, subject to the approval of the Sanitary Authority.

In 2009, the Sanitary Authority gave its approval in principle to the connection to the municipal wastewater treatment plant, however due to difficulties in obtaining way leaves to install the sewer line it was not possible to complete the connection.

Greenstar's landlord is currently engaged with both the Sanitary Authority and the Council regarding the connection and the necessary wayleaves and it is expected that the connection will be completed in 2014. The proposed position of the new sewer is shown on the enclosed drawing.

Following the connection, Greenstar will decommission the on-site wastewater treatment plant, and restart both the wheel wash and bin cleaning. Based on an annual average rainfall amount of 950mm the estimated average daily run-off from the 'dirty' area would be approximately 18.80m³ per day. The run-off will pass through a new grit trap and oil interceptor before connecting to the new foul sewer.

Based on a total of 22 full time and 15 part time staff, the volume of domestic wastewater would be approximately 0.88m³ per day. The wastewater from the truck and bin washing would average approximately 5m³ per day. The total average volume of trade effluent would be 25m³ per day.

Information on the quality of the effluent is presented in the Table below. The proposed limits are the maxima that will be present and typically the levels for the individual parameters will be significantly lower than the maxima.

Parameter	Proposed Limit
pH	6-9
Temperature	Ambient
BOD	2000 mg/l
COD	4000mg/l
Suspended solids	2000mg/l
Sulphate	500mg/l
Total nitrogen	100mg/l
Ammoniacal nitrogen	50mg/l
Total Phosphorous	20mg/l
Orthophosphate	10mg/l
Oils, Fats, greases	100mg/l

E 4 Emissions to Ground

The only direct emission to ground at the facility is the treated effluent from the on-site wastewater treatment plant, which discharges to a percolation area. The quality of the treated effluent is monitored quarterly and the results of the monitoring carried out in 2012 and 2013 are presented in Tables 1-8. There are no ELVs set in the Licence and for comparison purposes the table include the performance standards set in the EPA Waste Water Treatment Manual Guidelines.

Table 1

Parameter	Units	October	Performance Standards
pH	pH units	6.72	-
BOD	mg/l	1	20
Total Suspended Solids	mg/l	26	30
Ammonia Nitrogen	mg/l	2	20
Fats Oils Grease	mg/l	<0.01	-
Sulphate	mg/l	65.61	-
Total Phosphorous	mg/l	0.569	-
Total Nitrogen	mg/l	22.1	-
Nitrate	mg/l	33.6	-
Nitrite	mg/l	0.70	-
COD	mg/l	30	-

Table 2

Parameter	Units	April 2012	June 2012	July 2012	Performance Standards
pH	pH units	8.21	7.35	7.46	-
BOD	mg/l	<1	2	6	20
Total Suspended Solids	mg/l	23	<2	26	30
Ammonia Nitrogen	mg/l	0.43	0.2	<1	20
Fats Oils Grease	mg/l	<0.01	<1	3.4	-
Sulphate	mg/l	76.8	26.8	44.3	-
Total Phosphorous	mg/l	0.609	0.17	<1	-
Total Nitrogen	mg/l	14.2	<7	10.47	-
Nitrate	mg/l	54.5	15.59	32.60	-
Nitrite	mg/l	0.38	0.16	1.68	-
COD	mg/l	22	15	51	-

Table 3

Parameter	Units	1 st October 2012	Performance Standards
pH	pH units	6.73	-
BOD	mg/l	11	20
Total Suspended Solids	mg/l	81	30
Ammonia Nitrogen	mg/l	0.12	20
Fats Oils Grease	mg/l	<1	-
Sulphate	mg/l	160.5	-
Total Phosphorous	mg/l	2.54	-
Total Nitrogen	mg/l	40.51	-
Nitrate	mg/l	136.22	-
Nitrite	mg/l	<0.66	-
COD	mg/l	116	-

Table 4

Parameter	Units	1 st October 2012	20 th December 2012	Performance Standards
pH	pH units	6.73	7.55	-
BOD	mg/l	11	*	20
Total Suspended Solids	mg/l	81	7	30
Ammonia Nitrogen	mg/l	0.12	0.49	20
Fats Oils Grease	mg/l	<1	6.6	-
Sulphate	mg/l	160.5	56.9	-
Total Phosphorous	mg/l	2.54	0.32	-
Total Nitrogen	mg/l	40.51	<10	-
Nitrate	mg/l	136.22	26.89	-
Nitrite	mg/l	<0.66	<0.66	-
COD	mg/l	116	29	-

Table 5

Parameter	Units	28 th January 2013	22 nd March 2013	Performance Standards
pH	pH units	6.96	7.39	-
BOD	mg/l	76	20	20
Total Suspended Solids	mg/l	64	34	30
Ammonia Nitrogen	mg/l	1.72	11.18	20
Fats Oils Grease	mg/l	<1	<1	-
Sulphate	mg/l	34.1	51.1	-
Total Phosphorous	mg/l	2.23	0.94	-
Total Nitrogen	mg/l	<10	12.27	-
Nitrate	mg/l	<2	<2	-
Nitrite	mg/l	0.03	0.01	-
COD	mg/l	191	126	-

Table 6

Parameter	Units	30 th May 2013	28 th June 2013	Performance Standards
pH	pH units	7.69	8.09	-
BOD	mg/l	6	3	20
Total Suspended Solids	mg/l	5	10	30
Ammonia Nitrogen	mg/l	0.07	0.07	20
Fats Oils Grease	mg/l	<1	<1	-
Sulphate	mg/l	82.4	54.3	-
Total Phosphorous	mg/l	0.59	2.31	-
Total Nitrogen	mg/l	33.56	11.25	-
Nitrate	mg/l	19.23	50.9	-
Nitrite	mg/l	0.26	0.16	-
COD	mg/l	54	44	-

Table 7

Parameter	Units	26 th September 2013	Performance Standards
pH	pH units	7.47	-
BOD	mg/l	14	20
Total Suspended Solids	mg/l	4	30
Ammonia Nitrogen	mg/l	6.54	20
Fats Oils Grease	mg/l	<1	-
Sulphate	mg/l	81.1	-
Total Phosphorous	mg/l	2.22	-
Total Nitrogen	mg/l	42.72	-
Nitrate	mg/l	34.8	-
Nitrite	mg/l	1.56	-
COD	mg/l	76	-

Table 8

Parameter	Units	9 th December 2013	Performance Standards
pH	pH units	7.78	-
BOD	mg/l	8	20
Total Suspended Solids	mg/l	29	30
Ammonia Nitrogen	mg/l	13.8	20
Fats Oils Grease	mg/l	<1	-
Sulphate	mg/l	171.24	-
Total Phosphorous	mg/l	2.434	-
Total Nitrogen	mg/l	46.6	-
Nitrate	mg/l	<0.2	-
Nitrite	mg/l	0.44	-
COD	mg/l	97	-

It is proposed to discharge sanitary wastewater and trade effluent to a sewer that connects to the Bunlickey Wastewater Treatment Plant. Once this connection is in place, the on-site wastewater treatment plant will be decommissioned, which will eliminate the only direct or indirect discharge to ground at the facility. The proposed increase in the amounts of waste accepted will not result in any new emission to ground.

The wastes are handled inside Buildings 1 and 2, both of which have impermeable concrete floor that prevents any accidental spills or leaks from infiltrating to the underlying ground.

There is the potential for leaks/spills to ground during refuelling of oil storage tanks. The potential pathways to the ground include damaged paving and direct infiltration in unpaved landscaped areas. Other potential sources include leaks from the wastewater storage tank and surface water drainage system. The proposed changes do not require the provision new oil storage areas.

E5. Noise Emissions

Facility activities involve the use of plant and equipment that are sources of noise emissions. These include the conveyors and balers located inside the buildings and front end loaders clamp trucks and tracked excavators with grabs that operate both inside and outside the buildings. The heavy goods vehicles that access the facility and the manoeuvring of skips in the yards are also sources of noise emissions. The proposed increase in the amount of waste accepted does not require the provision of additional plant and equipment that would be new sources of noise emissions.

Noise emissions will occur when the site is operational. The facility is authorised to operate seven days per week twenty four hours per day. At present, there are two eight hour shifts operating from 06:00 – 14:00 and 14:00 to 22:00.

The results of the noise surveys carried out in 2012 and 2013 are in Tables 1 and 2

Table 1 Survey date: 24.05.2012

Station	Time	L _{Aeq} 30 min dB	L _{AF10} 30 min dB	L _{AF90} 30 min dB	Specific level* dB	Noise audible
NI1	0821-0851	57	58	48	55	Occasional loader and clamp truck movements audible at low level in main yard. Loader also slightly audible when in building. Loader dominant on sporadic occasions when entering N yard area. Starlings on NW boundary continuously dominant. Road traffic to E continuously significant in background.
NI2	0827-0857	61	62	50	61	Loader and clamp truck operations dominant around yard and in building. Tracked excavator on construction activity near NE corner slightly audible continuously, significantly screened by intervening structures. Tracked excavator with grab operating at 40 m from 0853. Bird calls and offsite road traffic significant.
NI3	0854-0924	54	56	51	53	Clamp truck operating almost continuously in main yard audible at low level. Baler and conveyor in nearest corner of building also continuously audible at low level. Distant road traffic to SW continuously audible at low level. Bird song/calls and rustling vegetation.
NI4	0933-1003	70	73	61	<<61	No site emissions audible, apart from sporadic trucks using access road. Dock Road traffic continuously intrusive. No other noise audible.

Table 2 Survey date: 08.10.2013

Station	Time	L _{Aeq} 30 min dB	L _{AF10} 30 min dB	L _{AF90} 30 min dB	Specific level* dB	Noise audible
NI1	1057-1127	60	62	45	58	Little or no site activity from 1100 apart from sporadic truck movements on yard, audible at low level when present, with one nearby movement significant. No other site noise audible. Road traffic to W clearly audible and significant. Bird calls significant.
NI2	1024-1054	54	53	43	54	Telescopic loader operating in yard almost continuously dominant. Baling plant in building also clearly audible. No other onsite sources audible during interval. Distant road traffic to NW faintly audible during loader lulls. Bird calls occasionally significant.
NI3	0945-1015	57	62	49	57	Conveyor and baler in adjacent building continuously audible and dominant. Frequent forklift truck movements in nearest parts of building and yard also significant. No other noise audible, apart from slightly audible road traffic to W.
NI4	1136-1206	71	73	62	<<62	No site emissions audible. Passing road traffic continuously dominant and intrusive. No other noise audible apart from occasional vehicles on site access road.

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Table E6 - GES Limerick

Point Code	Point Type	Easting	Northing	Verified	Pollutant
Provide label ID's assigned in section E		6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used	e.g. SO ₂ , HCl, NH ₃
FE-1A	Surface Water	154974	155769	N	Yard Runoff - Hydrocarbons, TSS, BOD.
FE-2A	Treated Foul Water to percolation area	154858	155720	N	Onsite Klargester WWTP System Discharge

Normal EPA Nomenclature not used as these are existing locations with historical monitoring data

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