ASB Biodiesel (Hong Kong) Limited

Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate

Monthly EM&A Report May 2012 (Version 1.0)

Certified By	VIL m	
	(Environmental Team Leader)	

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

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To:	Cinotech	Date:	7 June 2012
Attn:	Ms. Ivy Tam / Ms. Betty Choi	Fax:	3107 1388
From:	Mr. Mark Cheung	Ref:	D1067/G02228
Job No.	D1067	Total Pages:	1
SUBJECT:	Development of a Biodiesel Pl	-	wan O Industrial Estate

Monthly EM&A Report for May 2012

Dear Sir / Madam,

We refer to your submission of the Monthly EM&A Report for May 2012 via email dated 7 June 2012.

We write to advise that we have no comment on the captioned report.

Regards, Mark Cheung Independent Environmental Checker KTC/gk

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EXECUTIVE SUMMARY

Introduction

- 1. This is the 36th monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate". This report documents the findings of EM&A Works conducted in May 2012.
- 2. The major site activities undertaken in the reporting month included:
 - General site cleaning and tidying
 - Zone 1A Administration Building Transformer Room finishing works
 - Zone 1A Administration Building Finishing works
 - Zone 1A Administration Building MEK room metal works
 - Zone 1B Processing Building Cladding system installation works
 - Zone 1B Fat Preparation and Steam Boiler Room Building RC superstructure works
 - Zone 1B Fat Preparation and Steam Boiler Room Building Equipment Installation works
 - Zone 1B Fat Preparation and Steam Boiler Room Building Finishing works
 - Zone 2A Tank Farm Steel tank erection works
 - Zone 2B-2E Tank Farm Bund wall rectification works
 - WWTP RC superstructure construction works
 - WWTP RC tanks construction works
 - Jetty Temporary platform erection works
 - Jetty Temporary pile casing erection works
 - Building Services P&D U/G pipe cast-in works
 - Building Services Fire Service U/G pipe cast-in works
 - Building Services Cable duct cast-in works
 - Building Services Pressure Test works

Environmental Monitoring and Audit Works

3. Environmental monitoring and audit works for the Project were performed regularly as stipulated in the EM&A Manual and the results were checked and reviewed. The implementation of the environmental mitigation measures and environmental complaint handling procedures were also checked.

Environmental Licenses and Permits

4. Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project. Environmental Permits No. EP-319/2009 and EP-319/2009/A were issued on 11 March 2009 and 7 April 2009 respectively. The Contractor has applied for the Registration of Chemical Waste Producer (WPN-5113-839-C1186-15), Construction Noise Permits (GW-RE0376-12, GW-RE0377-12), Wastewater Discharge License (WT00004508-2009), Notification of Works under APCO (337009) and Waste Discharge Account (7013917). The new Construction Noise Permits (GW-RE0376-12, GW-RE0377-12) were issued by the EPD on 18th and 15th May 2012 respectively.

Key Information in the Reporting Month

5. Summary of key information in this reporting month is tabulated in **Table I**.

Table ISummary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark	
Event	Number	Nature	ACTION LAKEN	Status	кешагк	
Complaint received	0		N/A	N/A		
Changes to the assumptions and key construction / operation activities recorded	0		N/A	N/A		
Status of submissions under EP	1	Monthly EM&A Report for April 2012	Submitted to EPD on 15 May 2012	Verified by IEC		
Notifications of any summons & prosecutions	0		N/A	N/A		

Future Key Issues

- 6. Major site activities for the coming three months will include:
 - General site cleaning and tidying
 - Administration Building Steel and metal works at MEK Room
 - Administration Building Installation of roof waterproofing system works
 - Administration Building Finishing works
 - Processing Building Cladding system installation works
 - Fat Preparation Building Finishing works
 - Fat Preparation Building and Boiler Room Roof waterproofing system works
 - Fat Preparation Building and Boiler Room Structural steel works
 - Tank Farm 2A Footing and bund wall construction works
 - Tank Farm 2A Tank erection works
 - Grease Trap Waste Screening Room (GTWSR) Foundation construction works
 - Grease Trap Waste Screening Room (GTWSR) Superstructure construction works
 - Tank Farm 2B-2E Bund wall construction works
 - Tank Farm 2B-2E Tank erection works
 - WWTP Structural construction works
 - WWTP IC Reactor erection works
 - WWTP Water proofing system installation works
 - Jetty Temporary platform construction works
 - Jetty Bore pile installation works
 - Pipe Bridge Pipe support construction works and pipe bridge erection works
 - External Fence wall construction works
 - Building Services Fire services works
 - Building Services MVAC works

- Building Services Electrical works
- Building Services P&D works
- 7. The future environmental concerns are air quality, water quality, waste management and surface runoff from construction works.

1 INTRODUCTION

Background

- 1.1 Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate is a Designated Project (hereafter referred to as "the Project") under the Environmental Impact Assessment Ordinance (Cap. 449). A study of environmental impact assessment (EIA) was undertaken to consider the key issues of air quality, noise, water quality, ecological and identify possible mitigation measures associated with the works. An EIA Report was approved by the Environmental Protection Department (EPD) on 26 February 2009.
- 1.2 The project is to construct and operate a 100,000 tonnes per annum biodiesel plant at Tseung Kwan O Industrial Estate. The plant will use a multi-feedstock which consists of waste cooking oil (WCO), oil and grease recovered from grease trap waste (GTW), Palm Fatty Acid Distillate (PFAD) and animal fats. The proposed biodiesel plant not only offers a convenient recycling outlet for GTW and WCO but also converts the oil and grease recovered from these wastes into useful products. The Project also offers a cleaner alternative to diesel fuel to the Hong Kong market. The main processes include the followings:-
 - Construction of feedstock reception and storage facilities, and offices;
 - Construction of a grease trap waste pre-treatment facility (with a designated treatment capacity of about 200,000 tonnes per annum);
 - Construction of a wastewater treatment plant (with a designed treatment capacity of about 170,000 m³ per annum);
 - Installation of biodiesel production and glycerine purification system;
 - Construction of product storage and ancillary facilities;
 - Pretreatment of grease trap waste;
 - Treatment of wastewater generated from feedstock pre-treatment and glycerine dewatering process, and filtrates from dewatering process of sludge treatment;
 - Transesterification of feedstock with alcohol-catalyst; and
 - Purification of biodiesel.
 - 1.3 The general layout of the Project is shown in **Figure 1.1.**
 - 1.4 Layout plan of tank farm **2A**, **2B to 2E** is revised and a report is made by Environmental Resources Management (ERM) regarding such change. The report concluded that no deviation is found from the approved EIA report.
 - 1.5 An Environmental Permit (EP) No. EP-319/2009 and EP-319/2009/A was issued on 11 March 2009 and 7 April 2009 respectively for Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate to ASB Biodiesel (Hong Kong) Limited as the Permit Holder.
 - 1.6 Cinotech Consultants Limited was commissioned by the Contractor to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. This is the 36th Monthly EM&A report summarizing the EM&A works for the Project in May 2012.

Project Organizations

- 1.7 Different parties with different levels of involvement in the project organization include:
 - Project Proponent ASB Biodiesel (Hong Kong) Limited
 - Project Manager AECOM
 - Contractor China Harbour Engineering Company Limited (CHEC)
 - Environmental Team (ET) Cinotech Consultants Limited
 - Independent Environmental Checker (IEC) Mannings (Asia) Consultants Ltd.
- 1.8 The responsibilities of respective parties are detailed in Section 1.10 of the Final EM&A Manual of the Project.
- 1.9 The key contacts of the Project are shown in **Table 1.1**.

Table 1.1	Key Project Contacts
-----------	----------------------

Party	Role	Name	Position	Phone No.	Fax No.
ASB	Project Proponent	Ms. Sylvia Har	Senior Plant Engineer	9479 0949	3741 1661
		Dr. HF Chan	ET Leader	2151 2088	
Cinotech	Environmental Team	Ms. Ivy Tam	Project Coordinator	2151 2090	3107 1388
		Ms. Betty Choi	Audit Team Leader	2151 2072	
	Independent	Mr. Mark Cheung	Independent Environmental Checker	3168 2028	
Mannings	Environmental Checker	Mr. Gavin Kwok	Assistant to Independent Environmental Checker	3168 2028	3168 2022
AECOM	Project Manager	Mr. Matthew Lau	Construction Manager	9363 5586	N/A
CHEC C	Contractor	Mr. Peter Chung	Project Manager	9471 2438	
		Mr. Anson Wong	Safety and Environmental Officer	9656 3837	2623 9226
	CHEC	Contractor	Mr. Simon Li	Environmental Supervisor (Ass. Planning Engineer)	6152 7867

Construction Programme

- 1.10 The site activities undertaken in the reporting month were:
 - General site cleaning and tidying
 - Zone 1A Administration Building Transformer Room finishing works
 - Zone 1A Administration Building Finishing works
 - Zone 1A Administration Building MEK room metal works
 - Zone 1B Processing Building Cladding system installation works
 - Zone 1B Fat Preparation and Steam Boiler Room Building RC superstructure works
 - Zone 1B Fat Preparation and Steam Boiler Room Building Equipment Installation works
 - Zone 1B Fat Preparation and Steam Boiler Room Building Finishing works
 - Zone 2A Tank Farm Steel tank erection works
 - Zone 2B-2E Tank Farm Bund wall rectification works
 - WWTP RC superstructure construction works
 - WWTP RC tanks construction works
 - Jetty Temporary platform erection works
 - Jetty Temporary pile casing erection works
 - Building Services P&D U/G pipe cast-in works
 - Building Services Fire Service U/G pipe cast-in works
 - Building Services Cable duct cast-in works
 - Building Services Pressure Test works

Summary of EM&A Requirements

- 1.11 The EM&A requirements are described in the following sections, including:
 - Environmental mitigation measures, as recommended in the project EIA study final report; and
 - Environmental requirements in contract documents.
- 1.12 The advice on the implementation status of environmental protection and pollution control/ mitigation measures is summarized in Section 3 of this report.

2 ENVIRONMENTAL AUDIT

Site Audits

- 2.1 Site audits were carried out by ET on monthly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summary of the site audit in this reporting month is attached in **Appendix A**.
- 2.2 Site audit was conducted on 22nd May 2012 by ET in the reporting month. No non-compliance was observed during the site audits.

Status of Environmental Licensing and Permitting

2.3 All permits/licenses obtained for the Project are summarized in **Table 2.1**.

Status of Waste Management

2.4 The quantities of waste generated in this reporting month are summarized in **Appendix** C.

Implementation Status of Environmental Mitigation Measures

2.5 According to the EIA Study Report, Environmental Permit and the EM&A Manual of the Project, the mitigation measures detailed in the documents are recommended to be implemented during the construction phase. An updated summary of the EMIS is provided in **Appendix B**.

Permit / License No.	Valid Period		Details	Status	
i ci ilitti / Littelise INO.	From	То	Details	Status	
Environmental Permit (EP))				
EP-319/2009/A	07/04/2009	N/A	Construction and operation of	Valid	
			(i) a biochemical plant with a storage capacity of more than 500 tonnes and in which substances are processed and produced;		
			(ii) a storage, transfer and tran- shipment of oil facility with a storage capacity of not less than 1,000 tonnes; and		
			(iii) a dangerous goods godown with a storage capacity exceeding 500 tonnes .		
Registration of Chemical W	Vaste Produce	r			
WPN-5113-839-C1186-15	12/06/2009	-	Spent Lubrication oil.	Valid	
Construction Noise Permit	(CNP)				
GW-RE0376-12	22/05/2012	21/06/2012	Use of Powered Mechanical Equipment during 0000-2400 hours on general holidays (including Sundays), 0000- 0700 hours and 1900-2400 hours on any day not being a general holiday.	Valid	
GW-RE0377-12	22/05/2012	21/06/2012	Use of Powered Mechanical Equipment during 0000-2400 hours on general holidays (including Sundays), 0000- 0700 hours and 1900-2400 hours on any day not being a general holiday.	Valid	
Wastewater Discharge Lice	ense				
WT00004508-2009	07/09/2009	-	Discharge of wastewater from construction site including wheel washing water and chemical precipitation tank	Valid	
Billing Account for Disposa	l of Construct	tion Waste			
A/C No.: 7013917	-	-	-	Valid	
Notification of Works unde		1			

Table 2.1	Summary of Environmental Licensing and Permit Status
-----------	--

2.6 During the site inspection in the reporting month, no non-conformance was identified. The observations and recommendations made during the audit session are summarized in **Table 2.2**.

Parameters	Date	Observations and Recommendations	Follow-up
		Stockpile should be covered with tarpaulin.	Follow up action was taken by the Contractor.
Air Quality	22/05/2012	The wheels of vehicles moving in and out of the site should be sprayed with water more thoroughly.	Follow up action was taken by the Contractor.
Water Quality		Ponding water should be cleared or added with larvicidal oil.	Follow up action was taken by the Contractor.

 Table 2.2
 Observations and Recommendations of Site Audit

Summary of Complaint and Prosecution

- 2.7 No environmental related complaint, prosecution or notification of summons was received in the reporting month.
- 2.8 There was no environmental complaint, prosecution or notification of summons received since the Project commencement. The Complaint Log is attached in Appendix D.

3 FUTURE KEY ISSUES

Key Issues for the Coming Month

- 3.1 Key issues to be considered in the coming month include:
 - Noise from operation of the equipment and machinery on-site;
 - Effluent discharge generated from surface runoff;
 - Dust generated from excavation works and stockpile of dusty materials;
 - Maintenance of de-silting facilities and drainage system, such as U-channels;
 - Storage of chemicals/fuel and chemical waste/waste oil on site;
 - Accumulation of stagnant water in the site areas;
 - Accumulation of C&D waste and general waste on site; and
 - Suspended mud, sediment and potential leakage of bentonite slurry from marine piling work for jetty construction.
- 3.2 In May, temporary piles were constructed in the jetty area and temporary pile casing were erected. During the site inspection, silt curtain was erected as a mitigation measure. Bore piles will be installed in the coming month. Bentonite slurry will be injected and the process will be closely monitored to prevent leakage into the water.

Construction Program for the Next Months

- 3.3 A tentative construction programme is provided in **Appendix E**. The major construction activities in the coming three months will include:
 - General site cleaning and tidying
 - Administration Building Steel and metal works at MEK Room
 - Administration Building Installation of roof waterproofing system works
 - Administration Building Finishing works
 - Processing Building Cladding system installation works
 - Fat Preparation Building Finishing works
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 - Jetty Temporary platform construction works
 - Jetty Bore pile installation works
 - Pipe Bridge Pipe support construction works and pipe bridge erection works
 - External Fence wall construction works
 - Building Services Fire services works
 - Building Services MVAC works

- Building Services Electrical works
 Building Services P&D works

4 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 4.1 Environmental audit works were conducted in the reporting month. Site inspections were conducted on a monthly basis. The results were reviewed and checked.
- 4.2 There was no environmental complaint, prosecution or notification of summons received.

Recommendations

4.3 According to the environmental audit performed in the reporting month, the following recommendations were made:

Water Impact

- To identify any wastewater discharges from site.
- To ensure properly maintenance for de-silting facilities.
- To clear the silt and sediment in the sedimentation tanks.
- To review the capacity of de-silting facilities for discharge.
- To divert all the water generated from construction site to de-silting facilities with enough handling capacity before discharge.
- To avoid accumulation of stagnant and ponding water on site.
- To clear the drainage channel regularly to prevent blockage.
- To set up silt curtain around marine piling work.
- To check integrity of bore pile casing to prevent leakage.

Dust Impact

- To remove fugitive dusty material on the haul road periodically.
- Excavated dusty materials or stockpile of dusty materials should be covered by impervious sheeting, or sprayed with water so as to maintain entire surface wet.

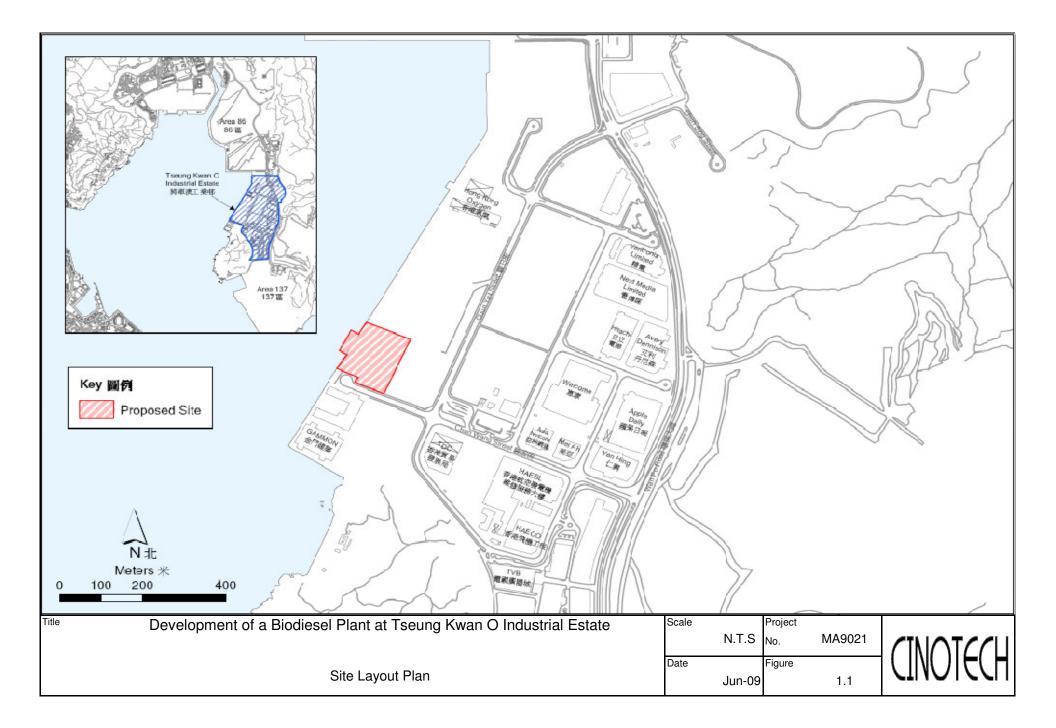
Noise Impact

- To space out noisy equipment and position as far away as possible from sensitive receivers.
- To inspect the noise sources inside the site.

Waste / Chemical Management

- To provide proper rubbish bins / skips for waste collection.
- To provide proper storage area for oil container on site.
- To avoid and check for any accumulation of waste materials or rubbish on site.
- To avoid any discharge or accidental spillage of chemical waste or oil directly from the equipment.

FIGURES



APPENDIX A SITE AUDIT SUMMARY

Monthly Site Inspection Record Summary

Inspection Information		
Checklist Reference Number	120522	
Date	22 May 2012 (Tuesday)	
Time	15:15 - 16:00	

Ref. No. Non-Compliance

		No.
-	None	-

Ref. No. Remarks/Observations

		No.
	A. Water Quality	
120522-R02	• Ponding water should be cleared or added with larvicidal oil.	B13
	B. Air Quality	
120522-R01	• Stockpile should be covered with tarpaulin.	C10
120522-R03	• The wheels of vehicles moving in and out of the site should be sprayed with water more thoroughly.	C3
	C. Noise	
	• No environmental deficiency was identified during site inspection.	
	D. Waste / Chemical Management	
	• No environmental deficiency was identified during site inspection.	
	E. Permit / Licenses	
	• No environmental deficiency was identified during site inspection.	
	F. Reminders	
	• No environmental deficiency was identified during site inspection.	
	G. Others	
	Follow-up on previous audit section (Ref. No.:120424):	
	• All environmental deficiencies were improved/rectified by the Contractor.	

	Name	Signature	Date
Recorded by	Betty Choi	Bittym	22 May 2012
Checked by	Dr. HF Chan	Tha	22 May 2012

Related Item

Related Item

APPENDIX B UPDATED ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE

Types of Impacts	Mitigation Measures	Status
Construction Dust	 Dust control measures such as water spaying on roads and dusty areas, covering of lorries by impervious sheets and controlling of the falling height of fill materials will be implemented; Effective dust screens, sheeting or netting will be provided to enclose the scaffolding from the ground level of the facility during the building construction; All debris and materials will be covered or stored in a sheltered debris collection area; Hoarding from ground level will be provided along the entire length of the site boundary except for a site entrance or exit; Every stockpile of dusty materials will be covered entirely by impermeable sheeting or placed in an area sheltered on the top and the 3 sides; Regular maintenance and checking of the diesel powered mechanical equipment will be adopted to avoid any black smoke emissions and to minimize gaseous emissions. Monthly site audits will be conducted to ensure the implementation of suitable dust control measures and good site practices. 	^ ^ ^ ^
Construction Noise	 Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction program; Silencers or mufflers on construction equipment will be utilized and will be properly maintained during the construction program; Mobile plant, if any, will be sited as far from NSRs as possible; Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum; Plant known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from onsite construction activities. 	

Appendix B - Summary of Environmental Mitigation Implementation Schedule (Construction Phase)

Compliance of mitigation measure; Remarks: ^

- X Non-compliance of mitigation measure;

N/A Not Applicable at this stage;
Non-compliance but rectified by the contractor;
Recommendation was made during site audit but improved/rectified by the contractor;
Mon-compliance but rectified/improved by the contractor and awaiting IEC's further comment.

Types of Impacts	Mitigation Measures	Status
	 <u>Piling Activities</u> Silt curtain will be installed around the marine piling area to contain any suspended mud and sediments generated during the piling works. Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from groundwater (if pumping is required) to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected monthly and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. <u>Construction Site Run-off and Drainage</u> 	۸
Water Quality	 Silt removal facilities such as silt traps or sedimentation facilities will be provided to remove silt particles from runoff to meet the requirements of the TM standard under the WPCO. The design of silt removal facilities will be based on the guidelines provided in ProPECC PN 1/94. All drainage facilities and erosion and sediment control structures will be inspected monthly and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Careful programming of the works to minimise surface excavations for the construction works during the wet season. If excavation of soil cannot be avoided during the wet season, exposed slope surfaces will be covered by a tarpaulin or other means. Other measures that need to be implemented before, during, and after rainstorms are summarised in ProPECC PN 1/94. Exposed soil surfaces will be protected by paving or fill material as soon as possible to reduce the potential of soil erosion. Open stockpiles of construction materials or construction wastes on-site of more than 50m³ will be covered with tarpaulin or similar fabric during rainstorms. These materials will not be placed near the seawall area. 	^ ^ ^
	 <u>General Construction Activities</u> Debris and refuse generated on-site will be collected, handled and disposed of properly to avoid entering the nearby water sensitive receivers (WSRs). Stockpiles of cement and other construction materials will be kept covered when not being used. Oils and fuels will only be used and stored in designated areas which have pollution prevention facilities. All fuel tanks and storage areas will be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund will be drained of rainwater after a rain event. 	^

Remarks: ^ Compliance of mitigation measure;

- X Non-compliance of mitigation measure;

N/A Not Applicable at this stage;
Non-compliance but rectified by the contractor;
Recommendation was made during site audit but improved/rectified by the contractor;
Mon-compliance but rectified/improved by the contractor and awaiting IEC's further comment.

Types of Impacts	Mitigation Measures	Status
	Sewage generated from On-site Workforce	
	 Temporary sanitary facilities, such as portable chemical toilets, will be provided on-site. A specialised contractor will be responsible for regular collection and appropriate disposal of the sewage and maintenance of these facilities. Monthly site inspections will be carried out during construction to ensure that the mitigation measures listed above are properly implemented. The site audit frequency will be increased to weekly intervals during the piling works. 	N/A
Ecology	 Mitigation measures for minimising water quality impacts are presented in detail above. These measures will be properly implemented and good construction practices will be adopted to minimise potential adverse impacts to marine ecological resources. 	^

Remarks: ^ Compliance of mitigation measure;

- X Non-compliance of mitigation measure;

N/A Not Applicable at this stage;
Non-compliance but rectified by the contractor;
Recommendation was made during site audit but improved/rectified by the contractor;
Mon-compliance but rectified/improved by the contractor and awaiting IEC's further comment.

APPENDIX C WASTE GENERATION IN THE REPORTING MONTH

	Actual	Quantities of Iner	rt C&D Materia	als Generated / Im	ported (in '00	0 m 3	Actual Quantities of Other C&D Materials / Wastes Generated							
Month	Total Quantities Generated [a+b+c+d]	Broken Concrete (including rock for recycling into aggregates) (a)	Reused in the Contract (b)	Reused in Other Projects (c)	Disposed as Public Fill (d)	Imported C&D Material	Metal (in '000 kg)	Paper/ cardboard packaging (in '000kg)	Plastics (bottles/containers, plastic sheets/ foams from package material) (in '000kg)	Chemical Waste (in '000kg)	Others (e.g. General Refuse etc.) (in '000m3)			
January	0.048	0	0	0	0.048	0.949	0	0.001	0	0	0.005			
February	0.087	0	0	0	0.087	0	0	0.001	0	0	0.005			
March	0.022	0	0	0	0.022	0	0	0.001	0	0	0.003			
April	0.042	0	0	0	0.042	0.583	0	0.001	0	0	0.004			
May	0.090	0	0	0	0.090	0	0	0.001	0	0	0.005			
June														
Half-year Total														
July														
August														
September														
October														
November														
December														
Yearly Total														

APPENDIX D COMPLAINT LOG

APPENDIX D – COMPLAINT LOG

Reporting Month: May 2012

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
N/A	N/A	N/A	N/A	N/A	N/A

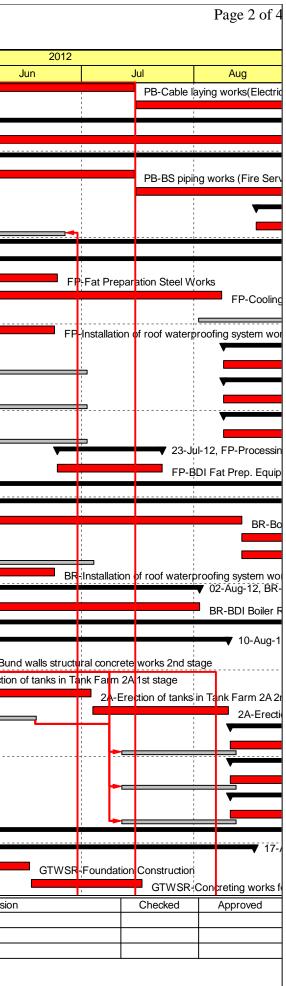
Remarks: No environmental complaint was received in the reporting month.

APPENDIX E CONSTRUCTION PROGRAMME

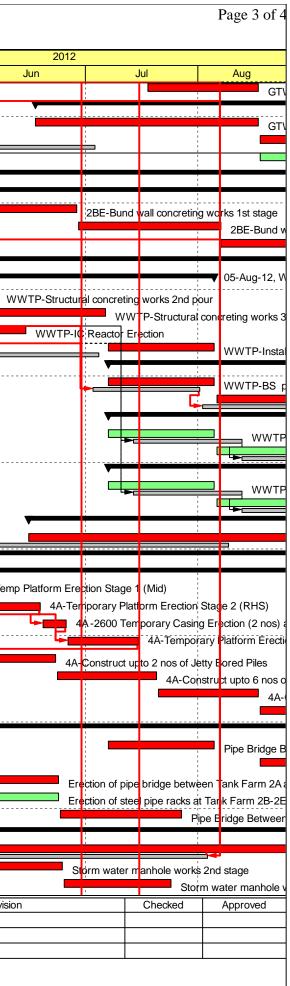
ctivity ID	Activity Name	BL Start	BL Finish	Current Duration	Current Start	Current Finish	% Complete	Delay from Initial	Total Float	\vdash	May	
C270MC-3M	I-Rolling Programme Ver.1.1 (250512)		08-Jun-13	674	14-Oct-11 A	17-Aug-13		-70	-70	╊━┿	iviay	
		14-Oct-11	08-Jun-13	674		17-Aug-13		-70	-70			1
Key Dates	Construct Auroral		00-0011-10			-	4000/		-70	4		
A15600 Contract Peri	Contract Award	14-Oct-11 04-Nov-11	12-Dec-12	0 475	14-Oct-11 A	20-Feb-13	100%	0 -70	-70			
A15700	Date of Commencement of the Works	04-Nov-11	12-Dec-12	475	04-Nov-11	20-Feb-13	100%	0	-70	4		
A15900	Date of Completion of the Works	04-1100-11	12-Dec-12	0	04-1100-11	20-Feb-13*	0%	-70	-70			·
Maintenance	•	04-Jan-13	08-Jun-13	162	09-Mar-13	17-Aug-13	0 /8	-70	-70			
A16400	Granting of DG License	15-Feb-13	00-301-13	0	12-May-13*	17-Aug-13	0%	-86	-86	4		
A16500	Commence T&C	04-Jan-13		0	09-Mar-13*		0%	-64	-64	-		
A16600	Complete T&C	04-041110	08-Jun-13	0	05-11121-15	17-Aug-13*	0%	-70	-70	-		
Milestones		04-Dec-11	04-Oct-12	118	27-Apr-12	23-Aug-12	070	42	289			
					. Δ						11 11 1	1
	Construction Works	22-Dec-11	04-Oct-12	338	Δ	08-Jan-13		-97	-68			1
	ent and Material Procurement and Delivery			180	· · · ·	27-Aug-12			0			1
P10000	Lift Procurement			180		27-Aug-12	47.22%		0			
	ration Building	26-Feb-12	19-Jul-12	196	· · · · ·	16-Oct-12		-89	-3			
	n Building Structural and Builder's Work	26-Feb-12	10-May-12	98	· · · · ·	11-Jul-12		-61	24			
A17040	AB-Steel and Metal Works at MEK Room	26-Feb-12		51	· · ·	27-May-12		-61	-62			AB-Steel a
A17410	AB-Installation of windows, louvers and doors 1st stage	27-Mar-12	15-Apr-12	20	27-May-12	16-Jun-12	0%	-61	19	_		
A17420	AB-Installation of windows, louvers and doors 2nd stage	16-Apr-12	10-May-12	25	16-Jun-12	11-Jul-12	0%	-61	22			
A17430	AB-ABWF works excluding windows, louvers & doors	27-Mar-12	10-May-12	80	04-Apr-12		40%	-43	42			-
A17440	AB-Installation of roof waterproofing system works	26-Feb-12	26-Mar-12	30	25-May-12	23-Jun-12	0%	-89	-89			
AB-Electrical		26-Feb-12	04-Jul-12	130	25-May-12	01-Oct-12		-89	-89			
A17130	AB-BS Cable laying works(Electrical) 1st stage	26-Feb-12	26-Mar-12	30	25-May-12	23-Jun-12	0%	-89	-89			
A17140	AB-BS Cable laying works(Electrical) 2nd stage	27-Mar-12	25-Apr-12	30	24-Jun-12	23-Jul-12	0%	-89	-89			
A17160	AB-BS Installation of switch board and cable termination works in Switch Rooms	11-Apr-12	20-May-12	40	09-Jul-12	17-Aug-12	0%	-89	-89			
A17190	AB-BS Lighting installation works	21-May-12	19-Jun-12	30	18-Aug-12	16-Sep-12	0%	-89	-89	_		
A17200	AB-Installation of switch board and cable termination works in Main Switch Room	11-Apr-12	20-May-12	40	09-Jul-12	17-Aug-12	0%	-89	-89	╞		
A17210	AB-Installation of Generators, Day Tanks and associated equipment & pipe works	21-May-12	04-Jul-12	45	18-Aug-12	01-Oct-12	0%	-89	-89		│ ┕–	
AB-Fire Servic		26-Feb-12		85	25-May-12			-89	57			
A17170	AB-BS Piping works(Fire Services) 1st stage	26-Feb-12		35	25-May-12			-89	-89			
A17180	AB-BS Piping works(Fire Services) 2nd stage	01-Apr-12	05-May-12	35	29-Jun-12	02-Aug-12	0%	-89	-59		-	
A17185	AB-Control Room and Pump Room FS equipment installation and associated pipe work		20-May-12	30	19-Jul-12	17-Aug-12	0%	-89	57	╞───	↓ ◄	
	and Drainage	26-Feb-12	19-Jul-12	145	25-May-12			-89	-83			-
A17110	AB-BS Piping works (P&D) 1st stage	26-Feb-12	05-Apr-12	40	25-May-12	03-Jul-12	0%	-89	-89	_		i
A17120	AB-BS Piping works(P&D) 2nd stage	06-Apr-12	20-May-12	45	04-Jul-12	17-Aug-12	0%	-89	-89	<u> </u>	╾┥╴	
A17155	AB-Installation of sanitary fittings	21-May-12	19-Jul-12	60	18-Aug-12	16-Oct-12	0%	-89	-83			
AB-MVAC		26-Feb-12	05-May-12	92	12-Apr-12			-68	-68			
A17150	AB-BS Installation of piping and ducting works (MVAC)	26-Feb-12	05-May-12	92	12-Apr-12		30%	-68	-68			1
1B - Process		03-Jan-12	26-Jun-12	284		15-Nov-12		-142	-14			21 Ma
	uilding Structural and Builder's Work	03-Jan-12	04-Mar-12	116	^	31-May-12		-88	-88			₹ 31-Ma
A18110	PB-Cladding wall for Processing Building	03-Jan-12	02-Feb-12	115		30-May-12		-118	-118			PB-Cla
A18120	PB-Cladding roof for Processing Building	03-Feb-12	04-Mar-12	57		31-May-12	30%	-88	-88			PB-Cla
	and Drainage	05-Mar-12	02-Jun-12	90		29-Aug-12		-88	-88			
A18010	PB-BS Piping works(P&D) 1st stage	05-Mar-12	18-Apr-12	45	01-Jun-12	15-Jul-12	0%	-88	-88	_		
A18020	PB-BS Piping works(P&D) 2nd stage	19-Apr-12	02-Jun-12	45	16-Jul-12	29-Aug-12	0%	-88	-88	_		
PB-Electrical		05-Mar-12	02-Jun-12	90	01-Jun-12	29-Aug-12		-88	-88			
BL	Milestone Proposed Bi	o-Diesel Plant a	at T.K.O. Lot	t 39 Main	Contract for	All Remaini	ng Works			ate		Revisio
Actual Wo	ork V Summary								11-May		Bi-weekly report	
		2 3		112 D					25-May	-12	Bi-weekly report	upuale
Remainin	g Work	3 N	Month Rol	ling Pr	ogramme						<u>`</u>	
	g Work emaining Work		weekly Ro	C	0							

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AB-	Installation of	of roof water	proofing system wor
AB-	BS Cable la		lectrical) 1st stage
		AB-E	BS Cable laying wor
			AB-
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	AB-BS Pipir	ng works(Fire	Services) 1st stage AB-BS Piping w
	 		AB-
		Dining works	(P&D) 1st stage
			AB-
		 12-Jul-12, AB	-MVAC
	;		ation of piping and (
lay-12, Processin	a Building S	tructural and	Builder's Work
ladding wall for P			
Hadding roof for I	-	•	
		PB-RS Pini	ng works(P&D) 1st
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y ID	Activity Name	BL Start	BL Finish	Current Duration	Current Start	Current Finish	% Complete	Delay from Initial	Total Float		
A18030	PB-Cable laying works(Electrical) 1st stage	05-Mar-12	10 Apr 10		01-Jun-12	15-Jul-12	0%		-88	May	
			18-Apr-12	45 45	16-Jul-12		0%	-88 -88	-88		
A18040	PB-Cable laying works(Electrical) 2nd stage	19-Apr-12 05-Mar-12	02-Jun-12 02-Jun-12	45 90		29-Aug-12	0%	-88 -88			
PB-MVAC	DD DO Installation of sizing and Dusting Warks (MVAC)				01-Jun-12	29-Aug-12	00/		-88		
A18060	PB-BS Installation of piping and Ducting Works (MVAC)	05-Mar-12	02-Jun-12	90	01-Jun-12 01-Jun-12	29-Aug-12	0%	-88	-88		
PB-Fire Servi		05-Mar-12	02-Jun-12	90		29-Aug-12	00(-88	-88		
A18070	PB-BS piping works (Fire Services) 1st stage	05-Mar-12	18-Apr-12	45	01-Jun-12	15-Jul-12	0%	-88	-88		
A18080	PB-BS piping works (Fire Services) 2nd stage	19-Apr-12	02-Jun-12	45	16-Jul-12	29-Aug-12	0%	-88	-88		
PB-Processi		03-Jan-12	26-Jun-12	90	18-Aug-12		00/	-142	-14		
A17900	PB-BDI Pipe insulation, Process Electrical & Instrumentatio		26-Jun-12	90	18-Aug-12	15-Nov-12	0%	-142	-14		
-	paration Building	21-Jan-12	02-Oct-12	268		08-Jan-13		-98	-98		
	ion Structural and Builder's Work	21-Jan-12	02-Oct-12	268	· · · ·	08-Jan-13		-98	-98		
A18600	FP-Fat Preparation Steel Works	21-Jan-12	19-Feb-12	30	25-May-12	24-Jun-12	0%	-125	-75		
A18700	FP-Cooling Tower Installation	04-Feb-12	05-Apr-12	62	08-Jun-12	08-Aug-12	0%	-125	-67		
A19130	FP-ABWF works excluding windows, louvers and doors	02-Aug-12	02-Oct-12	268	16-Apr-12		27.42%	-98	-98		
A19140	FP-Installation of roof waterproofing system works	21-Jan-12	19-Feb-12	30	25-May-12	23-Jun-12	0%	-125	-125		
	and Drainage	03-Jun-12	02-Jul-12	30	09-Aug-12			-67	-67		
A19010	FP-BS piping works(P&D) 1st stage	03-Jun-12	02-Jul-12	30	-	07-Sep-12	0%	-67	-67		
FP-Electrical		03-Jun-12	02-Jul-12	30	09-Aug-12	07-Sep-12		-67	-67		
A19030	FP-BS Cable laying works(Electrical) 1st stage	03-Jun-12	02-Jul-12	30	09-Aug-12	07-Sep-12	0%	-67	-67		
FP-Fire Servi	ices	03-Jun-12	02-Jul-12	30	09-Aug-12	07-Sep-12		-67	-67		
A19070	FP-BS piping works(Fire Services) 1st stage	03-Jun-12	02-Jul-12	30	09-Aug-12	07-Sep-12	0%	-67	-67		╘
FP-Processir	ng Works	20-Feb-12	19-Mar-12	29	24-Jun-12	23-Jul-12		-125	-58		
A18800	FP-BDI Fat Prep. Equipment Installation Works	20-Feb-12	19-Mar-12	29	24-Jun-12	23-Jul-12	0%	-125	-58		
<mark>B - Boiler</mark> R	oom	18-Jan-12	04-Jul-12	112	25-May-12	14-Sep-12		-72	-60		
Boiler Room	Structural and Builder's Work	21-Jan-12	04-Jul-12	112	25-May-12	14-Sep-12		-72	-60		
A19500	BR-Boiler Room Steel Works	29-Jan-12	08-Apr-12	70	04-Jun-12	14-Aug-12	0%	-128	-125		
A19800	BR-Cladding Roof Installation	08-Apr-12	09-May-12	31	14-Aug-12	14-Sep-12	0%	-128	-125		
A19900	BR-Chimney Works	03-Jun-12	04-Jul-12	31	14-Aug-12	14-Sep-12	0%	-72	-60		
A20140	BR-Installation of roof waterproofing system works	21-Jan-12	19-Feb-12	30	25-May-12	23-Jun-12	0%	-125	-125		
BR-Processi		18-Jan-12	27-Mar-12	70		02-Aug-12	0,0	-128	-125		
A19600	BR-BDI Boiler Room & Utility Equipment Installation Works	18-Jan-12	27-Mar-12	70		02-Aug-12	0%	-128	-125		
A- Tank Fai	· · · ·	26-Feb-12	12-Aug-12	181		11-Sep-12	070	-30	-46		
	A Structural and Builder's Work	26-Feb-12	18-Jun-12	149		10-Aug-12		-53	-53		
A20520	2A-Bund walls structural concrete works 2nd stage	05-Apr-12	12-May-12	76	^	31-May-12	81.58%	-19	-19		
A20520	2A-Erection of tanks in Tank Farm 2A 1st stage	26-Feb-12	03-Apr-12	73		26-May-12	94.74%	-53	-53		2
A20620	2A-Erection of tanks in Tank Farm 2A 2nd stage	04-Apr-12	11-May-12	38	27-May-12	03-Jul-12	0%	-53	-53		2Å-E
A20620	2A-Erection of tanks in Tank Farm 2A 3rd stage	12-May-12	18-Jun-12		04-Jul-12		0%	-53	-53		1
				38		10-Aug-12	0%			└ ►	
	and Drainage	12-Jul-12	12-Aug-12			11-Sep-12	00/	-30	-46		
A20810	2A-BS Piping works(P&D) at Tank Farms 1st stage	12-Jul-12	12-Aug-12	32	11-Aug-12	-	0%	-30	-46		
2A-Electrical		12-Jul-12	12-Aug-12	32	-	11-Sep-12		-30	-46		
A20830	2A-BS Cable laying works(Electrical) at Tank Farms 1st sta		12-Aug-12	32	11-Aug-12	-	0%	-30	-46		
2A-Fire Servi		12-Jul-12	12-Aug-12	32		11-Sep-12		-30	-46		
A20850	2A-Piping works(Fire Services) at Tank Farms 1st stage	12-Jul-12	12-Aug-12	32	11-Aug-12		0%	-30	-46		
·	paration Room	27-Jan-12	04-Oct-12	159	11-May-12			-13	12		, , , , , , , , , , , , , , , , , , ,
GTWSR Strue	ctural and Builder's Work	27-Jan-12	04-May-12	99	11-May-12	17-Aug-12		-105	-99		
A21300	GTWSR-Foundation Construction	27-Jan-12	03-Mar-12	37	11-May-12	16-Jun-12	37.84%	-105	-105		-
A21410	GTWSR-Concreting works for GTWSR 1st Stage	04-Mar-12	03-Apr-12	31	17-Jun-12	17-Jul-12	0%	-105	-105		
	Milestone	Proposed Bio-Diesel Plant a	TKO Io	t 39 Main	Contract for	All Remaini	ng Works	- <u></u>	Date		R
BI		roposed Bio-Dieser r faitt a		main	Conduct 101	itemanin			11 May 10	Diverselation	
BL Actual W									11-May-12	2 Bi-weekly re	sport update
Actual W		3 N	/Ionth Rol	lling Pr	ogramme				25-May-12		
Actual W		3 N	Aonth Ro	lling Pro	ogramme						



ity ID	Activity Name	BL Start	BL Finish	Current Duration	Current Start	Current Finish	% Complete	Delay from Initial	Total Float		May		
A21420	GTWSR-Concreting works for GTWSR 2nd Stage	04-Apr-12	04-May-12	31	18-Jul-12	17-Aug-12	0%	-105	-99		iviay		
GTWSR-Pro	cessing Works	04-Mar-12	-	122	17-Jun-12	16-Oct-12		-13	12				
A21500	GTWSR-Paques Process Equipment Installation Works	04-Mar-12		62	17-Jun-12			-105	-102				
A21600	GTWSR-Paques Piping, Electrical, Insulation & Instrumenta		03-Jul-12	60	18-Aug-12	16-Oct-12	0%	-105	-102				
A21700	GTWSR-BDI Unloading Equipment Installation Works	27-Sep-12		14	18-Aug-12		0%	33	58	E			_
2B-E Tank F	-	21-Jan-12	30-May-12	135	_	07-Sep-12	070	-99	-136				
	B-2E Structural and Builder's Work	21-Jan-12	30-May-12	135		07-Sep-12		-99	-136				
A22410	2BE-Bund wall concreting works 1st stage	21-Jan-12		65	· · ·	28-Jun-12	10.26%	-121	-136				
A22410	2BE-Bund wall concreting works 1st stage	21-541-12 29-Feb-12	07-Apr-12	39	29-Jun-12		0%	-121	-136				
			· ·		07-Aug-12		0%	-121					
A22510	2BE-Erection tanks in Tank Farm 2B-2E 1st stage	30-Apr-12	30-May-12	31	-		0%		-136				
	ater Treatment Plant	05-Apr-12	12-Sep-12	138	.	12-Sep-12		-1	0				
	Treatment Plant Structural and Builder's Work	05-Apr-12	04-Jul-12	100	· · · · ·	05-Aug-12		-32	-32				
A23320	WWTP-Structural concreting works 2nd pour	05-Apr-12	04-May-12	40	· · ·	06-Jun-12		-33	-33				W
A23330	WWTP-Structural concreting works 3rd pour	05-May-12	04-Jun-12	30	07-Jun-12	06-Jul-12	0%	-32	-32	الم			3
A23400	WWTP-IC Reactor Erection	21-Apr-12	11-May-12	21	25-May-12	14-Jun-12	0%	-34	-34				
A24010	WWTP-Installation of roof waterproofing system	05-Jun-12	04-Jul-12	30	07-Jul-12	05-Aug-12	0%	-32	-32			L	-
WWTP-Plum	bing and Drainage	03-Jul-12	31-Aug-12	60	07-Jul-12	04-Sep-12		-4	-4				
A23610	WWTP-BS piping works(P&D) at WWTP 1st stage	03-Jul-12	01-Aug-12	30	07-Jul-12	05-Aug-12	0%	-4	-4				
A23620	WWTP-BS piping works(P&D) at WWTP 2nd stage	02-Aug-12	31-Aug-12	30	06-Aug-12	04-Sep-12	0%	-4	-4				
WWTP-Elect	rical	14-Jul-12	12-Sep-12	60	07-Jul-12	04-Sep-12		7	8				
A23630	WWTP-Cable laying works (Electrical) at WWTP 1st stage	14-Jul-12	13-Aug-12	30	07-Jul-12	05-Aug-12	0%	7	8				
A23640	WWTP-Cable laying works (Electrical) at WWTP 2nd stag	e 13-Aug-12	12-Sep-12	30	06-Aug-12	04-Sep-12	0%	7	8				
WWTP-Fire S		14-Jul-12	12-Sep-12	60		04-Sep-12		7	8				
A23660	WWTP-Piping works(Fire Services) at WWTP 1st stage	14-Jul-12	13-Aug-12	30	07-Jul-12	05-Aug-12	0%	7	8				
A23670	WWTP-Piping works(Fire Services) at WWTP 2nd stage	13-Aug-12	12-Sep-12	30	06-Aug-12	04-Sep-12	0%	7	8				
	essing Works	12-May-12	•	90	<u> </u>	12-Sep-12		-34	-34				
A23500	WWTP-Treatment Equipment Installation Works	12-May-12		90		12-Sep-12		-34	-34				
4A - Jetty		22-Dec-11	19-May-12	131		12-Sep-12	070	-118	-70				
	ural and Builder's Work	22-Dec-11		131	^	14-Sep-12 14-Sep-12		-118	-70		·		
A24108	4A-Temp Platform Erection Stage 1 (Mid)	22-Dec-11	19-1viay-12	23		29-May-12		-110	-70		•	4/	A-Tem
A24100 A24117						-	0%		-70			τ	
	4A-Temporary Platform Erection Stage 2 (RHS)			20	30-May-12								
A24118	4A -2600 Temporary Casing Erection (2 nos) and level of F	latform Formation at seawall		7	19-Jun-12	25-Jun-12	0%		-65				
A24119	4A-Temporary Platform Erection Stage 3 (LHS)			20	26-Jun-12	15-Jul-12	0%		-65				
A24120	4A-Construct upto 2 nos of Jetty Bored Piles	22-Dec-11	24-Feb-12	24	30-May-12	22-Jun-12	0%	-119	-70				
A24130	4A-Construct upto 6 nos of Jetty Bored Piles	25-Feb-12	25-Mar-12	28	23-Jun-12	20-Jul-12	0%	-117	-70				
A24140	4A-Construct upto 10 nos of Jetty Bored Piles	26-Mar-12	24-Apr-12	28	21-Jul-12	17-Aug-12	0%	-115	-70				
A24210	4A-Construct upto 14 nos of Jetty Bored Piles	25-Apr-12	19-May-12	28	18-Aug-12	14-Sep-12	0%	-118	-70				
Pipe Bridge	& Pipe Trench Works	21-Jan-12	25-Feb-12	115	25-May-12	16-Sep-12		-204	-72				
A24900	Pipe Bridge Between FAT and WWTP	27-Jan-12	25-Feb-12	30	07-Jul-12	05-Aug-12	0%	-162	-30				
A24910	Erection of steel pipe racks at Tank Farm 2A & GTWSR	27-Jan-12	25-Feb-12	30	18-Aug-12	16-Sep-12	0%	-204	-74				
A24920	Erection of pipe bridge between Tank Farm 2A and Tank F	arm 2B-2E 27-Jan-12	25-Feb-12	30	25-May-12*	23-Jun-12	0%	-119	-53				
A24930	Erection of steel pipe racks at Tank Farm 2B-2E	27-Jan-12	25-Feb-12	30	25-May-12*	23-Jun-12	0%	-119	11			<u> </u>	
A25000	Pipe Bridge Between PB and FP	21-Jan-12	23-Feb-12	34	24-Jun-12	27-Jul-12	0%	-155	-53				
External Wo	rks	26-Feb-12	03-Aug-12	210	28-Mar-12	23-Oct-12		-81	-81				
A25200	External Drainage Works. (Divided into 6 Areas)	26-Feb-12	03-Aug-12	210	· · · · ·	23-Oct-12	5%	-81	-81				
A25220	Storm water manhole works 2nd stage	06-Mar-12	05-Apr-12	31	25-May-12	24-Jun-12	0%	-80	-80				
A25220	Storm water manhole works 2rd stage	06-Apr-12	· ·	30	25-Jun-12	24-Jul-12	0%	-80	-80				
	_							-00				<u> </u>	
BL	 Milestone 	Proposed Bio-Diesel Plant	at T.K.O. Lot	t 39 Main	Contract for	All Remaini	ng Works		Da 11-May-1		Bi-weekly repo		Revisio
Actual V	Vork Vork Summary								25-May-		Bi-weekly repo		
Remaini	ing Work	3 1	Month Rol	ling Pro	ogramme							apaut	
	Remaining Work										l		
Critical F		e T .•			5 N	())							
Critical F	-	for Bi-	weekly Re	eport (2	5 May 201	12)							



tivity ID	Activity Name BL Start BL Finis		Activity Name	BL Finish	Current Duration	Current Start	Current Finish	% Complete	Delay from Initial	Total Float	May	2012		Δυα
A25240	Storm water manhole works 4th stage	06-Mav-12	04-Jun-12	30	25-Jul-12	23-Aug-12	0%	-80	-80	iviay	Jun		Aug	
A25250	Storm water manhole works 5th stage	05-Jun-12		30	24-Aug-12		0%	-80	-80		ī c			
A25270	Faul Water manhole and the pipe works between the manholes with the associated brand	26-Feb-12	26-Mar-12	57	20-Apr-12	15-Jun-12	1%	-81	-81		Faul Wa	er manhole and the pipe	works between th	
A25280	Faul Water manhole and the pipe works between the manholes with the associated brand	27-Mar-12	25-Apr-12	30	16-Jun-12	15-Jul-12	0%	-81	-81				r manhole and the	
A25290	Faul Water manhole and the pipe works between the manholes with the associated brand	26-Apr-12	25-May-12	30	16-Jul-12	14-Aug-12	0%	-81	-81				Fau	
A25300	Faul Water manhole and the pipe works between the manholes with the associated brand	26-May-12	24-Jun-12	30	15-Aug-12	13-Sep-12	0%	-81	-81	L		· · · · · · · · · · · · · · · · · · ·		
Works By	Other Contractors			260	01-Mar-12	15-Nov-12			-113					
Works By Bl	DI			260	01-Mar-12	15-Nov-12			-113					
BDI Prelimin	aries			140	01-Mar-12	18-Jul-12			-113			¦ 18-Jul-′	12, BDI Preliminar	
P3220	Procurement and Prefabrication of Pipes			140	01-Mar-12	18-Jul-12	56.35%		-113				ment and Prefabr	
BDI Process	ing Pipe Installation Works			120	19-Jul-12	15-Nov-12			-113	 				
P3230	BDI - PB Pipe installation works			120	19-Jul-12	15-Nov-12	0%		-113					

BL Milestone	Proposed Bio-Diesel Plant at T.K.O. Lot 39 Main Contract for All Remaining Works	Date	Revision	Checked	Approved
Actual Work Summary		11-May-12	Bi-weekly report update		
	3 Month Rolling Programme	25-May-12	Bi-weekly report update		
Remaining Work					
Critical Remaining Work		•			
Baseline Milestone	for Bi-weekly Report (25 May 2012)				