


ASB Biodiesel (Hong Kong) Limited

Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate

Monthly EM&A Report

April 2013

(Version 1.0)

Certified By 
(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.

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<i>From:</i>	Mr. Mark Cheung	<i>Ref:</i>	D1067/H01604
<i>Job No.</i>	D1067	<i>Total Pages:</i>	1

**Subject: Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate
Monthly EM&A Summary Report for April 2013**

Dear Madam,

We refer to your submission of the Monthly EM&A Report for April 2013 via email dated 8 May 2013.

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

Regards,



Mark Cheung
Independent Environmental Checker

KTC/gk

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	I
Introduction	i
Environmental Monitoring and Audit Works	i
Environmental Licenses and Permits	i
Key Information in the Reporting Month	ii
Future Key Issues	ii
1 INTRODUCTION	1
Background.....	1
Project Organizations	2
Construction Programme.....	3
Summary of EM&A Requirements	3
2 ENVIRONMENTAL AUDIT	4
Site Audits	4
Status of Environmental Licensing and Permitting.....	4
Status of Waste Management	4
Implementation Status of Environmental Mitigation Measures.....	4
Summary of Complaint and Prosecution.....	6
3 FUTURE KEY ISSUES	7
Key Issues for the Coming Month.....	7
Construction Program for the Next Months	7
4 CONCLUSIONS AND RECOMMENDATIONS	8
Conclusions	8
Recommendations	8

LIST OF TABLES

Table I	Summary Table for Key Information in the Reporting Month
Table 1.1	Key Project Contacts
Table 2.1	Summary of Environmental Licensing and Permit Status
Table 2.2	Observations and Recommendations of Site Audit

LIST OF FIGURE

Figure 1.1	Site Layout Plan
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LIST OF APPENDICES

Appendix A	Site Audit Summary
Appendix B	Updated Environmental Mitigation Implementation Schedule
Appendix C	Waste Generation in the Reporting Month
Appendix D	Complaint Log
Appendix E	Construction Programme

EXECUTIVE SUMMARY

Introduction

1. This is the 47th 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 April 2013.
2. The major site activities undertaken in the reporting month included:
 - General site cleaning and tidying.
 - Zone 1A Administration Building – Finishing work
 - Zone 1A Administration Building – Windows, louver and doors installation work
 - Zone 1B Fat Preparation Building – Windows, louver and doors installation work
 - Zone 1B Fat Preparation Building – Finishing work
 - Zone 1B Steam Boiler Room Building – Windows, louver and doors installation work
 - Zone 2A GTWSR – Equipment installation work
 - Zone 2B-2E Tank Farm – Steel tank fabrication work
 - Zone 2B-2E – LV switch room construction work
 - WWTP – Equipment installation work
 - Jetty – Pile cap and deck superstructure construction work
 - Jetty – Seawater Pump House construction work
 - Jetty – Seawater Pump Installation work
 - Pipe Bridge – Pipe Bridge Erection Work
 - Building Services – P&D work
 - Building Services – Fire Service work
 - Building Services – MVAC work
 - Building Services – Electrical work
 - External Works – Boundary wall construction work
 - External Works – Storm water drainage work
 - External Works – Foul water drainage work
 - External Works – Fresh water main installation work
 - External Works – Salt water main installation work
 - External Works – Fire Services pipe laying work
 - External Works – Draw Pit construction & Cable Ducts laying work
 - External Works – Pavement work

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 Permit (GW-RE0043-13), Wastewater Discharge License (WT00004508-2009), Notification of Works under APCO (337009) and Waste Discharge Account (7013917).

Key Information in the Reporting Month

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

Table I Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
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 March 2013	Submitted to EPD on 16 April 2013	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.
 - Zone 1A Administration Building – Finishing works
 - Zone 1B Steam Boiler Room – ABWF works excluding windows, louvers and doors
 - Tank Farm 2A – Pipe installation work
 - Tank Farm 2A – Bund wall finishing work
 - Tank Farm 2A GTWSR – Equipment and pipe installation works
 - Tank Farm 2A GTWSR – ABWF works excluding windows, louvers and doors
 - Tank Farm 2B-2E – Tank fabrication works
 - Tank Farm 2B-2E – Finishing works
 - Pipe Bridge – Pipe bridge erection work
 - Building Services – Fire services work
 - Building Services – MVAC work
 - Building Services – Electrical work
 - Building Services – P&D work
 - Building Services – Lift installation work
 - External – Boundary wall construction work
 - External Works – Storm water drainage work
 - External Works – Foul water drainage work
 - External Works – Plumbing laying work
 - External Works – Fire Services piping laying work
 - External Works – Draw Pit construction & Cable Ducts laying work
 - External Works – Pavement work

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 Environmental Permits (EP) No. EP-319/2009, EP-319/2009/A and EP-319/2009/B were issued on 11 March 2009, 7 April 2009 and 31 Jan 2013 respectively for Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate to ASB Biodiesel (Hong Kong) Limited as the Permit Holder. A VEP was submitted and the latest EP No. EP-319/2009/C was issued by EPD on 5 Mar 2013.
- 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 47th Monthly EM&A report summarizing the EM&A works for the Project in April 2013.

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
Cinotech	Environmental Team	Dr. HF Chan	ET Leader	2151 2088	3107 1388
		Ms. Ivy Tam	Project Coordinator	2151 2090	
		Ms. Betty Choi	Audit Team Leader	2151 2072	
Mannings	Independent Environmental Checker	Mr. Mark Cheung	Independent Environmental Checker	3168 2028	3168 2022
		Mr. Gavin Kwok	Assistant to Independent Environmental Checker	3168 2028	
AECOM	Project Manager	Mr. Matthew Lau	Construction Manager	9363 5586	N/A
CHEC	Contractor	Mr. Peter Chung	Project Manager	9471 2438	2623 9226
		Mr. Anson Wong	Safety and Environmental Officer	9656 3837	
		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 – Finishing work
- Zone 1A Administration Building – Windows, louver and doors installation work
- Zone 1B Fat Preparation Building – Windows, louver and doors installation work
- Zone 1B Fat Preparation Building – Finishing work
- Zone 1B Steam Boiler Room Building – Windows, louver and doors installation work
- Zone 2A GTWSR – Equipment installation work
- Zone 2B-2E Tank Farm – Steel tank fabrication work
- Zone 2B-2E – LV switch room construction work
- WWTP – Equipment installation work
- Jetty – Pile cap and deck superstructure construction work
- Jetty – Seawater Pump House construction work
- Jetty – Seawater Pump Installation work
- Pipe Bridge – Pipe Bridge Erection Work
- Building Services – P&D work
- Building Services – Fire Service work
- Building Services – MVAC work
- Building Services – Electrical work
- External Works – Boundary wall construction work
- External Works – Storm water drainage work
- External Works – Foul water drainage work
- External Works – Fresh water main installation work
- External Works – Salt water main installation work
- External Works – Fire Services pipe laying work
- External Works – Draw Pit construction & Cable Ducts laying work
- External Works – Pavement work

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 17th April 2013 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**.

Table 2.1 Summary of Environmental Licensing and Permit Status

Permit / License No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-319/2009/A	07/04/2009	N/A	Construction and operation of (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 trans-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 .	Valid
Registration of Chemical Waste Producer				
WPN-5113-839-C1186-15	12/06/2009	-	Spent Lubrication oil.	Valid
Construction Noise Permit (CNP)				
GW-RE0043-13	02/01/2013	20/07/2013	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 License				
WT00004508-2009	07/09/2009	-	Discharge of wastewater from construction site including wheel washing water and chemical precipitation tank	Valid
Billing Account for Disposal of Construction Waste				
A/C No.: 7013917	-	-	-	Valid
Notification of Works under APCO				
Ref. no.: 337009	26/10/2011	-	-	Valid

- 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**.

Table 2.2 Observations and Recommendations of Site Audit

Parameters	Date	Observations and Recommendations	Follow-up
N/A	17/04/2013	N/A	N/A

Summary of Complaint and Prosecution

- 2.7 No environmental related complaint, prosecution or notification of summons was received in the reporting month.
- 2.8 Since the Project commencement, there were a total of 5 project-related environmental complaints. No prosecution or notification of summons was 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.

Construction Program for the Next Months

3.2 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.
- Zone 1A Administration Building – Finishing works
- Zone 1B Steam Boiler Room – ABWF works excluding windows, louvers and doors
- Tank Farm 2A – Pipe installation work
- Tank Farm 2A – Bund wall finishing work
- Tank Farm 2A GTWSR – Equipment and pipe installation works
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- External Works – Pavement work

4 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

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

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.

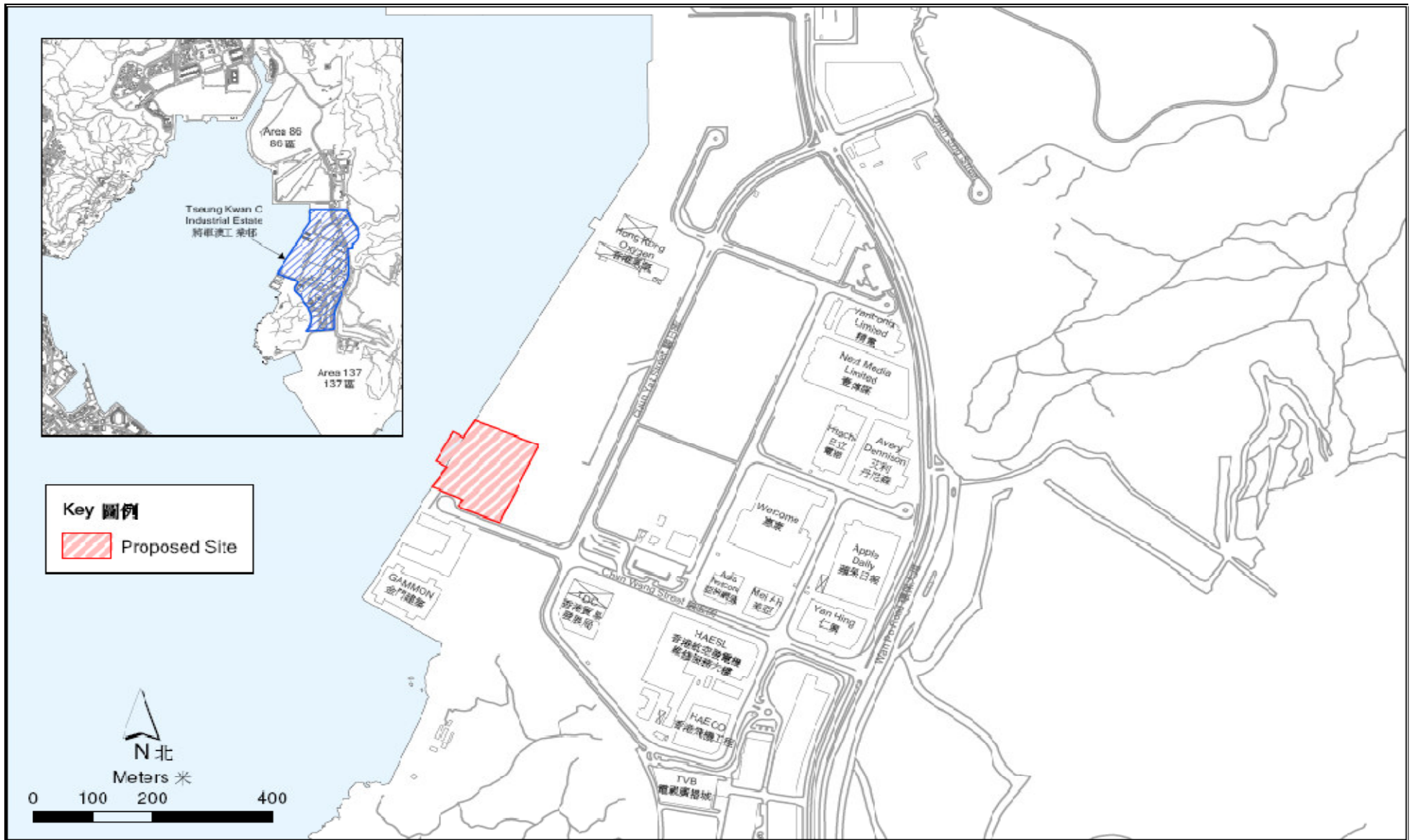
Noise Impact


- 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



Key 圖例
 Proposed Site

Title	Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate		Scale	N.T.S	Project No.	MA9021	CINOTECH
	Site Layout Plan		Date	Jun-09	Figure	1.1	

**APPENDIX A
SITE AUDIT SUMMARY**

Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate


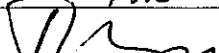
Monthly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	130417
Date	17 April 2013 (Wednesday)
Time	17:00 – 17:15

Ref. No.	Non-Compliance	Related Item No.
-	None	-

Ref. No.	Remarks/Observations	Related Item No.
	<p>A. Water Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>B. Air Quality</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>C. Noise</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>D. Waste / Chemical Management</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>E. Permit / Licenses</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>F. Reminders</p> <ul style="list-style-type: none"> No environmental deficiency was identified during site inspection. <p>G. Others</p> <ul style="list-style-type: none"> Follow-up on previous audit section (Ref. No.:130320): All environmental deficiencies were improve/rectified in this site inspection. 	

	Name	Signature	Date
Recorded by	Betty Choi		17 April 2013
Checked by	Dr. HF Chan		17 April 2013

**APPENDIX B
UPDATED ENVIRONMENTAL
MITIGATION IMPLEMENTATION
SCHEDULE**

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

Types of Impacts	Mitigation Measures	Status
Construction Dust	<ul style="list-style-type: none"> • 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. 	<p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>
Construction Noise	<ul style="list-style-type: none"> • 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. 	<p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>

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;
 # Non-compliance but rectified/improved by the contractor and awaiting IEC's further comment.

Types of Impacts	Mitigation Measures	Status
Water Quality	<p><u>Piling Activities</u></p> <ul style="list-style-type: none"> 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. 	^
	<p><u>Construction Site Run-off and Drainage</u></p> <ul style="list-style-type: none"> 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. 	^ ^ ^ ^
	<p><u>General Construction Activities</u></p> <ul style="list-style-type: none"> 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;
Non-compliance but rectified/improved by the contractor and awaiting IEC's further comment.

Types of Impacts	Mitigation Measures	Status
	<p data-bbox="394 225 902 256"><u>Sewage generated from On-site Workforce</u></p> <ul data-bbox="443 296 1977 427" style="list-style-type: none"> <li data-bbox="443 296 1977 360">• 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. <li data-bbox="443 363 1977 427">• 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. 	<p data-bbox="2056 296 2078 312">^</p> <p data-bbox="2056 363 2078 379">^</p>
<p data-bbox="215 488 315 520">Ecology</p>	<ul data-bbox="443 472 1977 563" style="list-style-type: none"> <li data-bbox="443 472 1977 563">• 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. 	<p data-bbox="2056 488 2078 504">^</p>

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;
Non-compliance but rectified/improved by the contractor and awaiting IEC's further comment.

**APPENDIX C
WASTE GENERATION IN THE
REPORTING MONTH**

**APPENDIX D
COMPLAINT LOG**

APPENDIX D – COMPLAINT LOG

Reporting Month: April 2013

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
COM-2012-08-001	Jetty Area	28-08-2012	A resident in Lohas Park complained about noise nuisance from the site.	Investigation by EPD identified the source to be chiselling work at the jetty area. Although the chisel machines were covered by valid CNP, the Contractor decided to suspend the corresponding work during restricted hours. The machine was later covered by sound proof canvas to minimize noise transmission. Subsequent inspection and noise measurement by the EPD on 3 rd September 2012 concluded that the noise reduction measure was effective and acceptable at Lohas Park.	Closed
COM-2012-09-002	Jetty Area	07-09-2012	A resident in Lohas Park complained about noise nuisance from the site.	Investigation by EPD identified the source to be chiselling work at the jetty area. Only one chisel machine was operated on the day of complain and it was screened by sound proof canvas. Although the machine was covered by valid CNP, the Contractor decided to suspend the corresponding work during restricted hours during investigation period. Subsequent inspection and noise measurement (daytime at site, night time at Lohas Park) by the EPD on 12 th September 2012 concluded that the noise levels were acceptable at Lohas Park.	Closed
COM-2012-09-003	Jetty Area	27-09-2012	A resident in Lohas Park complained about noise nuisance from the site.	The chisel machine used at JP3 of the jetty area was identified as the noise source. According to the Contractor, the machine was screened by sound proof canvas. Although the machine was covered by valid CNP, the Contractor decided to carry out the corresponding work during normal operation hours only. This was agreed with the complainant in Lohas Park.	Closed
COM-2012-09-004	Not Specified	04-10-2012	A resident in Lohas Park complained about noise nuisance from the site at	According to the Contractor, According to the Contractor, only one drilling machine and chiselling machine were in use, which were covered by valid CNP. We advised the Contractor to communicate with the residents in Lohas	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			11:18pm.	Park given consistent noise complains. The Contractor explained to the complainant that chiselling work will stop at 11pm every day and start after 10am during weekends to minimize noise nuisance. Further in November, a noise enclosure was erected to cover the noisy part of the chiselling machine.	
Com-2012-11-005	Jetty Area	23-11-2012	A resident in Lohas Park complained about noise nuisance from the site at around 3:00 am	The chisel machine used of the jetty area was identified as the noise source. According to the Contractor, the machine was screened by enclosure. Although the machine was covered by valid CNP, the Contractor decided to carry out the corresponding work during 7:00 – 23:00. Contractor explained to the complainant that the bored piling will be completed in early December.	Closed

Remarks: N/A

APPENDIX E
CONSTRUCTION PROGRAMME

Activity ID	Activity Name	Current Start	Current Finish	Current Duration	BL Start	BL Finish	% Complete	Delay from Initial	Total Float	2013			
										Apr	May	Jun	Jul
C270MC-3M-Rolling Programme Ver.2.0 (260413)		06-Apr-13 A	12-Sep-13	160	03-Jan-12	07-Feb-13		-217	270				
Key Dates		24-Jul-13	25-Jul-13	0	12-Dec-12	12-Dec-12		-224	-46				
Contract Period		24-Jul-13	24-Jul-13	0	12-Dec-12	12-Dec-12		-224	-224				
A15900	Date of Completion of the Works		24-Jul-13*	0		12-Dec-12	0%	-224	-224				
Maintenance Period		25-Jul-13	25-Jul-13	0					-46				
A16490	Commencement of Maintenance Period	25-Jul-13		0			0%		-46				
Milestones		26-Apr-13 A	30-Jun-13	65	04-Jan-12	10-Jan-13		-170	0	30-Jun-13, Milestones			
Remaining Construction Works		06-Apr-13 A	09-Aug-13	126	03-Jan-12	12-Dec-12		-240	303				
1B - Process Building		06-Apr-13 A	24-Jul-13	110	03-Jan-12	30-Sep-12		-297	-143	24-			
PB-Plumbing and Drainage		06-Apr-13 A	09-May-13	34	03-Jun-12	30-Sep-12		-221	-178	09-May-13, PB-Plumbing and Drainage			
A18025	PB-Installation of sanitary fittings	06-Apr-13 A	02-May-13	27	03-Jun-12	01-Aug-12	88.33%	-274	-183	PB-Installation of sanitary fittings			
A18300	PB-BS Plumbing and Drainage Testing	03-May-13	09-May-13	7	02-Aug-12	30-Sep-12	0%	-221	-178	PB-BS Plumbing and Drainage Testing			
PB-Electrical		15-May-13	21-May-13	7	05-Jul-12	02-Sep-12		-261	-79	21-May-13, PB-Electrical			
A18055	PB-BS Electrical Testing	15-May-13	21-May-13	7	05-Jul-12	02-Sep-12	0%	-261	-79	PB-BS Electrical Testing			
PB-MVAC		15-May-13	21-May-13	7	05-Jul-12	02-Sep-12		-261	-79	21-May-13, PB-MVAC			
A18065	PB BS MVAC Testing	15-May-13	21-May-13	7	05-Jul-12	02-Sep-12	0%	-261	-79	PB BS MVAC Testing			
PB-Processing Works		26-Apr-13	24-Jul-13	90	03-Jan-12	26-Jun-12		-393	-236	24-			
A17900	PB-BDI Pipe insulation, Process Electrical & Instrumentation Works	26-Apr-13	24-Jul-13	90	03-Jan-12	26-Jun-12	0%	-393	-236	26-Jun-13, 1B - Fat Prepar			
1B - Fat Preparation Building		26-Apr-13	26-Jun-13	62	13-Apr-12	10-Sep-12		-289	211	21-May-13, FP-Plumbing and Drainage			
FP-Plumbing and Drainage		26-Apr-13	21-May-13	26	02-Aug-12	10-Sep-12		-253	-190	21-May-13, FP-Plumbing and Drainage			
A19055	FP-Installation of sanitary fittings	26-Apr-13	01-May-13	6	02-Aug-12	31-Aug-12	0%	-243	-180	FP-Installation of sanitary fittings			
A19200	FP-BS Plumbing and Drainage Testing	15-May-13	21-May-13	7	02-Aug-12	10-Sep-12	0%	-253	-190	FP-BS Plumbing and Drainage Testing			
FP-Electrical		15-May-13	21-May-13	7	02-Aug-12	10-Sep-12		-253	-51	21-May-13, FP-Electrical			
A19090	FP-BS Electrical Testing	15-May-13	21-May-13	7	02-Aug-12	10-Sep-12	0%	-253	-51	FP-BS Electrical Testing			
FP-Fire Services		15-May-13	21-May-13	7	02-Aug-12	10-Sep-12		-253	-51	21-May-13, FP-Fire Services			
A19300	FP-Fire Service Testing	15-May-13	21-May-13	7	02-Aug-12	10-Sep-12	0%	-253	-51	FP-Fire Service Testing			
FP-Processing Works		02-May-13	26-Jun-13	56	13-Apr-12	07-Jun-12		-384	211	26-Jun-13, FP-Processing W			
A18900	FP-BDI Pipe insulation, Process Electrical & Instrumentation Works	02-May-13	26-Jun-13	56	13-Apr-12	07-Jun-12	0%	-384	211	24-Jun-13, 1B - Boiler Room			
1B - Boiler Room		26-Apr-13	24-Jun-13	60	08-Apr-12	30-Sep-12		-267	349	07-Jun-13, BR-Plumbing and Drainage			
BR-Plumbing and Drainage		25-May-13	07-Jun-13	14	02-Aug-12	31-Aug-12		-280	-207	07-Jun-13, BR-Plumbing and Drainage			
A20055	BR-Installation of sanitary fittings	25-May-13	31-May-13	7	02-Aug-12	31-Aug-12	0%	-273	-207	BR-Installation of sanitary fittings			
A20200	BR-BS Plumbing and Drainage Testing	01-Jun-13	07-Jun-13	7	02-Aug-12	22-Aug-12	0%	-289	-207	BR-BS Plumbing and Drainage Testing			
BR-Electrical		26-Apr-13	21-May-13	26	03-Jun-12	31-Aug-12		-263	-51	21-May-13, BR-Electrical			
A20030	BR-BS Cable laying works(Electrical) 1st stage	26-Apr-13	02-May-13	7	03-Jun-12	02-Jul-12	0%	-304	-201	BR-BS Cable laying works(Electrical) 1st stage			
A20040	BR-BS Cable laying works(Electrical) 2nd stage	03-May-13	09-May-13	7	03-Jul-12	01-Aug-12	0%	-281	-201	BR-BS Cable laying works(Electrical) 2nd stage			
A20050	BR-Lighting installation works	03-May-13	09-May-13	7	02-Aug-12	31-Aug-12	0%	-251	-201	BR-Lighting installation works			
A20061	BR-BS Final connection works(Electrical)	05-May-13	11-May-13	7			0%		-201	BR-BS Final connection works(Electrical)			
A20090	BR-BS Electrical Testing	15-May-13	21-May-13	7	02-Aug-12	22-Aug-12	0%	-272	-51	BR-BS Electrical Testing			
BR-Fire Services		26-Apr-13	04-Jun-13	40	03-Jul-12	30-Sep-12		-247	-65	04-Jun-13, BR-Fire Services			
A20080	BR-BS Detector installation works(Fire Services)	26-Apr-13	02-May-13	7	03-Jul-12	01-Aug-12	0%	-274	-122	BR-BS Detector installation works(Fire Services)			
A20100	BR-BS Cable laying works (Fire Services)	23-May-13	25-May-13	3			0%		-65	BR-BS Cable laying works (Fire Services)			
A20150	BR-BS Final connection works (Fire Services)	26-May-13	28-May-13	3			0%		-65	BR-BS Final connection works (Fire Services)			
A20300	BR-Fire Service Testing	29-May-13	04-Jun-13	7	02-Aug-12	30-Sep-12	0%	-247	-65	BR-Fire Service Testing			
BR-Processing Works		30-Apr-13	24-Jun-13	56	08-Apr-12	03-Jun-12		-387	349	24-Jun-13, BR-Processing W			
A19700	BR-BDI Pipe insulation, Process Electrical & Instrumentation Works	30-Apr-13	24-Jun-13	56	08-Apr-12	03-Jun-12	0%	-387	349	BR-BDI Pipe insulation, Proc			
2A - Tank Farm		17-Apr-13 A	09-Aug-13	115	26-Jun-12	30-Oct-12		-283	-131				

BL
 Actual Work
 Remaining Work
 Critical Remaining Work
 Baseline Milestone

Milestone
 Summary

Proposed Bio-Diesel Plant at T.K.O. Lot 39 Main Contract for All Remaining Works

3 Month Rolling Programme

for EM&A Report (26 Apr 2013)

Date	Revision	Checked	Approved
26-Apr-13	3 Month Rolling Programme		

Activity ID	Activity Name	Current Start	Current Finish	Current Duration	BL Start	BL Finish	% Complete	Delay from Initial	Total Float	2013				
										Apr	May	Jun	Jul	
Tank Farm 2A Structural and Builder's Work														
A21100	2A-ABWF works in Tank Farm 2A	26-Apr-13	25-May-13	30	01-Oct-12	30-Oct-12	0%	-207	-237					25-May-13, Tank Farm 2A Structural and Builder's Work
2A-Electrical														
A20840	2A-BS Cable laying works stage 2 (Electrical)	10-May-13	23-May-13	14	13-Aug-12	27-Sep-12	0%	-238	-53					23-May-13, 2A-Electrical
A20870	2A-BS Electrical Testing	17-May-13	23-May-13	7	14-Sep-12	27-Sep-12	0%	-238	-53					2A-BS Cable laying works stage 2 (Electrical)
2A-Fire Services														
A20880	2A-BS Cable laying works(Fire Services)	17-Apr-13 A	12-May-13	26			66.67%		-66					05-Jun-13, 2A-Fire Services
A20890	2A-BS Final connection works(Fire Services)	13-May-13	22-May-13	10			0%		-66					2A-BS Cable laying works(Fire Services)
A21000	2A-Fire Service Testing (excluding FSD Inspection)	23-May-13	05-Jun-13	14	14-Sep-12	04-Oct-12	0%	-244	-66					2A-BS Final connection works(Fire Services)
2A-Processing Works														
A20700	2A-BDI Pipe insulation, Process Electrical & Instrumentation Works	07-May-13	09-Aug-13	94	26-Jun-12	28-Sep-12	0%	-315	-162					2A-Fire Service Testing (excluding FSD Inspection)
2A - GTW Separation Room														
GTWSR-Plumbing and Drainage														
A21910	GTWSR-BS Piping works(Plumbing)	26-Apr-13	09-Jun-13	45	19-May-12	10-Jun-12	0%	-364	-223					23-Jun-13, 2A - GTW Separation Room
A22200	GTWSR-BS Plumbing and Drainage Testing	10-Jun-13	23-Jun-13	14	05-Jul-12	18-Jul-12	0%	-340	-223					23-Jun-13, GTWSR-Plumbing and Drainage
GTWSR-Electrical														
A21940	GTWSR-BS Cable exposed conduits laying works(Electrical)	26-Apr-13	02-May-13	7	08-Jun-12	30-Jun-12	0%	-307	-216					21-May-13, GTWSR-Electrical
A21950	GTWSR-Lighting installation works	28-Apr-13	04-May-13	7	30-Jun-12	30-Jul-12	0%	-279	-216					GTWSR-BS Cable exposed conduits laying works(Electrical)
A21951	GTWSR-BS Final connection works	30-Apr-13	06-May-13	7			0%		-196					GTWSR-Lighting installation works
A21980	GTWSR-BS Electrical Testing	15-May-13	21-May-13	7	30-Jul-12	13-Aug-12	0%	-282	-51					GTWSR-BS Final connection works
GTWSR-Fire Services														
A21960	GTWSR-BS Piping installation works(Fire Services)	18-Apr-13 A	30-Apr-13	13	16-May-12	08-Jun-12	80%	-326	-169					GTWSR-BS Electrical Testing
A22020	GTWSR-BS Final connection	26-Apr-13	09-May-13	14			0%		-53					28-May-13, GTWSR-Fire Services
A22300	GTWSR-Fire Service Testing	15-May-13	28-May-13	14	05-Jul-12	18-Jul-12	0%	-314	-58					GTWSR-BS Piping installation works(Fire Services)
GTWSR-Processing Works														
A21800	GTWSR-BDI Piping, Electrical, Insulation & Instrumentation Works	26-Apr-13	09-Jun-13	45	04-Oct-12	18-Nov-12	0%	-204	228					GTWSR-BS Final connection
2B-E Tank Farm														
Tank Farm 2B-2E-Electrical														
A22840	2BE-BS Cable exposed conduits laying works(Electrical)	26-Apr-13	16-May-13	21	02-Aug-12	02-Sep-12	0%	-256	-204					09-Jun-13, GTWSR-Processing Works
A22841	2BE-BS Final connection works(Electrical)	10-May-13	23-May-13	14			0%		-84					23-Jun-13, Tank Farm 2B-2E-Electrical
A22870	2BE-BS Electrical Testing	24-May-13	23-Jun-13	31	03-Sep-12	03-Oct-12	0%	-263	-84					2BE-BS Cable exposed conduits laying works(Electrical)
Tank Farm 2B-2E-Fire Services														
A22880	2BE-BS Cable laying works(Fire Services)	26-Apr-13	27-May-13	32			0%		-110					2BE-BS Final connection works(Electrical)
A22890	2BE-BS Final connection works(Fire Services)	28-May-13	17-Jun-13	21			0%		-110					2BE-BS Electrical Testing
A23000	2BE-Fire Service Testing	18-Jun-13	19-Jul-13	32	03-Sep-12	15-Oct-12	0%	-277	-110					2BE-BS Cable laying works(Fire Services)
Tank Farm 2B-2E-Processing Works														
A22700	2BE-BDI Pipe Insulation, Process Electrical & Instrumentation Works	26-Apr-13	27-Jun-13	63	10-Aug-12	11-Oct-12	0%	-259	-119					2BE-BS Final connection works(Fire Services)
3 - Waste Water Treatment Plant														
WWTP-Plumbing and Drainage														
A23655	WWTP-BS Installation of sanitary fittings	15-Apr-13 A	21-May-13	37	01-Sep-12	22-Sep-12	50%	-241	-211					19-Jul-13, Tank Farm 2B-2E-Processing Works
A23800	WWTP-BS Plumbing and Drainage Testing	22-May-13	11-Jun-13	21	01-Sep-12	30-Sep-12	0%	-254	-211					2BE-BDI Pipe Insulation, Process Electrical & Instrumentation Works
WWTP-Electrical														
A23680	WWTP-BS Electrical Testing	15-May-13	05-Jun-13	22	12-Sep-12	04-Oct-12	0%	-245	-66					21-Jun-13, 3 - Waste Water Treatment Plant
WWTP-Fire Services														
A23900	WWTP-Fire Service Testing	20-May-13	21-Jun-13	33	12-Sep-12	12-Oct-12	0%	-253	-82					11-Jun-13, WWTP-Plumbing and Drainage
WWTP-Processing Works														
A23700	WWTP-Treatment Installation Testing	15-May-13	14-Jun-13	30	10-Aug-12	08-Sep-12	0%	-279	-196					WWTP-BS Installation of sanitary fittings

— BL
█ Actual Work
█ Remaining Work
█ Critical Remaining Work
◊ Baseline Milestone
◆ Milestone
→ Summary

Proposed Bio-Diesel Plant at T.K.O. Lot 39 Main Contract for All Remaining Works
3 Month Rolling Programme
for EM&A Report (26 Apr 2013)

Date	Revision	Checked	Approved
26-Apr-13	3 Month Rolling Programme		

Activity ID	Activity Name	Current Start	Current Finish	Current Duration	BL Start	BL Finish	% Complete	Delay from Initial	Total Float	2013			
										Apr	May	Jun	Jul
4A - Jetty													
Jetty Structural and Builder's Work		10-Apr-13 A	23-Jun-13	75	15-Sep-12	19-Nov-12		-216	-115	23-Jun-13, 4A - Jetty			
Jetty Structural and Builder's Work		15-Apr-13 A	31-May-13	47	15-Sep-12	29-Oct-12		-214	-106	31-May-13, Jetty Structural and Builder's Work			
A24500	4A-Jetty Furniture, Lighting Works	15-Apr-13 A	31-May-13	47	15-Sep-12	29-Oct-12	20%	-214	-106	4A-Jetty Furniture, Lighting Works			
Jetty-Plumbing and Drainage		26-Apr-13	09-Jun-13	45	15-Sep-12	29-Oct-12		-223	-209	09-Jun-13, Jetty-Plumbing and Drainage			
A24510	4A-BS Piping works(Plumbing)	26-Apr-13	09-Jun-13	45	15-Sep-12	29-Oct-12	0%	-223	-209	4A-BS Piping works(Plumbing)			
A24540	4A-BS Piping works(Drainage)	26-Apr-13	09-Jun-13	45			0%		-209	4A-BS Piping works(Drainage)			
Jetty-Electrical		26-Apr-13	28-May-13	33					-103	28-May-13, Jetty-Electrical			
A24550	4A-BS Cable exposed conduits laying works(Electrical)	26-Apr-13	25-May-13	30			0%		-103	4A-BS Cable exposed conduits laying works(Electrical)			
A24560	4A-BS Final connection works(Electrical)	20-May-13	28-May-13	9			0%		-103	4A-BS Final connection works(Electrical)			
Jetty-Fire Services		10-Apr-13 A	23-Jun-13	75	15-Sep-12	19-Nov-12		-216	-115	23-Jun-13, Jetty-Fire Services			
A24530	4A-BS Piping installation works(Fire Services)	10-Apr-13 A	02-May-13	23	15-Sep-12	29-Oct-12	76.67%	-185	-171	4A-BS Piping installation works(Fire Services)			
A24570	4A-BS Sprinkler installation works(Fire Services)	26-Apr-13	28-Apr-13	3			0%		-76	4A-BS Sprinkler installation works(Fire Services)			
A24580	4A-BS Cable laying works(Fire Services)	29-Apr-13	05-May-13	7			0%		-80	4A-BS Cable laying works(Fire Services)			
A24590	4A-BS Final connection works(Fire Services)	06-May-13	12-May-13	7			0%		-80	4A-BS Final connection works(Fire Services)			
A24600	4A-Jetty E&M and FS testing	10-Jun-13	23-Jun-13	14	30-Oct-12	19-Nov-12	0%	-216	-115	4A-Jetty E&M and FS testing			
Pipe Bridge & Pipe Trench Works		26-Apr-13	04-Jun-13	40	21-Jan-12	03-Aug-12		-305	-186	04-Jun-13, Pipe Bridge & Pipe Trench Works			
A25000	Pipe Bridge Between PB and FP (PB3,4)	26-Apr-13	25-May-13	30	21-Jan-12	23-Feb-12	0%	-457	-176	Pipe Bridge Between PB and FP (PB3,4)			
A25100	Pipe Trench from WWTP to Jetty	06-May-13	04-Jun-13	30	05-Jun-12	03-Aug-12	0%	-305	-186	Pipe Trench from WWTP to Jetty			
External Works		15-Apr-13 A	19-Jul-13	96	05-Jul-12	12-Dec-12		-219	-141	19-Jul-13, External Works			
External Drainage Works		17-Apr-13 A	04-Jun-13	49	05-Jul-12	03-Aug-12		-305	-186	04-Jun-13, External Drainage Works			
Storm water manhole and pipe works		17-Apr-13 A	04-Jun-13	49	05-Jul-12	03-Aug-12		-305	-186	04-Jun-13, Storm water manhole and pipe works			
A25260	Storm water manhole works 6th stage	17-Apr-13 A	04-Jun-13	49	05-Jul-12	03-Aug-12	20%	-305	-186	Storm water manhole works 6th stage			
External Pumping Works		26-Apr-13	24-Jun-13	60					-224	24-Jun-13, External Pumping Works			
Salt water main installation works		26-Apr-13	24-Jun-13	60					-224	24-Jun-13, Salt water main installation works			
A25590	Installation of external salt watermain 6th stage	26-Apr-13	24-Jun-13	60			0%		-224	Installation of external salt watermain 6th stage			
Fresh water main installation works		26-Apr-13	24-Jun-13	60					-224	24-Jun-13, Fresh water main installation works			
A25560	Installation of external fresh watermain 6th stage	26-Apr-13	24-Jun-13	60			0%		-224	Installation of external fresh watermain 6th stage			
Fire Services Works		26-Apr-13	24-Jun-13	60					-224	24-Jun-13, Fire Services Works			
A25490	External - Fire Services pipe works 6th Stage	26-Apr-13	24-Jun-13	60			0%		-224	External - Fire Services pipe works 6th Stage			
External Service Cable Works		26-Apr-13	24-Jun-13	60					-141	24-Jun-13, External Service Cable Works			
A25730	External cable duct and draw pits installation works 6th stage	26-Apr-13	24-Jun-13	60			0%		-141	External cable duct and draw pits installation works 6th stage			
Road Works		15-Apr-13 A	19-Jul-13	96					-141	19-Jul-13, Road Works			
A25660	Road Works with associated surface channels and catch pits 6th stage	15-Apr-13 A	19-Jul-13	96			20%		-141	Road Works with associated surface channels and catch pits 6th stage			
Boundary Wall Construction Works		26-Apr-13	24-Jun-13	60	04-Nov-12	12-Dec-12		-194	-297	24-Jun-13, Boundary Wall Construction Works			
A25530	Boundary Wall-ABWF works	26-Apr-13	24-Jun-13	60	04-Nov-12	12-Dec-12	0%	-194	-297	Boundary Wall-ABWF works			
Water Supply Works		25-Jun-13	24-Jul-13	30	17-Sep-12	16-Oct-12		-281	-224	24-Jul-13, Water Supply Works			
A25800	WSD inspection and installation of portable watermeter (WWO46)	25-Jun-13	24-Jul-13	30	17-Sep-12	16-Oct-12	0%	-281	-224	WSD inspection and installation of portable watermeter (WWO46)			
A25810	WSD inspection and installation of FS watermeter (WWO46)	25-Jun-13	24-Jul-13	30			0%		-224	WSD inspection and installation of FS watermeter (WWO46)			
Works for CLP Energization		03-May-13	28-May-13	26	02-Aug-12	31-Aug-12		-270	-93	28-May-13, Works for CLP Energization			
A17615	AB-Energization of Main Switch Board	15-May-13		0			0%		-204	AB-Energization of Main Switch Board			
A18075	PB-BS Electrical Energization to Sub-main		15-May-13	0			0%		-79	PB-BS Electrical Energization to Sub-main			
A19100	FP-BS Electrical Energization to Sub-main		15-May-13	0			0%		-190	FP-BS Electrical Energization to Sub-main			
A20060	BR-BS installation of switch board and cable termination works in Switch	03-May-13	09-May-13	7	02-Aug-12	31-Aug-12	0%	-251	-201	BR-BS installation of switch board and cable termination works in Switch			
A20160	BR-BS Electrical Energization to Sub-main		15-May-13	0			0%		-190	BR-BS Electrical Energization to Sub-main			
A20910	2A-BS Electrical Energization to Sub-main		15-May-13	0			0%		-187	2A-BS Electrical Energization to Sub-main			
A21990	GTWSR-BS Electrical Energization to Sub-main		15-May-13	0			0%		-197	GTWSR-BS Electrical Energization to Sub-main			
A22910	2BE-BS Electrical Energization to Sub-main		15-May-13	0			0%		-196	2BE-BS Electrical Energization to Sub-main			

— BL
█ Actual Work
█ Remaining Work
█ Critical Remaining Work
◊ Milestone
→ Summary
◊ Baseline Milestone








Proposed Bio-Diesel Plant at T.K.O. Lot 39 Main Contract for All Remaining Works

3 Month Rolling Programme

for EM&A Report (26 Apr 2013)

Date	Revision	Checked	Approved
26-Apr-13	3 Month Rolling Programme		

Activity ID	Activity Name	Current Start	Current Finish	Current Duration	BL Start	BL Finish	% Complete	Delay from Initial	Total Float	2013			
										Apr	May	Jun	Jul
A23740	WWTP-BS Electrical Energization to Sub-main		15-May-13	0			0%		-204				
A24610	4A-BS Electrical Energization to Sub-main		28-May-13	0			0%		-103				
Maintenance Period		20-Jul-13	16-Aug-13	28	13-Dec-12	06-Feb-13		-191	195				
FS & OP Inspection		20-Jul-13	16-Aug-13	28	13-Dec-12	06-Feb-13		-191	195				
A25900	Notification to FSD	20-Jul-13	16-Aug-13	28	13-Dec-12	09-Jan-13	0%	-219	-108				
A26000	Notification for OP Inspection	20-Jul-13	16-Aug-13	28	10-Jan-13	06-Feb-13	0%	-191	195				
Works By Other Contractors		26-May-13	12-Sep-13	110	03-Jul-12	07-Feb-13		-217	270				
Works By BDI		26-May-13	12-Sep-13	110	03-Jul-12	07-Feb-13		-217	270				
BDI Processing Pipe Installation Works		26-May-13	23-Aug-13	90	10-Dec-12	07-Feb-13		-197	153				
P3280	BDI - Pipe Bridges Pipe installation works	26-May-13	23-Aug-13	90	10-Dec-12	07-Feb-13	0%	-197	153				
BDI Testing and Commissioning		14-Jun-13	12-Sep-13	90	03-Jul-12	01-Aug-12		-407	270				
A22100	GTWSR-Testing for Ventilation System (odour test)	24-Jun-13	23-Jul-13	30	03-Jul-12	01-Aug-12	0%	-356	218				
A23710	WWTP-Testing and Commissioning	14-Jun-13	12-Sep-13	90			0%		270				

-  BL
-  Actual Work
-  Remaining Work
-  Critical Remaining Work
-  Baseline Milestone
-  Milestone
-  Summary

Proposed Bio-Diesel Plant at T.K.O. Lot 39 Main Contract for All Remaining Works

**3 Month Rolling Programme
for EM&A Report (26 Apr 2013)**

Date	Revision	Checked	Approved
26-Apr-13	3 Month Rolling Programme		