# ASB Biodiesel (Hong Kong) Limited

# Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate

Monthly EM&A Report June 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.

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

# CINOTECH CONSULTANTS LTD

Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong Tel: (852) 2151 2083 Fax: (852) 3107 1388 Email: info@cinotech.com.hk



Address: 5/F, Winning Commercial Building, 46-48 Hillwood Road, Tsim Sha Tsui, Kowloon Tel: 852 - 3168 2028 Fax: 852 - 3168 2022

Subject:	Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate Monthly EM&A Summary Report for June 2013		
Job No.	D1067	Total Pages:	1
From:	Mr. Mark Cheung	Ref:	D1067/H02488
Attn:	Ms. Ivy Tam / Ms. Betty Choi	<i>Fax:</i>	3107 1388
To:	Cinotech	Date:	12 July 2013

Dear Madam,

We refer to your submission of the Monthly EM&A Report for June 2013 via email dated 12 July 2013.

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

Regards,

Mark Cheung

Independent Environmental Checker

KTC/gk

# **ASB Biodiesel (Hong Kong) Limited**

# Development of a Biodiesel Plant at **Tseung Kwan O Industrial Estate**

Monthly EM&A Report June 2013 (Version 1.0)

**DRAFT** 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.

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

# CINOTECH CONSULTANTS LTD

Room 1710, Technology Park, 18 On Lai Street, Shatin, NT, Hong Kong Tel: (852) 2151 2083 Fax: (852) 3107 1388

Email: info@cinotech.com.hk

# TABLE OF CONTENTS

	Pag
EXECUTIV	E SUMMARY
Introduction .	
	al Monitoring and Audit Works
	al Licenses and Permits
	tion in the Reporting Month
-	ssuesi
1 INTRO	DUCTION
Background.	
Project Organ	nizations
Construction	Programme
Summary of	EM&A Requirements
2 ENVIR	ONMENTAL AUDIT
	rironmental Licensing and Permitting
	ste Management
	on Status of Environmental Mitigation Measures
•	Complaint and Prosecution
3 FUTUR	RE KEY ISSUES
Key Issues fo	or the Coming Month
	Program for the Next Months
4 CONCI	LUSIONS AND RECOMMENDATIONS
Conclusions .	
	ations
LIST OF TA	ABLES
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 FI	GURE
Figure 1.1	Site Layout Plan
LIST OF AF	PPENDICES
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 49<sup>th</sup> 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 June 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
  - WWTP Equipment installation 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-RE0709-13), 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**.

i

**Table I** Summary Table for Key Information in the Reporting Month

Event	Ev	ent Details	Action Taken	Status	Remark	
Event	Number	Nature	Action Taken	Status	Kemark	
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	2	Monthly EM&A Report for May 2013, Quarterly EM&A Report for Mar- May 2013	Submitted to EPD on 17 Jun 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.
  - Tank Farm 2A Pipe installation work
  - Tank Farm 2A GTWSR Equipment and pipe installation works
  - Building Services Fire services work
  - Building Services MVAC work
  - Building Services Electrical work
  - Building Services P&D 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 49<sup>th</sup> Monthly EM&A report summarizing the EM&A works for the Project in June 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
		Dr. HF Chan	ET Leader	2151 2088	
Cinotech	Environment al Team	Ms. Ivy Tam	Project Coordinator	2151 2090	3107 1388
		Ms. Betty Choi	Audit Team Leader	2151 2072	
	Independent Environment al Checker	Mr. Mark Cheung	Independent Environmental Checker	3168 2028	
Mannings		Mr. Gavin Kwok	Assistant to Independent Environmental Checker	3168 2028	3168 2022
AECOM	Project Manager	Mr. Matthew Lau	Construction Manager	9363 5586	N/A
		Mr. Peter Chung	Project Manager	9471 2438	
СНЕС	Contractor	Mr. Anson Wong	Safety and Environmental Officer	9656 3837	2623 9226
		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
  - WWTP Equipment installation 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 21<sup>st</sup> June 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

Valid Period		Doto!!c	C404	
Permit / License No.	From	To	Details	Status
Environmental Permit (El	<b>?</b> )			
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 transhipment 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	Waste Produce	r	-	
WPN-5113-839-C1186-15	12/06/2009	-	Spent Lubrication oil.	Valid
Construction Noise Permi	t (CNP)		1	
GW-RE0709-13	02/07/2013	19/01/2014	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 Lic	ense			
WT00004508-2009	07/09/2009	-	Discharge of wastewater from construction site including wheel washing water and chemical precipitation tank	Valid
Billing Account for Dispos	al of Construct	tion Waste		
A/C No.: 7013917	-	-	-	Valid
Notification of Works und	er APCO	•		
Ref. no.: 337009	26/10/2011	-	-	Valid
		<u> </u>		

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	<b>Observations and Recommendations</b>	Follow-up
Water Quality	21/06/2013	Ponding water should be removed after	Follow up action was taken
water Quarity	21/00/2013	rain.	by the Contractor.

# **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.
  - Tank Farm 2A Pipe installation work
  - Tank Farm 2A GTWSR Equipment and pipe installation works
  - Building Services Fire services work
  - Building Services MVAC work
  - Building Services Electrical work
  - Building Services P&D 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

#### 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.

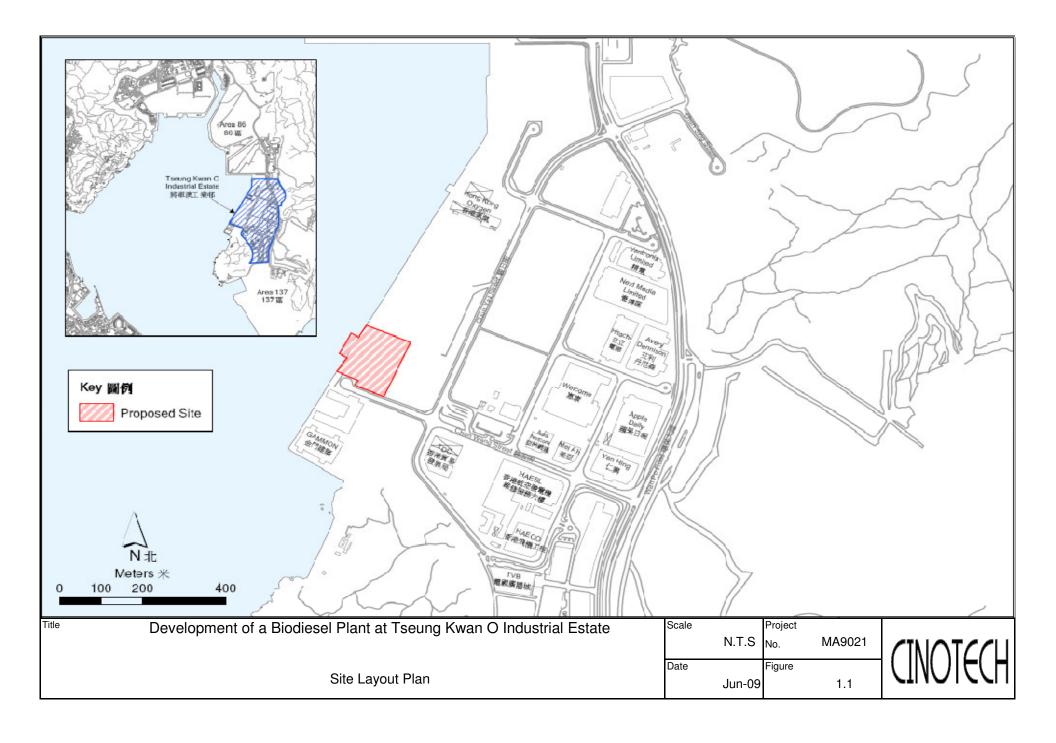
# Noise Impact

- 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**



# APPENDIX A SITE AUDIT SUMMARY

# Monthly Site Inspection Record Summary

**Inspection Information** 

Checklist Reference Number	130621
Date	21 June 2013 (Friday)
Time	16:25 – 16:45

Ref. No.	Non-Compliance		Related Item No.
	None		-
Ref. No.	Remarks/Observations		Related Item No.
	A. Water Quality		
130621–R01	Ponding water should be removed after rain.		B13
	B. Air Quality     No environmental deficiency was identified	during site inspection.	
	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 (P. of N.	0.130515)	
	Follow-up on previous audit section (Ref. N	o.:130515):	-

	Name	Signature	Date
Recorded by	Betty Choi	Bettyn	24 June 2013
Checked by	Dr. HF Chan	1/1/2	24 June 2013
		<b>V</b>	

• No environmental deficiency was observed in the previous site inspection.

CINOTECH MA9021 130621

APPENDIX B UPDATED ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE

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

Types of Impacts	Mitigation Measures	Status
	• 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;	^
	<ul> <li>All debris and materials will be covered or stored in a sheltered debris collection area;</li> </ul>	^
Construction Dust	<ul> <li>Hoarding from ground level will be provided along the entire length of the site boundary except for a site entrance or exit;</li> <li>Every stockpile of dusty materials will be covered entirely by impermeable sheeting or placed in an area sheltered on the top and the 2 sides.</li> </ul>	^
	<ul><li>and the 3 sides;</li><li>Regular maintenance and checking of the diesel powered mechanical equipment will be adopted to avoid any black smoke</li></ul>	^
	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.	^
	Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction program;	٨
	• Silencers or mufflers on construction equipment will be utilized and will be properly maintained during the construction program;	^
	<ul> <li>Mobile plant, if any, will be sited as far from NSRs as possible;</li> </ul>	^
Construction	<ul> <li>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;</li> </ul>	٨
Noise	• 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	٨
	<ul> <li>Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from onsite construction activities.</li> </ul>	^

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;

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

Types of Impacts	Mitigation Measures	Status
	• 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.  Construction Site Run-off and Drainage	^
Water Quality	<ul> <li>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.</li> <li>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.</li> <li>Exposed soil surfaces will be protected by paving or fill material as soon as possible to reduce the potential of soil erosion.</li> <li>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.</li> </ul>	^ ^
	<ul> <li>General Construction Activities</li> <li>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.</li> <li>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.</li> </ul>	^

Compliance of mitigation measure; Remarks: ^

X Non-compliance of mitigation measure;

N/A Not Applicable at this stage;

\* 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
	Sewage generated from On-site Workforce	
	<ul> <li>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> <li>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.</li> </ul>	^
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.	۸

<sup>^</sup> 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 Monthly Summary Waste Flow Table For Contract 270 Biodiesel Plant Tseung Kwan O Project Reporting Year: <u>2013</u>

	Actual	Quantities of Iner	rt C&D Materia	als Generated / In	iported (in '00	)0 m³)	Actuε	al Quantities of Ot	ther C&D Materials	/ Wastes Ger	ierated
Month	Total Quantities Generated [a+b+c+d]	Broken Concrete (including rock for recycling into aggregates) ( a )	Reused in the Contract	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	0	0	0	0	0	0	0.005	0	0	0.082
February	0	0	0	0	0	0	0	0.004	0	0	0.020
March	0	0	0	0	0	0	0	0.004	0	0	0.053
April	0.918	0	0	0	0.918	0	0	0.003	0	0	0.023
May	1.962	0	0	0	1.962	0	0	0.004	0	0	0.078
June	0.966	0	0	0	0.966	0	0	0.003	0	0	0.089
Half-year Total	3.846	0	0	0	3.846	0	0	0.023	0	0	0.345
July											
August											
September											
October											
November											
December											
Yearly Total											

# APPENDIX D COMPLAINT LOG

# APPENDIX D – COMPLAINT LOG

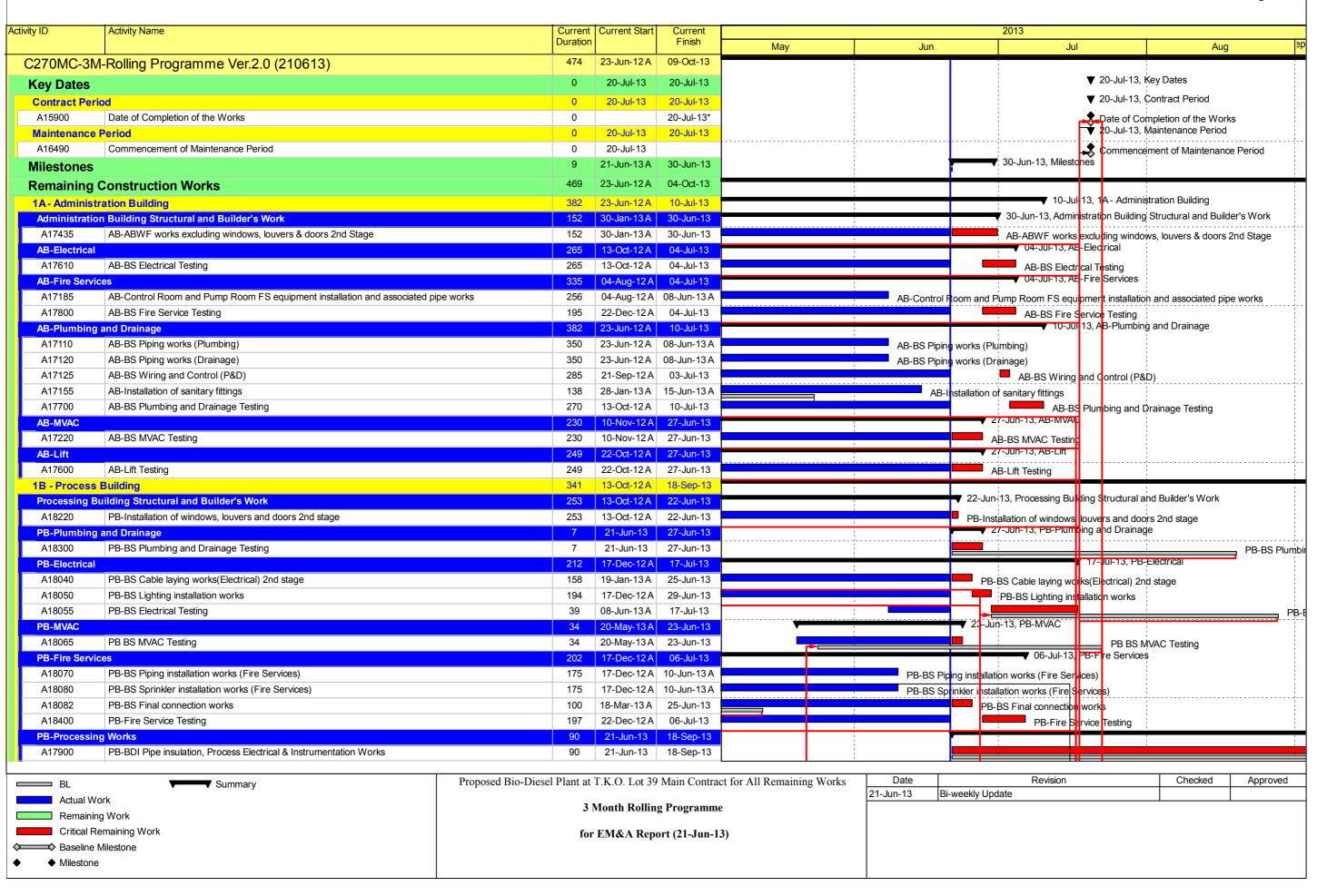
**Reporting Month**: June 2013

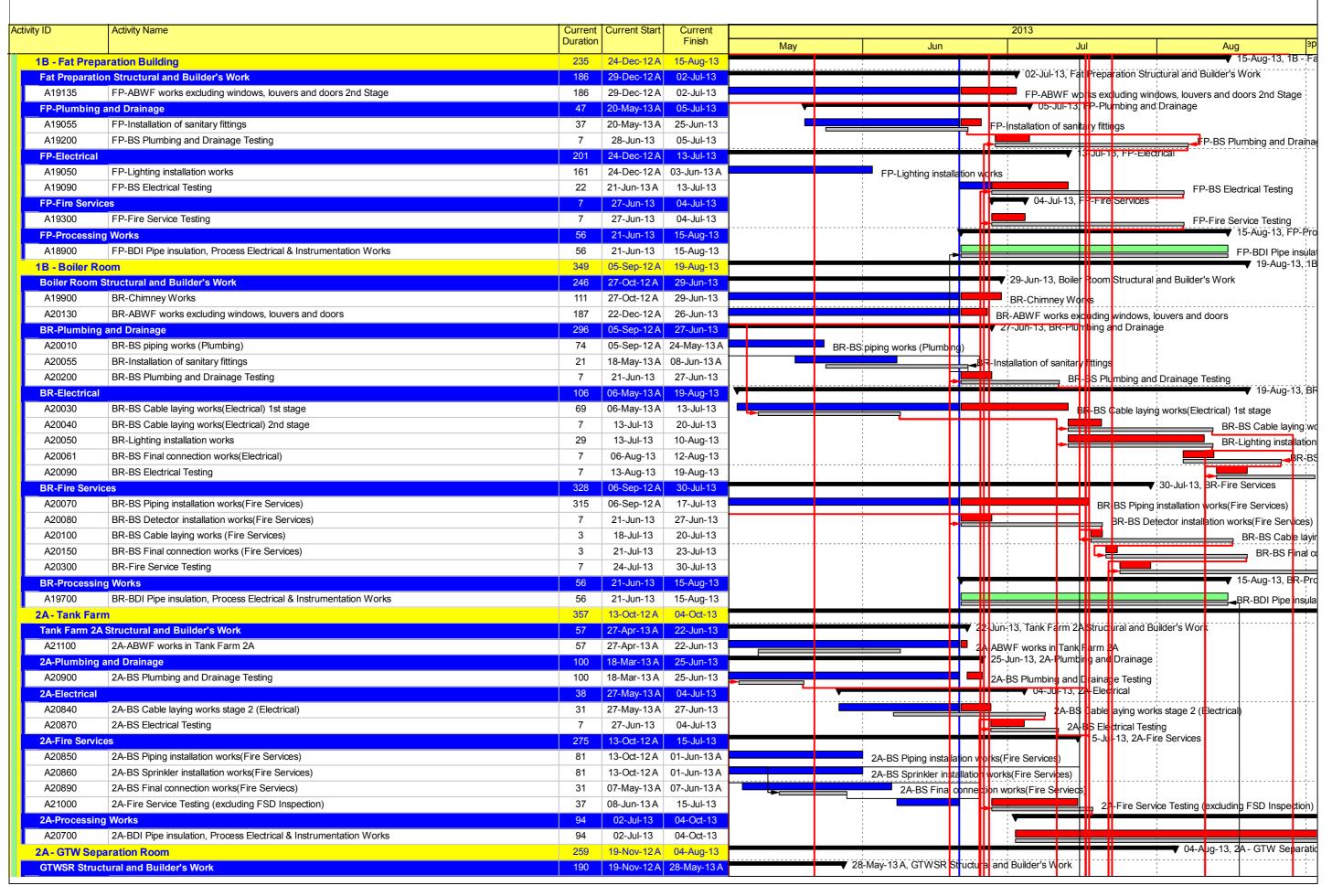
Log Ref.	Location	Received Date	<b>Details of Complaint</b>	Investigation/Mitigation Action	Status
COM- 2012- 08-001	Jetty Area	28-08- 2012	A resident in Lohas Park complained about noise nuisance from the site.	Investigation by EPD identified the source to be chiselling work at the jetty area. Although 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 <sup>rd</sup> 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 <sup>th</sup> 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

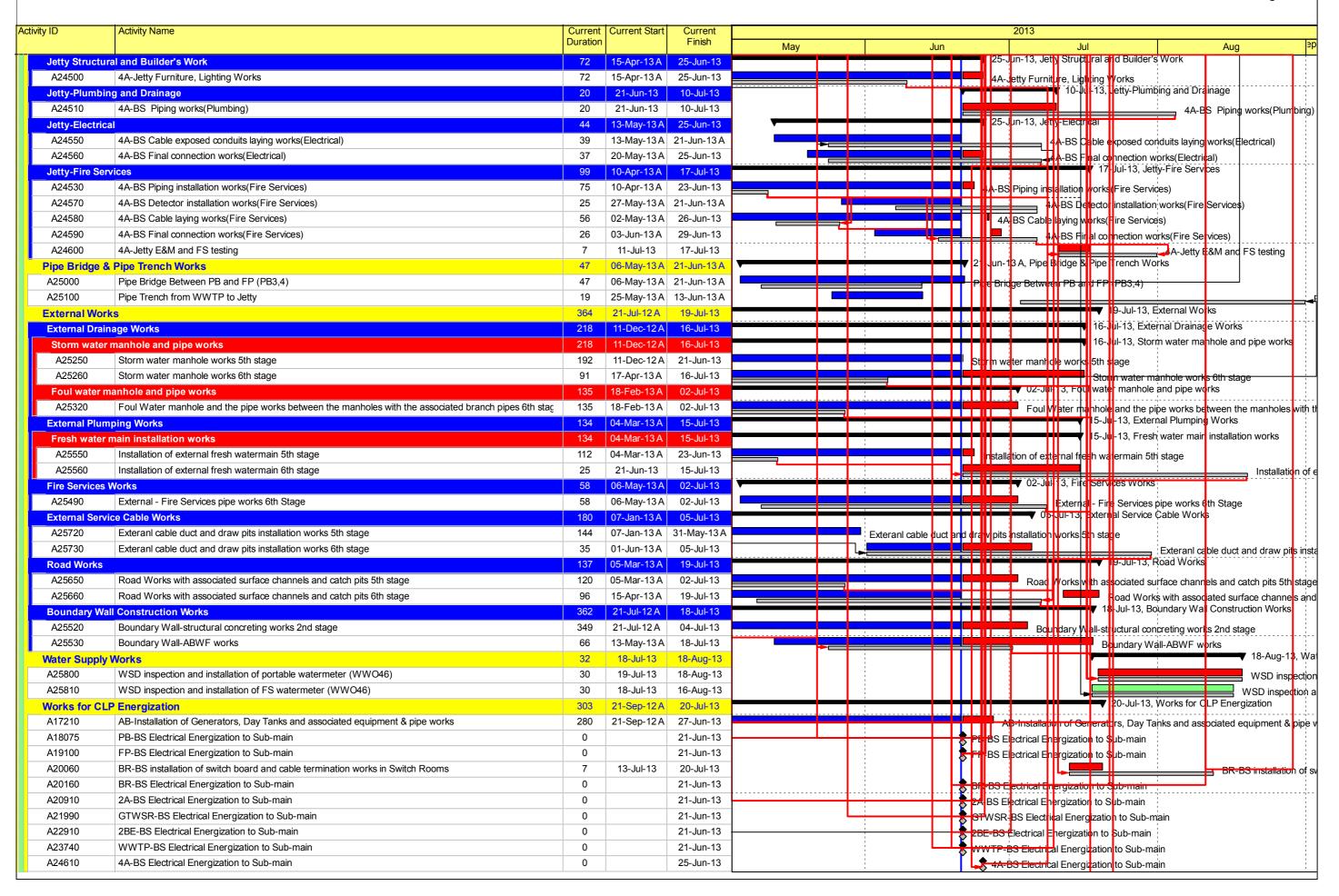
Remarks: N/A

# APPENDIX E CONSTRUCTION PROGRAMME





vity ID	Activity Name		Current Start	Current	2013
		Duration		Finish	May Jun Jul Aug
A22000	GTWSR-ABWF works including windows, louvers and door but excluding roller shutter	190		28-May-13 A	GTWSR-ABWF works including windows, louvers and coor but excluding roller shutter  **TO4-JG-13, GTWSR-Plumbing and Drainage**
	ibing and Drainage	32	03-Jun-13 A		04-Juli 13, G WSR-Plumbing and Drainage
A21910	GTWSR-BS Piping works(Plumbing)	5		08-Jun-13 A	GIWS -BS Piping works(Plumbing)
A22200	GTWSR-BS Plumbing and Drainage Testing	14	21-Jun-13	04-Jul-13	GTWSR-BS Plumping and Drainage Testing
GTWSR-Elect	tri <mark>cal</mark>	69	27-Apr-13 A	04-Jul-13	V 04-Jul-13, d WSR-Electrical
A21940	GTWSR-BS Cable exposed conduits laying works(Electrical)	55	27-Apr-13 A	21-Jun-13 A	GTW SR-BS Cable exposed conduits laying works(Electrical)
A21950	GTWSR-Lighting installation works	19	03-Jun-13 A	21-Jun-13 A	GTWSR-Lighting installation works
A21951	GTWSR-BS Final connection works	7	21-Jun-13	27-Jun-13	GTWSR-BS Fina connection works
A21980	GTWSR-BS Electrical Testing	7	28-Jun-13	04-Jul-13	GTWSR-S Electrical Testing
GTWSR-Fire S	Services	50	16-May-13 A	04-Jul-13	▼ 04-Ju <mark>l-13, G</mark> WS -Fire Services
A22300	GTWSR-Fire Service Testing	50	16-May-13 A	04-Jul-13	GTWSR-Fir: Service Testing
GTWSR-Proce	essing Works	154	04-Mar-13 A	04-Aug-13	04-Aug-13, GTWSR-Proc
A21600	GTWSR-Paques Piping, Electrical, Insulation & Instrumentation Works	102	04-Mar-13 A	14-Jun-13 A	GTWSR-Findues Piping, Electrical, Insulation & Instrumentation Works
A21800	GTWSR-BDI Piping, Electrical, Insulation & Instrumentation Works	45	21-Jun-13	04-Aug-13	GTW SR-BDI Piping, Elect
2B-E Tank Fa	The state of the s	188	16-Feb-13 A	-	▼ 22-A
Tank Farm 2B	3-2E Structural and Builder's Work	97	18-Mar-13 A		22-Jun-13, Tank Farm 2B 2E Structural and Builder's Work
A23100	2BE-ABWF works in Tank Farm 2B-2E	97	18-Mar-13 A	22-Jun-13	2BE-ABWF works in Tank Farm 2B-2E
	3-2E-Plumbing and Drainage	123	1 1 1	21-Jun-13 A	21 Jun-13 A, Tank Farm 2B 2E-P umbing and Drainage
A22900	2BE-BS Plumbing and Drainage Testing	123		21-Jun-13 A	2BE-BS Plumbing and Drainage Testing
	3-2E-Electrical	20	08-Jun-13 A		227-Jun-13, Tank Falin 2B-2E-Electrical
A22840	2BE-BS Cable exposed conduits laying works(Electrical)	11		21-Jun-13 A	2BE-BS Cable exposed conduits laying w
A22841	2BE-BS Final connection works(Electrical)	13	-	21-Jun-13 A	2BE-BS Cable exposed conjunts laying w  2BE-BS Cable exposed conjunts laying w
A22870	2BE-BS Electrical Testing	7	21-Jun-13	27-Jun-13	
	3-2E-Fire Services	145	16-Feb-13 A		2BE-BS Electrical Testing 10-Jul 13, Jank Farm 2B-2E-Fire Services
A22850	2BE-BS Piping installation works(Fire Services)	112		08-Jun-13 A	
	· · · · · · · · · · · · · · · · · · ·				2BE-BS Ploing in a lation works(Fire Services)
A22860	2BE-BS Sprinkler installation works(Fire Services)	112		08-Jun-13 A	2BE-BS Sprinkler in stallation works(Fire Services)
A22880	2BE-BS Cable laying works(Fire Services)	51	04-May-13 A		ZBE-BS Cable laying works(Fire Services);
A22890	2BE-BS Final connection works(Fire Services)	10	23-Jun-13	03-Jul-13	2BE-B\$ Final connection works(Fire Services)
A23000	2BE-Fire Service Testing	7	03-Jul-13	10-Jul-13	2BE-Fire Ser ✓ 22-A
_	3-2E-Processing Works	63	21-Jun-13	22-Aug-13	
A22700	2BE-BDI Pipe Insulation, Process Electrical & Instrumentation Works	63	21-Jun-13	22-Aug-13	2BE- 2BE- 2BE- 2BE- 2BE- 2BE- 2BI- 3 - Jul-13, 3 - Waste Water Treatment Plant
	ter Treatment Plant	303	20-Sep-12 A		22-Jun-13, Waste Water Treatment Plant Structural and Builder's Work
	Treatment Plant Structural and Builder's Work	223		22-Jun-13	
A24030	WWTP- ABWF works excluding windows, louvers and doors	223		22-Jun-13	WTP ABWF works excluding windows, louvers and doors
_	ping and Drainage	303	20-Sep-12 A		9-Jul-13, WWTP-Plum bing and Drainage
A23610	WWTP-BS piping works(Plumbing)	289	20-Sep-12 A	05-Jul-13	WW TP-BS piping works(Plumbing)
A23620	WWTP-BS piping works(Drainage)	289	20-Sep-12 A	05-Jul-13	WW TP-BS piping works(Drainage)
A23655	WWTP-BS Installation of sanitary fittings	89	15-Apr-13 A	12-Jul-13	WWTP-S Installation of sanitary fittings
A23800	WWTP-BS Plumbing and Drainage Testing	7	12-Jul-13	19-Jul-13	, WWTP-BS Plumb
WWTP-Electri	ical	217	30-Nov-12 A	04-Jul-13	04-Jul-13, WW TH Electrical
A23640	WWTP-BS Cable exposed conduits laying works (Electrical)	192	30-Nov-12 A	10-Jun-13 A	WWTP B\$ Calle exposed conduts laying works (Electrical)
A23650	WWTP-BS Lighting installation works	91	18-Mar-13 A	17-Jun-13 A	WWTF ES Lighting installation works
A23651	WWTP-BS Final connection works	88	18-Mar-13 A	14-Jun-13 A	WW/TP-B\$ Final connection works
A23680	WWTP-BS Electrical Testing	14	21-Jun-13	04-Jul-13	V/TP S Electrical Testing
WWTP-Fire Se	ervices	164	28-Jan-13 A	10-Jul-13	V 10-Jul-13, WWTP-Fire Services
A23670	WWTP-FS Detector installation work	140	28-Jan-13 A	17-Jun-13 A	WWTF-FS Detector installation work
A23730	WWTP-BS Final connection works(Final Services)	143	07-Feb-13 A	29-Jun-13	WWTP-BS Fina opnnection works(Final Services)
A23900	WWTP-Fire Service Testing	52	20-May-13 A	10-Jul-13	WW TP-Fire Service Testing
WWTP-Proces	-	291	24-Sep-12 A		▼ 11 LI-13 WWTP-Processing Works
A23500	WWTP-Treatment Equipment Installation Works	281		01-Jul-13	WWTP Treatment Equipment Installation Works
A23700	WWTP-Treatment Installation Testing	10	02-Jul-13	11-Jul-13	WWTP-Treatment Installation
	The state of the s	99	10-Apr-13 A		7 1/ Jul-13, 4A; Jetty



ty ID	Activity Name		Current Start		2013			
		Duration		Finish	May	Jun	Jul	Aug
Maintenand	ce Period	70	20-Jul-13	27-Sep-13			<b>V</b>	
FS & OP Insp	pection	70	20-Jul-13	27-Sep-13			<b>▼</b>	1
A25900	Notification to FSD	28	20-Jul-13	16-Aug-13			-	Notification
A25910	FS Inspection	1	16-Aug-13	16-Aug-13				S Inspect
A25920	Rectification to FSD Comments	14	17-Aug-13	30-Aug-13			<u> </u>	<b></b>
A25930	Notification to FSD for 2nd Inspection	28	31-Aug-13	27-Sep-13				
A26000	Notification for OP Inspection	28	20-Jul-13	16-Aug-13			L-	Notification
A26010	OP Inspection	1	16-Aug-13	16-Aug-13				P Inspect
Works By C	Other Contractors	375	30-Sep-12 A	09-Oct-13				