

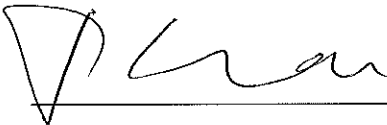
# ASB Biodiesel (Hong Kong) Limited

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

Monthly EM&A Report

November 2012

(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

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|                |                              |                     |                  |
|----------------|------------------------------|---------------------|------------------|
| <i>To:</i>     | Cinotech                     | <i>Date:</i>        | 13 December 2012 |
| <i>Attn:</i>   | Ms. Ivy Tam / Ms. Betty Choi | <i>Fax:</i>         | 3107 1388        |
| <i>From:</i>   | Mr. Mark Cheung              | <i>Ref:</i>         | D1067/G05159     |
| <i>Job No.</i> | D1067                        | <i>Total Pages:</i> | 1                |

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**Subject: Development of a Biodiesel Plant at Tseung Kwan O Industrial Estate  
Monthly EM&A Report for November 2012**

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Dear Madam,

We refer to your submission of the Monthly EM&A Report for November 2012 via email dated 13 December 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 42<sup>nd</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 November 2012.
2. The major site activities undertaken in the reporting month included:
  - General site cleaning and tidying.
  - Zone 1A Administration Building – Finishing works.
  - Zone 1B Processing Building – Cladding system installation works
  - Zone 1A Administration Building – Windows, louver and doors installation works
  - Zone 1B Processing Building – Windows, louver and doors installation works
  - Zone 1B Fat Preparation Building – Fire paint works
  - Zone 1B Fat Preparation Building – Windows, louver and doors installation works
  - Zone 1B Fat Preparation Building – Finishing works
  - Zone 1B Steam Boiler Room Building – Equipment installation works
  - Zone 1B Steam Boiler Room Building – Steel platform erection works
  - Zone 1B Steam Boiler Room Building – Cladding system installation works
  - Zone 2A Tank Farm – Steel tank fabrication works
  - Zone 2A Tank Farm – Tank sand blasting and painting works
  - Zone 2A Tank Farm – Tank cladding installation works
  - Zone 2A GTWSR – Equipment installation works
  - Zone 2B-2E Tank Farm – Steel tank fabrication works
  - WWTP – RC superstructure construction works
  - WWTP – Equipment installation works
  - WWTP – IC Reactor delivery and erection works
  - Jetty – Bore piles installation works
  - Building Services – P&D works
  - Building Services – Fire Service works
  - Building Services – MVAC works
  - Building Services – Electrical works
  - Building Services – Lift installation works
  - External Works – Boundary wall construction works
  - External Works – Storm water drainage works
  - External Works – Foul water drainage works
  - External Works – Fire Services pipes laying works
  - External Works – Cable laying works
  - External Works – Pavement 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 Permit (GW-RE0757-12), 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  | 1             | Noise nuisance                       | Communicated with complainant        | Closed          | ---    |
| 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 October 2012 | Submitted to EPD on 15 November 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.
  - Zone 1A Administration Building – Finishing works
  - Zone 1B Fat Preparation Building – Finishing works
  - Zone 1B Steam Boiler Room – Structural steel works
  - Zone 1B Steam Boiler Room – ABWF works excluding windows, louvers and doors
  - Zone 1B Steam Boiler Room – Cladding Roof Installation
  - Tank Farm 2A – Tanks fabrication works
  - Tank Farm 2A – Tank sand blasting and painting works
  - Tank Farm 2A – Steel tanks cladding installation works
  - Tank Farm 2A GTWSR – Equipment installation works
  - Tank Farm 2A GTWSR – ABWF works excluding windows, louvers and doors
  - Tank Farm 2B-2E – Tank fabrication works
  - Tank Farm 2B-2E – Tank sand blasting and painting works
  - Tank Farm 2B-2E – Finishing works

- WWTP – Water proofing system installation works
  - WWTP – ABWF works excluding windows, louvers and doors
  - Jetty – Bore pile installation works
  - Jetty – Bore pile testing works
  - Jetty – Deck superstructure preparation works
  - Pipe Bridge – Pipe support construction works and pipe bridge erection works.
  - Building Services – Fire services works
  - Building Services – MVAC works
  - Building Services – Electrical works
  - Building Services – P&D works
  - Building Services – Lift installation works
  - External – Boundary wall construction works.
  - External Works – Storm water drainage works
  - External Works – Foul water drainage works
  - External Works – Plumbing laying works
  - External Works – Fire Services piping laying works
  - External Works – Cable laying works
  - External Works – Pavement 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 m<sup>3</sup> 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 42<sup>nd</sup> Monthly EM&A report summarizing the EM&A works for the Project in November 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 |
| 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 works.
- Zone 1B Processing Building – Cladding system installation works
- Zone 1A Administration Building – Windows, louver and doors installation works
- Zone 1B Processing Building – Windows, louver and doors installation works
- Zone 1B Fat Preparation Building – Fire paint works
- Zone 1B Fat Preparation Building – Windows, louver and doors installation works
- Zone 1B Fat Preparation Building – Finishing works
- Zone 1B Steam Boiler Room Building – Equipment installation works
- Zone 1B Steam Boiler Room Building – Steel platform erection works
- Zone 1B Steam Boiler Room Building – Cladding system installation works
- Zone 2A Tank Farm – Steel tank fabrication works
- Zone 2A Tank Farm – Tank sand blasting and painting works
- Zone 2A Tank Farm – Tank cladding installation works
- Zone 2A GTWSR – Equipment installation works
- Zone 2B-2E Tank Farm – Steel tank fabrication works
- WWTP – RC superstructure construction works
- WWTP – Equipment installation works
- WWTP – IC Reactor delivery and erection works
- Jetty – Bore piles installation works
- Building Services – P&D works
- Building Services – Fire Service works
- Building Services – MVAC works
- Building Services – Electrical works
- Building Services – Lift installation works
- External Works – Boundary wall construction works
- External Works – Storm water drainage works
- External Works – Foul water drainage works
- External Works – Fire Services pipes laying works
- External Works – Cable laying works
- External Works – Pavement 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 weekly 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 audits were conducted on 2<sup>nd</sup>, 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> November 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**.

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

| Permit / License No.                                      | Valid Period |            | Details   | Status |
|---|--------------|------------|---|--------|
|   | From         | To         |   |        |
| <b>Environmental Permit (EP)</b>                          |              |            |   |        |
| EP-319/2009/A   | 07/04/2009   | N/A        | Construction and operation of<br><br>(i) a biochemical plant with a storage capacity of more than 500 tonnes and in which substances are processed and produced;<br><br>(ii) a storage, transfer and trans-shipment of oil facility with a storage capacity of not less than 1,000 tonnes; and<br><br>(iii) a dangerous goods godown with a storage capacity exceeding 500 tonnes . | Valid  |
| <b>Registration of Chemical Waste Producer</b>            |              |            |   |        |
| WPN-5113-839-C1186-15                                     | 12/06/2009   | -          | Spent Lubrication oil.  | Valid  |
| <b>Construction Noise Permit (CNP)</b>                    |              |            |   |        |
| GW-RE0757-12  | 21/09/2012   | 20/03/2013 | 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  |
| <b>Wastewater Discharge License</b>                       |              |            |   |        |
| WT00004508-2009   | 07/09/2009   | -          | Discharge of wastewater from construction site including wheel washing water and chemical precipitation tank  | Valid  |
| <b>Billing Account for Disposal of Construction Waste</b> |              |            |   |        |
| A/C No.: 7013917  | -            | -          | -   | Valid  |
| <b>Notification of Works under APCO</b>                   |              |            |   |        |
| 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   |
|---------------------------|------------|---|---|
| Water Quality             | 21/11/2012 | A leakage at the connection of the silt curtain was found and Bentonite was observed outside the silt curtain. The integrity or the effectiveness of the silt curtain should be maintained. | Follow up action was taken by the Contractor.   |
| Waste/Chemical Management | 02/11/2012 | Drip tray should be provided under oil/chemical container. Empty container should be stored at designated location.   | Follow up action was taken by the Contractor.   |
|                           | 14/11/2012 | Oil was observed on the seawater surface both within and outside the silt curtain. The oil leakage source should be identified and rectified. Oil above water should be removed.            | The item was found outstanding during the site inspection and recorded as 121114-R01. |
|                           | 21/11/2012 | Oil was observed on the seawater surface both within and outside the silt curtain. The oil leakage source should be identified and rectified. Oil above water should be removed.            | The item was found outstanding during the site inspection and recorded as 121128-R01. |
|                           | 28/11/2012 | Oil was observed on the seawater surface both within and outside the silt curtain. The oil leakage source should be identified and rectified. Oil above water should be removed.            | Follow up action was taken by the Contractor.   |

### Summary of Complaint and Prosecution

- 2.7 1 environmental related complaint was received in the reporting month. The detail can be found in the following table:

**Table 2.3 Complaint Details**

| Complaint No.   | Date       | Complaint Details   |
|-----------------|------------|---|
| COM-2012-11-005 | 23-11-2012 | A resident in Lohas Park complained about noise nuisance from the site at around 3:00 am. The chisel machine used in 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. |

- 2.8 No prosecution or notification of summons was received in the reporting month.

- 2.9 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; and
  - Suspended mud, sediment and potential leakage of bentonite slurry from marine piling work for jetty construction.
- 3.2 In November, bored pile installation was carried out in the jetty area. During the site inspection, silt curtain was erected as a mitigation measure. Bentonite was observed outside the silt curtain during the site inspection on 21 November 2012. The Contractor was reminded to check the integrity or the effectiveness of the silt curtain. The gap between buoys of the double-layer silt curtain was closed and no further leakage was found in the next inspection. Besides, oil was observed on the seawater surface both within and outside the silt curtain. The oil leakage source was identified and rectified. In the following process, any machines or equipments working on the jetty should be double checked for oil leakage and covered by canvas in case of raining. The process will be closely monitored by site staff and during site inspection to prevent leakage.

#### 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.
  - Zone 1A Administration Building – Finishing works
  - Zone 1B Fat Preparation Building – Finishing works
  - Zone 1B Steam Boiler Room – Structural steel works
  - Zone 1B Steam Boiler Room – ABWF works excluding windows, louvers and doors
  - Zone 1B Steam Boiler Room – Cladding Roof Installation
  - Tank Farm 2A – Tanks fabrication works
  - Tank Farm 2A – Tank sand blasting and painting works
  - Tank Farm 2A – Steel tanks cladding installation works
  - Tank Farm 2A GTWSR – Equipment installation works
  - Tank Farm 2A GTWSR – ABWF works excluding windows, louvers and doors
  - Tank Farm 2B-2E – Tank fabrication works
  - Tank Farm 2B-2E – Tank sand blasting and painting works
  - Tank Farm 2B-2E – Finishing works
  - WWTP – Water proofing system installation works
  - WWTP – ABWF works excluding windows, louvers and doors
  - Jetty – Bore pile installation works

- Jetty – Bore pile testing works
- Jetty – Deck superstructure preparation works
- Pipe Bridge – Pipe support construction works and pipe bridge erection works.
- Building Services – Fire services works
- Building Services – MVAC works
- Building Services – Electrical works
- Building Services – P&D works
- Building Services – Lift installation works
- External – Boundary wall construction works.
- External Works – Storm water drainage works
- External Works – Foul water drainage works
- External Works – Plumbing laying works
- External Works – Fire Services piping laying works
- External Works – Cable laying works
- External Works – Pavement works



## 4 CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

- 4.1 Environmental audit works were conducted in the reporting month. Site inspections were conducted on a weekly basis. The results were reviewed and checked.
- 4.2 1 environmental complaint was received. There was no prosecution or notification of summons.

### 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 the integrity of bore pile casing and connection pipes to prevent leakage.
- To monitor bentonite flow rate to prevent overflowing.
- To lower bentonite level in bored pile before concreting work.
- To check the integrity of the silt curtain and its effectiveness in preventing bentonite leakage to open water

#### *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.

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## FIGURES

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**APPENDIX A  
SITE AUDIT SUMMARY**

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

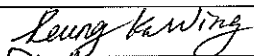

### Monthly Site Inspection Record Summary

#### Inspection Information

|                            |                           |
|----------------------------|---------------------------|
| Checklist Reference Number | 121102                    |
| Date                       | 02 November 2012 (Friday) |
| Time                       | 16:15 – 16:45             |

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

| Ref. No.   | Remarks/Observations  | Related Item No. |
|------------|---|------------------|
| 121102-R02 | <p><b>A. Water Quality</b></p> <ul style="list-style-type: none"> <li>A bit of bentonite was observed outside the steel casing of pipe, but they don't escape outside the slit curtain. The steel casing of pipe should be sealed to prevent any leakage of bentonite. Otherwise some containers should be used to temporarily store the leaked bentonite for regular disposal.</li> </ul>  | N/A              |
| 121102-R01 | <p><b>B. Air Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>C. Noise</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>D. Waste / Chemical Management</b></p> <ul style="list-style-type: none"> <li>Drip tray should be provided under oil/chemical container. Empty container should be stored at designated location.</li> </ul> <p><b>E. Permit / Licenses</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>F. Reminders</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>G. Others</b></p> <p>Follow-up on previous audit section (Ref. No.:121024):</p> <ul style="list-style-type: none"> <li>Environmental deficiency 121024-R01 was not improved/rectified by the Contractor. It was remarked as 121102-R01 in this site inspection.</li> </ul> | E2, E8           |

|             | Name        | Signature  | Date             |
|-------------|-------------|--|------------------|
| Recorded by | KW Leung    |  | 05 November 2012 |
| Checked by  | Dr. HF Chan |   | 05 November 2012 |

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

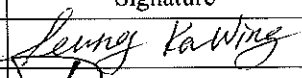
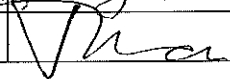
### Monthly Site Inspection Record Summary

#### Inspection Information

|                            |                              |
|----------------------------|------------------------------|
| Checklist Reference Number | 121107                       |
| Date                       | 07 November 2012 (Wednesday) |
| Time                       | 16:45 – 17:15                |

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

| Ref. No. | Remarks/Observations  | Related Item No. |
|----------|---|------------------|
|          | <p><b>A. Water Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>B. Air Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>C. Noise</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>D. Waste / Chemical Management</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>E. Permit / Licenses</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>F. Reminders</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>G. Others</b></p> <p>Follow-up on previous audit section (Ref. No.:121102):</p> <ul style="list-style-type: none"> <li>All environmental deficiencies were improved/rectified by the Contractor.</li> </ul> |                  |

|             | Name        | Signature  | Date             |
|-------------|-------------|--|------------------|
| Recorded by | KW Leung    |  | 07 November 2012 |
| Checked by  | Dr. HF Chan |  | 07 November 2012 |

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


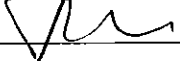
**Monthly Site Inspection Record Summary**

**Inspection Information**

|                            |                              |
|----------------------------|------------------------------|
| Checklist Reference Number | 121114                       |
| Date                       | 14 November 2012 (Wednesday) |
| Time                       | 16:15 – 17:00                |

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

| Ref. No.     | Remarks/Observations  | Related Item No. |
|--------------|---|------------------|
| 121114 – R01 | <p><b>A. Water Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>B. Air Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>C. Noise</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>D. Waste / Chemical Management</b></p> <ul style="list-style-type: none"> <li>Oil was observed on the seawater surface both within and outside the silt curtain. The oil leakage source should be identified and rectified. Oil above water should be removed.</li> </ul> <p><b>E. Permit / Licenses</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>F. Reminders</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>G. Others</b></p> <p>Follow-up on previous audit section (Ref. No.:121107):</p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified in the last site inspection.</li> </ul> | E7               |

|             | Name        | Signature   | Date             |
|-------------|-------------|---|------------------|
| Recorded by | Betty Choi  |  | 15 November 2012 |
| Checked by  | Dr. HF Chan |  | 15 November 2012 |



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

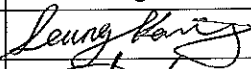
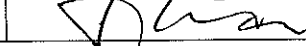
**Monthly Site Inspection Record Summary**

**Inspection Information**

|                            |                              |
|----------------------------|------------------------------|
| Checklist Reference Number | 121121                       |
| Date                       | 21 November 2012 (Wednesday) |
| Time                       | 16:00 – 16:30                |

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

| Ref. No.     | Remarks/Observations  | Related Item No. |
|--------------|---|------------------|
| 121121 – R02 | <p><b>A. Water Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>B. Air Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>C. Noise</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>D. Waste / Chemical Management</b></p> <ul style="list-style-type: none"> <li>Oil was observed on the seawater surface both within and outside the silt curtain. The oil leakage source should be identified and rectified. Oil above water should be removed.</li> </ul> | N/A              |
| 121121 – R01 | <p><b>E. Permit / Licenses</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>F. Reminders</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>G. Others</b></p> <p>Follow-up on previous audit section (Ref. No.:121114):</p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified in the last site inspection.</li> </ul>   | E7               |

|             | Name          | Signature  | Date             |
|-------------|---------------|--|------------------|
| Recorded by | Leung Ka Wing |  | 23 November 2012 |
| Checked by  | Dr. HF Chan   |  | 23 November 2012 |

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



Monthly Site Inspection Record Summary

**Inspection Information**

|                            |                              |
|----------------------------|------------------------------|
| Checklist Reference Number | 121128                       |
| Date                       | 28 November 2012 (Wednesday) |
| Time                       | 16:15 – 16:45                |

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

| Ref. No.     | Remarks/Observations  | Related Item No. |
|--------------|---|------------------|
| 121128 – R01 | <p><b>A. Water Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>B. Air Quality</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>C. Noise</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>D. Waste / Chemical Management</b></p> <ul style="list-style-type: none"> <li>Oil was observed on the seawater surface both within and outside the silt curtain. The oil leakage source should be identified and rectified. Oil above water should be removed.</li> </ul> <p><b>E. Permit / Licenses</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>F. Reminders</b></p> <ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul> <p><b>G. Others</b></p> <p>Follow-up on previous audit section (Ref. No.:121121):</p> <ul style="list-style-type: none"> <li>Environmental deficiency 121121-R01 was not improved/rectified by the Contractor. It was remarked as 121128-R01 in this site inspection.</li> <li>Environmental deficiency 121121-R02 was improved/rectified by the Contractor.</li> </ul> | E7               |

|             | Name          | Signature  | Date             |
|-------------|---------------|--|------------------|
| Recorded by | Leung Ka Wing |  | 29 November 2012 |
| Checked by  | Dr. HF Chan   |  | 29 November 2012 |

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**APPENDIX B  
UPDATED ENVIRONMENTAL  
MITIGATION IMPLEMENTATION  
SCHEDULE**

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

| Types of Impacts          | Mitigation Measures   | Status                          |
|---------------------------|---|---------------------------------|
| <b>Construction Dust</b>  | <ul style="list-style-type: none"> <li>• 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;</li> <li>• Effective dust screens, sheeting or netting will be provided to enclose the scaffolding from the ground level of the facility during the building construction;</li> <li>• All debris and materials will be covered or stored in a sheltered debris collection area;</li> <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 3 sides;</li> <li>• Regular maintenance and checking of the diesel powered mechanical equipment will be adopted to avoid any black smoke emissions and to minimize gaseous emissions.</li> <li>• Monthly site audits will be conducted to ensure the implementation of suitable dust control measures and good site practices.</li> </ul> | ^<br>^<br>^<br>^<br>^<br>^<br>^ |
| <b>Construction Noise</b> | <ul style="list-style-type: none"> <li>• Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction program;</li> <li>• Silencers or mufflers on construction equipment will be utilized and will be properly maintained during the construction program;</li> <li>• Mobile plant, if any, will be sited as far from NSRs as possible;</li> <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> <li>• 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</li> <li>• Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from onsite construction activities.</li> </ul>  | ^<br>^<br>^<br>^<br>^<br>^      |

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"> <li>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.</li> </ul>   | *                |
|                  | <p><u>Construction Site Run-off and Drainage</u></p> <ul style="list-style-type: none"> <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 50m<sup>3</sup> will be covered with tarpaulin or similar fabric during rainstorms. These materials will not be placed near the seawall area.</li> </ul> | ^<br>^<br>^<br>^ |
|                  | <p><u>General Construction Activities</u></p> <ul style="list-style-type: none"> <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>  | ^<br>^           |

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 1980 427" style="list-style-type: none"> <li data-bbox="443 296 1980 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> <li data-bbox="443 363 1980 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.</li> </ul> | <p data-bbox="2056 296 2078 312">^</p> <p data-bbox="2056 363 2078 379">^</p> |
| <p data-bbox="215 488 315 520"><b>Ecology</b></p> | <ul data-bbox="443 472 1980 563" style="list-style-type: none"> <li data-bbox="443 472 1980 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.</li> </ul>  | <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.

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

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**APPENDIX D  
COMPLAINT LOG**

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**APPENDIX D – COMPLAINT LOG****Reporting Month:** November 2012

| <b>Log Ref.</b> | <b>Location</b> | <b>Received Date</b> | <b>Details of Complaint</b>   | <b>Investigation/Mitigation Action</b>   | <b>Status</b> |
|-----------------|-----------------|----------------------|---|--|---------------|
| 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, 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 Park given consistent   | Closed        |

| Log Ref.        | Location   | Received Date | Details of Complaint  | Investigation/Mitigation Action   | Status |
|-----------------|------------|---------------|---|---|--------|
|                 |            |               | 11:18pm.  | 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

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**APPENDIX E**  
**CONSTRUCTION PROGRAMME**

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| Activity ID  | Activity Name  | BL Start  | BL Finish | Current Duration | Current Start | Current Finish | % Complete | Delay from Initial | Total Float | 2012 |   |   |   |   |   |   |   |     |   |   |     | 2013 |   |   |   |   |
|--|--|-----------|-----------|------------------|---------------|----------------|------------|--------------------|-------------|------|---|---|---|---|---|---|---|-----|---|---|-----|------|---|---|---|---|
|  |  |           |           |                  |               |                |            |                    |             | N    | D | J | F | M | A | M | J | Jul | A | S | Oct | N    | D | J | F | M |
| <b>C270MC-3M-Rolling Programme Ver.2.0 (301112)</b>      |  | 03-Jan-12 | 12-Dec-12 | 162              | 30-Nov-12     | 10-May-13      |            | -149               | 325         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>Remaining Construction Works</b>                      |  | 03-Jan-12 | 12-Dec-12 | 162              | 30-Nov-12     | 10-May-13      |            | -149               | 325         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>1A - Administration Building</b>                      |  | 21-May-12 | 02-Sep-12 | 89               | 30-Nov-12     | 26-Feb-13      |            | -177               | -106        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>AB-Fire Services</b>                                  |  | 05-Jul-12 | 02-Sep-12 | 60               | 28-Dec-12     | 26-Feb-13      |            | -177               | -106        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A17800   | AB-BS Fire Service Testing   | 05-Jul-12 | 02-Sep-12 | 60               | 28-Dec-12     | 26-Feb-13      | 0%         | -177               | -106        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>AB-Plumbing and Drainage</b>                          |  | 21-May-12 | 19-Jul-12 | 60               | 30-Nov-12     | 28-Jan-13      |            | -193               | -131        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A17155   | AB-Installation of sanitary fittings                               | 21-May-12 | 19-Jul-12 | 60               | 30-Nov-12     | 28-Jan-13      | 0%         | -193               | -131        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>1B - Process Building</b>                             |  | 03-Jan-12 | 30-Sep-12 | 147              | 30-Nov-12     | 25-Apr-13      |            | -207               | -134        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>Processing Building Structural and Builder's Work</b> |  | 03-Jun-12 | 03-Aug-12 | 62               | 30-Nov-12     | 30-Jan-13      |            | -180               | -174        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18230   | PB-ABWF works excluding windows, louvers and doors                 | 03-Jun-12 | 03-Aug-12 | 62               | 30-Nov-12     | 30-Jan-13      | 0%         | -180               | -174        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>PB-Plumbing and Drainage</b>                          |  | 05-Mar-12 | 30-Sep-12 | 81               | 07-Dec-12     | 25-Feb-13      |            | -148               | -105        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18010   | PB-BS Piping works (Plumbing)                                      | 05-Mar-12 | 18-Apr-12 | 30               | 07-Dec-12     | 05-Jan-13      | 0%         | -262               | -105        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18020   | PB-BS Piping works (Drainage)                                      | 19-Apr-12 | 02-Jun-12 | 30               | 07-Dec-12     | 05-Jan-13      | 0%         | -217               | -105        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18025   | PB-Installation of sanitary fittings                               | 03-Jun-12 | 01-Aug-12 | 21               | 06-Jan-13     | 26-Jan-13      | 0%         | -178               | -105        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18300   | PB-BS Plumbing and Drainage Testing                                | 02-Aug-12 | 30-Sep-12 | 30               | 27-Jan-13     | 25-Feb-13      | 0%         | -148               | -105        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>PB-Electrical</b>                                     |  | 05-Mar-12 | 02-Jun-12 | 90               | 07-Dec-12     | 06-Mar-13      |            | -277               | -174        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18030   | PB-BS Cable laying works(Electrical) 1st stage                     | 05-Mar-12 | 18-Apr-12 | 45               | 07-Dec-12     | 20-Jan-13      | 0%         | -277               | -174        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18040   | PB-BS Cable laying works(Electrical) 2nd stage                     | 19-Apr-12 | 02-Jun-12 | 45               | 21-Jan-13     | 06-Mar-13      | 0%         | -277               | -174        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>PB-MVAC</b>   |  | 05-Mar-12 | 02-Jun-12 | 90               | 07-Dec-12     | 06-Mar-13      |            | -277               | -84         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18060   | PB-BS Installation of piping and Ducting Works (MVAC)              | 05-Mar-12 | 02-Jun-12 | 90               | 07-Dec-12     | 06-Mar-13      | 0%         | -277               | -84         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>PB-Fire Services</b>                                  |  | 05-Mar-12 | 02-Sep-12 | 140              | 07-Dec-12     | 25-Apr-13      |            | -235               | -134        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18070   | PB-BS Piping installation works (Fire Services)                    | 05-Mar-12 | 18-Apr-12 | 60               | 07-Dec-12     | 04-Feb-13      | 0%         | -292               | -134        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18080   | PB-BS Sprinkler installation works (Fire Services)                 | 19-Apr-12 | 02-Jun-12 | 60               | 07-Dec-12     | 04-Feb-13      | 0%         | -247               | -134        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18081   | PB-BS Cable laying works   |           |           | 45               | 21-Dec-12     | 03-Feb-13      | 0%         |                    | -134        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18082   | PB-BS Final connection works                                       |           |           | 45               | 11-Jan-13     | 24-Feb-13      | 0%         |                    | -134        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18400   | PB-Fire Service Testing  | 05-Jul-12 | 02-Sep-12 | 60               | 25-Feb-13     | 25-Apr-13      | 0%         | -235               | -134        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>PB-Processing Works</b>                               |  | 03-Jan-12 | 26-Jun-12 | 90               | 18-Dec-12     | 17-Mar-13      |            | -264               | -107        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A17900   | PB-BDI Pipe insulation, Process Electrical & Instrumentation Works | 03-Jan-12 | 26-Jun-12 | 90               | 18-Dec-12     | 17-Mar-13      | 0%         | -264               | -107        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>1B - Fat Preparation Building</b>                     |  | 13-Apr-12 | 10-Sep-12 | 97               | 29-Dec-12     | 04-Apr-13      |            | -206               | 225         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>FP-Plumbing and Drainage</b>                          |  | 02-Aug-12 | 10-Sep-12 | 40               | 21-Jan-13     | 02-Mar-13      |            | -173               | -110        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A19055   | FP-Installation of sanitary fittings                               | 02-Aug-12 | 31-Aug-12 | 30               | 21-Jan-13     | 20-Feb-13      | 0%         | -173               | -110        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A19200   | FP-BS Plumbing and Drainage Testing                                | 02-Aug-12 | 10-Sep-12 | 30               | 31-Jan-13     | 02-Mar-13      | 0%         | -173               | -110        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>FP-Electrical</b>                                     |  | 02-Aug-12 | 10-Sep-12 | 85               | 29-Dec-12     | 23-Mar-13      |            | -194               | -101        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A19050   | FP-Lighting installation works                                     | 02-Aug-12 | 31-Aug-12 | 30               | 29-Dec-12     | 27-Jan-13      | 0%         | -149               | -101        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A19090   | FP-BS Electrical Testing   | 02-Aug-12 | 10-Sep-12 | 40               | 12-Feb-13     | 23-Mar-13      | 0%         | -194               | -101        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>FP-Fire Services</b>                                  |  | 02-Aug-12 | 10-Sep-12 | 70               | 14-Jan-13     | 24-Mar-13      |            | -195               | -102        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A19160   | FP-BS Final connection works (Fire Services)                       |           |           | 30               | 14-Jan-13     | 12-Feb-13      | 0%         |                    | -102        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A19300   | FP-Fire Service Testing  | 02-Aug-12 | 10-Sep-12 | 40               | 13-Feb-13     | 24-Mar-13      | 0%         | -195               | -102        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>FP-Processing Works</b>                               |  | 13-Apr-12 | 07-Jun-12 | 56               | 08-Feb-13     | 04-Apr-13      |            | -301               | 225         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A18900   | FP-BDI Pipe insulation, Process Electrical & Instrumentation Works | 13-Apr-12 | 07-Jun-12 | 56               | 08-Feb-13     | 04-Apr-13      | 0%         | -301               | 225         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>1B - Boiler Room</b>                                  |  | 21-Jan-12 | 30-Sep-12 | 104              | 20-Dec-12     | 02-Apr-13      |            | -184               | 363         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| <b>Boiler Room Structural and Builder's Work</b>         |  | 21-Jan-12 | 30-Sep-12 | 86               | 20-Dec-12     | 16-Mar-13      |            | -166               | 18          |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A20110   | BR-Installation of windows, louvers and doors 1st stage            | 02-Aug-12 | 31-Aug-12 | 30               | 15-Jan-13     | 14-Feb-13      | 0%         | -166               | -13         |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A20120   | BR-Installation of windows, louvers and doors 2nd stage            | 01-Sep-12 | 30-Sep-12 | 30               | 14-Feb-13     | 16-Mar-13      | 0%         | -166               | 16          |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A20130   | BR-ABWF works excluding windows, louvers and doors                 | 02-Aug-12 | 30-Sep-12 | 60               | 15-Jan-13     | 16-Mar-13      | 0%         | -166               | -132        |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |
| A20140   | BR-Installation of roof waterproofing system works                 | 21-Jan-12 | 19-Feb-12 | 30               | 20-Dec-12     | 19-Jan-13      | 0%         | -334               | 74          |      |   |   |   |   |   |   |   |     |   |   |     |      |   |   |   |   |

|   |  |  |          |          |         |          |           |                           |  |  |
|---|--|--|----------|----------|---------|----------|-----------|---------------------------|--|--|
| <ul style="list-style-type: none"> <li> BL</li> <li> Actual Work</li> <li> Remaining Work</li> <li> Critical Remaining Work</li> <li> Milestone</li> <li> Summary</li> <li> Baseline Milestone</li> </ul> | <p>Proposed Bio-Diesel Plant at T.K.O. Lot 39 Main Contract for All Remaining Works</p> <p><b>3 Month Rolling Programme (30 November 2012)</b></p> | <table border="1"> <tr> <td>Date</td> <td>Revision</td> <td>Checked</td> <td>Approved</td> </tr> <tr> <td>30-Nov-12</td> <td>3 Month Rolling Programme</td> <td></td> <td></td> </tr> </table> | Date     | Revision | Checked | Approved | 30-Nov-12 | 3 Month Rolling Programme |  |  |
| Date  | Revision   | Checked  | Approved |          |         |          |           |                           |  |  |
| 30-Nov-12   | 3 Month Rolling Programme  |  |          |          |         |          |           |                           |  |  |





