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Further Development of Tseung Kwan O Feasibility Study

ENVIRONMENTAL IMPACT ASSESSMENT EXECUTIVE SUMMARY

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FEASIBILITY STUDY
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1 INTRODUCTION

1.1 Project Background

1.1.1 Tseung Kwan O (TKO) is the seventh New Town in Hong Kong. Since the approval in 1982 to develop TKO into a new town, TKO has undergone very rapid development and the New Town now provides homes to about 330,000 people. According to the current TKO Outline Zoning Plan (OZP), Plan No. S/TKO/15, the existing and currently planned development would bring the population up to around 480,000.

1.1.2 Over the past few years, Civil Engineering and Development Department (CEDD) has conducted a number of studies on potential developments in TKO, to establish the extent of further development, population levels, external road connections, etc. However, since these studies were carried out, a number of planning parameters have changed, including population level targets and the associated need for extensive reclamation, the implementation timing and scale of strategic road links, as well as the deletion of port facilities previously proposed in Area 131. Therefore, a review of the overall planning of TKO has been undertaken in the light of these recent changes, and to ensure a comprehensive planning approach to the development of this area within the context of the South East New Territories (SENT) Development Strategy.

1.1.3 Maunsell Consultants Asia Limited (MCAL) was commissioned by the New Territories East Development Office of the CEDD of the Hong Kong SAR Government to undertake the Feasibility Study for Further Development of Tseung Kwan O (hereafter referred to as “the Project”), with environmental studies conducted by Maunsell Environmental Management Consultants Limited (MEMCL). The proposed developments under the Project are shown in **Figure 1.1** and comprise new developments at:

- Town Centre South (TCS)
- Pak Shing Kok (PSK)
- Remaining areas of Tiu Keng Leng (TKL)
- Western Coast Road (WCR)
- Cross Bay Link (CBL).

1.2 Consideration of Alternatives

1.2.1 The first phase of the Study underwent a detailed evaluation of different alignments and form of structures for the WCR and the CBL, as well as alternative land use proposals for TCS and PSK to arrive at the optimum planning and engineering solutions which would fit together in a coherent manner.

1.2.2 Public consultation was first held at the beginning of the Study, in September/ October 2002, to elicit public comments and views on the further development of TKO. These comments were then taken into consideration in the initial development options. These initial development options were then discussed at a Value Management Forum from which four alternative development themes for the Project were generated.

- 1.2.3 The four alternative development themes were evaluated against a range of performance criteria and subjected to comparative assessments from environmental, planning and technical perspectives. They were then put to extensive consultation to seek the public's views. Subsequent to this second round of public consultation, which was carried out in May 2003, a preferred development theme, incorporating the public feedback, was determined.
- 1.2.4 A Concept Plan was developed on the basis of the preferred development theme, which presents the broad land use framework for the further development areas of TKO, including TCS, PSK and the remaining areas of TKL. The form of the CBL associated with the preferred development theme is a bridge across Junk Bay linking the WCR on the western side of Junk Bay with Wan Po Road to the south of Area 86 on the eastern side of Junk Bay. The bridge scheme was incorporated in the Concept Plan.
- 1.2.5 At the same time as the evaluation of the alternative development themes, the alternative WCR tunnel and coastal alignments were also subjected to a detailed evaluation and put to consultation. The tunnel alignment of WCR was selected as the preferred option and was incorporated in the Concept Plan. The Concept Plan was put out to the third round of Public Consultation in January/ February 2004. The Plan was used for formulation of more detailed layout plans that provide the land use and infrastructure layout framework for testing in the various impact assessment studies including Environmental Impact Assessment (EIA) to confirm their feasibility.

1.3 Preferred Development Option

- 1.3.1 The preferred development option for the Project has considered reduced residential density in TCS and the remaining area of TKL. Further development of TKO under the preferred option would trim down the ultimate population at TKO to around 450,000 as compared to around 480,000 as outlined in the current OZP. The preferred option has also considered use of restored TKO Stage I Landfill for leisure and recreation, extensive park developments and waterfront promenade providing a variety of open spaces, as well as deletion of planned waterfront roads around TCS to create a traffic free pedestrian environment with easy access to bring people to the waterfront. The TCS development area provides opportunities to create a better living environment through good urban design planning with an attractive waterfront for the enjoyment of TKO residents. The Eastern Drainage Channel (EDC) and Inner Junk Bay would be utilised for water recreation activities. More landscape open space in TKL will alleviate the impact of the surrounding high-density environment.
- 1.3.2 Under the preferred development option, a narrow strip of new land of approximately 12.3 ha will be formed along the western shoreline of Junk Bay to accommodate the toll plaza, the tunnel operation and management facilities, the interchange linking WCR with the CBL bridge and Road P2 to the north carrying traffic to TKO Town Centre. The extent of the reclamation has already been minimised to satisfy the Government's requirement and the community's aspiration. There would be no reclamation required in the Victoria Harbour and no reclamation required for the new developments at TCS and PSK.

2 PROJECT DESCRIPTION

2.1 Project Scope

- 2.1.1 The scope of the Project comprises:
- (i) Local roads and engineering infrastructure for TCS, PSK and remaining areas of TKL.
 - (ii) Local engineering infrastructure for the proposed recreational development at TKO Stage 1 Landfill.

- (iii) Modification of existing infrastructure to serve TCS development.
- (iv) WCR to provide an additional linkage between TKO and the main urban area.
- (v) CBL to provide a linkage between the western and south-eastern areas of TKO as well as a direct linkage from south-eastern areas of TKO to Kowloon via the WCR, bypassing the New Town Centre.
- (vi) Road P2 to provide an extension of Po Shun Road to connect with WCR.

2.2 Project Programme

- 2.2.1 The Project construction works are anticipated to commence in January 2008 with completion of the Project by December 2017 with all the major roads such as WCR, CBL and Road P2 in operation by December 2016 (the remaining year is for laying of salt water main along Wan Po Road).

3 KEY FINDINGS OF THE ENVIRONMENTAL IMPACT ASSESSMENT

3.1 Air Quality

Construction Phase

- 3.1.1 Air quality impacts from the construction works would mainly be due to construction dust from excavation, materials handling, filling activities and wind erosion. With the implementation of recommended dust suppression measures and mitigation measures specified in the *Air Pollution Control (Construction Dust) Regulation* and EM&A programme, dust impact on air sensitive receivers is anticipated to be minimal.

Operational Phase

- 3.1.2 For the operation phase, cumulative air quality impact arising from vehicular emissions was assessed using air quality modelling. The following were included in the assessment:

- Vehicle emissions from traffic on open roads.
- Vehicle emissions from: tunnel portals of the WCR, Eastern Harbour Crossing (EHC), Lei Yue Mun underpass; portals of the deck-over at Sceneway Garden; portals of proposed full enclosures along the WCR; portals of the tunnel section of link roads of WCR/ CBL/ Road P2 interchange and the covered sections of Road P2.
- Vehicle emissions from idling traffic near the WCR and EHC toll plazas.
- Vehicle emissions from the EHC vent shafts and WCR ventilation exhaust buildings.
- Emissions from industrial chimneys at Yau Tong.
- Emissions from the landfill gas flaring plants located at Sai Tso Wan Landfill and TKO Stage I & Stage II/III Landfill.

- 3.1.3 Air quality modelling took into account the effect of the recommended roadside noise barriers and enclosures. With the provision of the recommended tunnel ventilation systems for the WCR (relocation of the Mid-Ventilation Building and extraction of 90% tunnel emission from the WCR westbound tunnel through vent shaft facing upward direction, and extraction of 70% tunnel emission from WCR eastbound tunnel through vent shafts facing

upward direction at Eastern Portal Ventilation Building at TKO area), the predicted air quality impacts at all representative ASRs would satisfy the AQO.

- 3.1.4 The air pollutant concentrations within the WCR tunnel would meet the requirements of the Environmental Protection Department (EPD) guideline given that the tunnel would be provided with an effective ventilation system.
- 3.1.5 Odour impacts from the proposed sewage pumping station located at the southern end of TKO Stage 1 Landfill near Area 86 are expected to be minimal, with the installation of high efficiency deodourization units. Cumulative odour impacts from the existing preliminary wastewater treatment works at Area 85 are not expected due to large separation distance.

3.2 Noise

Construction Phase

- 3.2.1 The assessment predicted that with the use of silenced equipment, and the use of movable noise barriers for some construction plant, noise levels at all of the representative Noise Sensitive Receivers (NSRs) would comply with the construction noise criteria.

Operational Phase

- 3.2.2 The potential road traffic noise impacts were assessed for the worst-case traffic flows in Year 2016 (prior to the opening of the WCR) and Year 2031 (15 years after opening of the WCR). Noise levels at most of the NSRs were predicted to exceed the traffic noise criteria established in the *Technical Memorandum on Environmental Impact Assessment Process* under the *Environmental Impact Assessment Ordinance (EIAO-TM)*. Therefore, direct mitigation measures such as use of low-noise road surfacing materials, roadside barriers and enclosures, have been proposed to be implemented on the 'new' roads to alleviate the traffic noise impacts. In addition, it is also recommended wherever possible to reduce traffic noise impacts in planned areas through careful building layout/ designs.
- 3.2.3 With the implementation of all the recommended mitigation measures, exceedance of the relevant noise limit was still predicted at some schools due to noise from 'new' roads. Since all the available direct mitigation measures have been exhausted, the affected schools would be provided with indirect technical remedies to reduce noise such as air-conditioning and appropriately glazed windows, which are the standard measures provided by Arch SD according to Class Assessment Document.
- 3.2.4 The predicted unmitigated noise levels at the NSRs in the vicinity of the proposed pumping stations and ventilation buildings, except Eastern Ventilation Building would comply with the EIAO-TM criterion. With the implementation of acoustic silencers for reversible fans at Eastern Ventilation Building, the closest NSRs would comply with the noise criteria.
- 3.2.5 Monitoring of noise is considered necessary to verify the effectiveness of the mitigation scheme. It is recommended that traffic noise monitoring should be carried out at the representative NSRs during the first year after road opening. Noise monitoring should also be carried out during the commissioning stage of the Eastern Ventilation Building.

3.3 Hydrodynamic and Water Quality Impact

Construction Phase

- 3.3.1 Short-term water quality impact could be associated with the proposed construction works. Impacts may result from the surface runoff from construction sites, sewage from on-site

construction workers, wastewater from general construction activities, dredging and filling operations and Deep Cement Mixing (DCM) treatment¹. Impacts could be controlled to comply with relevant standards in the *Water Pollution Control Ordinance* (WPCO) by implementing the recommended mitigation measures. Therefore, unacceptable residual impacts on water quality are not expected. Monitoring of water quality is recommended to verify the effectiveness of the mitigation measures.

Operational Phase

- 3.3.2 Water quality modelling results indicated that the proposed WCR reclamation and construction of the CBL bridge would not cause any adverse impact on the marine water quality in Junk Bay and Victoria Harbour, taking into account the cumulative effect of all pollution sources including those from landfill sites, non-point source surface run-off and sewage from cross connections.
- 3.3.3 To minimise potential impacts on the proposed beneficial use of Eastern Drainage Channel (EDC) for recreation activities, drainage diversion work is proposed under this Project to divert two existing storm outfalls from the EDC to the south of TKO town centre to enhance the dispersion of pollutants. Modelling results indicated that EDC and Junk Bay water quality would generally be acceptable for secondary contact recreation with the recommended drainage diversion. Monitoring of water quality is recommended to verify the model prediction.
- 3.3.4 Water recreation activity in the area of the EDC and Junk Bay could be affected by the emergency release of sewage at the seawall, but impacts are expected to be short-term. The occurrence of such an event is considered to be very remote. Nevertheless, should it occur, the plant operators of Tsung Kwan O Preliminary Treatment Works (TKOPTW) should closely communicate with EPD and LCSD to ensure appropriate actions can be undertaken to close the EDC and Junk Bay for water recreation activities. Water quality monitoring is recommended at such a time to determine when conditions are suitable for re-opening of the EDC and Junk Bay for recreational purposes. No insurmountable water quality impact on the proposed beneficial use is expected from any temporary discharges under emergency situation.

3.4 Sewerage and Sewage Treatment

- 3.4.1 The performance of the existing and committed sewerage infrastructure under full development condition for the ultimate scenario of TKO was assessed. The results indicate that there would be no risks of sewage overflow under various peak flow conditions for the ultimate scenario. Based on the *Environmental and Engineering Feasibility Assessment Studies in Relation to the Way Forward of the Harbour Area Treatment Scheme*, the TKOPTW and the Harbour Area Treatment Scheme (HATS) Stage I Tunnel section from TKO to Kwun Tong are considered to be adequate to handle the ultimate catchment flows. The Project would not pose any capacity constraint on HATS, as there would be an overall reduction in ultimate population and flows as a consequence of planned further developments.

3.5 Terrestrial Ecology

- 3.5.1 A literature review and 6-month ecological surveys covering the wet season were undertaken to establish the ecological profile of the Assessment Area. As much of the

¹ DCM (Deep Cement Mixing) is a well-known sediment treatment method to improve the load-bearing strength of sediments so they could be left in-situ under, in this instance, the future seawall for the WCR reclamation.

- proposed development area is dominated by highly disturbed urban districts, terrestrial ecological impact assessment was focussed on three areas where direct/indirect impacts to terrestrial ecological sensitive receivers were anticipated.
- 3.5.2 The Assessment Areas were found to be dominated largely by relatively low ecological value habitats, including areas of wasteland and developed areas. Habitats considered of conservation interest included moderate-high ecological value secondary woodland in the PSK Assessment Area, and moderate ecological value stream habitats in the WCR in TKO Area (E-WCR) and PSK Assessment Areas.
- 3.5.3 Four plant species of conservation interest were recorded from the Assessment Areas during recent surveys. Although the recorded species are all relatively common in Hong Kong, they are either protected through Hong Kong or mainland Chinese Legislation, or are considered to have regionally or globally threatened populations.
- 3.5.4 Several faunal species of conservation interest were recorded in the Assessment Areas, comprising one fish, two reptile, two mammal, one freshwater invertebrate, and 13 bird species. Of particular interest was the fish species Philippine Neon Goby (*Stiphodon artopurpureus*), recorded from a small stream below the Junk Bay Permanent Chinese Cemetery. Previous records of the Eurasian Eagle Owl (*Bubo bubo*), which is of regional conservation interest, have also been made from the E-WCR Assessment Area. Although not recorded during recent surveys, it is possible this species still occurs in the Assessment Area.
- 3.5.5 Direct terrestrial ecological impacts resulting from developments proposed under this Project would generally be confined to small areas of relatively low ecological value habitats. No direct impacts to moderate-high ecological value secondary woodland or moderate ecological value streams are expected. Habitat loss resulting from the proposed works is expected to result in minor and acceptable ecological impacts.
- 3.5.6 Individuals of two of the plant species (Small Persimmon (*Diospyros vaccinioides*) and Bamboo Orchid (*Arundina chinensis*)) of conservation interest would be directly impacted by works proposed under this Project. It is recommended that the plants be transplanted to suitable nearby habitats outside of the proposed works areas prior to the construction phase.
- 3.5.7 Impacts to the majority of faunal species of conservation interest recorded in the Assessment Areas are expected to be relatively minor in scale. Many of the recorded species are often found in urban/developed areas, and are not considered particularly sensitive to disturbance (e.g., Black Kite, *Milvus lineatus*). Other species (e.g., Besra, *Accipiter trivirgatus*) were recorded at some distance from the proposed works areas, and therefore would not be affected by construction or operation phase activities. Records of some species (e.g., Black-naped Oriole, *Oriolus chinensis*) refer to occasional sightings of migrant birds that would not be substantially affected by the proposed works.
- 3.5.8 Without mitigation, substantial impacts to the Philippine Neon Goby population recorded from the E-WCR Stream have been predicted. Although no direct impacts to the stream habitat are expected, reclamation works for the WCR within Junk Bay would result in the loss/disturbance of habitats potentially utilised by juvenile Neon Gobies. Measures to protect adult fishes during the construction phase and to provide suitable passage from the stream to marine habitats during the operation phase have therefore been recommended.
- 3.5.9 Measures to avoid, minimise and compensate for various identified ecological impacts have been recommended. With the implementation of the recommended mitigation measures, residual terrestrial ecological impacts resulting from developments proposed under this Project are expected to be ecologically acceptable.

3.6 Marine Ecology

- 3.6.1 Literature review of existing marine ecological conditions was supplemented by field surveys of marine ecological resources in the Assessment Area. Surveys were conducted

over a 6 month period from May to October 2004. Marine habitats affected by WCR reclamation and construction of CBL were generally of low ecological value. Rocky and sandy shore habitats were considered to be of low-medium ecological value. Artificial seawall was rated as being of very low ecological value. Soft substrata subtidal habitat at Junk Bay was considered to be of low ecological value. Owing to the sparse cover of common hard corals and patchy cover of soft and gorgonian corals, the Chui Keng Wan coast at the proposed reclamation area was considered to be of low ecological value.

3.6.2 WCR reclamation would cause direct and permanent loss of 1km of natural rocky shore and 0.2km of sandy shore. A total of 16.5ha of subtidal habitat would be permanently lost mainly due to the WCR reclamation area (16.3ha) but also due to construction of piers for the CBL (0.2ha). Impacts to marine habitats (and natural shorelines in particular) have been avoided and minimised as far as practicable taking into account engineering constraints and also constraints posed by other environmental considerations (e.g., the visual impact of the WCR reclamation). Direct impacts to these habitats therefore would be largely mitigated for through the compensation provided by construction of a sloping rubble mound seawall: the seawall would provide a suitable habitat for rocky inter-tidal and coral community re-colonisation. Owing to construction methods, dredging would be relatively small scale and be conducted for approximately 1 month. The predicted results from water quality modelling showed that relevant water quality objectives for suspended sediments and dissolved oxygen concentrations would be complied with. With the implementation of recommended water quality and marine ecological mitigation measures, indirect impacts on adjacent hard substrata subtidal habitat, which supported sparse hard coral, and some soft and gorgonian corals, were therefore predicted to be low.

3.6.3 The marine ecological impact assessment determined that Junk Bay was not a key habitat for marine mammals, with the nearest sighting of a live Finless Porpoise (*Neophocaena phocaenoides*) to Junk Bay about 2km to the south of Tung Lung Chau. No substantial impacts to marine mammals through increased marine traffic, noise disturbance or water quality impacts are expected.

3.6.4 In summary, residual marine ecological impacts resulting from the Project were assessed as being minor and acceptable.

3.7 Fisheries Impact

3.7.1 A literature review has been conducted to incorporate the latest relevant information for determining impacts on fisheries arising from the Project.

3.7.2 The size of catches in the Junk Bay Assessment Area was ranked as low to moderate compared to other fishing grounds in Hong Kong, and the fish species captured were considered to be of low commercial value. Fishing grounds in Inner Junk Bay were considered to be of low commercial importance. The only sensitive fisheries receiver identified in the vicinity of the project is the Fish Culture Zone at Tung Lung Chau.

3.7.3 The proposed WCR reclamation and CBL construction would result in the direct loss of approximately 16.5 ha of potential fishing ground at Inner Junk Bay. The loss of this area is anticipated to have little effect on fisheries production of Hong Kong as a whole.

3.7.4 Provided that all the mitigation measures recommended in the EIA for protection of the water quality are fully implemented, specific mitigation measures to protect fisheries resources would not be necessary. Similarly, audit activities on work sites to ensure prevention of water quality impact would also serve to protect fisheries resources. Therefore, a specific EM&A programme for fisheries is not recommended.

3.8 Landscape and Visual Impact

- 3.8.1 In terms of Annex 10 of the EIAO-TM, the landscape and visual impacts are considered to be acceptable with mitigation measures. While the residual impact on the landscape resources (the natural coastline and topography along the western side of Junk Bay and inner Junk Bay as well as the Character Area of inner Junk Bay) will remain substantial, the current design of the Project has already minimised the amount of reclamation as far as practicable and also ensures that other valued resources including areas of coral further along the coast would not be disturbed.

3.9 Waste Management Implications

- 3.9.1 The dredged volume for the WCR Phase 1 reclamation was estimated to be approximately 20,000 m³. With the implementation of the recommended mitigation measures and management procedures in accordance with the requirements of ETWB TCW No. 34/2002, no residual impact was predicted.
- 3.9.2 Other waste types generated by the construction activities are likely to include construction and demolition (C&D) material (from foundation, excavation and tunnelling works), general refuse from the workforce and chemical wastes from the maintenance of construction plant and equipment. Provided that these identified waste arisings are to be handled, transported and disposed of using approved methods and that the recommended good site practices are to be strictly followed, adverse environmental impacts would not be expected. During the operation phase, domestic waste would be generated by the planned residential use at the new development areas at PSK, TCS and TKL. Domestic waste generated in the development areas would be directed to the SENT Landfill.

3.10 Biogas Assessment

- 3.10.1 The calculations show that, assuming 75% biodegradable Total Organic Carbon (which is a worst-case scenario) the estimated methane emission from the WCR reclamation is estimated to be well below all relevant assessment criteria. It is therefore concluded that the methane gas generation potential is not expected to pose a development constraint to the proposed WCR reclamation.
- 3.10.2 Furthermore, the planned land use of highway and toll plaza on the proposed WCR reclamation is not sensitive to potential biogas emission. The proposed administration building of the toll plaza would not have a basement and therefore potential biogas emissions would be considered to pose a very limited, if any, risk.

3.11 Cultural Heritage

- 3.11.1 Based on the baseline review of marine archaeology and the marine geophysical survey results, a surface anomaly having archaeological potential was identified. This surface anomaly is located close to one of the proposed piers of the CBL and could be directly impacted. A visual diver survey should be carried out during the detailed design stage of the Project. The dive survey should cover the surface anomaly and also the position of the area to be reclaimed that was not covered by the marine geophysical survey.
- 3.11.2 No pre-war clan or notable feng shui features such as feng shui woods and ponds or historical trackway or other historic features were identified within the Study Area. All of the fourteen identified notable buildings and structures are located outside the Project boundary, so direct impacts are not expected. Nevertheless, since Cha Kwo Ling Tin Hau Temple is located less than 50m from the works area of the proposed roundabout at Cha Kwo Ling, it may be indirectly impacted by dust and vibration due to the nearby construction activities of the Project. To prevent damage to Cha Kwo Ling Tin Hau temple during the construction phase, a temporarily fenced-off buffer zone (with allowance for

public access) should be provided around the temple. Monitoring should be carried out at the temple during the construction period.

3.12 Landfill Gas Hazard

3.12.1 The results of the qualitative risk assessment of landfill gas hazard posed by TKO Stage I & II/III Landfill and Sai Tso Wan Landfill to the proposed project site suggested that the overall level of the landfill gas hazard would be medium for the three areas.

3.12.2 Some appropriate protection measures have been proposed to minimise the landfill gas hazard for the proposed project site during the construction phase and operational phase. These measures should be implemented as appropriate during the construction phase and/or operational phase of the proposed project.

3.12.3 Provided that the recommended protection measures are implemented properly, the health and safety of the site workers/ personnel working at the proposed project site would be safeguarded and there would be no adverse impact on the proposed project.

3.13 Hazard to Life

3.13.1 The hazard to life from the proposed Dangerous Goods Vehicles Ferry Pier (DGVFP) that could result from modification of the access road to the vehicle queuing area (due to the two WCR slip roads proposed under this Study) was assessed.

3.13.2 In the assessment, three changes introduced by the two proposed slip roads to the surrounding environment of the proposed DGVFP were noted but the changes would not induce significant change to the risk levels associated with the proposed DGVFP due to the following conditions: (1) the existing nature (presence of ignition sources with high presence factor) of locations near the proposed DGVFP, (2) an insignificant increase of total population arising from the proposed slip roads when compared to that considered in the Previous Assessment. Moreover, as assessed in the Previous Assessment, there is a comfortable margin between the estimated risk level and the upper boundary of acceptable region for societal risk. Therefore, it is considered unlikely that the risk guidelines would be breached due to the changes introduced by the two proposed slip roads. This shows that the Project is unlikely to be infeasible in terms of hazard to life implication.

3.13.3 Moreover, the scenario considered in the current Study (relocation of the existing DGVFP to Cha Kwo Ling, near Slip Roads S1 and S2) is based on the assumption that the sea area near the Kai Tak Airport Runway is reclaimed. Also, the Trunk Road T2 and DGVFP are subject to review under the South East Kowloon Development (SEKD) Comprehensive Planning and Engineering Review by Planning Department. A Quantitative Risk Assessment should be carried out by the project proponent of SEKD to confirm the compliance of risk guidelines, if it is proposed that the existing DGVFP is to be relocated.

3.14 Environmental Monitoring and Audit

3.14.1 Environmental monitoring and audit (EM&A) requirements have been specified in an EM&A Manual. The EM&A Manual contains full details of proposed baseline and compliance monitoring programmes, as well as performance specifications, audit requirements and monitoring procedures.

4 OVERALL CONCLUSION

- 4.1.1 The findings of this EIA have provided information on the nature and extent of environmental impacts likely to arise from the construction and operation of the Project. The EIA has, where appropriate, identified mitigation measures to ensure compliance with environmental legislation and standards.
- 4.1.2 Overall, the EIA Report concludes that the Project would be environmentally acceptable with the implementation of the proposed mitigation measures for construction and operation phases. An environmental monitoring and audit programme has been recommended to ensure the effectiveness of recommended mitigation measures.