New Contaminated Sediment Disposal Facility to the West of Lamma Island

Project Profile

December 2019

Civil Engineering and Development Department

Table of Contents

1. Basic Information

1.1 Project Title

The title of the Project is "New Contaminated Sediment Disposal Facility to the West of Lamma Island" (hereinafter referred to as the "Project")

1.2 Purpose and Nature of Project

Since 1992, the Government has been managing a number of contaminated sediment disposal facilities in the Hong Kong waters, including the contaminated mud pits (CMPs) to the east of Sha Chau[1] (ESC) and south of The Brothers (SB)[2]. According to the latest estimate by the Government, the total remaining capacity of the existing disposal facilities at ESC can only cope with the demand up to 2027 for the public and private projects. A new sediment disposal facility has to be planned for in order to meet the sediment disposal demand after 2027 arising from routine harbour / channel / river maintenance dredging works and other projects.

1.3 Name of Project Proponent

The Project Proponent is Civil Engineering and Development Department.

1.4 Location and Scale of Project and History of the Site

The proposed new marine contaminated sediment disposal facility will be located in the West Lamma Channel – in an area to the west of Lamma Island and to the east of the recommended Traffic Separation Scheme between south of Kau Yi Chau and Fan Lau (route via south of Cheung Chau). The plan of the Study Area of the Project is shown at **Appendix A**.

Back in 1997, there was a plan for the provision of additional shelters in this area to support the midstream and container terminal related development.[3] However, the Port 2030 Study anticipated that it would be sufficient to enhance the handling capacity of existing container terminals to cope with future growth and thus the planning for Container Terminal No.10 before 2030 was not

[1] The contaminated sediment disposal facility to the east of Sha Chau is covered by an Environmental Permit (No. EP-312/2008/A).

[2] The contaminated sediment disposal facility to the south of The Brothers is covered by an Environmental Permit (No. EP-427/2011/A).

[3] The Comprehensive Study on Marine Activities Associated Risk Assessment and Development of a Future Strategy (MARAD Strategy) for the Optimum Usage of Hong Kong Waters.

recommended. In view of the above, it is considered that this area would have potential for housing a new contaminated sediment disposal facility.

The Study Area shown in **Appendix A** is in the order of approximately 600 hectares, with decreasing seabed levels from -8 metres above Chart Datum (mCD) to -14 mCD from north to south. The water currents at the proposed study area were mainly in northwest (dry season) to southeast (wet season) directions and the current speed is considered low to moderate when compared to other areas in Hong Kong[4].

The proposed new sediment disposal facility will consist of individual contaminated mud pits (CMPs), occupying an operational area of approximately 100 hectares in total and capable of handling up to a minimum of 6 Mm^3 of contaminated sediment in total. The locations and configurations of the proposed CMPs will be subject to study and assessments, and optimized in the design stage. The scope of the Project includes the following activities:

(a) Dredging of the seabed for the formation of CMPs;
(b) Disposal of contaminated sediment in the formed CMP;
(c) Capping of the exhausted CMP by uncontaminated sediment up to the original seabed level.

The CMPs will be formed in a progressive manner taking into consideration of the latest forecast demand of sediment disposal. The construction of the first CMP will tentatively commence in 2024Q2 and ready for receiving contaminated sediment by end 2025. With an estimated annual disposal demand of 0.6Mm^3, the proposed CMPs are expected to be in service until late 2034.

1.5 Number and Types of Designated Projects to be Covered

The following elements of the Project are classified as Designated Projects under the Environmental Impact Assessment Ordinance (EIAO).

- A marine dumping area (item C.10, Part I of Schedule 2 of EIAO); and
- A dredging operation exceeding 500,000m^3 (item C.12, Part I of Schedule 2 of EIAO)

[4] With reference to the tidal stream prediction data obtained from the Marine Department.

1.6 Name and Telephone Number of Contact Person

All queries regarding the Project can be addressed to:

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Fill Management Division, Civil Engineering Office
5/F, Civil Engineering and Development Building, 101 Princess Margaret Road, Homantin, Kowloon.

Tel: 2762 5559 / Fax: 2714 0113

2. Outline of Planning and Implementation Programme

2.1 Project Implementation and Timetable

The project proponent will carry out the planning and detailed design of this facility while the construction works will be carried out by contractors and supervised by the project proponent. The project proponent will engage consultants to undertake the Environmental Impact Assessment (EIA) study and associated impact assessment (e.g. the Marine Traffic Impact Assessment).

It is tentatively scheduled that the EIA study will commence in 2020Q2 for completion by late 2021 and that the construction of the first CMP will commence in 2024Q2 for completion by late 2025, allowing a transitional period of 2 years to cater for possible surge of disposal demand before the anticipated exhaustion of the existing disposal facilities in 2027.

2.2 Interaction with Other Projects

The following developments may have potential interface with the Project:

- **South of Cheung Chau Open Sea Sediment Disposal Area**: this is an active disposal ground for receiving uncontaminated sediment generated from private and public infrastructure projects, including the routine maintenance dredging works of harbour / river / channels. This facility is expected to be in operation beyond 2029.

- **Maintenance dredging works at the Lamma Power Station Navigation Channel**: Further to the improvement dredging works to be conducted in 2019/2020, the next round of smaller scale maintenance dredging works may be arranged in 2027. The EIA Study will review the updated information to determine if there is any interaction between this

maintenance dredging works with this Project.

- **Hong Kong Offshore Liquefied Natural Gas (LNG) Terminal (Register No.: AEIAR-218/2018):** CLP Power Hong Kong Limited and the Hongkong Electric Company proposed to develop an offshore LNG receiving terminal in Hong Kong waters to serve as a gas supply source to meet Hong Kong's future power generation fuel supply needs. According to the latest programme, construction work will commence in 2020Q2. The EIA Study will review the updated information to determine if there is any interaction between the LNG terminal with this Project.

- **Development of a 100MW Offshore Wind Farm in Hong Kong (Register No.: AEIAR-152/2010):** Hongkong Electric Company proposed to develop an offshore wind farm in the waters between Lamma Island and Cheung Chau, at approximately 4 km southwest of the Lamma Power Station. The Study Area does not overlap with the infrastructure of the proposed wind farm. Details of its implementation programme are uncertain at this stage. The EIA Study will review the updated information to determine if there is any interaction between this wind farm and the Project.

- **Artificial Islands in Central Waters:** The proposal of developing artificial islands in the Central Waters was announced in the 2018 Policy Address. Details of the development including the implementation programme are subject to further study and have yet to be confirmed. The EIA Study will review the updated information to determine if there is any interaction between the proposed development (including any related re-provisioned facilities) and this Project.

3. Possible Impacts on the Environment

3.1 Air Quality

(a) Construction Phase

During the construction phase, the gaseous emission from construction plant will have an impact on the air quality. The closest Air Sensitive Receivers (ASR) to the Study Area are the existing housing development at Yung Shu Wan of Lamma Island (approximately 3 km from the Study Area). Due to the large separation distance from the Study Area to the ASR, the impact is

expected to be minimal. The impact can be minimized if the construction machines are properly operated and maintained.

(b) Operation Phase

During the operation phase, the gaseous emission from the sediment disposal vessels will have an impact on the air quality. As the time for the disposal operation is relatively short and the vessel will leave the facility immediately after the disposal, the air quality impact during the operation stage of the Project is considered insignificant. Any potential impact can be minimized if the vessels are properly maintained.

3.2 Noise

(a) Construction Phase

Dredging works for the formation of CMP during the construction phase will involve the use of Powered Mechanical Equipment (PME). The use of PME has the potential to generate intermittent and transient noise to the nearby Noise Sensitive Receivers (NSR). The closest NSR to the Study Area are the existing housing development at Yung Shu Wan of Lamma Island (approximately 3 km from the Study Area). The EIA study will assess this effect and recommend mitigation measures if needed.

(b) Operation Phase

During the operation stage, intermittent noise will be generated by the sediment disposal vessels and may affect nearby NSRs. As the time for the disposal operation is relatively short and the vessel will leave the facility afterwards, the impact is expected to be transient. The EIA study will assess this effect and recommend mitigation measures if needed.

3.3 Water Quality

(a) Construction Phase

The primary impacts of dredging on water quality are temporary increases in suspended sediment concentrations, generation of sediment plumes and decrease in dissolved oxygen. Such impacts may affect not only the water body within the site, but also the sensitive receivers in the vicinity of the area such as the gazetted beaches near Hung Shing Ye and Lo So Shing along the western coast of Lamma Island. The impact of dredging on water quality will be assessed in detail during the EIA study. Mitigation measures will be proposed if found necessary.

(b) Operation Phase

The primary impacts of the sediment disposal operations on water quality are the increases in concentrations of suspended sediment, heavy metals, PAHs, PCBs and TBT and decrease in dissolved oxygen. Such impacts may affect not only the water body within the site, but also the sensitive receivers in the vicinity of the area. The impact of sediment disposal activities on water quality and the potential cumulative impact including that from any nearby sewage outfalls will be assessed in detail during the EIA study. Mitigation measures will be proposed if found necessary.

3.4 Waste Management

(a) Construction Phase

The most significant construction waste impact for the Project will be handling and disposal of marine sediment associated with the dredging works in the formation of CMPs. With reference to EPD's routine marine sediment quality monitoring data taken at Stations SS3 and SS4 from 1987 to 2015, it is expected that the majority of the marine sediment in the Study Area will be uncontaminated. More samples will be taken at the Site Investigation stage to verify the sediment characteristics. The management and disposal of the dredged material will follow the procedures and requirements specified in ETWB TC(W) No. 34/2002 – "Management of Dredged/Excavated Sediment". Other construction wastes, such as general refuse, will be generated in limited quantities and normal waste management practices will be implemented.

(b) Operation Phase

No potential operational phase impact to waste management is expected.

3.5 Marine Ecology

(a) Construction Phase

The primary impact on marine ecology during pit formation is direct habitat loss due to dredging and sediment deposition from dispersed plumes of dredged material covering up the habitats causing their death. Direct habitat loss could not be avoided due to the nature of the works. Measures would be investigated to limit the deposition of dredged material to the pit area and limit the loss of habitat as far as possible. The impact on marine benthos would also be assessed during the EIA study.

Finless porpoise are seen in the vicinity of the Study Area. Therefore, the possible impact and risk to this marine mammal during pit-formation works will be assessed in detail during the EIA study. Mitigation measures will be proposed if found necessary.

(b) Operation Phase

The primary impact on marine ecology during the sediment disposal operations is sediment deposition from dispersed plumes of contaminated sediment covering up the habitats outside the pit area and causing their death. Other potential impacts include habitat disturbance due to increased marine traffic, noise and uptake of contaminants through bioturbation and bioaccumulation. Measures would be investigated to limit the sediment deposition to the pit area and limit the loss of habitat as far as possible. The impact on marine benthos during the disposal operation would also be assessed during the EIA study.

Upon completion of the disposal activities the pits will be capped with uncontaminated sediment to the original seabed level. Experience from the existing CMPs to the ESC and SB indicated that there would be gradual re-colonisation of benthic organisms. The effect of benthic re-colonisation upon completion of capping will be investigated in the EIA Study.

Finless Porpoise are seen inside the proposed Study Area. Therefore, possible impact and risk to this marine mammal during the sediment disposal operations will be assessed in detail during the EIA study.

3.6 Fisheries

(a) Construction Phase

The nearest Fish Culture Zones (FCZ) are at Lo Tik Wan and Sok Kwu Wan of Lamma Island, both located beyond 5 km water distance from the boundary of the Study Area. Another FCZ at Cheung Sha Wan on east Lantau Island was located beyond 7km water distance to the west of the Study Area. Results of the AFCD Port Survey 2016/17 suggested that key fishing areas with high fisheries production are located around Cheung Chau. Medium fisheries production was reported around Lamma Island and the Study Area. Potential impacts to fishing ground, fisheries resources and fishing operation arising from the dredging works are the direct disturbances

of benthic habitats (may cause a loss of food supply for the fisheries resources), changes in water quality and disturbance due to the operation of construction plant. The impact of pit construction on capture fisheries and aquaculture, including the impacts on spawning grounds and nursery areas of the commercial fisheries resources, will be assessed in detail during the EIA study. Mitigation measures will be proposed if found necessary.

(b) Operation Phase

Potential impacts to fishing ground, fisheries resources and fishing operation arising from the disposal operations are direct disturbances to benthic habitats due to sediment deposition in the vicinity of the pit causing a loss of food supply and indirect disturbance due to changes in water quality. The impact of pit operation on capture fisheries and aquaculture, including the impacts on spawning grounds and nursery areas of the commercial fisheries resources, will be assessed in detail during the EIA study. Mitigation measures will be proposed if found necessary.

3.7 Landscape and Visual

(a) Construction Phase

Landscape and visual impacts are expected from the dredging works, construction plant etc. Nevertheless, the Landscape and Visual impact is anticipated to be temporary and considered insignificant.

(b) Operation Phase

The CMPs are located at the seabed. As the time for the disposal operation is relatively short and the vessel will leave the facility afterwards, the level of visual impact is anticipated to be temporary and insignificant.

3.8 Cultural Heritage

(a) Construction Phase

From the desktop study, there is no recorded heritage site partly or wholly within the Study Area. As an extensive area of the seabed will be affected by the Project, a Marine Archaeological Investigation will be carried out in the EIA study to evaluate the potential impact on marine archaeological resources arising from the proposed works and to propose appropriate mitigation measures (if any) for implementation in prior agreement with the Antiquities and Monuments Office (AMO) before commencement of the proposed works.

(b) Operation Phase

Direct and indirect cultural heritage impacts during the operation stage are not expected.

3.9 Hazard to Life

(a) Construction Phase

It is expected that the majority of the marine sediment in the Study Area will be uncontaminated. As such, impact on hazard to life during the dredging works for the pit formation is not expected.

(b) Operation Phase

The impact of disposal activities on commercial fishery resources including risk to the health of human and marine mammal due to absorption of contaminants into the food chain will be assessed in detail during the EIA study. Mitigation measures will be proposed if found necessary.

4. Major Elements of the Surrounding Environment

4.1 General

The Study Area is situated within the Southern Water Control Zone, in an open sea area to the east of the recommended Traffic Separation Scheme between south of Kau Yi Chau and Fan Lau (route via south of Cheung Chau) and to the south of the North West Lamma Anchorage. This area is currently not covered by any statutory planning tools such as the Outline Zoning Plan.

4.2 Industrial, Commercial and Residential Developments

Existing, committed and planned industrial, commercial and residential developments are regarded as potential environmentally sensitive receivers for air quality, noise impacts and hazards to life. Examples of existing potential environmentally sensitive receivers in the vicinity of this Project include: site office of Lamma Power Station, residents at Yung Shue Wan, Hung Shing Ye, Pak Kok San Tsuen and Sok Kwu Wan of Lamma Island.[5]

4.3 Shipping Fairways

The Study Area is located in West Lamma Channel, to the east of the recommended Traffic Separation Scheme between south of Kau Yi Chau and

[5] The mentioned sensitive receivers shall be reviewed during the EIA study.

Fan Lau (route via south of Cheung Chau). The West Lamma Channel is frequently used as an access route by various large shipping vessels. A buffer distance should be allowed between the edge of the CMP and this corridor.[6]

4.4 Subsea utilities and Facilities

No pipeline or submarine cables are identified within the Study Area. The nearest submarine cable is running in the north-south direction, located at approximate 200m to the east of the Study Area owned by Wharf T&T Limited. There is a subsea gas pipeline connecting the Lamma Power Station and the Guangdong Liquified Natural Gas (LNG) Terminal in Dapeng Bay in Shenzhen, with the closest distance of 750m from the boundary of the Study Area. The alignment of the proposed subsea gas pipeline connecting the offshore LNG terminal and the Lamma Power Station[7] runs around the south-eastern corner of the Study Area. A buffer distance should be allowed between the edge of the CMP and the concerned gas pipeline or submarine cables, which would be further investigated and assessed in the EIA study.

4.5 Gazetted Bathing Beaches

The following gazetted beaches are identified in the vicinity of the Study Area:

- Hung Shing Ye Beach on the western coast of Lamma Island (~3.5km from Study Area);
- Lo So Shing Beach on the western coast of Lamma Island (~3.5km from Study Area);
- Cheung Chau Tung Wan Beach on eastern coast of Cheung Chau (~4km from Study Area);
- Kwun Yam Beach on eastern coast of Cheung Chau (~3.5km from Study Area).

Two other gazetted beaches (Pui O and Silver Mine Bay) are identified on Lantau Island, both located over 9km from the Study Area.

[6] A separate assessment will be conducted outside the EIA study to assess the effects of different construction plant/ different barges / vessels on marine traffic and recommend mitigation measures if needed.

[7] Hong Kong Offshore LNG Terminal (Register No. AEIAR-218/2018).

A number of non-gazetted beaches are identified on the western coast of Cheung Chau and eastern coast of Lamma Island, all located beyond 4 km from the Study Area.

These gazetted and non-gazetted beaches may be affected by the changed water quality resulting from the CMP dredging works and sediment disposal in the operation phase. Such impact will be further investigated and assessed in the EIA Study.

4.6 Seawater Intake

The nearest seawater (cooling water) intakes for the Lamma Power Station is located at approximately 2.5 km to the east of the Study Area. Another seawater intake for the Water Supplies Department's Flushing Water at Cheung Chau is located at approximately 4 km from the Study Area. The seawater intakes on the southern part of Hong Kong Island and Ap Lei Chau are all more than 6 km from the Study Area. These seawater intakes may have specified suspended sediment criteria to protect the water abstraction system and impact on these intake points will be further investigated and assessed in the EIA Study.

4.7 Areas of Conservation Value

The Sham Wan Sites of Special Scientific Interests (SSSIs) in southern Lamma Island is a nesting ground of green turtle. This SSSI is more than 4 km to the east of the Study Area. Encompassed within the Sham Wan SSSI, a portion of the sandy beach at Sham Wan of South Lamma has been designated as a Restricted Area under the Wild Animal Protection Ordinance in July 1999. Access to the beach is prohibited between 1 June and 31 October each year during the green turtle nesting season. It is also noted that the areas around this SSSI along the southern coast of Lamma Island have been proposed as a potential site for a Marine Park but at present, there is not much available information in the public domain regarding the designation for this proposed marine park.

Coral communities of high ecological value are located near the northern (Pak Kok), eastern (Luk Chau) and southern (Sham Wan) part of Lamma Island. All these locations are over 3.5km from the Study Area.

The nearest Country Parks and Special Areas are located on the Lantau Island,

beyond 5 km to the west of the Study Area.

4.8 Coastal Protection Area

A portion of the eastern coastline of Cheung Chau is designated as a Coastal Protection Area (CPA) under the Town Planning Ordinance. (OZP No. S/I-CC7) These CPA are 2.5 km – 4 km to the west of the Study Area.

Some areas along the western coastline of Lamma Island, including Hung Shing Ye, Lo So Shing and Ha Mei Wan are also designated as CPA under the Town Planning Ordinance. (OZP No. S/I-LI-11) These CPAs are at approximately 3.5 km to the east of the Study Area.

4.9 Ecological Sensitive Receivers

The Finless Porpoise was recorded with moderate densities in the waters to the southwest of Lamma Island. Intertidal and coral surveys were conducted in the vicinity of Lamma Power Station as part of the Offshore Windfarm EIA. Species common and widespread in Hong Kong were recorded and some isolated colonies of corals were recorded.

4.10 Fisheries Sensitive Receivers

There are two designated Fish Culture Zones (FCZ) at Lo Tik Wan and Sok Kwu Wan on east Lamma Island. Both FCZ are at a water distance of beyond 5 km to the east of the Study Area. Another FCZ at Cheung Sha Wan on east Lantau Island was located beyond 7 km water distance to the west of the Study Area.

Results of the AFCD Port Survey 2016/17 suggested that key fishing areas with high fisheries production are located around Cheung Chau. Medium fisheries production was reported around Lamma Island and the Study Area. As the proposed work area falls within the spawning grounds and nursery areas of commercial fisheries resources, these should be regarded as the Fisheries Sensitive Receivers for the Project as well.

4.11 Sites of Cultural Heritage

No declared/deemed monuments, graded historic buildings/recorded heritage resources or site of archaeological interest listed by the Antiquities and Monuments Office is located in the Study Area.

The EIA of the Offshore Wind Farm Project (Register No. AEIAR-152/2010)

located four shipwrecks/potential sites of marine archaeological value in the vicinity of the Lamma Power Station and the proposed Wind Farm. One of the ship wrecks (Wreck No.69098)[8], may be in close vicinity to the southern edge of the Study Area.

5. Environmental Protection Measures to be Incorporated in the Design and Operation of the Facility and any Future Environmental Implications

5.1 General

The environmental impacts (including both cumulative impacts and those solely arising from the Project) will be investigated in the EIA study. Appropriate mitigation measures will then be devised to ensure that the Project would be environmentally acceptable with reference to the relevant legislations and other requirements. Residual impacts, if any, would be confined within the allowable limits. Environmental monitoring and auditing of the potential impacts arising from the Project would be conducted at appropriate phases. Subject to further detailed assessment in the EIA study, the following mitigation measures are proposed to be implemented for the Project.

5.2 Air Quality

(a) Construction Phase

The control measures, set out in the Air Pollution Control (Construction Dust) Regulations (Cap. 311R) and good site practices would be implemented to reduce the dust emission from the Project.

(b) Operation Phase

Given the relatively short period of the disposal operation, it is not anticipated that adverse air quality impacts will occur at the sensitive receivers.

5.3 Noise

(a) Construction Phase

The noise level arising from the construction activities will be regulated by

[8] A "Live" wreck recorded in the United Kingdom Hydrographic Office record (Ref. EIA Report – EIA 177/2009)

the licensing conditions of construction noise permits issued under the Noise Control Ordinance. Appropriate mitigation measures as recommended in the noise impact assessment will be implemented to minimize the potential impact to the nearby NSRs. Other mitigation measures (e.g. recommended in ProPECC PN 2/93 "Noise from Construction Activities – Non-statutory") will be implemented, as appropriate, to control the noise impacts.

(b) Operation Phase

Given the relatively short period of the disposal operation, it is anticipated that the noise impact on the NSRs will be transient. Similar to the construction phase, appropriate mitigations as recommended in the noise impact assessment and published practice notes will be implemented, as appropriate to control the noise impacts.

5.4 Water Quality

(a) Construction Phase

A number of mitigation measures are expected during dredging for pit formation. The measures would serve to control the potential impacts to within acceptable levels. Examples of general mitigation measures include: the use of closed, watertight grabs; control of dredging rate and the speed of lowering the grab to minimize disturbance to the seabed etc. Subject to the detailed analysis in EIA study, other specific measures like the installation of silt curtains during dredging works to control the dispersion of sediment plumes, will be implemented if necessary.

(b) Operation Phase

During the operation phase, operation details such as the sediment disposal rate and disposal method taking into account of the current flow direction will be investigated under the EIA study so as to minimize the impact to an acceptable level. Mitigation measures will be implemented if found necessary.

5.5 Waste Management

(a) Construction Phase

Procedures and requirements specified in ETWB TC(W) No. 34/2002 – "Management of Dredged/Excavated Sediment" will be followed for the management and disposal of dredged marine sediment from the pit-formation work.

(b) Operation Phase

No potential operational phase impact to waste management is expected.

5.6 Marine Ecology & Fisheries

(a) Construction Phase

Considerations will be given to minimize the impact on marine ecology and fisheries resources during the site selection process and design of the CMPs. Practical measures should be taken to control the water quality impacts during dredging works to within acceptable levels so as to prevent subsequent impacts on the marine ecological and fisheries resources.

Direct habitat loss due to pit formation works could not be avoided due to the nature of the works. However, mitigation measures would be investigated and implemented to minimize the amount of sediment deposition from dispersed plumes. The effectiveness of the mitigation measures adopted will be closely monitored through a comprehensive environmental monitoring and audit scheme.

Finless Porpoise are seen in the vicinity of the Study Area. Detailed analysis will be carried out using the actual monitoring results to assess the possible impact and risk to this marine mammal during the various stages of the project. Mitigation measures will be implemented if found necessary.

(b) Operation Phase

Recommended measures to control water quality impacts to within acceptable levels are also expected to control impacts to ecological and fisheries resources.

Upon exhaustion, the CMPs will be capped with uncontaminated sediment to the origin seabed level. The effect of benthic re-colonisation upon completion of capping will be investigated in the EIA Study.

5.7 Landscape and Visual

The Landscape and Visual impact is anticipated to be temporary and insignificant. As such, no specific mitigation measures are required.

5.8 Cultural Heritage

As an extensive area of the seabed will be affected by the project, a Marine

Archaeological Investigation will be carried out in the EIA study to evaluate the potential impact on marine archaeological resources arising from the proposed works. Appropriate mitigation measures (such as locating the CMP to maintain a sufficient buffer distance from the area concerned) will be determined and adopted where practical.

5.9 Hazard to Life

(a) Construction Phase

The impact of hazard to life during construction phase is not anticipated.

(b) Operation Phase

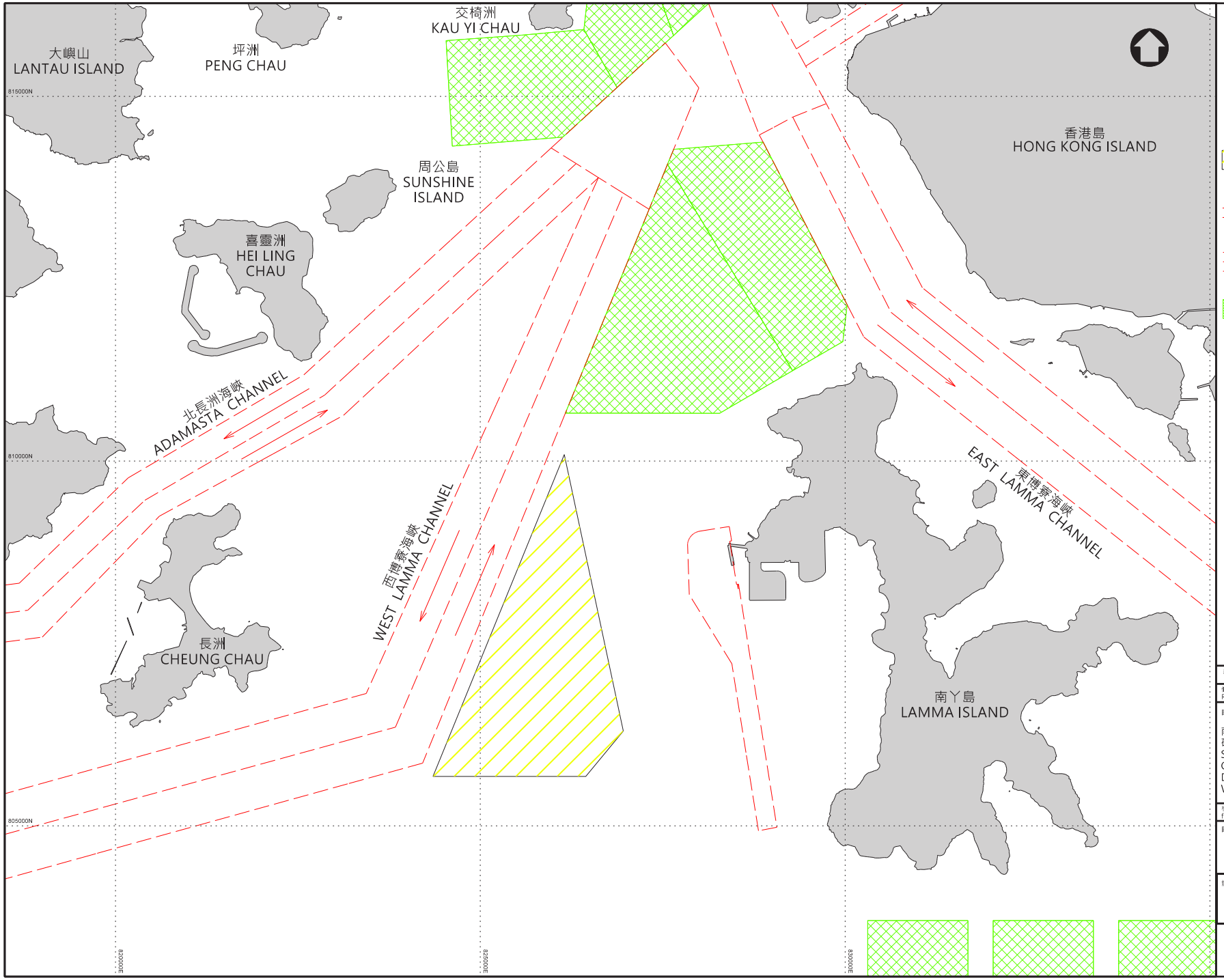
The risk to the health of human and marine mammal due to absorption of contaminants into the food chain will be assessed in detail during the EIA study. Mitigation measures will be implemented if found necessary.

6. Use of Previously Approved EIA Reports

The approved EIA report of projects that are of relevance to this Project are listed in the table below.

Register No.	Project Title	Aspect of Relevance
AEIAR-218/2018	Hong Kong Offshore LNG Terminal	Surrounding environment, sensitive receivers, water quality, ecology and fisheries impact assessment
AEIAR-212/2017	Improvement Dredging for Lamma Power Station Navigation Channel	Surrounding environment, sensitive receivers, water quality, ecology and fisheries impact assessment
AEIAR-152/2010	Development of a 100MW Offshore Wind Farm in Hong Kong	Surrounding environment, sensitive receivers, water quality, ecology and fisheries impact assessment
AEIAR-089/2005	New Contaminated Mud Marine Disposal Facility at Airport East / East Sha Chau Area	Project nature

Appendix A 附件甲



註釋
NOTES:

1. 所有座標參考香港大地測量基準1980及以米為單位。
ALL CO-ORDINATES REFER TO HONG KONG GEODETIC DATUM 1980 AND IN METRES.

圖例
LEGEND:

擬建污染泥卸置設施的研究範圍
INDICATIVE STUDY AREA FOR THE PROPOSED CONTAMINATED SEDIMENT DISPOSAL FACILITY

進口航道
APPROACH CHANNEL

海事分道航行制
(推薦 / 為國際海事組織所採納)
MARINE TRAFFIC SEPARATION SCHEME
(Recommended / IMO adopted)

錨地
ANCHORAGE AREAS

編號 no.	說明 description
修訂 REVISION	

圖則標題 drawing title

南丫島以西新污染海泥卸置設施的研究範圍
STUDY AREA FOR THE NEW CONTAMINATED SEDIMENT DISPOSAL FACILITY TO THE WEST OF LAMMA ISLAND

檔案編號 file no.

圖則編號 drawing no.	比例 scale
MFC/155	1:50 000

辦事處 office
土木工程處填料管理部
FILL MANAGEMENT DIVISION
CIVIL ENGINEERING OFFICE

土木工程拓展署
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

A3 420 x 297

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