Assessment Methodology	Key Assessment Assumptions	Limitations of Assessment Methodologies / Assumptions	Prior Agreements with EPD / Other Authorities	
			EIA Study Brief (ESB-312/2019) Clause Reference	Relevant Documentation
Air Quality Impact				
Construction Phase				
The air quality impact assessment follows: Annexes 4 and 12 of the EIAO-TM and requirement from the EIA Study Brief (ESB-312/2019), and the new AQOs. Qualitative assessment was carried out for air quality impact during construction phase.	<u>Emission from Construction Activities</u> • The construction works areas were assumed to be working in full capacity occupying the whole active works areas and to be conducting simultaneously during the construction period. <u>Background Concentration</u> • PATH background concentration at year 2025 was adopted.	• The actual construction works would be of small-scale and confined within small work area, and that construction activities would not take place at the entire construction work site at the same time, but to be undertaken at multiple work fronts at different construction periods. • The construction activities at different work fronts would not take place concurrently.	N/A	N/A
Operational Phase				
The air quality impact assessment follows: Annexes 4 and 12 of the EIAO-TM and requirement from the EIA Study Brief (ESB-312/2019), and the new AQOs. Quantitative assessment was carried out by applying EMFAC-HK (v4.3), AERMOD and CALINE4 model.	<u>Emission from CHP and Boilers</u> • The emission rate and design of CHP and boiler refer to the latest engineering design at the time of the assessment. <u>Cumulative Emission from Open Road Traffic</u> • Traffic flow and vehicle compositions in 24-hour profile reported in the Traffic Impact Assessment which has been agreed with Transport Department was adopted. • Vehicular emissions from open road was based on modelling results of EMFAC-HK v4.3 and the air quality impact was predicted using CALINE4 model. <u>Start Emission</u> • Start emission was estimated in broad-brush approach, i.e. all vehicle classes to have potential trip start on local road. • Start emission factor were extracted from EMFAC-HK v4.3. • Highest start emission factor was adopted for a vehicle class, irrelevant to its soak time. <u>Background Concentration</u> • PATH background concentration at year 2025 was adopted. <u>Emission from Deodourizers (DOs)</u> • The odour emission rate and design of DOs refer to the latest engineering design at the time of assessment.	• A 24-hour profile of traffic data was assumed for the whole year. No daily variation was considered. • Start emission would be overestimated on local roads. • Background concentration at Year 2025 may overestimate air quality in the future Year 2041.	N/A	N/A
Noise Impact				
Construction Phase				
The noise impact assessment follows: Annexes 5 and 13 of the EIAO-TM and requirement from the EIA Study Brief (ESB-312/2019).	• The construction noise was predicted based on standard acoustic principles. • Sound Power Levels (SWLs) of powered mechanical equipment (PME) were taken from Table 3 of the GW-TM, "Sound power levels of other commonly used PME" (Other PME) published by EPD or the Quality Powered Mechanical Equipment (QPME) System available at EPD's website or previous approved EIA reports.	• The prediction of construction noise impact was based on the procedures in GW-TM under the NCO. The programme and plant inventory for proposed construction works adopted in the assessment might vary in future.	Clause 2.2.1 (a), 2.2.1 (c) and 2.3.1, of Appendix C	Working Paper on Noise Impact Assessment agreed on 16 December 2021
Operational Phase				

Appendix 13.1 – Key Assessment Assumptions, Limitations of Assessment Methodologies and Prior Agreements with the Director

Assessment Methodology	Key Assessment Assumptions	Limitations of Assessment Methodologies / Assumptions	Prior Agreements with EPD / Other Authorities	
			EIA Study Brief (ESB-312/2019) Clause Reference	Relevant Documentation
The noise impact assessment follows: Annexes 5 and 13 of the EIAO-TM and requirement from the EIA Study Brief (ESB-312/2019).	• Fixed noise was predicted based on the sound power level provided by project engineer, standard acoustic principle and the procedures in the IND-TM under the NCO.	N/A	Clause 3.2.1(a), 3.2.1(c) and 3.3.1(a)(ii) of Appendix C	Working Paper on Noise Impact Assessment agreed on 16 December 2021
Water Quality Impact				
The water quality impact assessment follows: Annexes 6 and 14 of the EIAO-TM and requirement from the EIA Study Brief (ESB-312/2019). The water pollution to be generated during both construction and operation phases were identified. Qualitative assessment was conducted for the water quality impact during construction phase, while the water quality impact during operation phase was quantified. Mitigation measures are recommended to minimize the potential water quality impacts.	• The types and quantities of water pollution to be generated from the Project are based on the Project design and / or engineering assessments.	N/A	Appendix D-1 – Hydrodynamic and Water Quality Modelling Requirements	Working Paper on Water Quality Impact Assessment
Waste Management Implications				
The waste management implication assessment for the Project follows: Annexes 7 and 15 of the EIAO-TM as well as the requirements given in EIA Study Brief (No. ESB-312/2019).	• The waste quantities to be generated from the Project were estimated based on engineering assessment.	N/A	N/A	N/A
Land Contamination				
The land contamination assessment for the Project follows: • Annex 19 of the EIAO-TM and the requirements given in EIA Study Brief (No. ESB-313/2019) • Guidance Note for Contaminated Land Assessment and Remediation (EPD, 2007) • Practice Guide for Investigation and Remediation of Contaminated Land (EPD, 2011); and • Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management (EPD, 2007) The methodology includes desktop study, site survey, formulation of soil and groundwater sampling and testing strategy and recommendation of further works.	The assessment was undertaken based on relevant findings of the HSK NDA EIA Study, historical land use and site reconnaissance.	Similar to the HSK NDA EIA Study, the identified concerned areas were inaccessible for detailed site walkover or SI works and still in operation. In addition, there might be change in land use prior to development which could result in further land contamination issues. Therefore, site re-appraisal should be conducted for the identified concerned areas prior to development of the sites in order to update findings of the site appraisal (e.g. locations of hotspots) and the sampling and testing requirements for SI works. In addition, re-appraisal would be required for the other remaining areas of the proposed HSKEPP site in order to assess the latest land uses and site conditions. The further works including site re-appraisal for the whole proposed HSKEPP site, associated SI works, any necessary remediation works and submission of supplementary CAP / CAR / RAP / RR are recommended to be carried out prior to commencement of any construction or development works, and would follow the relevant Guidance Manual, Guidance Note and Practice Guide.	Clause 3.3(i) of Appendix E	Contamination Assessment Plan
Ecological Impact				

Appendix 13.1 – Key Assessment Assumptions, Limitations of Assessment Methodologies and Prior Agreements with the Director

Assessment Methodology	Key Assessment Assumptions	Limitations of Assessment Methodologies / Assumptions	Prior Agreements with EPD / Other Authorities	
			EIA Study Brief (ESB-312/2019) Clause Reference	Relevant Documentation
The ecological impact assessment follows: Annexes 8 and 16 of the EIAO-TM, EIAO Guidance Note No. 3/2010, No. 6/2010, No. 7/2010 and No. 10/2010, as well as the requirements given in EIA Study Brief (No. ESB-312/2019)	• The assessment was undertaken based on the results of literature review and ecological field surveys. • Impact assessment was conducted based on the proposed RODP and works programme for HSK/HT NDA, in which the Project site would have been formed and converted entirely into developed land under the HSK/HT NDA project, prior to the commencement of the construction for HSKEPP.	N/A	Clause 3.4.8 and Appendix F	N/A
Landscape and Visual Impacts				
The Landscape Impact and Visual Impact of the Project follows: • Annexes 10 and 18 of the EIAO-TM as well as the requirements given in EIA Study Brief (No. ESB-323/2019). • EIAO Guidance Note No. 8/2010 for general guidelines for preparation of landscape and visual impact assessment	• Landscape and Visual Impact Assessment was carried out based on the project description provided in Section2 of the EIA Report • The tree survey was undertaken in accordance with Clause 2 of Appendix I of the EIA Study Brief.	N/A	N/A	N/A
Hazard to Life				
The Hazard to Life assessment follows: Annex 4 of the EIAO-TM as well as the requirements given in EIA Study Brief (No. ESB-312/2019).	• Hazard to life assessment was carried out to evaluate the risks associated with the biogas facilities to the existing, committed and planned off-site population due to operation of the organic wastes co-digestion facility at the proposed HSKEPP. • The operation details of the biogas facilities were based on the engineering design of the proposed HSKEPP. • Off-site population in the HSK/HT NDA development were estimated based on the latest information provided by CEDD. • PhastRisk 6.7 was adopted for the quantitative assessment.	N/A	N/A	N/A