

Annex 10C

Compliance Checklist for
EIA Report (Brief No. ESB-
280/2014) against *Technical
Memorandum Annex 20:
Guidelines for the Review of an
EIA Report*

CONTRACT CV/2012/08 LIANTANG/HEUNG YUEN WAI BOUNDARY CONTROL POINT SITE FORMATION AND INFRASTRUCTURE WORKS – CONTRACT 2
WORKS PACKAGE NO. CA 012

COMPLIANCE CHECKLIST FOR EIA REPORT (BRIEF NO. ESB-280/2014) AGAINST TECHNICAL MEMORANDUM ANNEX 20: GUIDELINES FOR THE REVIEW OF AN EIA REPORT

Ref.	TM Annex 20 Title	EIA Report Compliance Check (July 2015)
1	<u>GENERAL APPROACH</u>	
	Organisation of the Information	
1.1	Is the Information logically arranged in sections	Yes. The EIA has been divided in to 10 sections to cover the key environmental media and hazard to life components off the Project. Figures, Tables and Annexes are numbered in accordance the Section number they relate to. In addition page numbers are numbered according to the Section they are in.
1.2	Is the location of information identified in an index or table of contents?	Yes, Table of Contents is provided at the start.
1.3	When information from external sources has been introduced, has a full reference to the source been included?	Yes. e.g. Section 3 provides links to publically available sites for two referenced documents. e.g. Section 8, Section 8.10 lists full details of all references.
	Presentation of Information	
1.4	Has information and analysis been offered to support all conclusions drawn?	Yes, each Section covering a particular medium [Sections 3 (Ecology), 4 (Noise), 5 (Air), 6 (Waste Management), 7 (Other including water quality and LVIA), 8 (Hazard to Life)] has provided information to support the conclusion drawn at the end of the Section. Section 10 then provides an overall conclusion to the EIA report and a summary of the environmental outcomes of the EIA.
1.5	Has information and analysis been presented so as to be comprehensive to the non-specialist using maps, tables and graphical material as appropriate?	Yes.
1.6	Are all the important data and results discussed in an integrated fashion within the information?	Yes.
1.7	Has superfluous information (i.e. information not needed for the decision) been avoided?	Yes. e.g. For Annexes 3A and 3B to Section 3, information repeated in both documents has been removed from one, making reference to the other.
1.8	Has the information been presented in a concise form with a consistent terminology and are there logical links between different sections?	Yes.
1.9	Have prominence and emphasis been given to severe adverse impacts, to substantial environmental benefits, and to controversial issues?	Yes, Section 10 provides a summary of the environmental outcomes of the EIA including Section 10.4 detailing the key environmental problems avoided.
1.10	Is the information objective?	Yes.
	Public Concerns	
1.11	Does the information identify and address the main concerns of the general public and special interest groups (clubs, societies etc.) who may be affected by the project?	Yes. e.g. For Section 8 (Hazard to Life), concerns of the Yuen Long District Council regarding traffic conditions of Pok Oi Interchange during road improvement works that are being carried out and how transport of explosives may be of concern, have been addressed.
1.12	Does the information take account of the main concerns of the relevant statutory or advisory bodies?	Yes. e.g. The draft EIA Report has been reviewed by EPD and specialist departments (e.g. AFCD, etc.) and any informal concerns addressed.
2	<u>DESCRIPTION OF THE PROJECT</u>	
	Features of the Project	
2.1	Are the purpose(s) and objectives of the project explained?	Yes, in Section 1 (Introduction) and Section 2 (Project Description).
2.2	Are the nature and status of project decision(s), for which the EIA study is undertaken, clearly indicated?	Yes, in Section 1 (Introduction) and Section 2 (Project Description).
2.3	Is the estimated duration of the construction phase, operational phase and, where appropriate, decommissioning phase given, together with the programme within these phases?	Yes. There is no construction phase, as detailed in the report. Section 2.3 details the Project Schedule.
2.4	Is the design and size of the project described, using diagrams, plans and/or maps as necessary?	Yes, in Section 2 (Project Description).
2.5	Are the methods of construction described?	n/a as not construction phase.
2.6	Are the nature and methods of production or other types of activity involved in operation of the project described?	Yes, in Section 2 (Project Description).
2.7	Has the land taken up by the project site(s), construction sites, and any associated access arrangements, auxiliary facilities and landscaping areas, been clearly shown on a scaled map?	Yes, in Section 2 (Project Description).
2.8	For a linear project, has the land corridor, vertical and horizontal alignment and need for tunnelling, and earthworks been described?	Yes, Section 2.1.2 describes the proposed transport routes considered for this Project.

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2.9	Have the uses to which the project will be put been described and the different land use areas demarcated?	n/a (no change in land use). Section 2 provides all necessary details of the Project.
	Residues and Emissions	
2.10	Have the types and quantities of waste matter, energy (noise, vibration, light, heat, radiation etc.) and residual materials generated during construction and operation of the project, and the rate at which these will be produced, been estimated ?	Construction n/a for this Project as explained in Section 2 and Section 2.4. Yes, relevant aspects are covered in Section 6 (Waste Management) and Section 4 (Noise).
2.11	Have the ways in which it is proposed to handle and/or treat these wastes and residual materials prior to release/disposal been indicated, together with the routes by which they will eventually be disposed of to the environment?	Yes, relevant aspects are covered in Section 6 (Waste Management).
2.12	Have any special or hazardous wastes which will be produced been identified as such and the methods for their disposal been described, as regards their likely main environmental impacts?	Yes, special or hazardous wastes are not identified as an issue but relevant aspects are covered in Section 6 (Waste Management).
2.13	Have the means by which the quantities of residuals and wastes were estimated been indicated and has uncertainty been acknowledged and ranges provided where appropriate?	Yes, waste is not identified as a key issue but relevant aspects are covered in Section 6 (Waste Management).
3	<u>BACKGROUND AND HISTORY OF THE PROJECT</u>	
3.1	Where appropriate does the information include reference to the consideration of the project's siting or alignment by the project proponent?	Yes, Section 2 (Project Description) includes Section 2.2 regarding Project Location and Section 2.1 regarding Project Alternatives.
3.2	Are the reasons for selecting the proposed project or its siting and alignment, and the part environmental factors played in the selection, adequately described?	Yes, in Section 2.1 Project Alternatives.
3.3	Have the main environmental impacts of different siting or alignment options been compared clearly and objectively with those of the proposed project and with the likely future environmental conditions in the absence of the project?	Yes, in Section 2.1 Project Alternatives and Section 9.4.2 of <i>Annex 8A</i> .
4	<u>DESCRIPTION OF THE ENVIRONMENT</u>	
	Description of the Area Occupied by and Surrounding the Project	
4.1	Have the areas expected to be significantly affected by the various aspects of the project been indicated with the aid of suitable maps?	Yes, Section 2 (Project Description) provides clear information on the area of the Project site and proposed transport route options. In addition relevant Sections regarding different media [e.g. Sections 3 (Ecology), 4 (Noise), 5 (Air)] detail their particular study areas with the aid of figures e.g. Figures 3.1, 4.1, 5.1, etc.
4.2	Have the land uses on the site(s) and in the surrounding areas been described?	Land use will remain the same as existing conditions, as described in Sections 1 (Introduction) and 2 (Project Description). In addition Section 3.3 and Section 7.2 describe the existing conditions.
4.3	Has the affected environment been defined broadly enough to include any potentially significant effects occurring away from the immediate areas of construction and operation?	Construction n/a as noted previously. Yes, affected environment has been defined broadly enough.
	Baseline Conditions	
4.4	Have the components of the environment potentially affected by the project been identified and described sufficiently for the prediction of impacts?	Yes, each Section covering a particular medium [Sections 3 (Ecology), 4 (Noise), 5 (Air), 6 (Waste Management), 7 (Other including water quality and LVIA), 8 (Hazard to Life)] has provided sufficient information on relevant baseline conditions.
4.5	Were the methods used to investigate the affected environment appropriate to the size and complexity of the assessment task?	Yes.
4.6	Has a prediction of the likely future environmental conditions in the absence of the project been developed?	Yes, Section 3 in particular considers this.
4.7	Have existing technical data sources, including local records and studies carried out for environmental agencies and/or interest groups been searched?	Yes, reference in particular is made the XRL EIA Report.
4.8	Have local, regional and national plans and policies been reviewed and other data collected as necessary to predict future environmental conditions?	Yes. e.g. Section 5.3. "Since the continued operation of the magazine site for the HKLTH will commence in 2015, the hourly ambient pollutant concentration data predicted by the PATH (Pollutants in the Atmosphere and their Transport over Hong Kong) model for Year 2015 has been adopted to reflect the future background air quality in the Project Site area during the operation of the Project".
4.9	Have relevant departments and agencies holding information on baseline environmental conditions been approached?	Yes, draft report circulated to EPD and relevant government departments e.g. AFCD & Risk Officers.

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5	DESCRIPTION OF IMPACTS	
5.1	Have the direct and indirect/secondary effects of constructing, operating and, where relevant, after use or decommissioning of the project been considered (including both positive and negative effects)?	Yes, each Section covering a particular medium [Sections 3 (Ecology), 4 (Noise), 5 (Air), 6 (Waste Management), 7 (Other including water quality and LVIA), 8 (Hazard to Life)] has provided relevant information regarding potential impacts.
5.2	Does the information include consideration of whether effects will arise as a result of "consequential" development i.e. whether additional development, which it would be difficult to resist, will be included in the area, leading to further environmental effects? For a project with multiple stages, are the impacts caused by overlapping of different stages considered and determined?	n/a.
5.3	Have the above types of impacts been investigated in so far as they affect the following:	
	air and climate;	Yes, Section 5.
	water and soils;	Yes, Section 7.
	noise;	Yes, Section 4.
	landscape;	Yes, Section 7.
	ecology;	Yes, Section 3.
	historic and cultural heritage;	Not relevant to this Project.
	land use;	Not relevant to this Project.
	impacts on people and communities;	Not relevant to this Project.
	impacts on agriculture and fisheries activities.	Not relevant to this Project.
5.4	If any of the above are not of concern in relation to the specific project and its location is this clearly stated in the information?	Yes, Section 1.3 clearly defines the scope of the report.
5.5	Is the investigation of each type of impact appropriate to its importance for the decision, avoiding unnecessary information and concentrating on the key issues?	Yes, information is succinct with Annexes provided for more detail where required.
5.6	Are impacts which may not be themselves significant, but which may contribute incrementally to a significant effect considered?	As stated in Section 2, there are no known existing, committed and/or planned projects in the vicinity of the Project that could potentially cause cumulative environmental impacts through their interaction with the Project. Any impacts that may have incremental significance have been duly considered.
5.7	Does the information include a description of the methods/approaches used to identify impacts and the rationale for using them?	Yes, each Section covering a particular medium [Sections 3 (Ecology), 4 (Noise), 5 (Air), 6 (Waste Management), 7 (Other including water quality and LVIA), 8 (Hazard to Life)] includes details of the methods/ approaches used.
5.7	If the nature of the project is such that accidents are possible which might cause severe damage within the surrounding environment, has an assessment of the probability and likely consequences of such events been carried out and the main findings reported?	Yes, Section 8 (Hazard to Life) covers this.
	Magnitude of Impacts	
5.9	Are impacts described in terms of the nature and magnitude of the change occurring and the nature (location, number, value, sensitivity) of the affected receiver?	Yes, magnitude of any potential impacts identified have been suitably described in each Section covering a particular medium [Sections 3 (Ecology), 4 (Noise), 5 (Air), 6 (Waste Management), 7 (Other including water quality and LVIA), 8 (Hazard to Life)].
5.10	Has the timescale over which the effects will occur been predicted such that it is clear whether impacts are short, medium or long term, temporary or permanent, reversible or irreversible?	Yes. Section 2.3 provides an overall schedule for the Project and duration of impacts is noted where necessary for particular media [Sections 3 (Ecology), 4 (Noise), 5 (Air), 6 (Waste Management), 7 (Other including water quality and LVIA), 8 (Hazard to Life)]
5.11	Where possible, have predictions of impacts been expressed in quantitative terms? Otherwise, have qualitative descriptions been defined?	Yes. In particular quantitative terms have been used in Section 8 (Hazard to Life), and Sections 4 (Noise), 5 (Air) and 7.1 (Water Quality). More qualitative descriptions are given in Section 3 (Ecology), 6 (Waste) and
5.12	Where quantitative predictions have been provided is the level of uncertainty attached to the results described?	Yes. e.g. for Section 8 (Hazard to Life), 8.5 discusses the base case and worst case quantitative risk assessment
	Data and Methods	

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5.13	Have the methods used to predict the nature, size and scale of impacts been described and are they appropriate to the importance of each projected impact?	Yes. Section 1.3 describes the scope of the EIA report and how, as per the Study Brief, reference has been made to the approved Hong Kong Section of <i>Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) EIA Report</i> (No. AEIAR-143/2009) (hereafter 'XRL EIA') according to which the EP under which the magazine site currently operates was issued. Noting there is no construction phase to the current Project, assessment methodologies have been provided separately to the legislation, policies, plans, standards and criteria, where as necessary for a medium. Section 4.5 describes the assessment methodology for Noise. For Air, Section 5.2 lists the relevant Air Quality Objectives and Section 5.3 explains the rationale for model adopted to predict baseline conditions. In Ch8 descriptions of the methodologies and relevant assumption are included in Section 8.3 'Study Objectives and Methodology', Section 8.5 'Base Case and Worst Case for Quantitative Risk Assessment', Section 8.6 'Population Data', Section 8.7 'Hazard Identification' and Section 8.8 'Summary of Risks'.
5.14	Are the data used to estimate the size and scale of the main impacts sufficient for the task, are they clearly described and have their sources been clearly identified?	Yes. e.g. for Section 8, Section 8.10 lists full details of all references.
6	<u>MITIGATION</u>	
	Description of Mitigating Measures	
6.1	Has the mitigation of significant negative impacts been considered and, where feasible, have specific measures been proposed to address each impact?	Yes. Impact identification and evaluation of impacts are provided in Section 3.4 (Ecology), 4.6 (Noise), 5.6 (Air), 6.4 (Waste Management), 7.1.3 (Other including water quality and LVIA). In Ch8 evaluation of residual impact is included in Section 8.8 'Summary of Risks'. Overall, specific measures have been proposed to address each impact identified to be of significance, as summarised for all media in Section 9 (Environmental Monitoring and Audit Requirements) and the Implementation Schedule of Recommended Mitigation measures in <i>Annex 9A</i> . Table 10.1 also provides a summary of environmental impacts
6.2	Have the reasons for choosing the particular type of mitigation, and the other options available, been described?	No adverse impacts are expected prior to mitigation for airborne noise, air quality and water quality although standard good practise measures are advised for good measure relating to noise and water quality during decommissioning, as described in Section 4 and 7.1 respectively. Mitigation for waste management, hazard to life and ecology are described in Sections 6, 8 and 3 respectively with Section 9 summarising the EM&A requirements and Annex 9A providing an implementation schedule
6.3	Where mitigating measures are proposed, has the significance of any impact remaining after mitigation been described?	Yes. Impact identification and evaluation of residual impacts are provided in Section 3.4 (Ecology), 4.6 (Noise), 5.6 (Air), 6.4 (Waste Management), 7.1.3 (Other including water quality and LVIA). In Ch8 evaluation of residual impact is included in Section 8.8 'Summary of Risks'. Table 10.1 also provides a summary of residual environmental impacts
6.4	Where appropriate, do mitigation methods considered include modification of project design, construction and operation, the replacement of facilities/resources, and the creation of new resources, as well as "end-of-pipe" technologies for pollution control?	Appropriate mitigation measures have been suggested. Since there is no construction phase to the Project, there are limited possibilities to modify the project design.
6.5	Is it clear to what extent the mitigation methods will be effective?	Yes.
6.6	Where the effectiveness is uncertain or depends on assumptions about operating procedures, climatic conditions, etc., or where there is a risk that mitigation will not work, is this made clear and has data been introduced to justify the acceptance of the assumptions?	The effectiveness of mitigation measures is not uncertain in this respect, therefore not applicable.
	Implementation of Mitigation Measures	
6.7	Have details of how the mitigation measures will be implemented and function over the time span for which they are necessary been presented? Does the report list out clearly what mitigation measures would be implemented, by whom, when, where and to what requirements? Is the responsibility for implementing the recommended mitigation measures clearly defined?	Yes, the Implementation Schedule of Recommended Mitigation Measures in <i>Annex 9A</i> provides these details.
	Environmental Effects of Mitigation	
6.8	Have any adverse environmental effects of mitigation measures been investigated and described?	None of the mitigation measures suggested are considered to have adverse environmental effects therefore this is not applicable.
6.9	Has the potential for conflict between the benefits of mitigating measures and their adverse impacts been considered?	Yes, but no conflict has been identified.
7	<u>Evaluation of Residual Impacts</u>	
7.1	Have the available standards, assumptions and criteria which can be used to evaluate the impacts been discussed?	Yes. Provided separately as necessary for each medium i.e. in Section 3.2 (Ecology), 4.2 (Noise), 5.2 (Air), 6.2 (Waste Management), 7.1.1 (Other including water quality and LVIA), 8.2 (Hazard to Life).

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7.2	Have the predicted impacts been compared to the available standards and criteria?	Yes. Impact identification and evaluation of impacts are provided in Section 3.4 (Ecology), 4.6 (Noise), 5.6 (Air), 6.4 (Waste Management), 7.1.3 (Other including water quality and LVIA). In Ch8 prediction of evaluation of impact is included in Section 8.8 'Summary of Risks'.
7.3	Have the residual impacts, which are the net impacts with the mitigation measures in place, been described and evaluated against the available Government policies, standards and criteria?	Yes. No adverse residual impacts are predicted for environmental media. For hazard to life, adverse residual impact is not predicted for risk due to storage of explosives and for risk due to transport, Individual Risk level is below 1×10^{-5} per year; and Societal Risk level is in ALARP region as summarised in Section 8.8.
7.4	Have the residual impacts been discussed and evaluated in terms of the impact on the health and welfare of the local community and on the protection of environmental resources?	Yes. e.g. Section 8.8.1 discussed Individual Risk results, 8.8.2 discusses Societal Risk results and 8.8.3 discusses the ALARP assessment.
7.5	Have the magnitude, location and duration of the residual impacts been discussed in conjunction with the value, sensitivity and rarity of the resource?	Yes.
7.6	Where there are no generally accepted standards or criteria for the evaluation of residual impacts, have alternative approaches been discussed and, if so, is a clear distinction made between fact, assumption and professional judgment?	There are generally accepted standards or criteria for all evaluated impacts and risks.
7.7	Have the residual impacts, if any, arising from the implementation of the proposed mitigation measures, been considered?	As no adverse impacts from implementing the proposed mitigation measures have been identified this is not applicable.
8	<u>Environmental Monitoring and Audit Proposals</u>	
8.1	If impacts are uncertain, have monitoring arrangements been proposed to check the environmental impacts resulting from the implementation of the project and their conformity with the predictions made?	Yes, Section 9 details the environmental monitoring and audit programme and a separate EM&A Manual has been developed for the Project.
8.2	Does the scale of any proposed monitoring arrangements correspond to the potential scale and significance of deviations from expected impacts?	Yes.
8.3	Is the need for and the scope of the monitoring and audit requirements defined in the report?	Yes. Section 9 details the environmental monitoring and audit programme and a separate EM&A Manual has been developed for the Project.
8.4	Does the report contain an Environmental Monitoring and Audit programme, as prescribed in Annex 21, if it is found to be needed?	Yes.
9	<u>Difficulties Compiling the Information</u>	
9.1	Have any gaps in the required data been indicated and the means used to deal with them in the assessment been explained?	No significant gaps in data identified.
9.2	Have any difficulties in assembling or analysing the data needed to predict impacts been acknowledged and explained?	No difficulties in assembling or analysing data were encountered.
10	<u>Executive Summary</u>	
10.1	Does the executive summary contain at least a brief description of the project and the environment, an account of the main mitigation measures to be implemented by the developer, and a description of any remaining or residual impacts?	Yes. The ES is ordered as such to summarise the key details of the EIA report: 1.1 Background 1.2 Project Description including nature and scope; purpose and benefit; and key facility of the Project 1.3 Environmental impact assessment, split into 1.3.1 covering all the environmental media (ecology, noise, air quality, waste management, and other environmental consideration', as well as 1.3.2 hazard to life 1.4 Environmental monitoring and audit 1.5 Conclusion
10.2	Have technical jargons been avoided as far as possible in the executive summary?	Yes.
10.3	Does the executive summary present the main findings of the assessment and cover all the main issues?	Yes. See check against 10.1
10.4	Does the executive summary include a brief explanation of the overall approach to the assessment?	Yes. See check against 10.1
10.5	Does the executive summary provide an indication of the confidence which can be placed in the results?	Yes. See check against 10.1
10.6	Is the executive summary presented in both English and Chinese?	Yes.