Comment Response Sheet (CRS)

Project Title	(ESIA) Tahrir Petrochemicals Complex, Economic Zone, Ain Sokhna, Egypt	**Customer**	Tahrir Petrochemicals		
Project No.	EJ6195	**CRS No.**	01		
Document Title		**Prepared By**	WorleyParsons	**Date**	14.01.2015
Document No.		**Rev. No.**	0	**Sheet**	**of**

Except for the following identified comments, all other comments on this document have been resolved.

No.	Section / Page	Comment	Response	Remarks
1.1		**Tahir Petrochemicals Complex Project Should meet the following Environmental and Social Standards** a- The OECD council recommendations on common Approaches on the environment and officially Support Credit (July 2014) b- The IFC Performance Standards (2012) c- EHS guidelines for large volume Petroleum based Organic Chemicals Manufacturing, Petroleum-based Polymers Manufacturing, Thermal Power, Crude Oil Petroleum Product Terminals, Water and Sanitation	Tahrir Petrochemicals Complex project compliance with the following standards/guidelines will be demonstrated in the ESIA Report as applicable: a. Organization for Economic Co-operation and Development (OECD) Recommendation of the council on common approaches for officially supported export credits and environmental and social due diligence, June 2012. Should there is specific guidelines dated 2014 you are kindly requested to provide us a copy of it. b. The IFC Performance Standards (2012) c. EHS guidelines for large volume Petroleum based Organic Chemicals Manufacturing, Petroleum-based Polymers Manufacturing, Thermal Power, Crude Oil Petroleum Product Terminals, Ports & Harbors and Water & Sanitation *Reference: Section 2.2.5 for OECD Guidelines and Section 2.2.2 for IFC Guidelines*	

No.	Section / Page	Comment	Response	Remarks
1.2		ESIA for all associated facilities should be conducted in the same manner as the primary facility and borrower has to be establish the relevant management plans and mitigation measures for their risks and impacts	The ESIA study covers the different components of the proposed project namely; Ethylene Plant (P1), Polyethylene Plant (P2) and Utilities &Offsite (including but not limited to: seawater intake and outfall, power generation units, desalination plant and storage tanks. A full list of the different components covered by the ESIA study is presented in Table 3-2 of the ESIA Report. Separate mitigation measures and management commitments for the individual components were provided as necessary and applicable in the ESIA study.	
1.3		According to Annex I of the common Approaches, the proposed project is classified as Category A considering the Sixth example of Annex I	Noted. A clear statement on the proposed complex classification has been added to the ESIA Report. *Reference: Section 2.2.5*	
		IFC PS1 assessment and management of environmental and social risks and impacts		
1.4		The ESMS (Environmental and Social Management System) has not yet made available to review. So the ESMS has to be developed	Noted. A separate section for an ESMS framework is presented in the ESIA report outlining the main elements of an ESMS (e.g. policy and management programs, etc.). *Reference: Section 8*	
1.5		The construction Environmental and Social Management Plans (CESMP) should be further refined to ensure alignment with IFC EHS Guideline.	The scope of the ESIA is limited to presenting a framework for the CESMP. The framework was reviewed and refined, as needed, to ensure alignment with IFC Guidelines. *Reference: Section 9.2*	

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1.6		Identify the range of stakeholder engagement plan that is scaled to the project risks, impacts and development stage.	The stakeholders defined for this project included project affected people such as individuals and families living near the project, the project sponsor; public sector representatives such as local elected officials and local and central government departments; organizations such as local, national non-governmental organizations (NGOs), universities and research centers and other private sector companies and business associations. Stakeholders were classified as: • Primary stakeholders: individuals, groups or local communities that may be affected by the project, and • Secondary stakeholders: broader stakeholders who may be able to influence the outcome of the project because of their knowledge about the affected communities or political influence over them. Both categories were efficiently engaged through socio-economic survey and two public hearings. More details on the stakeholders' engagement methodology as well as main findings of the socio-economic survey and the public hearing sessions are presented in the ESIA. A description of the stakeholder engagement during the study shall be also added to the executive summary of the ESIA. *Reference: Section 10*	

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		IFC PS2 Labor and Working Condition		
1.7		ESIA has to establish appropriate human resources policies and procedures to meet the requirement of host country	Establishing human resources policies is not part of the ESIA scope. However, it is worth mentioning that Carbon Holding (main investor and operator of Tahrir Petrochemicals) has Corporate Governance & Policies that are applicable to the project. Furthermore, Tahrir Petrochemicals is committed to comply with the host country (*i.e.* Egypt) Labour Law and international/regional conventions presented in the ESIA Report. *Reference: Section 2.1.2: SOCIAL AND LABOUR REGULATORY CONSIDERATIONS and Section 2.3.*	
1.8		Provide workers with accommodation for all basic needs	Noted. Similar statement has been incorporated in the ESIA where appropriate. *Reference: Section 3.5.2*	
1.9		Cite Borrower Policy statement/guideline/management/ Policy procedure where use of Child/force labor has been explicitly prohibited	Tahrir Petrochemicals is committed to comply with the Egyptian Labour Law, presented in the ESIA Report. Additionally, Tahrir Petrochemicals is committed to comply with the different international conventions signed by the Egyptian Governorate that prohibits Child/Forced labour (e.g. Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour). *Reference: Section 2.1.2: SOCIAL AND LABOUR REGULATORY CONSIDERATIONS and Section 2.3.*	

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1.10		Provide audit records/communications from suppliers/contractors ensuring Child/Forced labor is prohibited in their respective business	In general, Tahrir Petrochemicals is committed that all suppliers/contractors involved in the proposed project shall comply with the Egyptian Labour Law. It is worth mentioning that official audits will be conducted via regional labor governmental officials in Suez through random checks/audits.	
1.11		Establish the worker Health and Safety Plan and it should addressed in the ESIA	Developing Occupational Health and Safety Plan (OHSP) is not part of the scope of the present ESIA; however, Tahrir Petrochemicals shall develop a detailed OHSP at a later stage of the project, namely detailed engineering.	
1.12		Collective bargaining, fair salaries in line with the industry, reasonable work hours should be addressed including contracts for all in the ESIA	Tahrir Petrochemicals is committed to comply with the Egyptian Labour Law presented in the ESIA Report. *Reference: Section 2.1.2*	
1.13		It should be clear that all workers (including those working through contractors) will have a written contract.	Please refer to Response to Comment No: 1.10.	
1.14		Provide details on the following EHS Guideline elements with respect to general facility design and operation (Section 2.1 of IFC General EHS Guideline). *Integrity of Workplace Structure/Severe weather and Facility shutdown/Workspace and exit/Fire precautions/ Lavatories and Showers/ Potable water Supply/ Clean eating area/ Lighting/ Safe Access / First aid Air Supply/ Work environment temperature*	EHS Guidelines are integrated in the ESIA study as applicable. *Reference: Section 7.3.6*	

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1.15		Explain how following elements meet the EHS Guideline about Physical hazard. (Section 2.3. of IFC General EHS Guideline). ○ Rotating and Moving equipment / Noise (refer to Appendix B, Table 16), Vibration/Electrical (refer to Appendix B, Table 2 which illustrates GIIP for no approach zone for high voltage power line) ○ Eye hazards/ Welding / Hot work / Industrial vehicle driving and site traffic ○ Working environment temperature / Ergonomics respective motions, manual handing.	Please refer to *Schedule 24: Project Execution Plan* and *Schedule 23: Basis of Design*.	
1.16		The risks and impacts identification process will also consider those risks and impacts associated with primary supply chains. No information has been provided at this stages as to how primary supply chain risks are mitigated apart from contractors. So borrower has to address supply chain issues through ESMS.	Please refer to Response to Comment No: 1.4.	

No.	Section / Page	Comment	Response	Remarks
		IFC PS3 resource Efficiency and Pollution Prevention		
1.17		Greenhouse Gas (GHG) emissions need to be quantified using an internationally accepted methodology and provide an alternative analysis to reduce project related GHGs during the design and operation of the project as per the requirements of this IFC performance standard.	Noted, GHG is quantified as far as practical during the proposed project operation phase using the following reference document: "European Investment Bank Induced GHG Footprint-The carbon footprint of projects financed by the Bank-Methodologies for the Assessment of Project GHG Emissions and Emission Variations, Version 10.1" Greenhouse gases reduction measures are presented in the ESIA. *Reference: Section 6.3.1: Global Climate and Section 7.2.1: Global Climate*	
1.18		The approach to reducing GHG emissions, energy efficiency strategy, and GHG estimation methodology needs to be provided in the ESIA.	Please refer to Item 1.17.	

No.	Section / Page	Comment	Response	Remarks
1.19		Describe whether wastewater management plan considers the following aspects in accordance with the EHS Guideline (Section 1.3. of IFC General EHS Guideline) or any specific industry guideline standards ○ Industrial wastewater (process wastewater, utilities operation wastewater and storm water etc.) ○ Sanitary wastewater (in the absence of relevant national/local standards. Appendix B table 13 should be referred) ○ Residuals from wastewater treatment operations ○ Occupational health and safety issues in wastewater treatment operations ○ Monitoring of the management plan	In general, the wastewater management of the proposed complex is following the EHS Guidelines. Details on the industrial and sanitary wastewater treatment systems are presented in *Section 3.7.7.* Residuals from wastewater treatment operations management is presented in *Section 3.7.7 and Section 3.8.2.* Occupational health and safety is not part of the proposed ESIA scope. Nonetheless, Tahrir Petrochemicals shall develop a detailed OHSP at a later stage of the project, namely detailed engineering. Monitoring requirements for treated wastewater are presented in *Section 9.3.4.*	
1.20		formulate and implement an integrated pest use and management plan	The formulation of pest use and management plan is not part of the ESIA scope.	
		IFC PS4 Community Health, Safety and Security		
1.21		Identify and establish sufficient mitigation or control measures to avoid or minimize transmission of communicate disease that may be associated with the influx of project related workers	Tahrir Petrochemicals is committed to comply with the Egyptian Labour Law presented in Section 2.1.2 of the ESIA Report. The Labour Law specifies the appropriate procedures and measures for maintaining the well-being of workers. Additionally, Tahrir Petrochemicals is committed to conduct medical checks for the proposed project personnel before joining the project in additional to regular medical checks.	

No.	Section / Page	Comment	Response	Remarks
1.22		Establish a security management plan and provide sufficient training to the security personal; it has to provide a grievance mechanism for affected communities to express concerns regarding the security arrangement.	Site Security Framework developed for the proposed Complex and presented in *Appendix 9*. A grievance mechanism framework is presented in the ESIA Report. *Reference: Section 10.5*	
1.23		**IFC PS8 Cultural heritage** One archaeological site is located at a distance of approximately 13km far from the project area. So ESIA has to develop provisions for managing a project-specific procedure that outlines the actions to be taken if previously unknown cultural heritage is encountered	The proposed project main plant area is located at a designated industrial zone, namely Economic Zone. Similarly, the port facilities are located at an existing and operating port, namely Sokhna-1 (McDermott) Port. Consequently it is unlikely to encounter any cultural heritage sites at the project area. However, the procedures that outline the necessary actions to be taken in similar situations are included in the ESIA Report. *Reference: Table 9-2-Item 6*	

No.	Section / Page	Comment	Response	Remarks
1.24		**More details required on an earthquake contingency plan and mitigation measures and *also need to make EPC develop the seismic design***	The ESIA scope does not include an earthquake contingency plan. However, the relevant information regarding the seismic activity at the proposed project area has been presented in the ESIA study in *Section 4.3.2: Seismic Conditions*. It is worth noting that the gathered information indicates low seismic activity at the study area "*The instruments of Helwan station and International Seismic Network in Ain Sokhna have not recorded any earthquakes exceeding 4.0 on the Richter scale. It is worth mentioning that an earthquake of magnitude 6 to 7 is usually classified as a moderate earthquake*". Furthermore, referring to Project BOD Clause 2.3.2 titled General Seismic Requirements which Stipulated that, all Structures and Equipment other than flat bottomed, vertically oriented storage tanks shall be designed to resist earthquake forces in accordance with ASCE 7-05 —"Minimum Design Loads for Buildings & Other Structures". And Clause 2.3.3 titled Seismic Requirements for Storage Tanks which Stipulated that Earthquake Load for Storage Tanks shall be in accordance with API 620, API 625, API 650 or API 2510. API 625 will be followed for Cryogenic Double Wall Storage Tank.	

No.	Section / Page	Comment	Response	Remarks
1.25		The FRA (Flood Risk Assessment) should be 100 year and incorporate protection measures for area north of the site/Cairo Sokhna old road. So it has to establish a flood contingency plan on a 1 to 100 year return period flood.	Relevant information is presented in the ESIA study. *Reference: Section 4.3.4* It is worth noting that Tahrir Petrochemicals is talking to the government bodies responsible for flood management and the Government is working on launching a regional study for Sokhna region flood protection and risk mitigation.	
1.26		Provide external (independent) monitoring plan including duration, Frequency, responsible parties of the monitoring for the operation phase. Revisit the operational monitoring to include the online monitoring also the durations and frequencies for some parameters were not clearly defined	The ESIA scope is limited to presenting a framework for the Environmental and Social Management Plan that includes the monitoring requirements. However, relevant information as appropriate are presented in the ESIA Report (*e.g.* continuous monitoring). *Reference: Section 9.3.4*	
2.1	p. 23	paragraph above Table 2-11 references Table 2-12, but should be 2-11	Noted and updated in the ESIA Report.	
2.2	p. 27	Section on Crude Oil and Petroleum Product Terminals and VOC emissions is not clear. The Guideline should be briefly summarized here to make this section consistent with others.	Noted and updated in the ESIA Report. *Reference: Section 2.2.2- CRUDE OIL AND PETROLEUM PRODUCT TERMINALS*	
2.3	p.45	Table 3-4; information for ethane/ethylene pipeline diameter is blank	Noted and updated in the ESIA Report as per Tahrir Petrochemicals provided information. *Reference: Table 3-4*	
2.4	p.55	footnote at bottom of Table 3-5 references 140 KTA of propylene sent to "local consumers". Should align with other documents that show either 160, 180 or 185 KTA (OPC capacity)	Noted and updated in the ESIA Report as per Tahrir Petrochemicals provided information. *Reference: Table 3-5*	

No.	Section / Page	Comment	Response	Remarks
2.5	p.56	under the naphtha paragraph, reference is made to 4,000 kg/hr. Should be tonne/hr.	Noted and updated in the ESIA Report. *Reference: Section 3.6.3: Naphtha*	
2.6	p.57	paragraph under "Energy" should be revised to be consistent with current plans – ca 20 MMSCFD of natural gas	Noted and updated in the ESIA Report as per Tahrir Petrochemicals provided information. *Reference: Section 3.6.3: Power*	
2.7	p.67 – 3.7.6	Fuel Gas System - should be revised to be consistent with current plans – ca 20 MMSCFD of natural gas	Noted and updated in the Report as per Tahrir Petrochemicals provided information *Reference: Section 3.7.6: Fuel Gas System*	
2.8	p 74-80/ Table 3-22	List of Solid Wastes During Operating Phase. Probably need to add tank cleaning wastes (primarily naphtha, PGO, PFO)	Noted and added *to Section 3.8.2: Solid Wastes-Operation Phase* in the ESIA Report as per Tahrir Petrochemicals provided information.	
2.9	p82 – Table 3-24	Air Emissions Sources Characteristics – table does not show boilers and should be updated to be aligned with current plans and fuel sources.	The Table has been updated to include all the potential continuous air emissions sources during operation phase and aligned with Tahrir Petrochemicals plans and fuel resources. *Reference: Table 3-24*	

No.	Section / Page	Comment	Response	Remarks
2.10	p88	Site-Specific Air Quality Measurements – is two days adequate to develop a baseline?	The air quality baseline is not assessed by the site specific measurements only; it is also assessed based on measurements presented in Table 4-1 and Figures 4-1 to Figure 4-3. Some of the information in this section presents the results of a sampling period that extends from 2000 to 2008 and thus adequate to develop a baseline. Furthermore, WorleyParsons conducted another air monitoring campaign in the vicinity of the port area and added more historical measurements for air quality in the area that covered the period from 2009 to 2013. The results and analysis of these measurements are presented as part of the ESIA Report. *Reference: Section4.1.1: HISTORICAL AMBIENT AIR QUALITY MEASUREMENTS* *And Section 4.1.1: SITE-SPECIFIC AIR QUALITY MEASUREMENTS*	

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2.11	Table 6-2	Air (first row) characterized as "Medium" instead of "High"? Not clear why population (which is low in area) is scored as "High"; Not clear why economic activities categorized as "High"	• Air: The air quality within the proposed Complex area affects the local community well-being and health and thus can be classified as a Medium VR: "*VR containing local designations and/or features of local public value*". The effect of the proposed Complex on the ambient air quality is generally localized. • Population: The table presents the value/importance of the receptor regardless its magnitude. It is believed that the value of population (life, well-being, etc) is high. Furthermore, the low density of population in the area is reflected in the magnitude that has been classified as "low: A small proportion of the VR is affected" and "Very Low: A very small proportion of the VR is affected" • Economic activities: Egypt is classified as a low income country. Thus it is believed that economic activities which provide livelihood for population have a High importance to the local community.	
2.12	Table 6-3	Should consider adding "flaring and releases" to the "Accidental Events" category at bottom.	Noted and to be updated in the ESIA Report. *Reference: Table 6-3*	
2.13	Section 6.2	Predicted Impacts During Construction Phase – may need to note that the dredging operation will impact land/soil (storage of dredging material) and that there are environmental considerations for storage. Should also address dewatering plans. See for example: http://water.epa.gov/type/oceb/oceandumping/dredgedmaterial/evaluation.cfm Dredging impacts to marine/biodiversity are discussed (p.200) but not impacts resulting from dredge material removed (6 million m3). Also consider impacts to population from foul odors.	Noted and updated in the ESIA Report. *Reference: Section 6.2.2 and Section 6.2.5*	

No.	Section / Page	Comment	Response	Remarks
2.14	Table 6-6 (p. 203-206)	consider adding "Dredging Activities" as an Aspect	Noted and updated in the ESIA Report. *Reference: Table 6-3 and Table 6-6*	
2.15	6.3	Predicted Impacts during Operation Phase – entire section requires updating (including tables 6-7, 6-8, 6-9) due to addition of four boilers and low-quality liquid fuel combustion. Biggest impacts are likely to be NO2 and SO2	Noted and updated in the ESIA Report. *Reference: Section 6.3.1, Section 6.3.5, Table 6-7, Table 6-8 and Table 6-9*	
2.16	p. 207	first paragraph. Although the testing and start-up duration is expected to be less than one year, it is during this time that heavy flaring and the increased risk of vapor and liquid releases will be highest. It is not obvious that this period should be classified as "very low"	The "Very Low" reflects the duration of the testing and start-up activities which is expected to be less than one year. As for the heavy flaring and the increased risk of different releases, they are reflected in the magnitude of the impact which has been classified as "Very High" or "High" or "Moderate" depending on the VR and event.	
2.17	Table 6-10 pp 220-222	Should "Major Maintenance Turnaround" be added as an "Aspect", given the large influx of workers, related traffic, stoppage and restart of the plant, etc?	There is no need to include "Major Maintenance Turnaround" as a separate aspect as all the relevant impacts are already covered as part of Plant equipment testing and start-up stage (commissioning).	
2.18		As noted previously, consider adding "Dredging Activities" as an "Aspect" to mitigation measures during construction (Table 7-1).	Noted and updated in the ESIA Report. *Reference: Table 7-1, Section 7.1.2 and Section 7.1.3.*	
2.19	p.243	Mitigation measures during operation phase – Air. Bullet 6 – consider extending to include reporting as part of the leak detection and management process	Noted and updated in the ESIA Report. *Reference: Section 7.2.1"Bullet 11"*	
2.20	p.243	Mitigation measures during operation phase – Air. Last bullet references "Best Available Technologies" for emissions reduction. This should probably be further elaborated, and examples provided, such as the use of low-NOx burners, use of selective catalytic reduction (SCR) methods for NOx minimization, for furnaces above a certain threshold size, etc.	Noted and updated in the ESIA Report after consultation with Tahrir Petrochemicals. *Reference: Section 7.2.1. "Bullet number 16".*	

No.	Section / Page	Comment	Response	Remarks
2.21	p.243	Mitigation measures during operation phase – Air. Consider adding a comment about monitoring of naphtha sulphur content for SO_2 emissions considerations (liquid boiler fuels).	Noted and updated in the ESIA Report. *Reference: Section 7.2.1"Bullet number 14".*	
2.22	p.245	under Seawater. Consider adding temperature measurement/alarming/reporting for all outfall streams	Noted and updated in the ESIA Report. *Reference: Section 7.2.3-Seawater"Bullet number 3".*	
2.23	p.252/ Sec 7.3	Mitigation Measures during Non-Routine Events throughout the Project Phases. The list of bullets about management and control measures should be expanded to include preventative concepts such as proper definition and documentation of standard procedures, work permitting rules and procedures, safety training and safety aspects integrated into all operating/maintenance procedures, effective management of change (MOC) processes and the like. Also, HAZOP reviews and similar during detailed design.	Noted and updated in the ESIA Report as applicable. *Reference: Section 7.3"Bullet number 8".*	
2.24	Sec 8	Not sure where it might best apply, but should a requirement for plant personnel air monitoring badges be included? Maybe under Air Quality (Table 8-3) and Table 8-4 Operations Environmental Monitoring and Auditing Plan. See examples from links below: http://www.grainger.com/content/qt-safety-air-monitoring-equipment-231 http://multimedia.3m.com/mws/media/211130O/air-monitoring-guide-3500-3510-3520-3530-3550-3551.pdf	This item is relevant to Occupational Health and Safety and thus out of the ESIA scope. However Tahrir Petrochemicals is committed to develop a detailed OHSP at the detailed design phase of the project.	
2.25.a	Appendix 3 – Air Dispersion Model	Needs to be updated and aligned with current fuels configuration, including four boilers	Noted and updated in the ESIA Report. *Reference: Appendix 3- Table 4-1*	

No.	Section / Page	Comment	Response	Remarks
2.25.b	Appendix 3 – Air Dispersion Model /p.2 – Scenario B.	Furnace decoking frequency will be six times per year each furnace so almost 50 times per year in total (not six). This needs to be better reflected in the verbiage and the AERMOD inputs.	Noted and to updated in the ESIA Report, as applicable. *Reference: Appendix 3*	
2.26	Appendix 3 – Air Dispersion Model	General comment: are there any diesel fire water pumps or other liquid-fuel driven generators, pumps, etc.? If so, these should be included (although not material) if expected to be in operation	All the possible continuous air emissions sources are incorporated in the air dispersion model. Modelling discontinuous sources such as fire water pumps and generators is out of the scope of the air dispersion model.	
2.27	Appendix 3 – Air Dispersion Model/ p.4 – Table 2-1	For clarity, shouldn't the "WHO" label in the fourth column be replaced by IFC, as noted in the text in second-to-last paragraph of p.2?	Noted and updated in the air dispersion model Report. *Reference: Appendix 3- Table 2-1*	
2.28	Appendix 3 – Air Dispersion Model/ p.6	p.6 – Comments about PM10 As noted previously, given the short duration of ambient air testing (two days) and the relatively high PM10 (non-compliant with EU), won't additional data be required? Also, related to this, does the EU Directive come into play? Do not IFC standards govern (as noted previously)?	Tahrir Petrochemicals is considering the national limits, IFC guidelines in addition to the EU guidelines to show its compliance and commitment towards environmental preservation. The additional ambient air quality measurements and analysis are presented as part of *Section 4- Description of Receiving Environment* (Please refer to Comment No: 2.10).	

No.	Section / Page	Comment	Response	Remarks
2.29	General	Cumulative impacts assessment: ESIA should address the cumulative impacts through consideration of the impacts of the Project and other future projects taking place in the vicinity which could affect the same social and environmental resources and receptors that can be expected to have a combined effect. The impact of existing permitted facilities operating in the region is reflected in the baseline environmental quality: therefore, cumulative impacts have been assessed considering the impacts from the proposed development in combination with other future planned projects in the area.	WorleyParsons followed EEAA definition of "Cumulative impact" as stated in the Guidelines of Principles and Procedures for Environmental Impact Assessment, Second edition. The definition of Cumulative Impact is "*The aggregate of individual impacts of the activities of the project or the individual impacts of the project to those of other surrounding projects or activities*." (Section 6.4.2.6 Assessment of Impacts- Category C Projects). No reference is made to including the future/planned establishments and facilities as part of the environmental impact assessment in the EEAA Guidelines. A clear statement of the definition of the cumulative impact has been added to the ESIA Report *Reference: Section 6.1.4.*	
2.30	General	Greenhouse Gas (GHG) Emission: ESIA should include the projected amount of GHG annual emission during each phase calculated by the internationally recognized methodology as well as monitoring the method on quantification of GHG emission.	Please refer to Item 1.17.	
2.31	General	Assessment for Waste Management Plan: There isn't the dedicated assessment for waste management plan in ESIA, which should address the existing waste management facilities that are available for Project and evaluate the potential impacts resulting from waste management during the lifetime of Project.	Noted. Available details on the waste management facilities in Suez governorate will be added to *Section 4- Description of the Receiving Environment* in the ESIA Report. The potential impact resulting from waste during the different phases of the project is already incorporated in *Section 6- Environmental and Social Impact Assessment.*	

No.	Section / Page	Comment	Response	Remarks
2.32	General	Assessment for Health aspects: The assessment should be included in ESIA to provide information on regional health infrastructure, the baseline health data for the region where the Project is located. If there is any material adverse impact to environment, social bracket and infrastructure, the viable mitigation measure should be recommended.	The scope of the present study is limited to evaluating the environmental and social impacts. However, details on the health baseline and infrastructure for Suez as applicable have been added to the ESIA Report. *Reference: Section 4.9*	
2.33	General	Emergency response plan (ERP): ERP should be prepared to prevent injury to staff and personnel, damage to property, harm to the environment and impact on neighbor communities. One of the major significant negative impacts for Project is due to impacts to recreational resorts in particular. The viable ERP which addresses procedures not to harm them should be in place.	Noted. WorleyParsons incorporated Tahrir Petrochemicals ERP framework as applicable as part of the ESIA Report. *Reference: Appendix 9*	
2.34	General	Environmental and social management plan (ESMP): ESMPs for each development phase have been also incorporated in ESIA, however, they are too general to address the mitigation, monitoring and institutional measures to be taken by Project to eliminate adverse E&S impacts. It appears that the mitigation measures resulting from the impact assessment are not appropriately reflected on ESMP.	Noted and updated in the ESIA Report. *Reference: Section 9*	
2.35	General	Grievance Mechanism and Stakeholder Engagement Plan (SEP): Section 9, Public consultation and stakeholder engagement, provides the identification of stakeholders for Project and discussion of 1st public hearing. However, Stakeholder Engagement is ongoing process to be developed and implemented along with the development stage of Project. The specific plan should be established in accordance with IFC PS1. Together with this, Sponsors should establish a grievance mechanism to receive and facilitate resolution of affected communities' concerns and grievances about Project's E&S performance	Noted. The results of the second public hearing have been added to the ESIA Report in addition to a framework for Grievance Mechanism. *Reference: Section 10.4 and Section 10.5.*	

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E.1	General	The use of IFC's Ports & Harbors Guidelines especially for dredging operations, dredging impacts on marine ecosystems, disposal of dredged material, etc.	Noted and updated in the ESIA Report. *Reference: Section 2.2.2*	
E.2	General	Comparing project's emissions/discharges to IFC's EHS Guidelines (Large Volume Petroleum-Based Organic Chemicals, Petroleum-Based Polymers, Thermal Power, General, etc.); management of wastewaters, clarifying if any unlined ponds will be used or not; treated water recycling; the use of treated effluents in irrigation and applicable Guidelines, etc.; demonstrating compliance with these Guidelines and adopting mitigation measures, if needed; hazardous waste management especially what can go to landfill and what should not, etc.; hazardous waste treatment and disposal options, etc.	Some of these items are already addressed in the Draft ESIA Report (e.g. the use of treated effluents in irrigation and applicable Guidelines, hazardous waste management especially what can go to landfill and what should not, etc.; hazardous waste treatment and disposal options, etc.). For the rest of the presented points, noted and updated in the ESIA Report. *Reference: Section 3.7.7,Section 3.8, Table 3-25, Table 6-7, Table 6-9, Figure 6-2, Figure 6-3, Figure 6-5 and Figure 7-1.*	
E.3	General	Emergency response measures for process upsets, levels to be used for exposure assessment, etc.	Please refer to item 2.33 and *Appendix 8 (QRA study).*	
E.4	General	Environmental management and monitoring framework/plans etc.(right now, it's premature to go into too many details but we can present a framework that is a little more detailed than the one presented in the EIA).	Noted and updated in the ESIA Report. *Reference: Section 9.2.3 and Section 9.3.4.*	
E.5	General	Identifying any vulnerable people in the project's area of influence such as any indigenous people/Bedouins, etc.; how the project is addressing comments from stakeholders, etc.	Noted and updated in the ESIA Report, as applicable. *Reference: Section 10.5.*	
E.6	General	Occupational health, sand safety; environmental and social management system; community safety; land acquisition; cultural property; and any other issues associated with the compliance with IFC's Performance Standards.	Noted and updated in the ESIA Report, as applicable to the project and study scope. *Reference: Section 8*	

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Additional Notes (if any)

No.1.x: Second set of comments received on 26.11.2014

No.2.x: First set of comments received on 13.11.2014

No. E.x: Comments received by email on 12.10.2014