

# Environment and Social Compliance Audit Report

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Project Number: 54401-001  
Final Asset-Level Report - Gongping  
April 2021

## People's Republic of China: Asia Cube Wastewater Treatment Upgrade Project

Prepared by Stantec Environmental Engineering (Shanghai) Co., Ltd. ("Stantec") for the China Cube Water Company (the "Client") and the Asian Development Bank.

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## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

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**CURRENCY EQUIVALENTS**

(as of 12 April 2021)

Currency unit	–	yuan (CNY)
CNY1.00	=	\$0.1526
\$1.00	=	CNY6.5522

**ABBREVIATIONS**

AAOV	Average Annual Output Value
ACMs	Asbestos Containing Materials
ADB	Asian Development Bank
ADB's SPS	ADB Safeguard Policy Statement
AESR	Applicable E&S Requirements
AO	Anoxic Oxidation
BOD	Biochemical oxygen demand
BOLAR	Bureau of Land and Resources
BOT	Build-Operate-Transfer
CAI	Completion Acceptance Inspection
CAP	Corrective Action Plan
Capex	Capital Expenditure
CCW	China Cube Water
COD	Chemical oxygen demand
COVID-19	Coronavirus disease-19
ECAI	Environment Completion Acceptance Inspection
E&S	Environmental and Social
EEB	Ecology and Environment Bureau
EIA	Environmental Impact Assessment
EIF	Environmental Impact Form
EIR	Environmental Impact Registration
EMP	Environmental Management Plan
ERP	Emergency Response Plan
ESMS	Environmental and Social Management System
EHS	Environmental, Health and Safety
EHSS	Environmental, Health, Safety and Social
FCAI	Fire-fighting Completion Acceptance Inspection
FSR	Feasibility Study Report
GIIP	Good International Industry Practice
GRM	Grievance Redress Mechanism
HR	Human Resource
HW	Hazardous wastes
IFC	International Finance Centre
IH	Industrial Hygiene
IR	Involuntary Resettlement
IP	Indigenous Peoples
ISQ	I Squared Capital



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

MEE	Ministry of Ecology and Environment
MEP	Ministry of Environmental Protection
MSDS	Material Safety Data Sheet
NGO	Non-Governmental Organizations
ODH	Occupational Disease health
ODSs	Ozone Depleting Substances
Opex	Operating Expenses
PAHs	Project Affected Households
PCB	Polychlorinated Biphenyls
PDP	Pollutant Discharge Permit
PPE	Personal Protective Equipment
PRC	People's Republic of China
SEP	Stakeholder Engagement Plan
SOP	Standard Operating Procedure
SPS	Safeguard Policy Statement
SS	Suspended Solids
WWTP	Wastewater Treatment Plant

## WEIGHTS AND MEASURES

m	meter	mg/m <sup>3</sup>	milligram per cubic meter
km	kilometre	ha	hectare
km <sup>2</sup>	square kilometre	t/a	tons per annum
m <sup>2</sup>	square meter	h	hour
m <sup>3</sup>	cubic meter	t	metric ton
mg/kg	milligram per kilogram	°C	degree centigrade
µg/m <sup>3</sup>	microgram per cubic meter	dB	decibel
t/d	tons per day	MPN/L	Most Probable Number per liter



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## Executive Summary

The Asian Development Bank (ADB) is considering provision of financing to the I Squared Capital (ISQ), an independent fund which 100% owns China Cube Water Limited (CCW or the Company). CCW focuses on wastewater treatment projects alongside major rivers in China, and operates nine wastewater treatment plants (WWTPs) with a total capacity of 222,500 tons/day, serving over 2 million population in Henan Province (6 WWTPs), Shaanxi Province (1 WWTP), Heilongjiang Province (1 WWTP) and Guangdong Province (1 WWTP), PRC.

ADB engaged Stantec Environmental Engineering (Shanghai) Co., Ltd. ("Stantec") to conduct an Environmental and Social (E&S) audit at CCW in support of the proposed loan. On 1 February 2021, Stantec conducted the E&S audit at Haifeng Town Gongping WWTP (Gongping WWTP or the Site). This E&S audit was conducted based on Gongping WWTP's current E&S management performance against the Applicable E&S Requirements (AESRs) detailed as Section 1.2.

The land acquisition and resettlement was conducted by the local government in 2013 and 2014. In 2015, Haifeng Jiaqing Minghao Water Co., Ltd. (Haifeng Jiaqing) reached a Build-Operate-Transfer (BOT) agreement with local government. In 2019, the Phase I development of Gongping WWTP with a designed treatment capacity of 20,000 t/d started the operation. At the time of the site visit, the Phase I development was in operation. Site management reported that there is no such demand proposed by the local government, nor specific plan or schedule proposed by CCW for the Phase II and Phase III developments.

The Site, located at No.21 of Middle Xinxing Road, Gongping Town, Haifeng County, Guangdong Province, PRC, covers a total land area of about 20,000 square meters (m<sup>2</sup>). The scope of the BOT agreement only covers operations of Gongping WWTP for 30 years. As per the BOT agreement, besides the operation of the WWTP, construction of phase I pipelines and transporting facilities are also covered whilst the operation of these offsite facilities are undertaken by the local government. The wastewater collection pipelines are managed by the local authority including the portions within the site boundaries connecting to the onsite wastewater collection tank. The wastewater collection tank and other wastewater pipelines within the site boundaries are operated and maintained by the site. The pipelines and valves are part of the existing Haifeng town wastewater treatment network. The sludge treatment stations and/or designated disposal site for dewatered sludge are appointed by the local government as per the concession agreement. These auxiliary facilities are operated and maintained by Haifeng Town and third parties. The Site receives both industrial wastewater and domestic wastewater from the area of about 6 square kilometres (km<sup>2</sup>).

During the audit, no Red Flag (as defined in **Table 2-3**) issues were identified at the Site, whilst lack of a formalized E&S Management System (ESMS) was identified as a High Risk issue. Overall, the Site has developed and implemented certain health and safety related management procedures which is in consistent with CCW corporate EHS procedures. However, no dedicated EHS officer leading its implementation and a formal E&S Management System (ESMS) was not in place. During the Audit, the Site representatives and management expressed knowledge and experience for E&S management (mainly health and safety oriented), as well as willingness for improvement and positive attitude for the risks identified. For the gaps identified and the corresponding recommendations, please refer to Chapter 4.



# 1. INTRODUCTION

## 1.1 PROJECT BACKGROUND

The Asian Development Bank (ADB) is considering provision of financing to the I Squared Capital (ISQ), an independent fund focusing on infrastructure investment around the globe. In Asia, ISQ owns and manages infrastructure projects including co-generation of heat and power, renewable energy (solar and wind), telecom, data centre, highway, wastewater treatment via multiple platform companies.

Established in 2006, Jiangsu Jiaqing Water Development Co., Ltd. (Jiangsu Jiaqing) headquarters in Nanjing, Jiangsu province, focuses on municipal and industrial wastewater treatment. Jiangsu Jiaqing introduced ISQ as its strategic investor. By the end of 2018, ISQ acquired 100% share of Jiangsu Jiaqing, making Jiangsu Jiaqing its wholly owned flagship platform company in the field of environmental protection industry. In May 2019, Jiangsu Jiaqing changed the company name to China Cube Water Limited (CCW or the Company).

CCW focuses on wastewater treatment projects alongside major rivers in China, such as the Yellow River and Huai River. As of January 2021, CCW operates nine wastewater treatment plants (WWTPs) with a total capacity of 222,500 tons/day, serving over 2 million population in Henan Province (6 WWTPs), Shaanxi Province (1 WWTP), Heilongjiang Province (1 WWTP) and Guangdong Province (1 WWTP), PRC.

Haifeng Town Gongping WWTP (Gongping WWTP or the Site) was established in 2015 which designed to be developed into three phases, with a total wastewater treatment capacity of 60,000 tons per day (t/d), 20,000 t/d for each phase, respectively. CCW holds 60% of shares of Gongping WWTP whilst Shenzhen Minghao Environmental Protection Co., Ltd holds 30% and Jiangsu Huada Environmental Engineering Co., Ltd holds 10%. At the time of the site visit, the Phase I development, with 20,000 t/d capacity, was in operation. Site management reported that there is no such demand proposed by the local government, nor specific plan or schedule proposed by CCW for the Phase II and Phase III developments. **The following descriptions and E&S management discussions focuses on the Phase I development.**

ADB engaged Stantec Environmental Engineering (Shanghai) Co., Ltd. ("Stantec") to conduct an Environmental and Social (E&S) audit at CCW in support of the proposed loan. On 1 February 2021, Stantec conducted the E&S audit at Gongping WWTP. This report presents the findings of the E&S audit and provides a gap analysis of Gongping WWTP's current E&S management performance against the Applicable E&S Requirements (AESRs) detailed as Section 1.2.

## 1.2 SCOPE OF THE ASSET-LEVEL E&S AUDIT

The objective of the E&S audit was to (1) determine the Site's E&S performance; (2) identify potential risks during the construction and operation of the Site, and (3) verify the compliance status of the Site with the following AESRs:

- ADB Safeguard Policy Statement (SPS) (including SPS SR1, SR2, SR3 & SR4), June 2009;
- ADB's Social Protection Strategy, 2001;
- ADB Gender and Development Policy, May 1998;
- ADB Access to Information Policy, 2018;



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### INTRODUCTION

- World Bank Group's General Environmental, Health and Safety Guidelines, 2007;
- World Bank Group's EHS Guidelines for Water and Sanitation, 2007; and
- Applicable national, provincial and local laws and regulations pertaining to E&S (including land acquisition and resettlement), health and safety and labour in the RPC.

In particular, the scope of the Asset-level E&S audit is to:

- Provide a description of the Site, including types of wastewater treated, water treatment technology; amount and quality of influent and effluent; methane generation and use, if relevant; electricity consumption, any resource conservation technology currently used and/or to be used in the future.
- Review past, current and potential environmental, involuntary resettlement (IR) and indigenous peoples (IP) impacts from construction and operation of the Site and confirm categorization based on ADB's SPS.
- Determine where the Site, including ancillary facilities such as sludge disposal site and pipelines, may cause or are causing environment, occupational and community health and safety (EHS) impacts and risks and opine on the suitability of the existing ESMS or EMP of the Site, including management of COVID-19 risks, monitoring and reporting and related organizational structure and capacity.
- Review any impacts from extreme weather events due to climate change such as floods, and recommended commensurate adaptation measures, as necessary.
- Review related documents, such as the domestic Environmental Impact Assessment (EIA) documents submitted to or approved by the local environmental authorities, Feasibility Study Reports (FSRs), conditions and requirements in the in the EIA approval documents, permits/clearances/certificates, external/internal monitoring results, and any associated reporting requirements to authorities, and opine on the Site's EHS and social aspects and determine if the Site is in compliance with the AESRs.
- Review the suitability and implementation status of any Corrective Action Plans (CAPs) prepared, if any.
- Review any prior land acquisitions done by the local government for the Site and determine if these were undertaken in compliance with PRC's national laws and ADB's requirements.
- Determine if the Site's operation has any impacts on ethnic minorities and assess whether these have been addressed in accordance with PRC's national laws and ADB's SPS.
- Review the Site's stakeholder engagement activities and information disclosure procedures.
- Review the Site's internal and external grievance redress mechanisms, identify past and ongoing complaints issues or feedbacks and review the current status or resolution.

### 1.3 REPORT STURCTURE

The remainder sections of this report are structured as follows:

- Section 2: Application Standards and Methodology;
- Section 3: Site Assessment;
- Section 4: Corrective Action Plan.

This report is supported by the following annexures:

Annex A: List of Documents Reviewed

Annex B: Stakeholders Engaged during the E&S Audit

Annex C: Photo Log



## 1.4 LIMITATIONS

The report was prepared in accordance with a scope of work agreed by ADB. The results of the Site are based on conditions at the time of site visit and documents provided by Gongping WWTP. A change in any of these conditions may alter the findings, observations and report content presented herein by Stantec. A site walkthrough, by nature, is limited in its ability to fully assess potential Environmental, Health, Safety and Social (EHSS) liabilities or concerns associated with a property or operation. Further investigations would be required to identify the presence or absence of potential EHSS liabilities but are beyond detection by performance of the scope of this Site. Laws and regulations, if referenced in this report, are provided for information purposes only and should not be construed as legal opinion or recommendation.

The limitations encountered during the site visit include the following:

- 1) The routine environmental monitoring conducted by third parties is reportedly handled by the minority shareholder of the Site and the corresponding latest monitoring reports were not provided for review.
- 2) Due to time constraints, the document review (e.g. labour contracts, inspection records) was conducted by random sampling. The sampling process was not designed to be a comprehensive document review, but rather to verify the current status by sampling for risk screening purpose.
- 3) Only the payroll records in September 2020 were provided for review, whilst the attendance records and payroll records in other months were not provided for review.
- 4) Interview with representative of the local environmental authority was not arranged by CCW.
- 5) The land acquisition was undertaken by the local government in 2013 and 2014. CCW management is not aware of the detailed information about the land acquisition and no interview was conducted with representatives from corresponding stakeholders such as affected person and the local authority.



## 2. APPLICATION STANDARDS AND METHODOLOGY

### 2.1 APPLICABLE STANDARDS

This E&S audit was undertaken in accordance with the following AESRs:

- ADB Safeguard Policy Statement (SPS) (including SPS SR1, SR2, SR3 & SR4), June 2009;
- ADB's Social Protection Strategy, 2001;
- ADB Gender and Development Policy, May 1998;
- ADB Access to Information Policy, 2018;
- World Bank Group's General Environmental, Health and Safety Guidelines, 2007;
- World Bank Group's EHS Guidelines for Water and Sanitation, 2007; and
- Applicable national, provincial and local laws and regulations pertaining to E&S (including land acquisition and resettlement), health and safety and labour in the RPC.

In the PRC, wastewater treatment projects are governed by the following key applicable Chinese E&S regulations listed in *Error! Not a valid bookmark self-reference..*

**Table 2-1: Related E&S Laws and Regulations**

Title	General Description
<b>Environment</b>	
<i>Law on Environment Protection (2015)</i>	The law is an umbrella under which relevant laws on air, noise and wastewater emissions, as well as waste management and disposal are integrated. The Law authorizes environmental authorities to establish two types of standards: environmental quality (ambient) standards and discharge/emission standards. Ambient standards are the maximum allowable concentrations of pollutants in water, air or soil. Discharge / emission standards are the maximum allowable concentrations of pollutants' emissions or discharges. The standards provide a basis for the inspection activities of the environmental authorities. The Law on Environmental Protection allocates responsibility for the implementation of environmental protection policies and environmental monitoring to relevant government organizations. Specific details, permits and procedures are stipulated under the relevant State laws for air, water, noise, waste management etc.
<i>Law on Environmental Impact Assessment (2018)</i>	<p>All construction projects are required to comply with a series of environmental protection procedures and policies, principally the following:</p> <ul style="list-style-type: none"> <li>• Environmental Impact Assessment (EIA) Policy;</li> <li>• "Three Synchronies" Policy; and</li> <li>• Pollutant Discharge Permitting.</li> </ul> <p>There are three categories of EIA in the PRC, including (a) Full EIA report for projects with significant environmental impacts, (b) Environmental Impact Form (EIF) for project with moderate environmental impacts, and (c) Environmental Impact Registration (EIR) for projects with limited environmental impacts.</p>
<i>Management Regulations for Environmental Protection for Construction Projects (2017)</i>	
<i>Catalogue for Management of Environmental Impact</i>	



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### APPLICATION STANDARDS AND METHODOLOGY

Title	General Description
<i>Assessment of Construction Projects (2021)</i>	between 500 tons and 100,000 tons, and the EIR is applicable for the rest WWTP with the daily treatment capacity below 500 tons.
<i>Measures on Environmental Impact Post-Assessment of Construction Project (2016)</i>	The measure stipulates the legal requirements of Environmental Impact Post-Assessment for required construction projects, and the post-assessment registration requirement.
<i>Catalogue for management of Pollutant Discharge Permit (2019)</i>	According to the amount of pollutants generated and discharged by the enterprises, public institutions or other business operators and the degree of environmental hazards, three types of pollutant discharge permits (key regulatory, simplified regulatory and registration management) shall be implemented.
<i>Law on the Prevention and Control of Atmospheric Pollution (2018)</i>	The Law on the Prevention and Control of Atmospheric Pollution (2018) provides the basis for air quality protection in China. The Integrated Emission Standard of Air Pollutants (1996) specifies the discharge standards for air emissions.
<i>Integrated Emission Standard of Air Pollutants (1996)</i>	
<i>Law on the Prevention and Control of Water (2017)</i>	The Law on the Prevention and Control of Water (2017) is the key law for water pollution control. It applies to the pollution prevention and control of groundwater and all surface water bodies excluding the sea. It contains water pollution prevention and control standards; monitoring requirements and the management guidelines for water pollution prevention and control; measures for water pollution prevention and control; the pollution prevention and control measures for special water bodies including drinking water sources; the treatment of water pollution events; and legal liabilities. For industrial projects, a Water Pollutant Discharge Permit is required from the Ecology and Environment Bureau (EEB) prior to operational discharges to surface water.
<i>Discharge Standard of Pollutants for Municipal Wastewater Plant (2002)</i>	
<i>Environmental Quality Standards for Surface Water (2002)</i>	
<i>Integrated Wastewater Discharge Standard (1996)</i>	
<i>Law on the Prevention and Control of Environmental Noise Pollution (2018)</i>	Noise is regulated by the Law on the Prevention and Control of Environmental Noise Pollution (2018). This Law sets out the general requirements for noise control including noise from industrial sites, construction sites and transportation.
<i>Emission Standard of Environmental Noise for Boundary of Construction Site (2011)</i>	The Emission Standard of Environmental Noise for Boundary of Construction Site (2011) and the Emission Standard for Industrial Enterprises Noise at Boundary (2008) are applicable for construction and operational activities, respectively.
<i>Emission Standard for Industrial Enterprises Noise at Boundary (2008)</i>	
<i>Law on the Prevention and Control of Solid Waste Pollution (2020)</i>	Law on the Prevention and Control of Solid Waste Pollution (2020) stipulates the requirements for general industrial waste, domestic waste, and hazardous



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### APPLICATION STANDARDS AND METHODOLOGY

Title	General Description
Management Regulation for Hazardous Waste Transfer Manifests (1999)	waste management including collection, storage, transportation, treatment, recycling and disposal.
Standard for Pollution Control on Industrial Solid Waste Storage and Landfill (2020)	The on-site storage and disposal of industrial solid waste is subject to the Standard for Pollution Control on Industrial Solid Waste Storage and Landfill (2020). The Management Regulation for Hazardous Waste Transfer Manifests (1999) stipulates the documentation and tracking procedures for hazardous waste generators, transporters and disposal operators.
Law on Energy Conservation (2018)	The Law on Energy Conservation (2018) and Law on Cleaner Production Promotion (2012) stipulates the legal requirements on energy saving during both construction and operation of a development project.
Law on Cleaner Production Promotion (2012)	
Law on the Prevention and Control of Soil Pollution (2019)	The Environmental Quality Standards for Construction Soil Pollution Risk Control (Trial) (2018), Environmental Quality Standards for Agriculture Soil Pollution Risk Control (Trial) (2018), Law on the Prevention and Control of Soil Pollution (2019) and the Quality Standard for Ground Water (2017) define the quality standards applicable for soil and groundwater depending on the different uses.
Environmental Quality Standards for Construction Soil Pollution Risk Control (Trial) (2018)	
Environmental Quality Standards for Agriculture Soil Pollution Risk Control (Trial) (2018)	
Environmental Quality Standard for Ground Water (2017)	
Methods for Public Participation in Environmental Impact Assessment (2019)	The Methods for Public Participation in Environmental Impact Assessment (2019) prescribes the requirements for public consultation during the process of EIA for a development project. And it requires that public consultation should be conducted while preparing full EIA Report, whilst there is no specific legal requirement regarding consultation with communities for EIF and EIR.
Health & Safety	
Law on Work Safety (2014)	These laws stipulate principles on work safety, occupational health and fire protection issues, including work safety and occupational hazards assessment, facility design and construction, completion acceptance inspection, training, monitoring and medical check-up, facility inspection and maintenance, etc.
Law on Occupational Diseases Prevention (2018)	
Law on Fire Protection (2019)	
Biodiversity	
Law for Wildlife Protection (2018)	Law for Wildlife Protection (2018) and Regulation on Wild Plant Protection (2017) stipulates the requirements for protecting and saving wildlife or wild



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### APPLICATION STANDARDS AND METHODOLOGY

Title	General Description
<i>Regulation on Wild Plant Protection (2017)</i>	plant, defines the wildlife or wild plant habitat, and establishes disciplinary measures.
Land Acquisition and Resettlement	
<i>Law on Land Administration (2020)</i>	The Land Administration Law stipulates that where land acquisition is necessary <sup>1</sup> , compensation shall be made in accordance with the original usage of the acquired land, which shall include a land compensation fee, a resettlement subsidy (if applicable) and a compensation fee for land “attachments“ (e.g. various trees and houses) and standing crops. The land compensation fee for cultivated land is six to10 times the average annual output value (AAOV) of the land in the three years preceding the land acquisition. The relevant compensation standards for land “attachments” and standing crops are to be determined by the local government.
<i>Regulations on Implementation of Land Administration Law (2014)</i>	
Labour	
<i>Labour Law (2018)</i>	Labour law (2018) stipulates the rights and corresponding obligations of workers, states that “employees enjoy the rights of equal employment and choice of occupation, the right to receive labour remuneration, the right to rest and vacation, the right to obtain labour safety and health protection, the right to receive vocational skill training, the right to enjoy social insurance and welfare, the right to apply for settlement of labour disputes and other labour rights stipulated by law” and “laborers should complete their labour tasks, improve their professional skills, implement labour safety and health regulations, and abide by labour discipline and professional ethics”.
<i>Labour Contract Law (2012)</i>	
Cultural Heritage	
<i>Cultural Relics Protection Law (2017)</i>	It stipulates project proponents to undertake baseline archaeological surveys to determine the presence and condition of cultural relics where construction works have the potentiality to damage them.
<i>Implementation Regulations of the Law on Cultural Relics Protection (2017)</i>	
Public Consultation and Information Disclosure	
<i>Methods for Public Participation in Environmental Impact Assessment (2019)</i>	It stipulates that construction projects that may have significant effects on the environment should incorporate public comments into the EIA report. Either the Project proponent (or the EIA agency on behalf of the Project proponent) should provide project information to the public and to the local EEB during the process of environmental impact assessment. A summary EIA report shall be provided for public review in hard copy format at a designated location or in electronic format on a public website.
Gender	
<i>Law on the Protection of Women's Rights and Interests (2018)</i>	It stipulates women's rights in social and economic life, including political rights, cultural and educational rights and interests, labour and social security rights and interests, property rights, personal rights, marriage and family rights and interests.

<sup>1</sup> The Project Affected Households (PAHs) can reject the land acquisition as long as it is not for the public good projects. The land law applies to all land acquisition activities, as long as it is 'land acquisition/ expropriation'.



Title	General Description
<b>Ethnic Minorities</b>	
<i>Law on Regional National Autonomy (2001)</i>	It stipulates that regional ethnic autonomy is a basic political system in China. Article 10 emphasizes that the organs of self-government in national autonomous areas shall guarantee the freedom of all ethnic groups in the region to use and develop their own languages and characters, and the freedom to maintain or reform their own customs and habits.

In addition, in regard to flood risk control, as per the Code of Design of Outdoor Wastewater Engineering (GB 50014-2006 amended in 2014), the site selection should not be impacted by flooding, and the flood control standard of the site should be as least meeting the local city flood control standard (as per the Standard for Flood Control (GB 50201-2014), mainly taking the population and economic of the city into consideration) with good drainage condition. In both the FSR and EIA documents, a simple description of the local meteorological condition is included, stating the status quo of temperature, precipitation, wind direction, etc. in the local area, however, it is not an extreme weather impact assessment covering historic and future situations, nor mentioning the historical events as only the historical max precipitation data is included.

## 2.2 E&S PERMITTING REQUIREMENTS

In general, for a wastewater treatment project, the following key topical assessments and applications are required (**Table 2-2**).

**Table 2-2: E&S Permitting Requirements**

E&S Permit	Applicable Standard Type	Description
Site selection application	National Standard	An approval issued by the local authorities on whether the project comply with local planning requirement.
Feasibility Study Report (FSR)	National Standard	A comprehensive analysing report based on economic, technological, production, supply and marketing, social, environmental and legal factors, to determine the feasibility of the project.
Land Use documents	National Standard	Land users are required to obtain Construction Land Use Certificate. The land certificate is issued by the local government. It is a written document certifying that the holder has the ownership or right to use a certain area of land.
Environmental Impact Assessment (EIA) documents	National Standard	Based on Catalogue for Management of Environmental Impact Assessment of Construction Projects (2021), the EIF report is applicable for the Site as the WWTP with the daily treatment capacity between 500 tons and 100,000 tons.  The EIF report is generally consisting of applicable standards, project description, pollution control analysis, ecological impacts, extreme weather analysis (including climate, flooding, earthquake, etc.).
Environmental Completion Acceptance Inspection (ECAI)	National Standard	Since November 2017, China government has been implementing self-conducting ECAI procedures (meaning the corresponding monitoring and acceptance are conducted by the project owner) for environmental protection by phases.



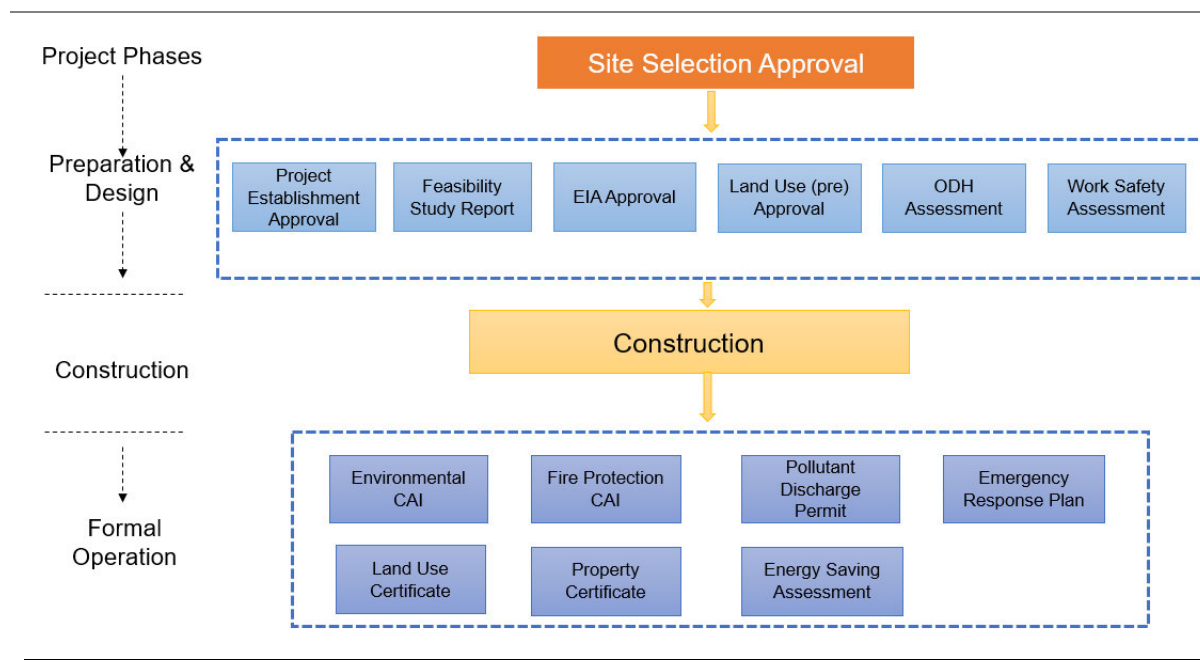
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### APPLICATION STANDARDS AND METHODOLOGY

		<p>In November 2017, the air emission self-conducting ECAI has been commenced;</p> <p>In January 2018, the wastewater discharge self-conducting ECAI has been commenced;</p> <p>In December 2018, the boundary noise self-conducting ECAI has been commenced;</p> <p>In September 2020, the solid waste self-conducting ECAI has been commenced.</p>
Pollutant Discharge Permit (PDP)	National Standard	For wastewater and air emission discharge companies, the PDP was required from local EEB, which illustrate the pollutant discharge capacity, discharge points, and monitoring programme.
Fire Protection CAI	National Standard	An approval issued by the local authorities on whether the project comply with fire protection design and implementation requirement.
Work Safety Assessment	National Standard	The report identifies and analysis of project's production and business operation activities of potential danger and harmful factors, and safety standards, to predict the likelihood of accidents and its severity, and then puts forward feasible safety control measures.
Occupational Disease Hazards Assessment (ODH)	National Standard	The report identifies and analysis of potential occupation health hazards within the project's production processes and compare with local standards to predict the likelihood of occupational health hazard and its severity, and then puts forward feasible safety control measures.
Emergency Response Plan (ERP)	National Standard	<p>The ERP includes sudden environment and safety ERPs.</p> <p>The sudden environment ERP consists of applicable standard, environmental risk analysis (including chemical storage and spills, water pollution, soil pollution, ecological conditions, etc.), and emergency response methods.</p> <p>The safety ERP consists of applicable standard, safety risk analysis (including fire, explosion, equipment hazards etc.), and emergency response methods.</p>
Energy Saving Assessment	National Standard	The Energy Saving Assessment consists of applicable standard, energy supply and consumption conditions, and applicable energy saving measures.

*Error! Reference source not found.* below presents the general permitting process that a project will need to maintain compliance over the full life cycle with applicable E&S regulations.



**Figure 2-1: Indicative Project Permitting Flowchart by Project Phases**

Please note that the above flowchart is indicative only under the current regulatory regime, which has been and continues to evolve rapidly. Meanwhile, local implementation of the national level laws and regulations often varies, which may lead to variations to the permitting flowchart presented in this report.

## 2.3 METHODOLOGY

### 2.3.1 Approach

An integrated approach with three steps was proposed by Stantec for subproject level E&S audit as stated below. This approach was subsequently agreed by the ADB.

#### Step 1: Document Request and Desktop-based Review:

Stantec requested documents from Gongping WWTP including (i) CCW and Gongping WWTP ESMS or policies and official commitments related to environmental, health, safety and social safeguards, policies and procedures that would typically be covered by an ESMS; (ii) Information about the system for project planning to manage environmental and social risks; (iii) Information about Gongping WWTP's training records for staff regarding environmental and social safeguards; (iv) Human Resource (HR) management and procurement policies and procedures, gender disaggregated information, labour contract, attendance sheet and salary records in Gongping WWTP; (v) Information about Gongping WWTP's main stakeholder groups, activities through which they are engaged and consulted, and any grievance redress system and its results log; and (vi) Information about the environmental, health, safety and social monitoring records, pollutant prevention and reporting system.

Stantec conducted a review of documentation of Gongping WWTP through intermediaries and onsite review. Annex A lists the key documents provided by Gongping WWTP and reviewed by Stantec during this E&S audit.



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### APPLICATION STANDARDS AND METHODOLOGY

#### Step 2: Site Visit

Stantec conducted an onsite visit at Gongping WWTP on 1 February 2021. During the onsite visit, Stantec's E&S team:

- Reviewed documentation available at the Site (listed in Annex A);
- Conducted selected interviews with site representatives (listed in Annex B);
- Conducted a limited visual observation of the Site (WWTP sections/areas observed with photos are in Annex C); and
- Reviewed the implementation and compliance status of the E&S mitigation and management measures.

#### Step 3: Gap Analysis and Reporting

Based on the information obtained during Steps 1 and 2, gaps against the AESRs were identified at the Site (refer to Section 3). A CAP setting out the steps that would be required to close the identified gap(s) is outlined in Section 4.

### 2.3.2 Risk Categorization

Risk levels were adopted in evaluating identified E&S risks and issues against the AESRs: "Red Flag", "High", "Medium", "Low" and "Best Practice" risks as defined in **Table 2-3**.

**Table 2-3: Definition for Risk Categorization**

Risk Level	Definition
<b>Red Flag</b>	Trigger of ADB SPS Prohibited Activities or issue with potential severe consequences and limited opportunities of mitigating, leading to operation shut down (e.g. catastrophic or multiple-casualty accidents; large community or NGO protest(s); reputational damage/possibilities of significant reputational risks arising in the future; impacts to sensitive environmental and social receptors including critical habitats and Indigenous Peoples/Ethnic Minorities/Tribes and criminal proceedings).
<b>High</b>	Significant non-conformance with the AESRs, which may result in operation /construction interruption; and/or affect sensitive receptors, and/or induce community opposition that may damage Owner's/Investor's reputation.
<b>Medium</b>	Non-conformance with the AESRs, which may result in rectification cost or fine, and is unlikely to result in the short-term business discontinuity in current regulatory enforcement context.
<b>Low</b>	Minor regulatory or safeguard non-compliance, which may result in limited cost or only require management time to address the issue.
<b>Best Practice</b>	Best practice; approach is considered prudent but does not pose a compliance issue.



## 3. SITE ASSESSMENT

### 3.1 BASIC INFORMATION

The Site is located in No.21 of Middle Xinxing Road, Gongping Town, Haifeng County, Guangdong Province, PRC. The location of the Site is shown in *Error! Reference source not found.*

The Site history is mainly obtained through interview with CCW's senior management and onsite management, and is summarised as below:

- 2013 and 2014: Farmland of Huya Village. Land acquisition and resettlement was conducted by the local government, i.e. Haifeng County Bureau of Land and Resources (BOLAR), whilst the Site management was not aware of the detail process;
- 2015: Haifeng Jiaqing Minghao Water Co., Ltd. (Minghao), the subsidiary of CCW, reached the Build-Operate-Transfer (BOT) agreement with the local government. Construction of the Phase I development conducted by Minghao was commenced;
- 2019: Construction was completed. Operation was commenced. Site management reported that due to the "Not In My Back Yard" syndrome and land use issue, the site selection and construction was objected by the local residents and delayed the construction of the WWTP. For detail please refer to Sections 3.4.1 and 3.4.4.

The scope of the BOT agreement only covers operations of Gongping WWTP for 30 years. As per the BOT agreement, besides the operation of the WWTP, construction of phase I pipelines and transporting facilities are also covered whilst the operation of these offsite facilities are undertaken by the local government. The wastewater collection pipelines are managed by the local authority including the portions within the site boundaries connecting to the onsite wastewater collection tank. The wastewater collection tank and other wastewater pipelines within the site boundaries are operated and maintained by the site. The Site receives both industrial and domestic wastewater from the Gongping Town (about 6 square kilometres (km<sup>2</sup>)). The designed treatment capacity of the Phase I development is 20,000 t/d, and the actual treatment scale reaches the designed capacity. The Site runs in a three-shifts working system for 365 days a year, with 13 staff.

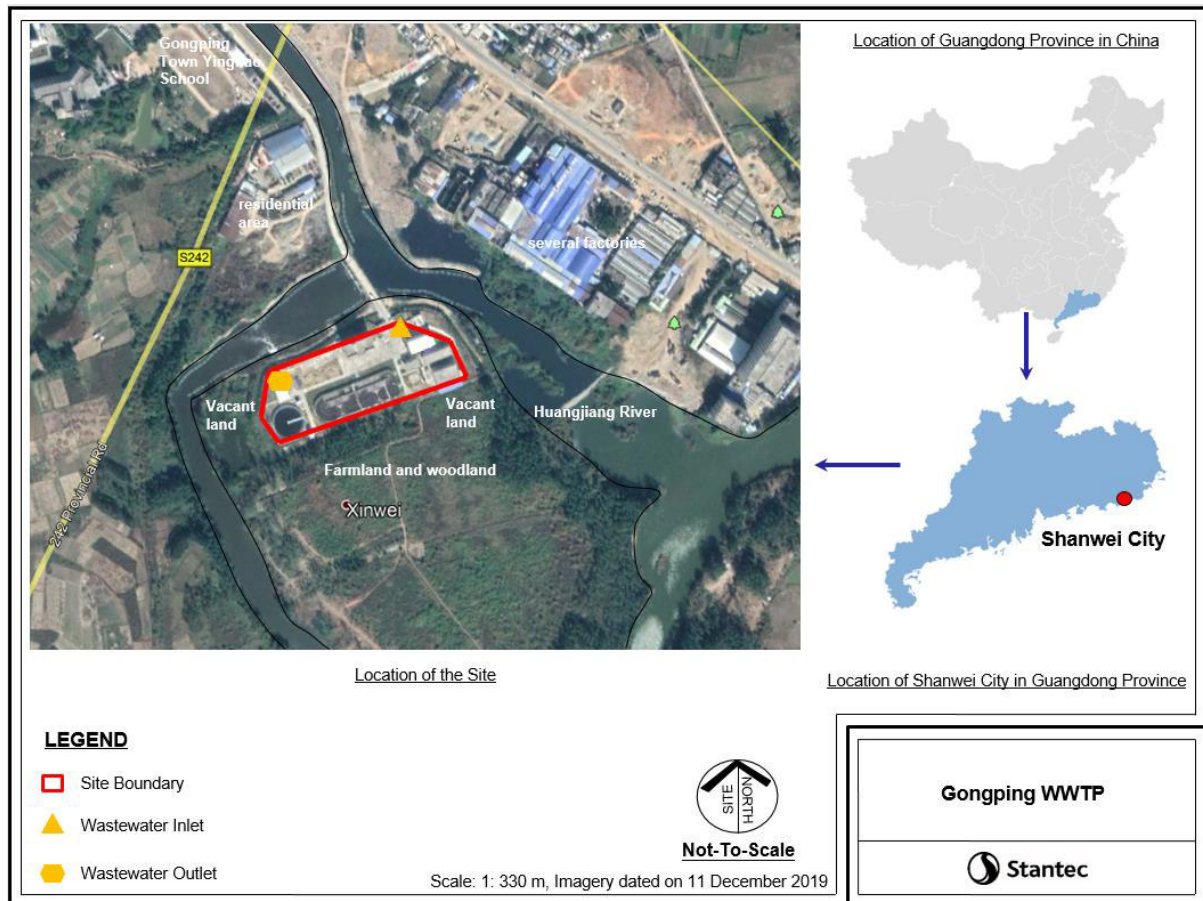
The Site covered a total land area of approximately 20,000 m<sup>2</sup>, including reserved lands for future developments, whilst CCW reported that there is no such demand proposed by the local government, nor specific plan or schedule proposed by CCW for the Phase II and Phase III developments. According to the Site EIF dated 2014, the buffer zone area is determined as a 100 m radius of the production area. The Adjacent facilities and properties of the Site were identified as follows:

- West boundary: Vacant land and Huangjiang River.
- East boundary: Vacant land and Huangjiang River. Further east is several factories.
- North boundary: Vacant land and Huangjiang River. Further north are residential area (located about 200 m away from the Site) and Gongping Town Yinghao School (located about 300m away from the Site).
- South boundary: Farmland and woodland.

The Site is classified as a construction land and is not within area of the ecological red line (which in China refers to the strictly controlled boundary demarcated in accordance with law in key ecological function zones, sensitive and fragile areas of the ecological environment). There are no natural reserves, drinking water protection zone, scenic spot, national key protected animals and plants, seed fields, cultural relics and historic sites located in the 1 km area around the Site. The Site meets the requirements of the overall planning of Gongping City. Based on onsite observation, the nearest Sensitive receptor of the Site is residential area which is located about 200 m to the north of the Site and Gongping Town Yinghao School which is located approximately 300 m to the north of the Site, both are out of the mandated buffer zone.



**Figure 3-1: Site Location**



Source: Google Earth Pro

## 3.2 SITE DESCRIPTION

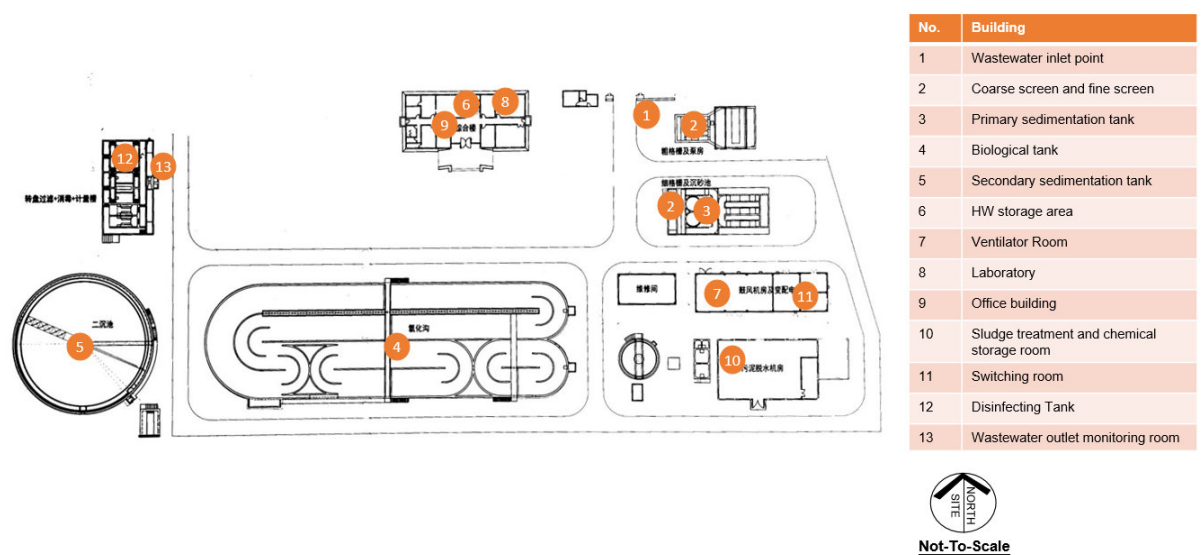
The main structures of the Site cover wastewater treatment facilities, environmental protection facilities, and office building. Pumps houses, switching room, and ventilation room were built, operated and maintained by the Site. The wastewater collection pipelines are managed by the local authority including the portions within the site boundaries connecting to the onsite wastewater collection tank. The wastewater collection tank and other wastewater pipelines within the site boundaries are operated and maintained by the site. In addition, the inlet and outlet monitoring rooms were built by the Site, operated and maintained by the local EEB.

The layout of the Site is presented in **Figure 3-2**.



## SITE ASSESSMENT

Figure 3-2: Site Layout



The wastewater treatment processes consist of three stages: pre-treatment, biological treatment (or secondary treatment), and tertiary treatment. The main treatment processes are Wastewater Feeding, Coarse Screen and Fine Screen, Primary Sedimentation Tank, Anaerobic Tank, Anoxic Tank, Oxidation Tank, Secondary Sedimentation Tank and Final Discharge. Chemicals used for wastewater treatment include polymeric ferric sulphate, polyacrylamide, and carbon source. These chemicals are in bulk storage and the corresponding storage condition is described in Section 3.3.3.

The Site adopts Anaerobic-Anoxic-Oxidation technology which is commonly adopted for WWTPs for industrial and domestic wastewater treatment in PRC. Based on review of the available document and interview with site management, no violation with regard to wastewater discharge has been taken place at the Site.

The sludge is dehydrated onsite to around 60% and is transferred by the sludge truck owned and operated by the subproject company to Haifeng Sanfeng Power Plant for incineration. Haifeng Sanfeng Power Plant is the sludge treatment party appointed by the local government as per the signed BOT agreement.

The treated wastewater shall comply with the Class I Level A Discharge Standard of Pollutants for Municipal Wastewater Plant (2002) and then discharged to the Huangjiang River which is located 20 m to the west of the Site.

### 3.3 EHS ASSESSMENT

#### 3.3.1 EHS Management Overview

The EHS issues arising from the Site are under the jurisdiction of Haifeng County EEB, Haifeng County Health Bureau, Haifeng County Emergency Management Bureau and Fire Brigade of Haifeng County Public Security Department. Mr. Zhong Youwei (WWTP Deputy Director) and Mr. Cai Zifeng (Manager of the Production Department) are responsible for the general on-site environmental and safety management. Mr. Tan Yousong (Manager of the Administration Department) is responsible for



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arranging routine health check for the onsite staff. The day-to-day EHS status are reported to the Production Technology Department of CCW corporate directly via weekly, monthly and annual reports.

The Site inherits the EHS procedures from the CCW corporate and developed its own safety and health oriented procedures covering equipment operational procedure, work safety management (e.g. fire, electricity and working at height), safety inspection procedure, underground work procedure, laboratory management procedure, and occupational hazard management procedure. Environmental related procedures such as chemical management, environmental monitoring management, solid waste management, etc. were not in place.

According to the management interview, at subproject level, all subprojects safety inspections were conducted as follows:

- Subsidiary-level safety overall inspection conducted by the manager of the Tier 2 subsidiaries on a yearly basis. The inspection reports and corresponding mitigation measures are submitted for the corporate for review.
- Subproject-level daily safety and operational inspection is conducted by the representative of Operation Department.

Based on the management interview and document review, the E&S related capital expenditure (Capex) and operating expenses (Opex) application for the subproject is prepared by the subproject manager in October every year, and then submitted for General Manager Office of CCW corporate for review and approval. The Capex (including items such as safety correction, COVID-19 prevention material, etc.) and Opex (including items such as environmental monitoring, sludge monitoring, equipment maintenance, laboratory material, routine check-ups, Personal Protective Equipment (PPE), etc.) for Gongping WWTP in 2021 was provided for review, with a total budget of RMB 558,200.

#### Key EHS related findings and issues were summarized as follow:

- A formal environmental and social management system was not developed and implemented by Gongping WWTP. Environmental related procedures such as chemical management, environmental monitoring management, solid waste management, etc. were not in place.

### 3.3.2 EHS Permit

The permit compliance status of the Site is summarized as follows in the **Table 3-1**:

**Table 3-1: Permit Compliance Status**

Permit	Review
Site Selection Application	Site Selection Application approval issued by Gongping Housing and Urban-Rural Development Bureau on 14 October 2014
FSR and its approval	FSR approval for the initial development issued by Haifeng County Development and Reform Commission on 28 October 2014
Land Permit	<ul style="list-style-type: none"><li>• Project location selection opinion issued by Haifeng County Bureau of Housing and Urban-Rural Planning and Construction on 14 October 2014</li><li>• Approval on construction land issued by Guangdong Department of Land and Resources on 6 November 2017</li><li>• Construction land planning permit issued by Haifeng County Bureau of Natural and Resources on 8 April 2020</li><li>• Construction Land-use Certificate of area 14,486 m<sup>2</sup> issued by Haifeng Bureau of Natural and Resources on 9 May 2020</li></ul>
EIA, ECAI and the approvals	<ul style="list-style-type: none"><li>• EIF and the approval issued by Haifeng County EEB on 30 July 2014</li><li>• ECAI approval regarding solid waste issued by Shanwei City EEB on 27 November 2019</li></ul>
PDP	PDP issued by Shanwei City EEB, valid from 28 June 2019 to 27 June 2022



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Permit	Review
Water Abstraction Permit	Not applicable as Gongping WWTP does not utilise groundwater
Fire Protection CAI	Not available
Work Safety CAI	Not available
Occupational Disease Hazards Assessment	Not available
Sudden Environmental Emergency Response Plan (ERP) and its registration record	Not available
Safety Production ERP and its registration record	ERP for work safety accidents on 5 November 2020
Energy Saving Assessment	This document was not required by the local authorities at the time of the Site establishment

The EIF prepared for this project during the permitting phase identified air emission/odour and solid waste/sludge as the key environmental impacts during construction and operation and the project was required implementing corresponding dust control measures such as sprinkler for construction vehicles, proper treatment of construction waste, etc. during construction and regular boundary odour monitoring and ensuring sludge is treated by the third party appointed by the local government during operation. Compared to an environmental assessment required by ADB's SPS the public consultation and alternative analysis are not included.

During construction, there are typical EHS requirements in PRC, including the dust control, solid waste management, PPE, regular monitoring, etc. No findings were identified.

The project started its operation in 2019 after securing the ECAI which confirmed the that the WWTP complied with the standards of boundary odour, wastewater discharge, boundary noise and solid waste treatment.

#### **Key EHS related findings and issues were summarized as follow:**

- Fire-fighting design registration or fire-fighting CAI approval is required, but have not been obtained.
- Work Safety Assessment is required, but has not been conducted.
- ODH assessment is required, but has not been conducted.
- No Sudden Environmental and the corresponding registration record have been prepared/obtained as required.
- No Safety Production ERP registration record has been obtained as required.
- Compared to an environmental assessment required by ADB's SPS the public consultation and alternative analysis are not included in the existing project EIF.

### **3.3.3 EHS Performance**

#### **Water Supply, Domestic and Storm Wastewater**

Water used for sanitary purpose is from the municipal tap; water for drinking purpose is purchased bottled water; water for production purposes (wastewater treatment) is the treated wastewater from the



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onsite facility. Separate wastewater and stormwater drainage systems were established for the Site. The domestic wastewater generated onsite is collected and discharged to the onsite facility for further treatment. Stormwater generated onsite is collected and discharged via the same treated wastewater outlet, which is ultimately discharged to the Huangjiang River.

#### **Wastewater and Sludge from the Wastewater Treatment Process**

The Huangjiang River is located 20 m to the west of Gongping WWTP. According to the Site's EIA documents, the Huangjiang River is a Type III water body as defined in the Environmental Quality Standards for Surface Water (2002), which refers to surface water protection zones for domestic and drinking water, shrimp wintering and migration channels, aquaculture area, and swimming area. Site management reported that the treated wastewater discharge from Gongping WWTP is strictly monitored as the following:

- Haifeng County EEB has installed the real-time influent and effluent wastewater online monitoring system to conduct pollutant tests on a two-hour basis;
- Haifeng County EEB conducts treated wastewater sampling test every six months;
- Gongping WWTP engages a licensed third party to conduct wastewater test on a monthly basis;
- The laboratory of Gongping WWTP conducts the influent and effluent wastewater test once a day.

The five pollutants including chemical oxygen demand (COD), suspend solids (SS), total nitrogen, total phosphorus and ammonia nitrogen are monitored by both onsite laboratory and online monitoring system every day. Based on the internal monitoring data (in average of 2020) and monitoring report conducted by a licensed third party dated May 2019 (refer to **Table 3-2**), the results met the Class I Level A of the Discharge Standard of Pollutants for Municipal Wastewater Plant (2002). As there is no ADB or IFC standards for the wastewater discharge, the national regulatory standard is the applicable standard. However, the Site did not provide wastewater monitoring report after May 2019 for review.

**Table 3-2: Wastewater Monitoring Results**

Monitoring Type	Elements	Unit	Monitoring Results	Local Standard	Compliance Statue
			wastewater discharge point		
Internal Monitoring (in average of 2020)	COD	mg/L	17.66	40	Meet the standards
	SS	mg/L	0.41	10	Meet the standards
	Total nitrogen	mg/L	6.37	15	Meet the standards
	Total phosphorus	mg/L	0.39	0.5	Meet the standards
	Ammonia nitrogen	mg/L	0.14	5	Meet the standards
Third Party Monitoring (dated May 2019)	pH	—	7.09-7.23	6-9	Meet the standards
	COD	mg/L	14	40	Meet the standards
	SS	mg/L	ND	10	Meet the standards
	BOD <sub>5</sub>	mg/L	3.5	10	Meet the standards
	Ammonia nitrogen	mg/L	0.282	5	Meet the standards



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Monitoring Type	Elements	Unit	Monitoring Results	Local Standard	Compliance Statue
			wastewater discharge point		
	<b>Total nitrogen</b>	mg/L	0.74	15	Meet the standards
	<b>Oil and grease</b>	mg/L	0.71	1	Meet the standards
	<b>Petro</b>	mg/L	0.24	1	Meet the standards
	<b>Anionic surfactant</b>	mg/L	0.23	0.5	Meet the standards
	<b>Total phosphorus</b>	mg/L	0.18	0.5	Meet the standards
	<b>Chroma</b>	-	4.8	30	Meet the standards
	<b>Total mercury</b>	mg/L	ND	0.001	Meet the standards
	<b>Total cadmium</b>	mg/L	ND	0.01	Meet the standards
	<b>Total chromium</b>	mg/L	ND	0.1	Meet the standards
	<b>Hexavalent chromium</b>	mg/L	ND	0.05	Meet the standards
	<b>Total lead</b>	mg/L	ND	0.1	Meet the standards
	<b>Total arsenic</b>	mg/L	$0.4 \times 10^{-3}$	0.1	Meet the standards
	<b>Total coliform bacteria</b>	MPN/L	$6.2 \times 10^2$	$1 \times 10^3$	Meet the standards
	<b>Alkyl mercury</b>	ng/L	ND	Not Allowed	Meet the standards

\*Note:

1. The monitoring is conducted by Guangdong Zhongnuo Testing Technology Co., Ltd.

2. Local Standard refers to Class I Level A Discharge Standard of Pollutants for Municipal Wastewater Plant (2002)

3. ND means Not Detected

In China, the annual pollutant mass loading quotas are allocated to WWTP projects during the EIA stage based on (1) designed wastewater treatment capacity; (2) pollutant removal efficiency and discharge limits; (3) local environmental capacity. The mass loading quotas for wastewater pollutants COD, ammonia nitrogen, total nitrogen and total phosphorus are 292 t/a, 36.5 t/a, 109.5 t/a and 3.65 t/a, respectively. Given the current actual wastewater treatment is close to the designed wastewater treatment capacity, and the treated wastewater meets the local standards, Gongping WWTP is in compliance with the allocated pollutant mass loading quotas.

### Air Emission

The main sources of air emission in this Site is fugitive odour emission from the uncovered wastewater treatment tanks. Gongping WWTP engages a licensed third party to conduct fugitive air emission monitoring on a half year basis around the Site boundary following the methodology by Analysis Methods for air and gas emission monitoring (2003). Based on the monitoring report conducted by a licensed third party dated May 2019 provided for review (**Table 3-3**), the results met the Discharge Standard of Pollutants for Municipal Wastewater Plant (2002). As there is no ADB or IFC standards for



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the fugitive air emission pollutants, the national regulatory standard is the applicable standard. However, the Site did not provide fugitive air emission monitoring report after May 2019 for review.

**Table 3-3: Fugitive Air Emission Monitoring Results**

Monitoring date		Location	Pollutant	Unit	Monitoring Results	Local Standard	Compliance Statue
4 May 2019	The first time	Boundary	NH <sub>3</sub>	mg/m <sup>3</sup>	0.06	1.5	Meet the standards
			H <sub>2</sub> S	mg/m <sup>3</sup>	0.005	0.06	Meet the standards
			Odour	——	<10	20	Meet the standards
	The second time	Boundary	NH <sub>3</sub>	mg/m <sup>3</sup>	0.06	1.5	Meet the standards
			H <sub>2</sub> S	mg/m <sup>3</sup>	0.005	0.06	Meet the standards
			Odour	——	<10	20	Meet the standards
	The third time	Boundary	NH <sub>3</sub>	mg/m <sup>3</sup>	0.06	1.5	Meet the standards
			H <sub>2</sub> S	mg/m <sup>3</sup>	0.004	0.06	Meet the standards
			Odour	——	<10	20	Meet the standards

\*Note:

1. The monitoring is conducted by Guangdong Zhongnuo Testing Technology Co., Ltd.

2. Local Standard refers to Discharge Standard of Pollutants for Municipal Wastewater Plant (2002)

3. ND means Not Detected

### Noise Emission

The main sources of noise are the onsite production facilities such as pumps and ventilator. The Site boundary noise is subject to Class II of Emission standard for industrial enterprises noise at boundary (2008), which requires the maximum 60 dB(A) during the daytime (6:00 AM – 10:00 PM) and 50 dB(A) at night (10:00 PM – 6:00 AM). The Site engages a licensed third party to conduct boundary noise monitoring on an annual basis. Based on the monitoring report dated May 2019, the boundary noise emission of the Site (**Table 3-4**) met the local standards and the IFC standards. However, the Site did not provide boundary noise monitoring report after May 2019 for review.

**Table 3-4: Boundary Noise Monitoring Results**

Location	Monitoring Date	Daytime (Leq[dB(A)])				Night time (Leq[dB(A)])			
		Results	Local Standard	IFC Standard (Residential)	Compliance Status	Results	Local Standard	IFC Standard (Residential)	Compliance Status
East boundary	4 May 2019	56	60	70	Meet the standards	46	50	70	Meet the standards
South boundary		55			Meet the standards	47			Meet the standards
West boundary		55			Meet the standards	46			Meet the standards



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Location	Monitoring Date	Daytime (Leq[dB(A)])				Night time (Leq[dB(A)])			
		Results	Local Standard	IFC Standard (Residential)	Compliance Status	Results	Local Standard	IFC Standard (Residential)	Compliance Status
North boundary	5 May 2019	55			Meet the standards	46			Meet the standards
East boundary		55			Meet the standards	45			Meet the standards
South boundary		54			Meet the standards	45			Meet the standards
West boundary		55			Meet the standards	46			Meet the standards
North boundary		56			Meet the standards	47			Meet the standards

\*Note:

1. The monitoring is conducted by Guangdong Zhongnuo Testing Technology Co., Ltd.
2. The IFC standard refers to Environmental, Health, and Safety (EHS) Guidelines: General EHS Guidelines (2007)
3. Local Standard refers to Class II of Emission standard for industrial enterprises noise at boundary (2008)

### **Chemical Management and Hazardous Waste**

Chemicals consumed by the Site are summarised below:

- Polymeric ferric sulphate is used in secondary sedimentation tank to remove total phosphorus and guarantee the effluent total phosphorus is within the discharge limit. The polymeric ferric sulphate is stored in one aboveground storage tank.
- Polyacrylamide is used in sludge dewatering equipment to improve the sludge dewatering efficiency. Polymeric ferric sulphate is stored in 20kg bags in sludge treatment room.
- Carbon source is used in biological system to optimize Carbon/Nitrogen ratio in the wastewater and improve total nitrogen removal efficiency. The carbon source is stored in one aboveground storage tank (AST).
- Sodium hypochlorite is used for disinfection and is stored in one AST.
- Limited amount lubricant/machine oil that are used for maintenance purposed, are in 200 litre drums and only purchased upon demand.
- Limited amount of reagents such as hydrogen chloride that are used in the laboratory for routine internal water testing purpose, are in bottles stored in the onsite laboratory. No precursor chemicals registration record was provided for review.

All chemicals are stored in onsite aboveground storage tanks and one chemical storage room (with an area of about 200 m<sup>2</sup>) with Standard Operating Procedure (SOP), Material Safety Data Sheet (MSDS) and safety guidelines posted in the area, however, secondary containment is not available.

Hazardous wastes (HW) such as empty chemical containers, waste lubricant oil and waste liquid are stored in the designated HW warehouse (about 10 m<sup>2</sup>) with secondary containment, weather-proof and warning sign provisions. Due to limited amount of HW have been generated, a hazardous waste treatment contract has not been signed and the first batch of hazardous waste has not been transferred.

### **Domestic Solid Waste Management**

The solid wastes disposal methods are summarised below:

- Domestic wastes including domestic waste generated onsite and the solid waste from the coarse and fine screens, and waste packaging materials are collected and transported by the local



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sanitation station to local municipal domestic waste treatment facilities for landfill three times per week.

- Based on the EIF documents, municipal wastewater treatment sludge is not categorized as hazardous waste as per Chinese regulation. Sludge is dehydrated onsite to around 60% and is transferred by the sludge truck owned and operated by the subproject company to Haifeng Sanfeng Power Plant for incineration. The corresponding sludge transfer manifests were provided for review. SOP and safety guidelines were posted in the area.

#### **Emergency Preparedness and Training**

No Sudden Environmental ERP and the corresponding registration records, and Safety Production ERP registration records were provided for review. The current Safety Production ERP covers fire-fighting, electric shock, machine injury, drowning, poisoning and asphyxiation, high temperature, vehicle accident, and confine space emergency response plans. Based on the management interview and document review, the EHS training and inspection records covering daily onsite equipment safety inspection records, equipment maintenance records, and annual safety specification examination records were provided for review. In addition, chemical leakage, incidental discharge and flooding ERP are not in place and no corresponding drills have been conducted.

Fire-fighting equipment installed at the Site include fire hydrants, fire extinguishers, fire water tank and pumps, emergency lights and evacuation signs. One fire drill was conducted in December 2020. No regular inspection was conducted for all onsite fire-fighting equipment.

#### **Onsite Occupational Health and Safety**

Based on document review and onsite observations, key occupational disease hazards identified at the Site included chemical exposure and noise. Noticeable noise was identified in the ventilator room. The patrol inspection is carried out every two hours (lasts about 30 minutes per inspection). Proper PPE (including helmets, gloves, safety shoes, and masks), hazard warning signs, machine guards, insulation tools and production area monitoring cameras were provided at the Site. Routine medical check-ups were provided to all employees every year, while no occupational disease hazard assessment was conducted and no occupational health check-ups were provided to staff who are exposed to occupational disease hazards.

Specially, the COVID-19 prevention methods and procedure were established according to CCW corporate and local authorities' requirements. The COVID-19 prevention equipment, including masks, clinic thermometer, hand washing liquid and disinfection agent are provided onsite. In addition, management measures such as travel restriction, quarantine requirements, access registration, body temperature measuring as per the local authorities are also implemented by the Site.

Site management reported that no incidents/accidents have taken place to the onsite staff. According to the Site representatives and document review, the one operator involved in live-line work has obtained the Electrician Certificate for High-voltage electrical operation. However, the certificate expired in 2018. No special equipment was reportedly used or observed onsite during the site visit.

#### **Community Occupational Health and Safety**

Given no construction activities were conducted onsite, no population influx was caused at the time of the audit. The health and safety risks exposed to surrounding communities mainly includes noise and odour during operation period, emergency accidents, traffic congestion and accident, and surface or underground water contamination. Mitigation measures were adopted as follows:

- The noise and odour hazards are monitored regularly to ensure the compliance status.



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- The wastewater treatment and anti-seepage measures are strictly complied with national regulations.
- Vehicle speed is controlled, and the truck used for sludge transportation is equipped with cover to prevent leakage of the sludge along the transportation route.

#### **Electricity Supply**

Based on the electricity fee provided by the Site, the electricity consumption for Gongping WWTP between January and November 2020 is 1,493,350 kwh. The total electricity fee is RMB 836,360. There are no energy efficiency measures planned or in place.

#### **Restricted Substances**

No onsite sources of Asbestos Containing Materials (ACMs), Polychlorinated Biphenyls (PCB), Ozone Depleting Substances (ODSs) or radioactive materials were reported by Site management and none was observed at the Site by Stantec during the visit.

#### **Notices of Violation**

Based on desktop research, and interview with the Site management, no nuisance or complaints regarding the site's noise and vibration, dust or other environmental aspects were identified.

#### **Ecosystem**

Given the treated wastewater can meet the Class I Level A Discharge Standard of Pollutants for Municipal Wastewater Plant (2002), the treated wastewater discharge is not expected to impact the aquatic ecosystem of the Huangjiang River. The design and construction of the WWTP has taken soil and groundwater impact into consideration. Concrete with impermeable layers have been applied to the construction of the WWTP.

The site area was a modified habitat prior to the construction of the Site, hence, biodiversity impact of the Site is considered limited. No protected fauna and flora were identified in the local area. Given the type of operation of the Site, the potential impact is considered limited.

#### **Staff Capacity and Training**

The Site provides two-level training to its new employees, namely plant-level and position-level, covering the SOPs, general plant rules and EHS aspects such as chemical handling (if needed), PPE, etc. In addition, the EHS training and inspection records covering daily onsite equipment safety inspection records, equipment maintenance records, and annual safety specification examination records were provided for review. One fire drill was conducted in December 2020.

#### **Key EHS related findings and issues (apart from which mentioned in Section 3.3.1 and 3.3.2) were summarized as follow:**

- No wastewater, fugitive air emission, and boundary noise monitoring reports after May 2019 were provided for review.
- No precursor chemicals registration record was provided for review.
- Due to limited amount of HW have been generated, a hazardous waste treatment contract has not been signed and the first batch of hazardous waste has not been transferred and is currently at the dedicated HW storage room with secondary containment and hazardous warning signs.



### SITE ASSESSMENT

- No secondary containment was provided to the ASTs for polymeric ferric sulphate and sodium hypochlorite which are required in compliance with Good International Industry Practice (GIIP).
- Chemical leakage, incidental discharge and flooding ERP are not in place and no corresponding drills have been conducted.
- No regular inspection was conducted for all onsite fire-fighting equipment.
- Occupational disease hazard assessment and industrial hygiene monitoring have not been conducted, and occupational health check-ups have not been provided to staff who are exposed to occupational disease hazards.
- The Electrician Certificate expired in 2018.

## 3.4 SOCIAL ASSESSMENT

### 3.4.1 Land Acquisition and Resettlement

Haifeng Jiaqing Minghao Water Co., Ltd. (Haifeng Jiaqing) reached a BOT agreement with local government in November 2015. Prior to that, the land acquisition and resettlement was conducted by the local government in 2013 and 2014. The land acquisition impacted Huya Village in Gongping Township of Haifeng County and mainly impacted farmland, as well as some standing crop and ground attachments. There was no physical displacement in this process. The Site locates at Huya Village of Gongping Town, occupying a total land area of 20,000 m<sup>2</sup> (30 mu). Mr. Zhong Youwei, the general manager of Gongping WWTP, introduced that the WWTP started construction in July 2015 and started operation in January 2019. Mr. Zhong also reported that due to the “Not In My Back Yard” syndrome and land use issue, the site selection and construction was objected by the local residents and the construction of the WWTP was delayed. In this period the communication was mainly conducted between the local government and the local residents and Mr. Zhong was not aware of the detail. No interviews with the original officials who were involved in the land acquisition or representative of PAH were arranged during Stantec’s onsite visit. The Site management reported that since the operation in 2019, Gongping WWTP has not received any complaints related to land acquisition and resettlement and none was identified by Stantec’s limited internet research.

On 9 May 2020, the Construction Land-use Certificate of the Site with 14,486 m<sup>2</sup> land area was issued, entitling Gongping Town People’s Government. Mr. Zhong reported that the land use certificate for the remaining land (around 5,500 m<sup>2</sup>, located in the southeast corner of the WWTP) has not been obtained due to the local land quota restriction (no more detail provided) and is currently in the process of resolving this issue, however, the detail schedule was unclear. The Site management also added land acquisition was conducted by the local government and the documents related to land acquisition and compensation also were kept by the local government. There is no detail impact data such as land acquisition impact rosters, compensation agreement, compensation payment voucher, etc. for review.

#### **Key social related findings and issues were summarized as follows:**

- No Construction Land Use Certificate for the area of around 5,500 m<sup>2</sup>, located in the southeast corner of the WWTP has been obtained for Gongping WWTP, which is a non-compliance against PRC regulations.
- No documents (such as asset inventory, compensation agreement, etc.) regarding Phase I development land acquisition were held by Gongping WWTP. There is no in-place procedure to document land acquisition activities, as well as monitor and evaluate the payment status, which is a non-conformance against ADB SR2.
- No land acquisition and compensation audit was conducted by CCW or the Site, which is non-conformance against ADB SPS2.



#### 3.4.2 Indigenous People

The Site is located in Gongping Town of Haifeng County of Shanwei City. The ethnic Han is predominant in PRC as well as in the local area and there are no ethnic minority residential areas identified or affected. Therefore, ADB SR3 is not triggered for the Site.

#### 3.4.3 Stakeholder Engagement and Consultation

It is identified no stakeholder analysis has been conducted for Gongping WWTP and no document records regarding stakeholder engagement were available for review.

According to interview with CCW's corporate, Stantec's onsite consultation, as well as similar project experience, three major stakeholder groups are identified for this type of project, including (a) government authorities, such as Haifeng County EEB and Emergency Management Bureau, (b) local community (wastewater discharge unit / individual), including Gongsan Village, Gongping Yinghao School, etc., (c) local residents affected by land acquisition, i.e. Huya Village. Gongping WWTP is responsible for liaison with local government.

The Site is following PRC's laws and regulations. In China, consultation with the local communities is a regulatory requirement during the process of EIA as well as land acquisition and resettlement. Given an EIF was prepared for the Site, no public consultation in this regard has been reportedly conducted whilst Site management was not aware of the public consultation conducted during the land acquisition.

##### **Key social related findings and issues were summarized as follow:**

- There is no formalized stakeholder engagement procedure established for Gongping WWTP to manage stakeholder identification, analysis, engagement especially for dealing with those concerns related with land acquisition and resettlement, and other community affairs.

#### 3.4.4 Grievance Redress

It was identified there are no grievance procedures or designated personal for managing the grievances of employees, local communities and other stakeholders. No records of grievances are available for review.

For the workers' grievances, the site management reported that the workers usually may file a grievance to the HR directly, if the HR cannot address the grievance, it will be reported to the site general manager. Usually, employees' complaints can be properly resolved at the HR level, and according to Mr. Tan from HR department of the Site, there are no grievances reported to date.

For the community grievances, the Site management reported that although during the construction (2015 to 2018) of the Gongping WWTP, due to the "Not In My Back Yard" syndrome and some land use issues (the details was not available), some nearby residents had expressed opposition to the construction of Gongping WWTP. Reportedly the concerns were potential odour and noise generated from WWTP. The grievances were handled and communications were made by the local government and the Site management is not aware of the communication detail and process. Since the operation of the WWTP in 2019, such opposition or complaint has not been received as the water quality of the local river has been improved and no obvious odour or noise has been noticed. No other grievance has been received to date reportedly and no corresponding records were available for review during onsite audit.

##### **Key social related findings and issues were summarized as follow:**



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### SITE ASSESSMENT

- There is no system in place to record and track the complaints raised by the local community, employees and construction workers during construction and operation phases, which is a non-conformance against ADB safeguards.

#### 3.4.5 Labour and Social Protection

At the time of onsite visit, there were 13 employees directly hired by the Site, including one general manager, one technician, four operational staff, one maintenance staff, two laboratory staff, two sludge staff, one administrative staff and one cleaner. All the 13 employees are formal contracted workers and no temporary, dispatching, and outsourcing workers were identified at the Site. All the 13 employees are Han Chinese, 2 out of 13 are female and the rest 11 employees are male.

Reportedly, the workers except for the operating workers are typically working five day with 40 hours in one shift (8:00~12:00 and 13:30~17:30) between Monday and Friday. The four operating workers were divided into four groups with three shifts (8:00~16:00, 16:00~24:00 and 24:00~8:00 respectively). Each shift had one responsible staff.

Wages are paid on the next 15th of each month. In addition, the WWTP also provides meal allowance for each employee and the standard is 400 RMB per month. The Site provided the payroll records in September 2020 for all 13 employees for review. The payroll record includes working hours and overtime, normal wage, overtime wage and social insurance. The normal wages for workers were above the minimum wage requirement. No underage or juvenile workers were identified onsite. The age of minimum employee is 25 years old. No sexual harassment or discrimination was identified during onsite interview.

No noncompliance regarding labour and social protection was identified against either the PRC regulations or ADB SPS for the Site.

#### 3.4.6 Gender and Development

Although there are no specific procedures regarding gender and development identified in any of the Site's existing policies and procedures, no indication of gender inequality or discrimination is identified from document review and interview.

To date, 2 out of the 13 workers at the Site companies are female, i.e. two laboratory staff. The males are skilled workers primarily focusing on engineering, whilst most females on non-engineering positions such as administration and logistics. The consulted female employees are treated equally in payment, training and promotion. All the female employees at the Site are entitled to the same specific benefits (98 days of maternity leave, women's toilets, and small gifts on Women's Day) as other females in the Company. Stantec's interview with randomly selected operators did not identify any concern over gender composition of the positions.

No noncompliance regarding gender and development was identified against either the PRC regulations or ADB SPS for the Site. In addition, according to consultation with both site management and the randomly selected workers, no disproportionate impacts were caused by the Site on women.



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### CORRECTIVE ACTION PLAN

## 4. CORRECTIVE ACTION PLAN

**Table 4-1** summarises the E&S issues identified at Gongping WWTP. As implementing the actions described below might signify economic costs to different degrees, estimations were not made.

**Table 4-1: Gongping WWTP - Findings and Recommended CAP**

No.	Applicable E&S Standards	Theme	Description of Issue(s)	Suggested Corrective Action(s)	Risk Level	Suggested Time Frame	Completion Indicator(s)
1	ADB SPS 1 and 2	E&S Management	At the time of the site visit, a formal ESMS was not developed onsite. Environmental procedures such as chemical management, environmental monitoring management, solid waste management, etc. were not in place.	Upon completion of development of the corporate ESMS, the Site should seek for assistance from the CCW corporate and developed its own subproject level ESMS covering EHS, HR and Social aspects. The subproject level ESMS should be implemented by qualified and trained onsite personnel.	High	1 month after adoption of corporate level ESMS  [6 months after ESMS adoption]	Development and adoption of Subsidiary level ESMS  ESMS implementation and training record  Updates in the annual E&S performance report to ADB on the effectiveness of ESMS implementation
2	ADB SPS 1	EHS Permit	Fire-fighting design registration or fire-fighting CAI approval has not been obtained.	The Site should consult with the local housing and construction authority in this regard and take action accordingly.	Medium	Prior to disbursement  6 months after disbursement	Communication records of consultation with the local housing and construction authority on next steps  Fire-fighting design registration and fire-fighting CAI approvals



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### CORRECTIVE ACTION PLAN

No.	Applicable E&S Standards	Theme	Description of Issue(s)	Suggested Corrective Action(s)	Risk Level	Suggested Time Frame	Completion Indicator(s)
3	ADB SPS 1	Health and Safety	Occupational disease hazard assessment or industrial hygiene monitoring has not been conducted, and occupational health check-ups have not been provided to staffs who are exposed to occupational disease hazards.	The Site should engage licensed third parties to prepare occupational disease hazard assessment and provide occupational health check-ups to staffs who exposed to occupational hazards.	Medium	Prior to disbursement  [same time as ESMS]  3 months after disbursement	Contract/agreement with a licensed third party  Occupational disease hazard assessment or industrial hygiene monitoring procedure included in the Subsidiary level ESMS  Occupational disease hazard assessment, industrial hygiene monitoring and occupational health check-up reports
4	ADB SPS 1	EHS Permit	No Work Safety Assessment was provided for review.	The Site should consult with the local Emergency Management Bureau in this regard and take action accordingly.	Low	Prior to disbursement  3 months after disbursement	Communication records of consultation with the Emergency management Bureau on next steps.  Work Safety Assessment
5	ADB SPS 1	Emergency Response	No Sudden Environmental ERP and its registration record, and Safety ERP registration record were provided for review at the time of audit. In addition, chemical leakage, incidental discharge and flooding ERP are not in place and no	The Site should consult with the local EEB and Emergency Management Bureau in this regard and take action accordingly. As a minimum, supplementary ERP covering chemical leakage, incidental discharge and flooding should be	Medium	Prior to disbursement  [same time as ESMS]	Communication records of consultation with the EEB and Emergency management Bureau on next steps  ERP and the Supplementary ERP



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### CORRECTIVE ACTION PLAN

No.	Applicable E&S Standards	Theme	Description of Issue(s)	Suggested Corrective Action(s)	Risk Level	Suggested Time Frame	Completion Indicator(s)
			corresponding drills have been conducted.	prepared and corresponding drills should be conducted.		6 months after disbursement	included in the Subsidiary level ESMS  ERP registration record and drill records
6	ADB SPS 1	Public Consultation	Compared to an environmental assessment required by ADB's SPS the public consultation and alternative analysis are not included in the project EIF.	The Site should ensure its ESMS covers gap analysis requirements of existing domestic EIA documents against the ADB's SPS, for instance, procedures for public consultation and alternative analysis.	Medium	[same time as ESMS]	Gap analysis requirements in the Subsidiary level ESMS
7	ADB SPS 1	Pollution Prevention and Abatement	No treated wastewater, fugitive air emission and boundary noise monitoring reports after May 2019 were provided for review.	The Site should engage licensed third parties to conduct periodic environmental monitoring and ensure the compliance status as per the PDP.	Medium	Prior to disbursement  [same time as ESMS]  3 months after disbursement	Contract/agreement with licensed third party  Environmental Monitoring procedures as part of the Subsidiary level ESMS  Environmental monitoring reports
8	ADB SPS 1	Chemical Management	No precursor chemicals registration record was provided for review.	The Site should consult with the local public security authority and obtain a precursor chemicals registration record, or use rapid testing reagents instead.	Low	Prior to disbursement  3 months after disbursement  [same time as ESMS]	Communication records of consultation with local public security authority  Precursor chemicals registration record  Chemical management procedures as part of subsidiary level ESMS



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### CORRECTIVE ACTION PLAN

No.	Applicable E&S Standards	Theme	Description of Issue(s)	Suggested Corrective Action(s)	Risk Level	Suggested Time Frame	Completion Indicator(s)
9	ADB SPS 1	Chemical Management	No secondary containment was provided to the aboveground storage tanks.	The Site should provide secondary containment to the aboveground storage tanks.	Medium	Prior to disbursement	Onsite photos and corresponding records
10	ADB SPS 1	Waste Management	Due to limited amount of HW have been generated, a hazardous waste treatment contract has not been signed and the first batch of hazardous waste has not been transferred.	The Site should ensure all HW generated onsite is treated by licensed HW vendor.	Low	[same time as ESMS]  6 months after disbursement	Procedure for HW management as part of the subsidiary level ESMS  HW treatment contract and manifests
11	ADB SPS 1	Health and Safety	No regular inspection was conducted for all onsite fire-fighting equipment.	The Site should strengthen fire-fighting equipment inspection in regular basis.	Low	[same time as ESMS]  3 months after disbursement	Procedure and schedule of inspection as part of the subsidiary level ESMS  Inspection records
12	ADB SPS 2	Health and Safety	The Electrician Certificate expired in 2018.	The Site should request the electrician to update his Electrician Certificate.	Medium	Prior to disbursement	Electrician Certificate
13	ADB SPS 2	Involuntary Resettlement	No Construction Land Use Certificate for the remaining area (around 5,500 m <sup>2</sup> , located in the southeast corner of the WWTP) has been obtained for Gongping WWTP.	The Site should follow with the local government to obtain Construction Land Use Certificate for the remaining land in a timely manner.	Medium	9 months after disbursement	Construction Land Use Certificate obtained for the remaining area of the Site
14	ADB SPS 2	Involuntary Resettlement	No documents (such as asset inventory, compensation agreement, etc.) regarding Gongping	Upon development and implementation of the corporate ESMS, the Site should follow the corporate Resettlement Policy Framework to document the	Medium	9 months after disbursement	Relevant documents



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### CORRECTIVE ACTION PLAN

No.	Applicable E&S Standards	Theme	Description of Issue(s)	Suggested Corrective Action(s)	Risk Level	Suggested Time Frame	Completion Indicator(s)
			WWTP land use for the Site were provided for review.	compensation payment and evaluate its status.			
15	ADB SPS 2	Involuntary Resettlement	No land acquisition and compensation audit through an external expert was conducted by CCW or the Site.	CCW and the Site should conduct, through an external expert, a land acquisition and compensation audit against SPS 2 requirements. If deficiencies are identified, a CAP should be developed in line with SPS 2 (including full replacement cost and restoration of livelihood).	Medium	6 months after disbursement	A Land Acquisition audit report prepared by qualified E&S consultant in line with requirement set in SPS 2
16	ADB SPS 2	Stakeholder Engagement	There is no system/procedure in place to guide the company to identify stakeholders, make analysis, and conduct engagement.	Upon development and implementation of the corporate ESMS, the Site should develop a procedure as part of E&S for the purpose of managing stakeholder engagement process.	Low	[same time as ESMS]	A stakeholder engagement plan (SEP)
17	ADB SPS 2	Grievance Redress	There is no system in place to record and track the complaints raised by the local community, employees and construction workers during construction and operation phases. Thus, no record of previous grievances was available for review.	Upon development and implementation of the corporate ESMS, the Site should develop a site-specific grievance redress procedure to collect and document any complaints and grievances raised by the employees and the broader local community.	Low	[same time as ESMS]	Site specific grievance mechanism (including the employees and the local community) and grievance records



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

Annex A: LIST OF DOCUMENT REVIEWED

### Annex A: LIST OF DOCUMENT REVIEWED

No.	Name
1	Site Selection Application approval approved by Gongping Housing and Urban-Rural Development Bureau on 14 October 2014
2	FSR approval issued by Haifeng County Development and Reform Commission on 28 October 2014
3	EIF approval issued by Haifeng County EEB on 30 July 2014
4	ECAI approval regarding solid waste issued by Haifeng County EEB on 27 November 2019
5	PDP issued by Shanwei City EEB, valid from 28 June 2019 to 27 June 2022
6	Emergency response plan for work safety accidents on 5 November 2020
7	Environmental monitoring reports (regarding treated wastewater, boundary noise and fugitive air) dated May 2019
8	Sampled sludge Transfer Manifests dated 2020
9	EHS management procedures and training records
10	Project location selection opinion issued by Haifeng County Bureau of Housing and Urban-Rural Planning and Construction on 14 October 2014
11	Approval on construction land issued by Guangdong Department of Land and Resources on 6 November 2017
12	Construction land planning permit issued by Haifeng County Bureau of Natural and Resources on 8 April 2020
13	Construction Land-use Certificate of area 14,486 m <sup>2</sup> issued by Haifeng Bureau of Natural and Resources on 9 May 2020
14	Attendance and vacation management procedure
15	Payroll records in September 2020



## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

Annex B: STAKEHOLDERS ENGAGED DURING THE E&S AUDIT

### Annex B: STAKEHOLDERS ENGAGED DURING THE E&S Audit

Name	Category	Department	Title
Mr. Zhong Youwei	Internal	Management Team of the Site	General Manager
Mr. Cai Zifeng	Internal	Management Team of the Site	Manager of Production Department
Mr. Tan Yousong	Internal	Management Team of the Site	HR manager

## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

Annex C: PHOTO LOG

### Annex C: PHOTO LOG

#### Photo Log – Gongping WWTP



Photo 1 Entrance of the Site



Photo 2 Wastewater Inlet of the Site



Photo 3 Biological Tank



Photo 4 Secondary Sedimentation Tank



Photo 5 Aboveground storage tanks for carbon source



Photo 6 HW Warehouse

## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### Annex C: PHOTO LOG

#### Photo Log – Gongping WWTP



Photo 7 Laboratory



Photo 8 Treated Wastewater Outlet



Photo 9 PPE Warning Sign



Photo 10 PPE Warning Sign



Photo 11 Wastewater Inlet Online Monitoring Room



Photo 12 Wastewater Outlet Online Monitoring Room

## ASSET-LEVEL E&S AUDIT REPORT - GONGPING

### Annex C: PHOTO LOG

#### Photo Log – Gongping WWTP



Photo 13 Huangjiang River is located immediately to the north of the Site



Photo 14 West side of factory boundary: vacant land and Huangjiang River



Photo 15 Woodland and farmland are located immediately to the south of the Site



Photo 16 Overview of Gongping Yinghao School