

Environment and Social Compliance Audit Report

Project Number: 50273-001

Jinyuan Water Plant Project of Ji'an Water Affairs Group Co., Ltd.

May 2021

People's Republic of China: Integrated Urban Water Management Project

Prepared by China Water Affairs Group Limited for Asian Development Bank.

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Jinyuan Water Plant Project of Ji'an Water Affairs Group Co., Ltd.

Environmental and Social Security Assurance Compliance Audit

China Water Affairs Group Limited

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I . Introduction

A. Introduction to project

i. Project company

Ji'an Water Affairs Group Co., Ltd. (hereinafter referred to as Ji'an Water Affairs), formerly known as Ji'an Water Supply Company, is a holding subsidiary of China Water Affairs Group Limited. In December 2010, with the consent of the People's Government of Ji'an, China Water Affairs Group Limited obtained 70% equity of Ji'an Water Supply Company through competitive negotiation, and the People's Government of Ji'an held 30%. In July 2011, Ji'an Water Affairs Group Co., Ltd., a joint venture company, was registered and established.

Ji'an Water Affairs Group Co., Ltd. is responsible for the water supply to urban area of Ji'an City (see Figure 1 for the specific location) and some surrounding villages and towns. There are 4 water plants with a total water supply capacity of 285,000 m³/d. See Table 1 for details. Ji'an City is a prefecture-level city in Jiangxi Province, and consists of 2 districts, 1 city and 10 counties, covering an area of 25,300 square kilometers and with a permanent population of 4.96 million by the end of 2019.



Figure 1

Table 1 Water Plants of Ji'an Water Affairs Group Co., Ltd.

Water plant	Water supply capacity (10,000 m ³ /d)	Water source	Water supply area
Jifu Water Plant	10	Gangjiang River	Jizhou District
Wuyue Guan Water Plant	5	Gangjiang River	Jizhou District
Hedong Water Plant	6	Gangjiang River	Qingyuan District
Chengbei Water Plant	7.5	Gangjiang River	Jizhou District

ii. Project background

In recent years, the Jinggangshan Economic and Technological Development Zone in Ji'an City has developed rapidly, urban construction has been intensified and people's living standards have been improved. Therefore, the demand for water supply is increasing, and it is imminent to set up more water supply facilities. In order to promote the urban construction and industrial development of Jinggangshan Economic and Technological Development Zone, improve the quality of drinking water for residents and ensure the safety of water supply, and alleviate the contradiction between water demand and insufficient water supply, Ji'an Water Affairs Group Co., Ltd. has invested 263 million CNY to complete the Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone.

iii. General construction conditions of project

Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone is located at the southeast corner of the intersection between Shenzhen Avenue and Yonghe Avenue in Jinggangshan Economic and Technological Development Zone, Ji'an City, covering an area of 123 mu (see Figure 2 for specific location). Phase-I construction scale is 90,000 m³/d, with margin for long-term expansion. The main construction items include a water intake pump house, a waterline, water treatment structures of the purification plant, sludge treatment structures, inspection scheduling building, dosing and disinfection building, power transformation and distribution facilities, a water supply pump house and extended and improved water distribution pipeline, etc. See Table 2 for the main equipment and facilities.

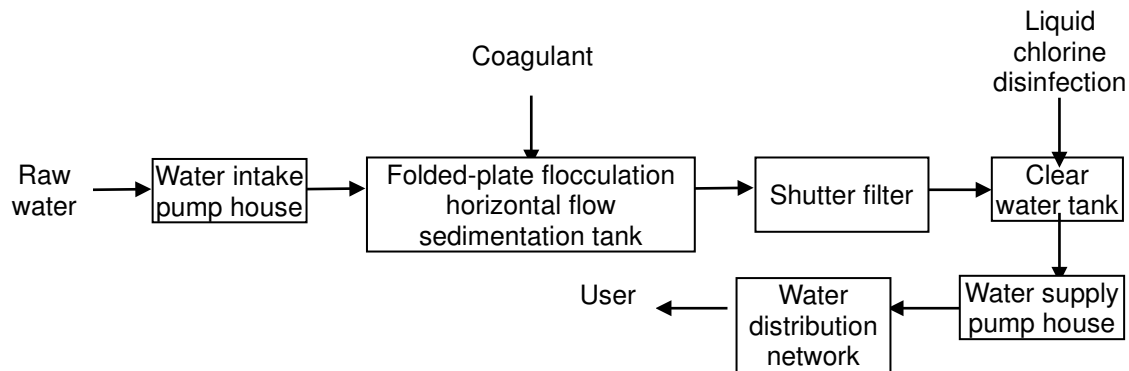


Figure 2

Table 2 Main equipment and facilities

Name of equipment and facilities	Quantity	Specifications
Water intake centrifugal pump	3 sets	2 in service and 1 standby, type 500S35 ($Q=1,620\sim 2,340\text{ m}^3/\text{h}$, $H=28\sim 40\text{ m}$)
S-type single stage double-suction centrifugal pump	3 sets	2 in service and 1 standby, type 500S59 ($Q=2,340\text{ m}^3/\text{h}$, $H=47\text{ m}$, $N=450\text{ kw}$)
Backwash pump	3 sets	2 in service and 1 standby ($Q= 576\text{ m}^3/\text{h}$, $H=11\text{ m}$)
Roots blower	2 sets	1 in service and 1 standby ($Q=28.3\text{ m}^3/\text{min}$, $H=49\text{ KPa}$)
Air compressor	2 sets	1 in service and 1 standby ($Q=1.5\text{ m}^3/\text{min}$, $H=0.6\sim 0.9\text{ MPa}$)
Trussed suction dredger	2 sets	Gauge 11m
Water pipeline	2,250 m	DN 1200 ductile iron pipe

Project process:



The water required for the project is sourced from the surface water in Gangjiang River (left bank) which according to the approved EIA report showing no impact on downstream users, as indicated in the EIA approval letter appended to this report. Water is taken at 600 m upstream of Yonghe Lianxin Bridge on the left bank of Gangjiang River. The water quality conforms to CAT-III level as specified in Environmental Quality Standards for Surface Water (GB3838-2002) (see Attachment 1 for source water test report), and water there can be used as domestic drinking water source. The extraction amount to match designed capacity - max 90,000m³/day, and the extraction permit approval process in parallel with construction, to be received before operation.

Project progress:

The project commenced in April 2020 after a series of preliminary preparations had been completed, including project filing, proposal for project site selection, red line map and preliminary review of land use for construction project, environmental impact assessment and the EIA has already approved by local authority, feasibility study, water resources demonstration, preliminary design, navigation condition impact assessment and approval, flood control approval, land transfer, project planning permit for the purification plant, construction engineering permit for the purification plant, construction permit for the plant, phase-I construction bid, contract signing, etc. The civil construction of structures in the purification plant has been completed by 30% of total engineering quantity. The plant is estimated to be put into operation in 2021 (see Figure 3 for project design rendering).



Figure 3

B. Objective and scope of report

i. Objective

Identify key issues involved in the project such as the environment, involuntary resettlement, and indigenous peoples in the area of influence, determine whether the production and operation activities of the project comply with the *Safeguard Policy Statement of ADB* (2009), and propose corrective action plans for the production and operation activities that do not comply with the *Safeguard Policy Statement of ADB* (2009). This is being prepared as a requirements of the CWA ESMS.

ii. Scope

Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone.

C. Method

Based on the practical situations, the audit of the project will be conducted with a variety of methods, including:

1. On-site verification. China Water Affairs Group Limited has established an expert group composed of 7 internal and external members dealing with engineering technologies,

environmental assessment, operation and management, etc., and it has conducted a comprehensive inspection of the project site. Jinyuan water Plant is under Ji'an Water Affairs, a subsidiary of CWA, who will be responsible for the operation and maintenance of this new Jinyuan Water Plant.

2. Data review. The expert group reviews the project data, including the project feasibility study report, environmental impact report form, documents of local government on land acquisition, demolition and resettlement, and related contract agreements, where data is not available or assessment is incomplete, updates will be provided to ADB through the annual monitoring reports:

a. Feasibility Study Report on Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone, prepared by Shanxi Guoyang Investment Consulting Co., Ltd. in July, 2018;

b. Environmental Impact List for Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone, prepared by Jiangxi Jing Ruixiang Environmental Technology Co., Ltd. in September, 2018; The Permits received upon approval of EIA

c. b. Environmental Impact List of Construction Project for Water Intake Pumping Station in Jinyuan Water Plant, prepared by Jiangxi Xiashi Spring & Autumn Environment Co., Ltd. in February, 2019;

d. Proposal for Selection of Jinyuan Water Plant Construction Site issued by Planning, Construction, and Environmental Protection Bureau of Jinggangshan Economic and Technological Development Zone and Proposal for Selection of Water Intake Pumping Station Construction Site in Jinyuan Water Plant issued by Ji'an Urban and Rural Construction Bureau;

e. The notice on the Interim Procedures for the Group Expropriation and Compensation of Houses on Land in Jinggangshan Economic and Technological Development Zone issued by the Administration Committee of Jinggangshan Economic and Technological Development Zone in July 2017;

f. Documents, notices and report forms about the project issued by the local government.

3. Operational investigation. Meetings, seminars and other modes will be adopted to investigate the environmental impact of existing facilities in the production and operation process, the

conditions of involuntary resettlement and indigenous peoples, and the measures to avoid potential impacts.

4. System review. The project documents and related systems issued by the project owner, construction unit, survey unit, design unit, and supervision unit will be reviewed, focusing on the institutional arrangements for the environment, indigenous peoples, and other social impacts of all parties in the project construction process.

5. Soliciting opinions. The environmental and social impact of the project will be verified with local government and departments such as the Environmental Protection Agency, the Construction Bureau, the Development and Reform Commission, the Ministry of Land and Resources, and Village Committees.

II. Audit results

A. Relevant information about assurance issues

i. Environment

1. Environmental assessment report of project. In strict accordance with laws and regulations including Environmental Protection Law of the People's Republic of China, Ordinance on Management of Environmental Protection for Construction Project, and Law of the People's Republic of China on Evaluation of Environmental Effects, Jiangxi Jing Ruixiang Environmental Technology Co., Ltd. is employed to conduct environmental evaluation and issue relevant report for Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone.

2. Surroundings of the project. The location of Jinyuan Water Plant was selected at southeast corner of the intersection between Shenzhen Avenue and Yonghe Avenue. There are woodlands in the east, south and north of the plant and open space in the west. No schools, residential areas or other environmental sensitive sites are present within 100 m around the plant (see Attachment 2 for the surrounding environment of the plant and water intake pump house). The nearest sensitive site of the project is a pond surrounded by camphor trees in the south, about 120 m away. The nearest enterprise to the project is Jiangxi Yifeng Tai Optoelectronic Technology Co., Ltd., 450 m away in the west. It is mainly engaged in the production of display devices (TFT-LCD panel). At present, the factory of this company is still under construction.

3. Site selection of project. The selected site for Jinyuan Water Plant was approved by the Planning, Construction, and Environmental Protection Bureau of Jinggangshan Economic and

Technological Development Zone, and that for the water intake pump station was approved by Ji'an Urban and Rural Construction Bureau. There are no places of interests, resort areas, natural reserves, and other environmental sensitive sites within the project, and water supply pipelines do not pass through above-mentioned ecological protection objects. Therefore, the environmental protection requirements can be met.

4. Impact of project construction and operation on the environment and measures taken. During construction and operation of the project, the surroundings is mainly affected by waste water, flying dust, noise, waste gas, solid wastes and vegetation restoration.

a. Waste water: the waste water generated during project construction mainly includes the site waste water and the domestic waste water from construction personnel. The construction waste water is discharged into the temporary detritus tank set in the site for disposal, and the supernatant will be reused without being discharged; the domestic waste water from construction personnel is used as farm manure after being disposed in the dry pail latrine. The waste water generated during the operation of the project is mainly filter backwash water from the purification plant and sludge water from the setting tank after the sediment process. The filter backwash water is discharged into the water recycling tank for recycling without external discharge; the sludge water from the setting tank is discharged into the sludge treatment facilities; the supernatant from the sludge thickener and the filtrate from the sludge dewatering room are discharged into the sewage treatment plant in Jinggangshan Economic and Technological Development Zone.

b. Flying dust: it is mainly generated during the construction, and the influence range is within 100 m around the construction area. The project is located in rural areas. The impact of flying dust on the ambient air quality can be greatly reduced by taking measures such as sprinkling-driven dust suppression and setting fences no less than 1.2 m high, so as to ensure that the concentration of particulate matter at the highest point around the site was $< 1.0 \text{ mg/m}^3$. No complaint about flying dust from construction has been received since the project commenced.

c. Noise: main noise sources during project construction are various construction machineries, transportation vehicles, etc. Prevention measures include rational arrangement of construction schedule, rational layout of construction site, selection of fine construction equipment, etc. It is strictly forbidden to commence construction with noise-generating equipment at night. After measures mentioned above are taken, noise during construction period is in line with *Emission Standard of Environment Noise for the Boundary of Construction Site* (GB 12523-2011), i.e. $\leq 70 \text{ dB(A)}$ in daytime, $\leq 55 \text{ dB(A)}$ at night. During the project operation, the main noise sources came from pumps and blowers. It was proposed to install mufflers on the equipment. In this way,

combined with distance attenuation, the impact on the surrounding acoustic environment was insignificant, and the CAT-II level as specified in *Emission Standard for Industrial Enterprises Noise at Boundary* (GB 12348-2008) can be met, i.e. ≤ 60 dB(A) in daytime, ≤ 50 dB(A) at night. No complaints about noises were received since the project started.

d. Waste gas: the waste gases generated during project operation are mainly oil fume from canteen and chlorine gas that may leak. According to analysis, the canteen in the project produced oil fume at a rate of 2.74 kg/a, with the concentration about 2.5 mg/m^3 , requiring disposal. In this project, the high-efficiency fume purification device is used to remove oil fume. After disposal, the fume emission concentration decreases to 1 mg/m^3 , which meets the requirements of *Emission Standard of Cooking Fume* (trial) (GB 18483-2001) (oil fume emission concentration $\leq 2 \text{ mg/m}^3$); The raw water qualify Cat-III according to Testing Report (Attachment-1) and chlorine is used in the water treatment process. In order to ensure the safety of chlorine use, a leaked chlorine absorption room is set up, where a set of leaked chlorine absorption device with a treatment capacity of 1,000 kg Cl_2 is installed. In addition, a set of chlorine leakage alarm is set in the chlorine dosing room. Chemical management measures in the source and delivery process for the chemical, storage and management of associated hazardous waste, conform the OHS procedures, and emergency spill measures. In case of chlorine leakage, the leaked chlorine absorption device can operate immediately. The chlorine dosing room and chlorine warehouse are equipped with forced ventilation facilities.

e. Solid waste: solid wastes generated during project construction period are mainly packaging wastes and domestic garbage from construction personnel. The amount of packaging wastes is relatively small, so temporary stock sites are set up for unified collection before the wastes are delivered to salvage station which is handled by qualified third-party collection; domestic garbage from construction personnel is counted as 0.25 kg/person-d , with production amount of 9.13 t/a, and such garbages will be disposed by the municipal sanitation department. Solid wastes generated during operation period mainly includes sludge generated by sludge treatment process, the used liquid chlorine cylinders and domestic wastes from staff. Sludge generated in water supply process is subject to CAT-I industrial solid waste which is handled by qualified collector and contains no toxic and harmful substances. According to analysis of sludge water discharged from the setting tank, sludge cake output is 26,600 t/a, which shall be sent to and treated in the landfill with a treatment capacity 1,200 t/d. The landfill is operated by Everbright Environmental Energy (Ji'an) Co., Ltd., which is close to the Jinyuan Water Plant; the used liquid chlorine steel cylinders are subject to unified recycling by supporting manufacturers, about 146 cans per year; the number of project operators is 45, and the amount of domestic waste generated is counted as

8.21 t/a on the basis of 0.5 kg/d per person. All solid wastes shall be packaged in bags and sent to the municipal sanitation department for unified treatment. Waste transportation arrangements including whether these are undertaken by a qualified third party .

f. Vegetation restoration: the construction of purification plant in the project will change the layout of the original green belt. In the project, we will strengthen the greening in strict accordance with the requirements of urban planning and landscape environment, making the new landscape better than the original one. During the construction of pipeline in the project, the vegetation within 3 m of the excavation route may be affected. After the completion of the project, vegetation restoration will be carried out for the temporarily occupied land. The environmental monitoring conducted by project manager during construction stage, and to be handed over to ESMS manager during operation stage, and routinely working environment safety training is offered to staff and related parties

li. Involuntary resettlement

1. Land use of the project. The water intake pump house of the project is located at about 600 m upstream of Yonghe Lianxin Bridge on the left bank of Ganjiang River in Yonghe Town, Ji'an County, covering an area of 3 mu. The purification plant of the project is located at the southeast corner of the intersection between Shenzhen Avenue and Yonghe Avenue in Jinggangshan Economic and Technological Development Zone, covering an area of 120 mu. The land is used for utilities (water supply land), which belongs to the Land Resources Bureau of Jinggangshan Economic and Technological Development Zone, and was originally state-owned construction land. On December 20, 2019, Ji'an Water Affairs Group Co., Ltd. and the Land Resources Bureau of Jinggangshan Economic and Technological Development Zone signed the Contract for Transfer of State-owned Construction Land Use Right (see Attachment 3). The transfer price was 157 CNY/m², and the land use certificate was obtained (see Attachment 4). Prior to the transfer, the land has never been developed, therefore, it involves no compensation for land expropriation and demolition.

2. Land use for pipeline construction. The muddy water pipeline of the project passes through Jinggangshan Economic and Technological Development Zone and Ji'an County. For temporary land for muddy water pipes, the compensation standard shall be determined in reference to the Implementation Scheme for Temporary Land and Demolition Compensation for Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City and relevant reply (see Attachment 5). The compensation shall be led by the Promotion Working Group of

Emergency Alternate Water Source Construction Project in Central Urban Area of Ji'an City, and the specific compensation is carried out by the township and village committees along the way. Ji'an Water Affairs Group Co., Ltd. would pay compensation. The Company has signed Temporary Land Use Agreement (see Attachment 6) with a total length of about 800 m from Linjiayuan Village Road, Wuxing Village Committee, Yonghe Town, Ji'an County to Shengangshan Avenue. All users on the roster (see Attachment 7) in the agreement have received their compensation, without any complaint. Compensation for temporary land of residual muddy water pipeline is under promotion. The muddy water pipeline (raw water pipeline) is 2.2km in length, with few land temporarily affected but fully cash compensated, and there are no water supply distribution pipeline under this sub-project, thus no land acquisition in general.

3. Public participation. During promotion of Jinyuan Water Plant Project, Ji'an Water Affairs Group Co., Ltd. has timely issued project information on news media and network platforms, actively sought for opinions for all walks of life. No public participation during EIA stage. Stakeholders usually wish to know when can access to new water infrastructure, and look forward to receiving high quality water. Moreover, the Company properly coordinated temporary land issues during construction, and ensured the openness and transparency of the project construction. -

4. Appeal mechanism. Ji'an Water Affairs Group Co., Ltd. set up the Project Department for Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone. The Department was responsible for compliant from affected persons and coordination, and protecting legal rights of affected persons. At the same time, according to the relevant provisions of the *Civil Procedure Law of the People's Republic of China*, the affected persons can also sue through the Government Department of Letters and Calls or the People's Court at the same level to protect their legal rights. Since construction of Jinyuan Water Plant Project, no appeal about non-voluntary demolition issues has been received yet.

iii. Indigenous peoples

There are no minority inhabited areas within the construction scope and water supply scope of Phase-I of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone; therefore, no distinct and vulnerable ethnic minority groups are affected by the project.

B. Other social issues

i. Gender and development

1. Current water price in Ji'an City The price of domestic water for urban residents was 1.4 CNY/m³ in Ji'an City in 2019. Based on the current average monthly domestic water consumption of 10 cubic meters in Ji'an City, the monthly per capita water cost was 14 CNY. In 2019, the per capita monthly disposable income of urban residents was 4,736 CNY in Ji'an City, in which the monthly water cost only accounted for 0.3%. This shows that the water price in Ji'an City is very low, and even if the water price is adjusted in the future, the living standards of residents will not be affected.

2. Preferential water price and preferential water gauge improvement fees for vulnerable groups. According to current regulations, water price adjustment was jointly coordinated by the local government, water supply enterprises and user representatives through a hearing, and the government made the final decision. Companies must take into account the living standards and affordability of vulnerable social groups, such as poverty groups, low-income groups, and female groups when raising the water price, and appropriate preferential measures shall be taken. The specific content and water price adjustments must be made known to public. In this regard, the water price adjustments will not have a significant impact on vulnerable groups. Ji'an Water Affairs Group Co., Ltd. has always been an enterprise with a strong sense of social responsibility. The Company executed the price before the reform of ladder-like water price, i.e. 1.15 CNY/m³. Only after the water consumption exceeds the first ladder of 30 m³ will it implement the current water price. Moreover, it provided renovation preference with "one meter per household" for users enjoying basic living allowance and pensions. The renovation fees were charged at half of the standard approved by Ji'an Bureau of Commodity Prices, which fully reflects the care for the social vulnerable groups.

3. Improve user service and publicity work. In recent years, Ji'an Water Affairs Group Co., Ltd. has made positive efforts on creating service brand "China Water-Care for Every Family", greatly improving the service awareness and service level. The Company has launched a 24-hour customer service hotline to timely accept users' inquiries and complaints, and solve users' problems in the first time; and the Company regularly organized public welfare activities such as community service, water-saving and water-using knowledge publicity to establish communication channels with users and help users solve their difficulties in life on site. In addition, the Company has also carried out water-saving publicity and popularized the common sense of water use through network platforms, radio, newspapers and other media.

ii. Gender and employment issues

1. Ji'an Water Affairs Group Co., Ltd. is the construction unit of Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone. At present, there are 286 employees in the company, among which 112 are female employees, accounting for 39.2%. See Table 3 for details The company maintains gender equality principle in the recruitment of employees and the selection of management personnel. It implements the post salary + performance appraisal mechanism in salary distribution, i.e., equal pay for the same post and more pay when taking more work.

Table 3 Employees of Ji'an Water Affairs Group Co., Ltd.

Employee classification	Number of employees	Number and percentage of male employees	Number and percentage of female employees
Senior management	9	8 (89%)	1 (11%)
Middle management	26	16 (62%)	10 (38%)
Technical and operational staff	251	150 (60%)	101 (40%)
Total	286	174 (61%)	112 (39%)

2. Ji'an Water Affairs Group Co., Ltd. fully protects the rights and interests of female employees. Female employees enjoy maternity leave according to national policies and regulations. During the period, their wages and benefits are the same as those of on-duty employees. The Company will appoint female employees to suitable positions, if women have equal opportunity as men to apply for any job for which they are qualified. And if both men and women have equal opportunity to undertake training that will enable them to advance in the company. And regularly organize physical examination every year. Meanwhile, it will also distribute subsidies for special supplies to female employees.

iii. Labor and community health and safety

1. Ji'an Water Affairs Group Co., Ltd. pays pension insurance, medical insurance, unemployment insurance, work-related injury insurance and maternity insurance in accordance with national policies and regulations.

2. The Company recruits employees strictly in accordance with the requirements of the Labor Law, all subsidiaries of CWA has their own union to collectively represent their rights, and the vast majority of employees are recruited locally to support community employment and development.

The working hours of employees meet the requirements of the Ministry of Labor and Social Security, which stipulate that, the working hours must not exceed 40 hours per week, and the continuous working hours must not exceed 8 hours per day. Where extension of working hours is required as needed, it must be agreed with the employee and the company must give financial compensation or arrange compensatory time off in accordance with national regulations.

3. The Company conducts induction training for newly recruited employees to make them familiarize with the work process so that they can meet the job requirements. The company formulates an annual training plan for all employees to strengthen the training of reserve talents, regularly organizes technical competitions for front-line operators, such as electricians, fitters, pump workers, line inspection and leak detection workers, etc., and recognizes employees for good performance to establish a harmonious and progressive working atmosphere.

4. Contractors of Ji'an Water Affairs Group Co., Ltd. recruit employees in the formal market through compliance procedures, most of whom are local residents.

5. The Company transports, stores, uses and manages chemical agents in strict accordance with the requirements of the local Public Security Bureau and the Safe Production Supervision Administration. The operators regularly participate in the training organized by the Safe Production Supervision Administration and obtain the certificate of employment before taking the relevant job.

6. The Company has prepared an emergency plan for urban water supply, which can be implemented in case of sudden accidents such as water source pollution, insufficient water source, sudden power outage, and extreme weather. The emergency plan defines the responsible departments, persons responsible and emergency measures for handling various accidents, with an aim to effectively guarantee the urban water safety.

7. In the past five years, the company has not had any major safety accident, injury or death accident due to work, nor any emergency events such as water pollution and water shortage. Since the commencement of Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone, no safety accident has occurred.

III. Conclusion

Phase-I Construction Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone is imperative to speed up urban development and improve residents' living standard in Jinggangshan Economic and Technological Development Zone of

Ji'an. The project construction is supported by Ji'an City and Ji'an County People's Government, and approved by relevant government authorities. The project construction procedures strictly comply with the relevant national, provincial and municipal requirements. Professional institutions were employed to carry out the feasibility study and environmental impact assessment of the project and issue reports. The project planning has been approved by the Economic Development and Technology Administration of Jinggangshan Economic and Technological Development Zone. The construction of the project is undertaken by qualified enterprises through bidding. During the construction process, environmental protection is emphasized to reduce the impact on the surroundings. The environmental protection issues to be considered after completion of the project have also been properly arranged. The land for construction of the project is transferred by the government with transparent pricing, rationality and legitimacy.

Attachment 1: Source Water Test Report



181413341181

Report No.: B18050772

Inspection report

Sample name:	Surface water
Sampling site:	East of Songshuxia Village, Yonghe Town, Ji'an
Entrusting unit:	Ji'an Water Affairs Group Co., Ltd.
Inspection category:	Entrusted inspection



Jiangxi Yinlong Testing Co., Ltd.

Report date: May 21, 2018

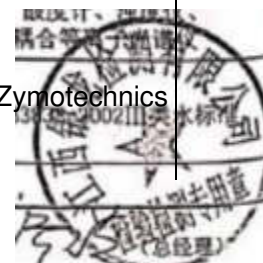
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Jiangxi Yinlong Testing Co., Ltd.


Inspection report


Sample name	Surface water	Sample No.	B18050772
Entrusting unit	Ji'an Water Affairs Group Co., Ltd.	Client and contact method	Hu Yin 13133671676
Address of the client	No.46, Changgang South Road, Jizhou District, Ji'an City, Jiangxi Province		
Sampling person	Hu Ying	Sample state	Little suspended matter, yellowish
Sampling site	East of Songshuxia Village, Yonghe Town, Ji'an	Sampling environment	Weather: sunny Temperature: 23°C
Sampling date	Tuesday, May 8, 2018	Sample accepted on:	Tuesday, May 8, 2018
On-site testing person	—	On-site testing location	—
Test date	May 8, 2018~May 21, 2018	Inspection item	29 in total
Sampling basis	Standard Examination Methods for Drinking Water - Collection and Preservation of Water Samples GB/T 5750.2-2006		
Limits standard basis	Environmental Quality Standards for Surface Water - GB3838-2002		
Inspection standard basis	<p>Water Quality - Determination of Water Temperature - Thermometer or Reserving Thermometer Method GB13195-1991</p> <p>Water Quality - Determination of PH Value - Glass Electrode Method GB6920-1986</p> <p>Water Quality - Determination of Dissolved Oxygen - Iodometric Method GB7489-1987</p> <p>Water Quality - Determination of Permanganate Index GB11892-1989</p> <p>Water Quality - Determination of the Chemical Oxygen Demand - Dichromate Method GB11914-1989</p>		

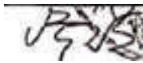
	Water Quality - Determination of Five-day Biochemical Oxygen (BOD ₅) for Dilution and Seeding Method HJ505-2009
	Water Quality - Determination of Ammonia Nitrogen - Nessler' Reagent Spectrophotometry HJ 535-2009
	Water Quality - Determination of Total Phosphorus - Ammonium Molybdate Spectrophotometry Method GB11893-1989
	Water Quality - Determination of Total Nitrogen - Alkaline Potassium Persulfate Digestion UV Spectrophotometric Method HJ636-2012
	Water Quality - Determination of Copper, Zinc, Lead and Cadmium - Atomic Absorption Spectrophotometry GB7475-1987
	Water Quality - Determination of Inorganic Anions - Ion Chromatography HJ/T 84-2001
	Water Quality - Determination of Selenium - Graphite Furnace Atomic Absorption Spectrometric Method GB/T15505-1995
	Water and Waste Water Monitoring and Analysis Method (fourth edition)
	Water Quality - Determination of Chromium (VI) - 1,5 Diphenylcarbonyl Spectrometric Method GB7467-1987
	Water Quality - Determination of Cyanide Isonicotinic - Acid-pyrazolone Spectrophotometry Method HJ484-2009
	Water Quality - Determination of Volatile Phenolic Compounds - 4-AAP Spectrometric Method HJ503-2009
	Water Quality - Determination of Petroleum Oils and Animal Vegetable Oils - Infrared Spectrophotometry HJ637-2012
	Water Quality - Determination of Anionic Surfactants - Methylene Blue Spectrometric Method GB7494-1987
	Water Quality - Determination of Sulfide - Methylene Blue Spectrometric Method GB/T16489-1996
	Water Quality - Determination of Iron and Manganese - Flame Atomic Absorption Spectrometric Method GB 11911-1989
	Water Quality - Determination of Fecal Coliform - Manifold Zymotechnics and Filter Membrane HJ/T 347-2007



Main testing instruments	UV spectrophotometer, atomic absorption (graphite furnace) spectrophotometer, acidimeter, turbidity meter, atomic fluorescence spectrophotometer, ion chromatograph, inductively coupled plasma chromatograph
Inspection conclusion	All inspected items of the water sample are in line with Cat-III water standard in Environmental Quality Standards for Surface Water - GB3838-2002
Remarks	Total nitrogen was not incorporated into comment.

Prepared by: 

Reviewed by: 

Signed and Issued by: (General Manager) 

Prepared on: 2018.5.21

Reviewed on: 2018.5.21

Signed and Issued on: 2018.5.21

Special Seal for Inspection and Testing of Jiangxi Yinlong Testing Co., Ltd.

Page 2 of 4

Jiangxi Yinlong Testing Co., Ltd.

Inspection report

Sample No.: B18050772

Inspection item	Inspection result (mg/L)	Limit standard					Individual judgement	Remarks
		I	II	III	IV	V		
Water temperature (°C)	<0.2	The man-made average maximum temperature rise is $\leq 1^{\circ}\text{C}$ and the weekly average maximum temperature drop is $\leq 2^{\circ}\text{C}$					Conforming	
PH value (without dimension)	7.98	6~9					Conforming	
Dissolved oxygen	8.14	≥ 7.5	≥ 6	≥ 5	≥ 3	≥ 2	Cat-I	
Permanganate Index	2.07	≤ 2	≤ 4	≤ 6	≤ 10	≤ 15	Cat-II	
Chemical oxygen demand	6.80	≤ 15	≤ 15	≤ 20	≤ 30	≤ 40	Cat-I	
Biochemical Oxygen Demand after 5 Days	1.56	≤ 3	≤ 3	≤ 4	≤ 6	≤ 10	Cat-I	
Nitrogen	<0.02	≤ 0.15	≤ 0.15	≤ 1.0	≤ 1.5	≤ 2.0	Cat-I	

Total phosphorus	0.04	≤0.02	≤0.02	≤0.2	≤0.3	≤0.4	Cat-II	
Total nitrogen	1.91	≤0.2	≤0.2	≤1.0	≤1.5	≤20	Cat-V	
Steel	<0.009	≤0.01	≤0.01	≤1.0	≤1.0	≤1.0	Cat-I	
Zinc	0.001	≤0.05	≤0.05	≤1.0	≤2.0	≤2.0	Cat-I	
Fluoride	0.26	≤1.0	≤1.0	≤1.0	≤1.5	≤1.5	Cat-I	
Selenium	<0.0004	≤0.01	≤0.01	≤0.01	≤0.02	≤0.02	Cat-I	
Arsenic	0.0032	≤0.05	≤0.05	≤0.05	≤0.1	≤0.1	Cat-I	
Mercury	<0.00001	≤0.00005		≤0.0001	≤0.001	≤0.001	Cat-I	
Cadmium	<0.0005	≤0.001	≤0.005	≤0.005	≤0.005	≤0.01	Cat-I	
Chromium (VI)	<0.004	≤0.01	≤0.05	≤0.05	≤0.05	≤0.1	Cat-I	
Lead	<0.0025	≤0.01	≤0.01	≤0.05	≤0.05	≤0.1	Cat-I	
Cyanide	<0.002	≤0.005	≤0.05	≤0.2	≤0.2	≤0.2	Cat-I	
Volatile phenol	<0.002	≤0.002	≤0.002	≤0.005	≤0.01	≤0.1	Cat-I	
Petroleum	<0.05	≤0.05	≤0.05	≤0.05	≤0.5	≤1.0	Cat-I	
Anionic surfactant	<0.025	≤0.2	≤0.2	≤0.2	≤0.3	≤0.3	Cat-I	
Sulfide	<0.01	≤0.05	≤0.1	≤0.2	≤0.5	≤1.0	Cat-I	
Fecal coliform (EA / L)	2,100	≤200	≤2,000	≤10,000	≤20,000	≤40,000	Cat-III	

Sulfate (as SO ₄)	10.28	≤250	Conforming	
Chloride (as Cl ⁻)	10.36	≤250	Conforming	
Nitrate (as N)	1.21	≤10	Conforming	
Iron	0.027	≤0.3	Conforming	
Manganese	<0.001	≤0.1	Conforming	

Page 3 of 4

Notes and additional description

1. Invalid without inspection seal;
2. Invalid without the signature of the chief inspector, auditor and signer;
3. Do not partially copy the report, and the duplicate report is invalid if it is not restamped with the inspection and testing seal;
4. Do not fill in the report with pencil or ball point pen, and no alternations, additions or deletions shall be made to the report;
5. If there is any objection to this report, it shall be submitted to the inspection unit within ten days from the receipt of the report. If the objection is not submitted within the time limit, it shall not be deemed to exist;
6. The charging standard is implemented in accordance with Charging Standards for Professional Environmental Monitoring Services in Jiangxi Province;

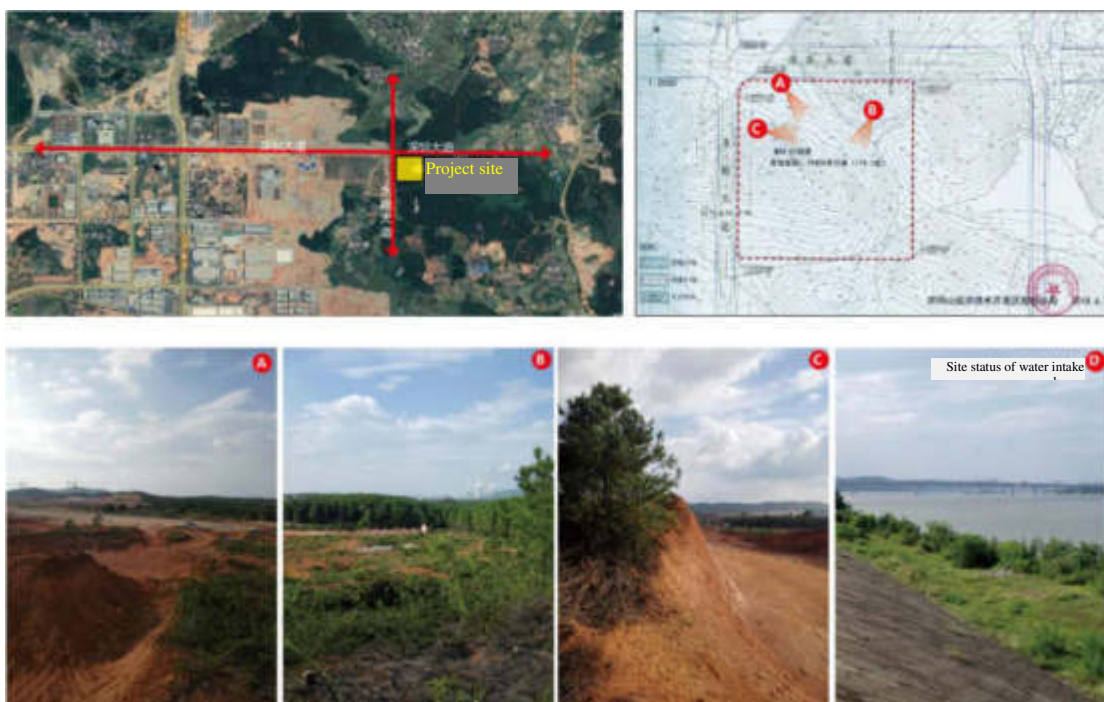
Unit address: the Third Water Plant, Qingyi Highway, Yushui
District, Xinyu City

Postcode: 338000

Phone: 0790-6330304

Fax: 0790-6330304

Attachment 2: Surroundings of the Plant and Water Intake Pump House



Attachment 3:



Electronic supervision code: 3608002019B00541

Contract on Transferring the State-owned Construction Land Use Rights

Ministry of Land and Resources of the
People's Republic of China

State Administration for Industry & Developed by
Commerce (SAIC) of the People's
Republic of China

Contract No.: DDE2019055

Contract on Transferring the State-owned Construction Land Use Rights

Parties to the contract:

Transferor: Land Resources Bureau of Jinggangshan Economic and Technological Development Zone

Contact address: Room 620, Management Committee of Jinggangshan Economic and Technological Development Zone

Postal code: 343100;

Tel: 0796-8403619;

Fax: _____ / _____;

Bank of Deposit: _____ / _____;

Account: _____ / _____;

Transferee: Ji'an Water Affairs Group Co., Ltd.

Contract address: No.46, Changgang South Road, Jizhou District, Ji'an City, Jiangxi Province

Postal code: 343100;

Tel: 0796-8312118;

Fax: _____ / _____;

Bank of Deposit: _____ / _____;

Account: _____ / _____;

Made in duplicate with equal legal effect.

Transferor (seal):



Transferee (seal):



Land Resources Bureau of Jinggangshan Ji'an Water Affairs Group Co., Ltd. (seal)
Economic and Technological Development
Zone (seal)

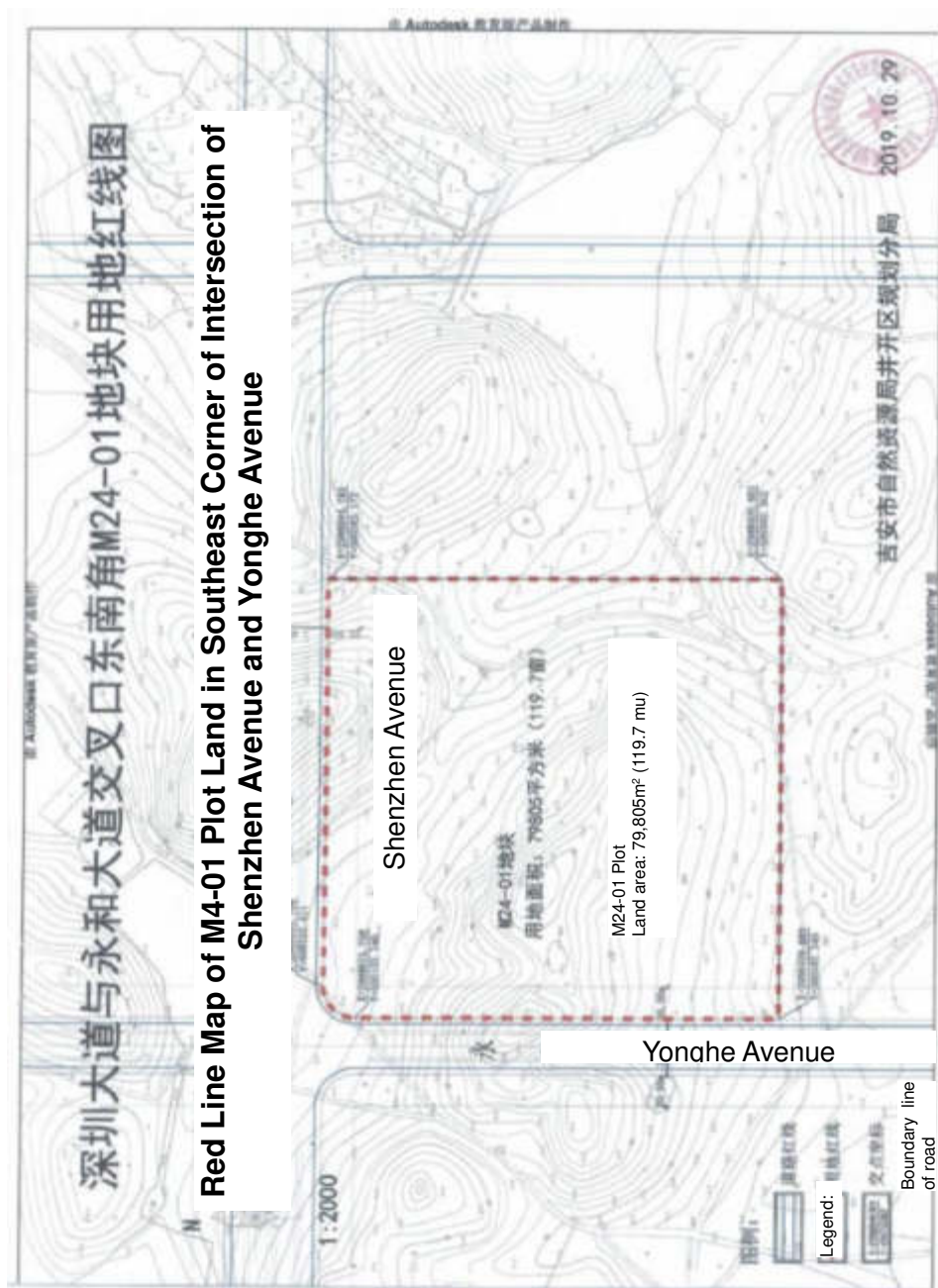
Legal representative (entrusted agent)

(Signature):

Legal representative (entrusted agent)




(Signature):

December 20, 2019



Jinggangshan Economic and Technological
Development Zone Planning Branch of Ji'an
Natural Resources Authority

Attachment 4:

<p>Real Property Certificate</p> 	 <p>In accordance with the <i>Property Law of the People's Republic of China</i> and other laws and regulations, to protect the legal rights and interests of the owner of the real property, the real property rights listed in this certificate and which are to be applied for registration by the owner are permitted for registration after review, and the certificate is hereby issued.</p>  <p>Registration agency (seal)</p> <p>November 1, 2020</p> <p>Supervised by the Ministry of Natural Resources of the People's Republic of China (seal)</p> <p>No.: 36004811483</p>
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Gan (2020) Jinggangshan Economic and Technological
Development Zone Right over Real Estate Property No. 0000293

Notes

Right holder	Ji'an Water Affairs Group Co., Ltd.
Co-ownership	Individually owned
Location	M24-01 Plot Land in Southeast corner of the intersection of Shenzhen Avenue and Yonghe Avenue
Real property unit number	360821013003GB00035W00000000
Type of right	State-owned construction land use right
Nature of right	Transfer
Purpose	For utilities
Area	Land area: 79,805m ²
Period of use	Monday, December 23, 2019 to Sunday, December 22, 2069

Other status of rights			
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Documents of Ji'an Municipal People's Government

JFZ [2019] No.54

Approval of Ji'an Municipal People's Government on Implementation Scheme for Temporary Land and Demolition Compensation for Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City

Municipal Housing and Construction Bureau:

We have received the Request for Approving Implementation Scheme for Temporary Land and Demolition Compensation for Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City (JSYJSYJBZ [2019] No. 1) submitted by Leading Group Office for Promotion of Emergency Water Source Construction Project in Urban Central Area. After research, Implementation Scheme for Temporary Land and Demolition Compensation for Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City was agreed in principle. Please announce it to the public in accordance with relevant procedures, and execute compensation with care by law, and ensure smooth progress of the project.



The People's Government of Ji'an (seal)

Monday, April 29, 2019

(This document will not be announced)

Cc: Municipal Development and Reform Commission, Municipal Finance Bureau, Municipal Audit Bureau, Qingyuan District Government and Leading Group Office for Promotion of Alternate Water Source Construction Project in Urban Central Area

Office of the People's Government of Ji'an

Issued on May 5, 2019

Attachment:

Implementation Scheme for Temporary Land and Demolition Compensation for

Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City

According to Notice on Issuance of Arrangement of Key Projects in the City in 2018 (JZ [2018] No.12) issued by Municipal Party Committee and Municipal Government, Construction Project of Emergency Water Source in Central Urban Area of Ji'an City is a key municipal project. The project is constructed with a capacity of 170,000 t per day, and is planned to connect DN1400 branch from the existing DN2600 pipeline of Luotan Reservoir in Qingyuan District for water diversion, and establish an intermediate booster pump station on hillside in the northwest corner of Shantou Village, Futan Town. The intermediate booster pump station will adopt DN1400 main pipeline as the outlet pressure pipe along Longjiang River and the farmland in Zhixia Town and Futan Town, as well as Qingdong Highway, the East Bank of Ganjiang River and the opposite bank of Shengang Mountain, with a total length of 24.994 km. The main pipeline is divided into two branches after reaching the other side of Shengang Mountain, one of which includes a DN1400 pipeline of 1,000 m leading to Jizhou District and passing through the top of the Ganjiang River, and then separates out a DN800 pipeline with a length of 120 m to connect with the outlet pipe of water intake pump house in Wuyue Guan Water Plant, and a DN1200 pipeline with a length of 2,520 m to the water intake pump house of Jifu Water Plant along the green belt in west side of the Yanjiang Road and connects with the current muddy water pipe; and another separates out a DN800 pipeline with a length of about 6,328 m from the other side of Shengang Mountain to Hedong Water Plant in Qingyuan District to connect with the outlet pipe of water intake pump house in Hedong Water Plant. The total length of the pipeline is about 34.96 km, and the total investment of the project construction is about 310 million CNY.

In order to ensure comprehensive completion of expropriation tasks for temporary land and booster pump station, this implementation scheme is hereby developed in combination with the project reality according to Implementation Scheme for Temporary Land and Demolition Compensation for Project in Part of Jinggangshan Economic and Technological Development Zone-Jishui-Yongfeng Branch of Jiangxi Natural Gas Pipeline Network in Qingyuan District.

I. General principle

1. Work on temporary land and Demolition for construction project of emergency alternate water source in central urban area in Ji'an City features tight schedule and heavy task. The whole temporary land and demolition work is organized and implemented by Land and Housing Expropriation Department of the Project Promotion Working Group.
2. Temporary land and demolition work along the pipeline within the jurisdiction of each township and town is subject to contracting-out system of townships and towns. I.e.: compete work tasks, coordinate and solve issues involving areas under jurisdiction, and complete temporary and demolition tasks within jurisdictions on schedule.
3. The temporary land use and demolition work must be completed within the specified time to ensure on-schedule commencement of construction project of emergency alternate water source in central urban area of Ji'an City.

II. Compensation standard of temporary land for pipeline construction

The type of temporary land shall be confirmed according to the land type of the previous year, and the compensation standard shall be "compensation for temporary land + compensation for young crops and attachments on the land". The specific compensation standards are as follows:

(I) Compensation standard of temporary land

1. Forest land: 625 CNY/year·mu, 325 CNY/half a year·mu;
2. Cultivated land: paddy field and dry land, 1,500 CNY/year·mu, 1,000 CNY/half a year·mu;
3. Pond: 1,000 CNY/year·mu, 600 CNY/half a year·mu;
4. Wasteland, barren mountain and barren beach: 625 CNY/year·mu, 325 CNY/half a year·mu

(II) Compensation standard for young crops and attachments on temporary land (compensating in accordance with the current status of young crops)

1. Farm land

- (1) Orchard: 3,000 CNY/mu for orchard with fruit, 1,000 CNY/mu for orchard without fruit;

(2) Sasanqua forest: 2,000 CNY/mu for general sasanqua forest, 4,000 CNY/mu for manual high-output sasanqua forest;

(3) Intensive forest (lumber forest and bamboo forest): 2,000 CNY/mu;

(4) Sparse forest (remnant forest): 800 CNY/mu.

2. Paddy field, vegetable field and dry land: 1,000 CNY/mu.

3. Pond

(1) General pond and reservoir: 1,000 CNY/mu;

(2) Intensive fishpond: 3,000 CNY/mu.

In case cultivated land is occupied, the construction unit shall be responsible for backfilling and reclamation; in case reclamation is not feasible, one-off compensation shall be provided based on the difference between compensation standard for category of the expropriated land and compensation standard for expropriation of "wasteland, barren mountain and barren beach". In case other categories of land are occupied, the construction unit shall be responsible for backfilling and compaction; in case roads, bridges, drainage trenches and other public infrastructures are occupied, the project unit shall be responsible for restoring them timely in accordance with equivalent standard.

III. Compensation standard for demolition of ground buildings

The compensation standard for ground building demolition involves demolition compensation fee and resettlement subsidy. The specific compensation standards are as follows:

1. 125 CNY/m² for pigsty and oxer, toilet, temporary shed, 3,660 CNY for each public well, 980 CNY for each domestic well or pressure well, 98 CNY/linear meter for brick wall, 65 CNY/m² for cement ground, 1,500 CNY for each grave with tombstone, and 200 CNY for each grave without tombstone. For items not covered in the compensation standard, refer to demolition-related compensation standard for key projects of Jiangxi Province.

2. High-value attachments: power, communication, cable TV lines, tap water pipe network and other pipeline projects encountered in the pipeline construction shall be relocated in time according to the relevant requirements of key projects in Jiangxi Province.

IV. Compensation time

The compensation for temporary land is divided into two categories: half a year and one year. The temporary occupation time starts from the time the construction personnel enter the site for construction and ends at the backfilling and compaction or reclamation. In the determination of the compensation for temporary land, if the compensation time is less than half a year, it will be calculated as half a year, if the compensation time is over half a year but less than one year, it will be calculated as one year. The compensation for temporary land and ground building demolition is one-off compensation.

V. Payment method

The construction unit will lay out the line in advance according to the requirements of the design drawing, and determine the scope of land use, and the Land and house Expropriation Department of the project Promotion Working Group will arrange personnel to measure the land on the spot together with the townships and towns, and approve the land area before full payment, so that the townships and towns concerned can pay the compensation for land expropriation in time.

VI. Work expenditure

In order to ensure smooth progress of Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City, the Promotion Working Group of Emergency Alternate Water Source Construction Project in Central Urban Area of Ji'an City will, at one time, compensate every township and town with work expenditure of 30 thousand CNY, and every administrative village with work expenditure of 5 thousand CNY. According to the unified dispatching of Qingyuan District, if the temporary land and demolition compensation work are completed in advance or on time, the work reward will be offered according to the appropriate standard, and the specific reward standard shall be separately formulated by the Promotion Working Group of Emergency Alternate Water Source Construction Project in Central Urban Area of Ji'an City.

VII. Relevant requirements

Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City is a key municipal project, which features tight schedule, heavy task, and wide coverage, and involves vital interests of the general public. Each relevant unit shall, in accordance with the overall requirement of smooth progress of the project construction, properly balance the relationship among interests of nation, group, and the public, and the relationship between local and overall situation, as well as the relationship between pipeline project construction and economic development, and actively cooperate according to the construction requirements. Focus shall be

put on the following aspects:

1. Strengthen the organization and leadership, and arrange special personnel to take charge. After the construction unit has determined the boundary line of land, immediately organize personnel to go deep into the masses, do a good job in the ideological work of the masses, and hand over the land in time according to the requirements of the project construction. Problems and disputes occur during construction shall be coordinated by the main leaders and handled by the leaders with specific duties on site so as to be rapidly solved in such a way that difficulties will not be passed to the leadership and intensified and there will be no appealing to higher authorities for help.

2. Adhere to laws and regulations and ensure that compensation is in place. All townships and towns should pay the compensation due to the masses in full according to the actual measured area, actual occupation time and compensation standards. It is strictly forbidden for any unit or individual to intercept or misappropriate the compensation.

3. Control boundary line of land, forbid planting crops or building house intentionally for compensation. After the construction unit determined the boundary line of land, township- (town) and village-level cadres shall make enough efforts for publicity work to strictly forbid planting crops or building houses hurriedly for compensation within the boundary line of land. After the boundary line of land is determined, compensation will not be given on occurrence of planting crops or building houses by masses hurriedly for compensation, and crops planted or houses built for this purpose will be forcedly removed.

Attachment 6:

Agreement on Temporary Land

December 13, 2019

Muddy Water Pipeline Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone.

Agreement on Temporary Land in Yonghe Town

Party A: Ji'an Water Affairs Group Co., Ltd.

Party B: Wuxing Village Committee, Yonghe Town, Ji'an County

Party C: People's Government of Yonghe Town, Ji'an County

I. General rules

In order to ensure the smooth implementation of Muddy Water Pipeline Project of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone, in accordance with Land Administration Law of the People's Republic of China, Contract Law of the People's Republic of China, Approval of Ji'an Municipal People's Government on Implementation Scheme for Temporary Land and Demolition Compensation for Construction Project of Emergency Alternate Water Source in Central Urban Area of Ji'an City (JFZ [2019] No.54), Notice by General Office of People's Government of Jiangxi Province on Expropriation and Demolition Compensation and Fees Payment Standard for Phase-II Project of Jiangxi Provincial Natural Gas Pipeline Network and other relevant laws and documents, Parties A, B, C, in terms of matters on compensation for temporary land occupied by Muddy Water Pipeline of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone, signed the Agreement through negotiation.

II. Overview of temporary land

1. Location: the parcel is within the jurisdiction of Wuxing Village Committee, Yonghe Town, Ji'an County, Jiangxi Province

(Specific location: from Linjiayuan Village Road, Wuxing Village Committee, Yonghe Town, Ji'an County to Shengangshan Avenue, with a total length of about 800 meters)

2. Land area: 32.12 mu

3. Land nature: other land

4. Land category: Cat III

5. Purpose: laying of muddy water pipeline of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone.

6. Service life: one year, starting from the actual delivery time

III. Scope, time, standard and total of compensation

1. Compensation standard

The compensation standard for temporary land in the operation belt of pipeline construction is a comprehensive compensation standard. During execution, Party A may determine specific compensation standards according to land categories, land nature, and land use duration. Comprehensive compensation standard: 4,000 CNY/year·mu for forest land, 625 CNY/year·mu for wasteland, barren mountain and barren beach, 3,500 CNY/year·mu for vegetable field and paddy field, and 5,000 CNY/year·mu for fishpond.

Land category	Width of the operation belt	Area (mu)	Compensation standard	Amount (CNY)	Remarks
Vegetable field	20 m	7.48	3,500 CNY/year·mu	26,180.00	
Paddy field	30 m	24.64	3,500 CNY/year·mu	86,240.00	
Total		32.12		112,420.00	

2. Compensation time

The compensation for temporary land is divided into two categories: half a year and one year. The temporary occupation time starts from the time the construction personnel enter the site and ends at backfilling and compaction or reclamation. In the determination of the compensation for temporary land, if the compensation time is less than half a year, it will be calculated as half a year, if the compensation time is over than half a year but less than one year, it will be calculated as one year. The compensation for temporary land and ground building demolition is one-off contract-based compensation.

3. According to Expropriation and Demolition Compensation and Fees Payment Method for Phase-II Project of Jiangxi Provincial Natural Gas Pipeline Network, compensation adjustment fee would be charged at 3% of the total amount of the compensation for temporary land in the operation belt for pipeline construction, i.e. CNY: ¥: 3,372.60, capital: **three thousand three hundred and seventy-two yuan and six dime only**. The fee would only be paid as compensation adjustment involving interests of masses during actual work of Party A.

4. High-value attachment: after the completion of inventory for fences, graves, green houses and other structures (buildings), Party A shall provide compensation in accordance with relevant demolition standards for key projects in Ji'an City.

5. Work expenditure: in order to ensure the smooth progress of the project construction, according to areas involving pipeline, Party A would, at one time, compensate every township and town with work expenditure of thirty thousand CNY, every village committee with five thousand CNY, and every village working group with two thousand CNY. As the fifth and sixth village groups of Wuxing Village Committee are involved in this Agreement, they are paid in advance with a total of: CNY: ¥: 40,000, capital: four thousand yuan only. [Remark: where another agreement is signed in case the project involves other line section, the fifth and sixth village groups will not be provided with work expenditure.]

6. In order to support the smooth construction of muddy water pipeline of Jinyuan Water Plant in Jinggangshan Economic and Technological Development Zone from Linjiayuan Village Road, Wuxing Village Committee, Yonghe Town, Ji'an County to Shengangshan Avenue, villagers of the fifth and sixth village groups of Wuxing Village Committee failed to cultivate late rice in paddy field in 2019, and the economic loss caused thereof was compensated at 1,000 CNY/mu at one time [total: for 24.64 mu paddy field, the total cost is: ¥: 24,640.00 CNY: and no compensation will be provided in the implementation of the project in the future.]

7. Basis and method for measurement: each party shall sign on Temporary Land Registration Table (Attachment 1) and On-ground High-value Attachments Registration Table (Attachment 2) for confirmation.

8. In case backfilling and compaction for trenches fails within one year due to force majeure, Party A may provide compensation for young crops according to the delay time at 1,000 CNY/mu for half year, and 2,000 CNY/mu for one year.

IV. Payment method

1. The construction unit will lay out the line in advance according to the requirements of the design drawing, and determine the scope of land use, and the Project Department of Party A and the Village Committee will arrange personnel to measure the land on site, and approve the land area before full payment, so that the village groups can receive the compensation for temporary land in time.

2. For all cost for item 3, Party B and Party C shall issue valid invoice to Party A, and Party A shall make payment accordingly through bank transfer: after Party A has made payments mentioned

above, Party B and Party C shall not put forward any other requirements relevant to the scope of temporary land for construction of muddy pipeline of Jinyuan Water Plant.

V. Rights and obligations

1. Rights and obligations of Party A

- (1) Maintain relevant legal interests of Party B;
- (2) Timely pay compensation for temporary land according to the agreement;
- (3) Urge the construction unit to fill, level, and compact the excavation site of the pipeline, and backfill mellow soil according to second plowing requirements, so as to ensure cultivation.

2. Rights and obligations of Party B

- (1) Enjoy rights of temporary land mentioned above according to law.
- (2) After the construction unit determined the boundary line of land, town- and village-level cadres shall make enough efforts for publicity work, strictly forbid planting crops and building houses hurriedly for compensation within the boundary line of land; after the boundary line of land is determined, compensation will not be given on occurrence of planting crops or building houses by masses hurriedly for compensation, and corps planted or houses built for this purpose will be forcedly removed by Party B and Party C.
- (3) During the construction period of the project, Party B and Party C shall be responsible for coordination in case of work hindrance or ownership disputes within the scope of temporary land.

VI. Violation responsibility

During service life of the temporary land for the project, except for the factors stipulated herein and the adjustment in accordance with national policies, either Party A, B or C shall not change or terminate the Agreement at will. In case of any violation, the violating party shall bear the economic losses of the other party.

VII. Others

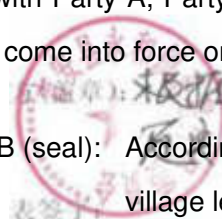
- 1. Any matters that may be omitted or not covered herein can be solved by signing a supplementary agreement through negotiation during the execution hereof.
- 2. The term of validity hereof ends when the three parties have fulfilled all the work hereof and the agreement price has been paid.

3. This Agreement shall be made in sixuplicate, with Party A, Party B and Party C holding two copies respectively, with equivalent force, and shall come into force on the date of signing.

Party A (seal):



Party B (seal): According to the audit opinion of the village leaders, it is true



Signature of representative:

Signature of
representative

Ji'an Water Affairs Group Co., Ltd. (seal)

Wuxing Village Committee, Yonghe Town, Ji'an County (seal)



Signature of representative of the fifth group:

Signature of representative of the sixth group:

Party C (seal):


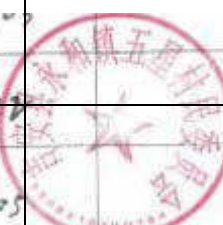

Signature of representative:

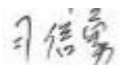

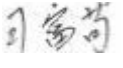

Signed and Issued on: December 13, 2019

People's Government of Yonghe Town, Ji'an County (seal)

Attachment 7:

Roster of Temporary Land for Muddy Pipeline in Wuxing Village, Yonghe Town

S/N	Name	Area	Amount	Signature of farmers	Remarks
	刁富苟	0.216		刁富苟	Vegetable field
	刁信倚	0.103		刁信倚	Vegetable field
	刁长发	0.32		刁长发	Vegetable field
	刁水生	0.105		刁水生	Vegetable field
	刁秋元	0.39		刁秋元	Vegetable field
	刁哲昆	0.293		刁哲昆	Vegetable field
	刁先德	0.218		刁先德	Vegetable field
	刁水桂	0.047		刁水桂	Vegetable field
	刁水桂	0.259		刁水桂	Vegetable field
	焦长英	0.105		焦长英	Vegetable field
	刁水元	0.245		刁水元	Vegetable field
	刁进全	0.243		刁进全	Vegetable field

		0.369			Vegetable field
		0.355			Vegetable field

Wuxing Village Committee, Yonghe Town, Ji'an County (seal)

Roster of Temporary Land for Muddy Pipeline in Wuxing Village, Yonghe Town

S/N	Name	Area	Amount	Signature of farmers	Remarks
	习国芳	0.16		习国芳	Vegetable field
	习长发	0.217		习长发	Vegetable field
	习信仕	0.215		习信仕	Vegetable field
	习生苟	0.511		习生苟	Vegetable field
	习桂芳	0.288		习桂芳	Vegetable field
	习信安	0.222		习信安	Vegetable field
	习二香	0.559		习二香	Paddy field
	习先贵	0.425		习先贵	Paddy field
	习九香	0.648		习九香	Paddy field
	习富平	1.80		习富平	Paddy field
	习二香	0.369		习二香	Paddy field
	习二香	0.261		习二香	Paddy field
	习富芳	0.212		习富芳	Paddy field
	习小平	0.778		习小平	Paddy field

Wuxing Village Committee, Yonghe Town, Ji'an County (seal)

Roster of Temporary Land for Muddy Pipeline in Wuxing Village, Yonghe Town

S/N	Name	Area	Amount	Signature of farmers	Remarks
	习水松	0.639		习水松	Paddy field
	习生菊	1.314		习生菊	Paddy field
	习正相	0.23		习正香	Paddy field
	习九香	0.382		习九香	Paddy field
	习冬林	0.612		习冬林	Paddy field
	习富菊	0.219		习富菊	Paddy field
	习水元	0.463		习水元	Paddy field
	习先德	1.42		习先德	Paddy field
	习春菊	0.513		习春菊	Paddy field

Roster of Temporary Land for Muddy Pipeline in Wuxing Village, Yonghe Town

S/N	Name	Area 面积	Amount 金额	Signature of farmers	Remarks
	习玉保	0.442		习兰花	Vegetable field
	习海发	0.266		习海发	Vegetable field
	习发苟	0.162		习发苟	Vegetable field
	习冬根	0.23		习冬根	Vegetable field
	习三苟	0.212		习三苟	Vegetable field
	刘爱华	0.199		习爱华	Vegetable field
	习春保	0.199		习春保	Vegetable field
	杨招妹	0.244		杨招妹	Vegetable field
	杨兰英	0.243		杨兰英	Vegetable field
	刘发妹	0.076		刘发妹	Vegetable field
	习金保	0.324		习金保	Vegetable field
	习冬根	0.67		习冬根	Paddy field
	习三龙	0.454		习三龙	Paddy field

		0.585			Paddy field
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Wuxing Village Committee, Yonghe Town, Ji'an County (seal)

Roster of Temporary Land for Muddy Pipeline in Wuxing Village, Yonghe Town

S/N	Name	Area 面积	Amount 金额	Signature of farmers	Remarks
	刁富保	1.471		刁富保	Paddy field
	刁发华	0.594		刁发华	Paddy field
	刁九元	0.747			
	周足香	0.607		周足香	Paddy field
	刁伏保	0.828		刁伏保	Paddy field
	刁玉保	1.174		肖兰花	Paddy field
	刁龙保	0.27		刁龙保	Paddy field
	刁发苟	0.216		刁发苟	Paddy field
	刁海龙	0.441		刁海龙	Paddy field
	刁晓旭	1.404		刁晓旭	Paddy field
	刁发	0.405		刁发	Paddy field
	阮春风	0.306		阮春风	Paddy field
	阮春风	0.459		阮春风	Paddy field
	周足香	0.963		周足香	Paddy field

Wuxing Village Committee, Yonghe Town, Ji'an County (seal)

Roster of Temporary Land for Muddy Pipeline in Wuxing Village, Yonghe Town

S/N	Name	Area	Amount	Signature of farmers	Remarks
	王春发	0.207		王春发	Paddy field
	王心华	0.913		王心华	Paddy field
	王伏保	1.077		王伏保	Paddy field
	王志刚	0.374		王志刚	Paddy field
	王志强	0.373		王志强	Paddy field

井冈山经济技术开发区环境保护局

井开区环字[2018]51号

关于吉安水务集团有限公司井冈山经开区 锦源水厂一期建设工程项目环境影响 报告表的批复

吉安水务集团有限公司：

你公司报送的《井冈山经开区锦源水厂一期建设工程项目环境影响报告表》（以下简称《报告表》）收悉。经研究，现批复如下：

一、项目批复意见及基本情况

井冈山经开区经科局已以井开经科字[2017]111号文对该项目进行了备案，该项目符合国家产业政策。根据“从环境保护角度分析，本项目的建设是可行的”的《报告表》结论，在认真落实《报告表》提出的各项环保措施的前提下，同意该项目按《报告表》提供的建设地点、性质、内容、规模和污染防治对策及措施进行建设。

本次批复项目基本情况：该项目属新建项目，建设地点

— 1 —

位于井冈山经济技术开发区深圳大道与永和大道交叉口东南角(中心地理坐标为北纬 27° 00' 32", 东经 115° 00' 06")。项目源水(赣江水)经预臭氧接触池、折板絮凝平流式沉淀池、翻板滤池、后臭氧接触池、活性炭滤池、清水池处理后,形成日生产自来水 9 万 m³ 的规模,工艺过程使用液氯、PAC、PAM、石灰等原料,项目总投资 26300 万元,其中环保投资 550 万元,占总投资的 2.1%。

项目建设主要内容有:该项目为新建工程,占地面积 123 亩,建筑面积约为 12506m²,包括主体工程(净水厂工程,包括 1 座折板絮凝、平流式沉淀池,1 座翻板滤池,1 座清水池,1 座高位水池,1 座回收水池,1 座排泥池,1 座污泥浓缩池)、环保工程(废气处理设施、废水处理措施、噪声处理措施、固废存储和危废暂存场)、临时工程(施工营地)、公用工程(供电、给排水等)和辅助工程(配水管线工程、送水泵房、变配电间、加氯加药间、脱水机房、检验调度楼、门卫室等)。

二、项目建设的污染防治措施及要求

项目在建设和运行过程中必须认真落实《报告表》提出的各项环保要求,并重点做好以下几项工作:

(一) 废水污染防治

项目废水主要为生产废水、生活污水,生产废水中反冲洗水不外排,污泥浓缩池产生的上清液和污泥脱水机房产生的泥水,经沉淀处理后经园区市政污水管网排入井冈山经开区污水处理厂进一步处理,生活污水经“隔油池+化粪池”预处理后经园区市政污水管网进入井冈山经开区污水处理

— 2 —

厂进一步处理。

(二) 废气污染防治

项目运行过程中正常情况下无工艺废气产生，运行过程中员工操作不当及失误等非正常情况下会产生氯气，应根据《报告表》要求针对氯气泄漏，配备漏氯报警器和吸收装置，一旦发生严重泄氯事故，漏氯吸收装置立即投运，加氯间及氯库均按规范要求设置强制通风设施。

食堂油烟产生的废气，经静电式油烟净化处理后经专用的烟道引至楼顶排放。

(三) 噪声污染防治

项目运营期噪声源主要为泵类、鼓风机等设备产生的噪声，通过优先选用低噪声设备、对新增高噪声设备加装消声、隔声、减振设施、在机房内墙面上安装一些吸声材料及距离衰减等措施以减轻噪声排放。

(四) 固废污染防治

按“资源化、减量化、无害化”处置原则，认真落实《报告表》提出的固废收集、处置和综合利用措施。该项目一般固体废物中净水过程产生的污泥运至垃圾填埋场处理，滤池产生的废活性炭和使用过的液氯钢瓶由厂家统一回收，絮凝剂包装废料交废品收购站；生活垃圾收集后由环卫部门统一收集处理；化验室废水属于危险废物，应按照《危险废物贮存污染控制标准》（GB18597-2001）及2013修改单要求设置临时贮存场所，并定期交有危废处置资质单位进行安全处置，危废暂存库应设警示标志，做好地面防渗防腐工作，严禁露天堆放。

(五) 生态影响防治

在管道施工过程中，开挖管沟及施工机械、车辆、人员践踏等活动以及建设施工便道，会对土壤和生态环境产生影响，将破。工程结束后，应及时对临时占地进行植被恢复。

(六) 规范整治排污口及环境监测要求

按国家和我省排污口规范化整治要求设置各类排污口和标识并建档。认真制定和落实监测计划，定期开展监测，并将结果及时报送至我局。

三、项目运行和竣工验收的环保要求

项目建设必须严格执行环境保护设施与主体工程同时设计、同时施工、同时投入使用的环境保护“三同时”制度。工程建成投入试生产后，必须按规定程序自主开展竣工环保验收，并报我局备案，经验收合格后方可正式投入生产。

四、项目污染物排放标准和排放总量控制要求

(一) 废气排放执行《大气污染物综合排放标准》(GB16297-1996)表2中无组织排放监控浓度限值要求；油烟废气执行《饮食业油烟排放标准》(GB18483-2001)中的小型标准限值。

(二) 废水经厂区预处理后达到《污水综合排放标准》(GB8978-1996)表4中三级标准及井冈山经开区污水处理厂进水水质的严者要求后经市政污水管网排入井冈山经开区污水处理厂处理，处理达到《城镇污水处理厂污水排放标准》(GB18918-2002)一级A标准后尾水排入赣江。

(三) 场界噪声执行《工业企业厂界环境噪声排放标准》

(GB12348-2008)中3类标准。

(四)一般固体废物执行《一般工业固体废物贮存、处置场污染控制标准》(GB18599-2001)及其2013年修改单要求;危险废物暂存执行《危险废物贮存污染控制标准》(GB18597-2001)及其2013年修改单要求。

(五)该项目新增污染物排放总量必须满足以下控制指标要求:总量控制指标(以井开区污水处理厂外排计算) COD_{Cr} $\leq 0.099\text{t/a}$ 、 $\text{NH}_3\text{-N}$ $\leq 0.010\text{t/a}$;考核指标(以井开区污水处理厂纳管计算): COD_{Cr} $\leq 0.394\text{t/a}$ 、 $\text{NH}_3\text{-N}$ $\leq 0.030\text{t/a}$ 。

五、其它环保要求

(一)项目变更环保要求。本批复仅限于《报告表》确定的建设内容,若项目建设地点、内容、工艺、规模等发生重大变化或自批复之日起超过5年方开工建设,必须重新向我局申请办理环境保护审批手续。

(二)违法追究。对已批复的各项环境保护事项必须认真执行,如有违反,将依法追究法律责任。

(三)日常环保监管。我局将加强你公司项目建设及运行的日常监督管理工作。

井冈山经开区环境保护局

2018年8月30日

RAPID ENVIRONMENTAL ASSESSMENT (REA) CHECKLIST¹
and ENVIRONMENT CATEGORIZATION FORM

Location/Project Title:

Subproject III Jinyuan Water Plant Project of Ji'an Water Affairs Group Co., Ltd.

Subsidiary/Division: China Water Affairs Group Limited

Part I. Rapid Environmental Assessment Checklist

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
A. Project Siting Is the project area...			
<input type="checkbox"/> Densely populated?		√	There is no schools and residential area in 100 meter radius. The closest sensitive facility is Camphor tree reservoir, where is 120m away from project location.
<input type="checkbox"/> Heavy with development activities?		√	The project is in the planning industrial zone, Current it is still in underdeveloped rural area.
<input type="checkbox"/> Adjacent to or within any environmentally sensitive areas?		√	There are no natural reservoir, tourism place, place of historic near the project's location thus no environmentally sensitive areas
<input type="checkbox"/> Cultural heritage site		√	Not applicable as no Cultural heritage site in surrounding sites

¹Major indicators provided but the checklist should be adapted to the specific project or activity. More details are available from the following sources: IFC Environmental, Health and Safety Guidelines, 2007; World Bank Environmental Assessment Sourcebook (1991) and Updates; ADB Environment Assessment Guidelines, 2003.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Protected Area		√	Not applicable as no Protected Area in surrounding sites
<input type="checkbox"/> Wetland		√	Not applicable as no Wetland in surrounding sites
<input type="checkbox"/> Mangrove	√		Camphor tree reservoir, where is 120m away from project location
<input type="checkbox"/> Estuarine		√	Not applicable as no Estuarine around project site
<input type="checkbox"/> Buffer zone of protected area		√	Not applicable as no buffer zone around project site
<input type="checkbox"/> Special area for protecting biodiversity		√	Not applicable as no special area around project site
<input type="checkbox"/> Bay		√	Not applicable as no Bay around project site
B. Potential Environmental Impacts Will the Project cause...			
<input type="checkbox"/> Pollution of raw water supply from upstream wastewater discharge from communities, industries, agriculture, and soil erosion runoff?		√	Project locates at downstream of raw water supply
<input type="checkbox"/> Impairment of historical/cultural monuments/areas and loss/damage to these sites?		√	Not applicable, there are no historical/cultural monuments near the project site.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Hazard of land subsidence caused by excessive ground water pumping?		√	Not applicable, as the project utilizes primarily surface water.
<input type="checkbox"/> Social conflicts arising from displacement of communities?		√	The project land has been a parcel of reserved land authorized by government and company confirms that such land has been in idle without residents, and has not been involved any confliction or disputes.
<input type="checkbox"/> Conflicts in abstraction of raw water for water supply with other beneficial water uses for surface and ground waters?		√	Not applicable, the raw water of the project comes from the water pipeline designated by the government.
<input type="checkbox"/> Unsatisfactory raw water supply (e.g. excessive pathogens or mineral constituents)?		√	The water quality conforms to CAT-III level as specified in Environmental Quality Standards for Surface Water (GB3838-2002) (see Attachment 1 for source water test report), and water there can be used as domestic drinking water source
<input type="checkbox"/> Delivery of unsafe water to distribution system?		√	The project utilizes the standard tap water treatment processes involving coagulation – sedimentation – filtration and disinfection to treat it up to national drinking water standard
<input type="checkbox"/> Inadequate protection of intake works or wells, leading to pollution of water supply?		√	Raw water intake facility is well protected in restricted zone, prevent irrelevant people from trespassing.
<input type="checkbox"/> Over pumping of ground water, leading to salinization and ground subsidence?		√	Not applicable, the raw water of the project comes from the water pipeline designated by the government.
<input type="checkbox"/> Excessive algal growth in storage reservoir?		√	Not applicable

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Increase in production of sewage beyond capabilities of community facilities?		√	The sewage pipe network at the project site is complete. Wastewater generated during the construction period is reused by sedimentation and not discharged; Domestic sewage during the operation period is discharged into sewage treatment plant in Jinggangshan Economic and Technological Development Zone
<input type="checkbox"/> Inadequate disposal of sludge from water treatment plants?		√	Construction period: none Operation period: sludge dewatering are discharged into the sewage treatment plant in Jinggangshan Economic and Technological Development Zone
<input type="checkbox"/> Inadequate buffer zone around pumping and treatment plants to alleviate noise and other possible nuisances and protect facilities?		√	Construction period: noise level is controlled no more than 70dB (A) during the daytime, 55dB (A) during the night; No complaints about noises were received since the project started Operation period: noise level is controlled no more than 60dB (A) daytime and no more than 50dB (A) nighttime – considered no impact according GB12523-2011and GB 12348-2008 standard
<input type="checkbox"/> Impairments associated with transmission lines and access roads?		√	Electricity for the project is supplied by the municipal lines, no additional transmission line or access roads needed.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Health hazards arising from inadequate design of facilities for receiving, storing, and handling of chlorine and other hazardous chemicals.		√	<p>Waste gas: the waste gases generated during project operation are mainly oil fume from canteen and chlorine gas that may leak. According to analysis, the canteen in the project produced oil fume at a rate of 2.74 kg/a, with the concentration about 2.5 mg/m³, requiring disposal. In this project, the high-efficiency fume purification device is used to remove oil fume. After disposal, the fume emission concentration decreases to 1 mg/m³, which meets the requirements of Emission Standard of Cooking Fume (trial) (GB 18483-2001) (oil fume emission concentration ≤2 mg/m³); The raw water qualify Cat-III according to Testing Report (Attachment-1) and chlorine is used in the water treatment process. In order to ensure the safety of chlorine use, a leaked chlorine absorption room is set up, where a set of leaked chlorine absorption device with a treatment capacity of 1,000 kg Cl₂ is installed. In addition, a set of chlorine leakage alarm is set in the chlorine dosing room. Chemical management measures in the source and delivery process for the chemical, storage and management of associated hazardous waste, conform the OHS procedures, and emergency spill measures. In case of chlorine leakage, the leaked chlorine absorption device can operate immediately. The chlorine dosing room and chlorine warehouse are equipped with forced ventilation facilities.</p>

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Health and safety hazards to workers from handling and management of chlorine used for disinfection, other contaminants, and biological and physical hazards during project construction and operation?		√	Construction period: Not applicable. Operation period: For safety concerns, the project uses sodium hypochlorite instead of chlorine as a disinfectant, provides a full set of labor protection equipment for operators, and organize safety training regularly.
<input type="checkbox"/> Involuntary resettlement (physical or economic displacement) of people?		√	The land is used for utilities (water supply land), which belongs to the Land Resources Bureau of Jinggangshan Economic and Technological Development Zone, and was originally state-owned construction land. On December 20, 2019, Ji'an Water Affairs Group Co., Ltd. and the Land Resources Bureau of Jinggangshan Economic and Technological Development Zone signed the Contract for Transfer of State-owned Construction Land Use Right (see Attachment 3). The transfer price was 157 CNY/m ² , and the land use certificate was obtained (see Attachment 4). Prior to the transfer, the land has never been developed, therefore, it involves no compensation for land expropriation and demolition.
<input type="checkbox"/> Disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?		√	The project can further improve the safety of local water supply system and benefit the people, especially the vulnerable groups. In addition, new employment opportunities have been created for the local area.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Noise and dust from construction activities?	√		<p>Noise control: Adopt advanced construction technology, reasonable layout of construction equipment, install sound insulation barriers around the site, strengthen construction vehicle management, do not allow construction at night.</p> <p>Dust control: set up construction enclosures and close-meshed safety nets; sprinkle water to suppress dust, set vehicles to automatically flush.</p>
<input type="checkbox"/> Increased road traffic due to interference of construction activities?		√	Construction site is not a densely populated.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Continuing soil erosion/silt runoff from construction operations?		√	<p>solid wastes generated during project construction period are mainly packaging wastes and domestic garbage from construction personnel. The amount of packaging wastes is relatively small, so temporary stock sites are set up for unified collection before the wastes are delivered to salvage station which is handled by qualified third-party collection; domestic garbage from construction personnel is counted as 0.25 kg/person·d, with production amount of 9.13 t/a, and such garbages will be disposed by the municipal sanitation department. Solid wastes generated during operation period mainly includes sludge generated by sludge treatment process, the used liquid chlorine cylinders and domestic wastes from staff. Sludge generated in water supply process is subject to CAT-I industrial solid waste which is handled by qualified collector and contains no toxic and harmful substances. According to analysis of sludge water discharged from the setting tank, sludge cake output is 26,600 t/a, which shall be sent to and treated in the landfill with a treatment capacity 1,200 t/d. The landfill is operated by Everbright Environmental Energy (Ji'an) Co., Ltd., which is close to the Jinyuan Water Plant; the used liquid chlorine steel cylinders are subject to unified recycling by supporting manufacturers, about 146 cans per year; the number of project operators is 45, and the amount of domestic waste generated is counted as 8.21 t/a on the basis of 0.5 kg/d per person. All solid wastes shall be packaged in bags and sent to the municipal sanitation department for unified treatment. Waste transportation arrangements including whether these are undertaken by a qualified third party</p> <p>the construction of purification plant in the project will change the layout of the original green belt. In the project, we will strengthen the greening in strict accordance with the</p>

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Delivery of unsafe water due to poor O&M treatment processes (especially mud accumulations in filters) and inadequate chlorination due to lack of adequate monitoring of chlorine residuals in distribution systems?		√	Strictly implement standardized O&M management, Install online water quality monitoring equipment at the outlet of the filtration system and water treatment plant; Select multiple sampling points in distribution system, laboratory department measures chlorine residuals in distribution systems according to the requirements of the urban water quality standard CJ / T 206-2005, ensure water supply meets standard.
<input type="checkbox"/> Delivery of water to distribution system, which is corrosive due to inadequate attention to feeding of corrective chemicals?		√	The project uses PLC (Programmable Logic Controller) to control the dosing equipment, which can precisely adjust the dosage of various chemicals and avoid corrosion of the distribution system.
<input type="checkbox"/> Accidental leakage of chlorine gas?		√	The project uses sodium hypochlorite instead of chlorine gas, which is safer to store and use. For the accidental leakage of sodium hypochlorite, the project formulated a comprehensive emergency response plan, including preventive measures, emergency measures and accident aftermath.
<input type="checkbox"/> Excessive abstraction of water affecting downstream water users?		√	Not applicable, the raw water of the project comes from the water pipeline designated by the government.
<input type="checkbox"/> Competing uses of water?		√	Not applicable, the raw water of the project comes from the water pipeline designated by the government.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Increased sewage flow due to increased water supply	√		Waste water: the waste water generated during project construction mainly includes the site waste water and the domestic waste water from construction personnel. The construction waste water is discharged into the temporary detritus tank set in the site for disposal, and the supernatant will be reused without being discharged; the domestic waste water from construction personnel is used as farm manure after being disposed in the dry pail latrine. The waste water generated during the operation of the project is mainly filter backwash water from the purification plant and sludge water from the setting tank after the sediment process. The filter backwash water is discharged into the water recycling tank for recycling without external discharge; the sludge water from the setting tank is discharged into the sludge treatment facilities; the supernatant from the sludge thickener and the filtrate from the sludge dewatering room are discharged into the sewage treatment plant in Jinggangshan Economic and Technological Development Zone.
<input type="checkbox"/> Increased volume of sullage (wastewater from cooking and washing) and sludge from wastewater treatment plant		√	Water treatment plant contribute no cooking related waste and very little amount of domestic sewage.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		√	The projects are all constructed based on the urban planning population growth and current actual water demand, and they will effectively promote the local economy and the users living standard. But the project construction and operation will not result in a large population gathering to increase the burden on the entire public facilities.
<input type="checkbox"/> Social conflicts if workers from other regions or countries are hired?		√	The project only provides a few job opportunities to local residents.

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during operation and construction?		√	<p>Construction period:</p> <p>Flying dust: it is mainly generated during the construction, and the influence range is within 100 m around the construction area. The project is located in rural areas. The impact of flying dust on the ambient air quality can be greatly reduced by taking measures such as sprinkling-driven dust suppression and setting fences no less than 1.2 m high, so as to ensure that the concentration of particulate matter at the highest point around the site was $< 1.0 \text{ mg/m}^3$. No complaint about flying dust from construction has been received since the project commenced</p> <p>Operation period:</p> <p>Waste water: the waste water generated during project construction mainly includes the site waste water and the domestic waste water from construction personnel. The construction waste water is discharged into the temporary detritus tank set in the site for disposal, and the supernatant will be reused without being discharged; the domestic waste water from construction personnel is used as farm manure after being disposed in the dry pail latrine. The waste water generated during the operation of the project is mainly filter backwash water from the purification plant and sludge water from the setting tank after the sediment process. The filter backwash water is discharged into the water recycling tank for recycling without external discharge; the sludge water from the setting tank is discharged into the sludge treatment facilities; the supernatant from the sludge thickener and the filtrate from the sludge dewatering room are discharged into the sewage treatment plant in Jinggangshan Economic and Technological Development Zonet.</p> <p>Waste gas: the waste gases generated during project operation are mainly oil fume from canteen and chlorine gas that may leak. According to analysis, the canteen in the project produced oil fume at a rate of 2.74 kg/a, with the</p>

Screening Questions	Yes	No	Remarks (Use this section for relevant information and mitigating measures to be undertaken)
<input type="checkbox"/> Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?		√	<p>The project has a comprehensive Contingency Plan with details including:</p> <ul style="list-style-type: none"> - Emergency district - Emergency repose team - First-aid and relevant equipment - Reporting mechanism, emergency line to fire, police, transportation departments, and local regulators - Emergency control measures - Evacuation plan - Facility shut down - Emergency training programming - Public awareness program especially to those nearby facilities
C. Information on Existing/Associated Facilities			
Does project involve facilities and/or business activities that already exist or are under construction?	√		An environmental and social compliance audit prepared by CWA was submitted to ADB
Does the proposed subproject include associated facilities that are integral to the operations of the ADB funded subproject?		√	Phase I is not an ADB funded project

Climate Change and Disaster Risk Questions	Yes	No	Remarks
The following questions are not for environmental categorization. They are included in this checklist to help identify potential climate and disaster risks.			
Is the Project area subject to hazards such as earthquakes, floods, landslides, tropical cyclone winds, storm surges, tsunami or volcanic eruptions and climate changes?		√	They will demonstration in project feasibility study and sometimes special demonstration will be conducted on some projects.
Could changes in temperature, precipitation, or extreme events patterns over the Project lifespan affect technical or financial sustainability (e.g., changes in rainfall patterns disrupt reliability of water supply; sea level rise creates salinity intrusion into proposed water supply source)?		√	The project site belongs to the south subtropical maritime monsoon climate area. It is mild and warm all year round. Due to the influence of mountains, there is less chance of being directly hit by typhoons every summer.
Are there any demographic or socio-economic aspects of the Project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, ethnic minorities, women or children)?		√	Primarily industrial site
Could the Project potentially increase the climate or disaster vulnerability of the surrounding area (e.g., by using water from a vulnerable source that is relied upon by many user groups, or encouraging settlement in earthquake zones)?		√	The project has no impact on the climate, nor does it involve land acquisition and resettlement.
Hazards are potentially damaging physical events		√	

II. ENVIRONMENTAL IMPACT CATEGORY AND REQUIREMENTS

IMPACT CATEGORY			Action
	A	With potential significant impacts	Exclude for ADB financing. For subprojects not financed by ADB, EIA needs to be prepared to comply with all national laws
√	B	With less significant impacts	Comply with PIAL and (i) ADB SPS SR1 including IEE preparation & submission, and (ii) compliance with national laws
	C	With minimal or no impacts	Comply with national laws and ADB's PIAL

Prepared by (Responsible Officer):	Approved by(ESMS Manager):
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Date:	Date: