

First Round Stakeholder Engagement for Environmental and Social Impact Assessment on Sichuan Water Supply and Sanitation PPP Project

March 1st, 2019

(Draft)

I. Project Overview

Name: Sichuan Water Supply and Sanitation PPP Project

Location: Jingyang District, Deyang City, Sichuan Province

Construction Unit: Housing and Urban-Rural Construction Bureau of Jingyang District, Deyang City

Construction Type: new construction, reconstruction and expansion

Investment: 131,600

Main Construction Contents: to reconstruct and newly-built facilities for water supply and drainage, and to evaluate existing assets in 11 villages and towns in Jingyang District of Deyang as well as to improve certain part of water environment in the area. Project Contents: New construction or reconstruction of drinking system (water intake facilities, water production and water supply plant stations, water transmission and distribution network, household facilities)¹, drainage system (centralized or decentralized treatment facilities, collection network, household facilities), other water environment improvement projects (local river regulation, toilet reconstruction, etc.) and ‘cloud platform’ of intelligent management. At the same time, stock projects are included, namely, the existing water supply and drainage facilities in towns and villages, the existing drinking system facilities (water supply stations and water supply network), and the sewage pipeline network under construction. According to the preliminary implementation plan of PPP, during the concession period, all the stock subprojects are transferred to the PPP Project Company for operation and maintenance, and projects under construction will be

transferred after completion. Sewage treatment facilities and water supply stations in the stock projects need to be reconstructed by the project company.

II. Summary of potential impacts of construction projects on the environment and management measures

Water Supply

1. In Construction period

(1) Exhaust gas

Construction dust: During the whole construction period, the dust generated will be controlled by a series of measures to reduce its impact on ambient air. The measures include: enclosing construction site; using dense mesh safety network; regular water spraying on the ground; timely removal of slag and spoil scattered on the road surface; using hard pavement for major transport routes if possible; forbidding overload of dump truck, garbage truck and other transport vehicles; tire-cleaning before leaving the site; covering exposed materials with blanket; and placing dust-proof cushions at the exit of construction area.

Mechanical exhaust: During the construction period, the use of motor vehicles to transport raw materials, equipment and construction machinery and other equipment will emit certain amount of exhaust gas, which is small in quantity and intermittent. Considering the good diffusion condition of the project construction site, this kind of exhaust gas can meet emission standards.

(2) waste water

During the construction period, wastewater generated in construction will be reused after treatment in temporary sedimentation basin, and will not be discharged; wastewater in pressure test of the pipe network will be reused in construction and will be discharged neither; and sanitary wastewater from constructors will be treated by the existing sewage treatment facilities of the surrounding farmers.

(3) Noise

Construction noise will be controlled by the following measures: making a

reasonable construction time arrangement and a construction scheme; prohibiting construction at night; selecting low noise construction technology, equipment and construction machinery; carefully completing the floor plan and following civilized construction; strictly controlling noise in accordance with relevant standards; taking noise elimination and insulation measures when necessary. All above are aimed to effectively prevent the noise disturbing people.

(4) solid waste

Solid waste generated during construction mainly include earthwork, construction waste and domestic garbage. Part of the earthwork is used for backfilling of the site, and the rest is to be disposed of. The part to be disposed is transported to the designated site. Construction waste and domestic garbage, after centralized collection, are regularly sent to the domestic waste disposal site for centralized processing.

(5) traffic

During the construction period, pipe network construction has a significant impact on road traffic. It should be carefully planned and promptly constructed. Pipe jacking may be adopted. Before construction, temporary driving routes should be worked out in consultation with local traffic management departments, residents in the affected areas should be informed in advance, signs should be erected at the construction site and special personnel should be designated to guide traffic. In addition, to prevent traffic jams, measures to ensure the management of construction and to shorten the construction period and other feasible means should also be taken into consideration.

(6) safety

Find out the exact location of underground installations, such as water supply and drainage, gas, power cables, telecommunication lines, etc. And the designer, the supervisor and the project leader should recheck them on the site before excavation.

The main construction scope of this project is located in rural area and its

surroundings. Thus, the existing facilities can be used to accommodate the workers and construction camps are not needed. Constructors for this project are mainly local people; migrant workers are few. Thus, there will be no problems relating to influx of workers (normally due to immigration of migrant workers' family members), nor pressure on community services. In addition, labor-related laws and various criminal offences (sexual assault for instance) in China are comprehensive in regulations and strict in enforcement.

2. In Operation Period

(1) Wastewater

Wastewater in the project will be treated to meet the standards, and then, part of it will be reused for farmland irrigation and part of it will be discharged into rivers.

(2) Exhaust Gas

Only a small amount of chlorine dioxide will be generated during the project due to the use of disinfectants, which will have little impact on ambient air and public health.

(3) Noise

After completion, the project will be on operation period, during which, all kinds of pumps, by placing sound insulation cover and vibration attenuation cushion, using acoustic absorption materials in walls to fulfill plants sound insulation, and strengthening maintenance during operation, can achieve standard discharge. Thus, there will be little impact on the surrounding environment.

(4) solid waste

During the operation period of the project, solid wastes are sand, sludge and domestic garbage. screenings is transported to the local landfill for landfill treatment; sludge will be disposed of properly and domestic garbage are regularly cleared and transported by the environmental sanitation department.

Drainage

1. In Construction period

(1) Exhaust gas

Construction dust: During the whole construction period, the dust generated will be controlled by a series of measures to reduce its impact on ambient air. The measures include: closing construction site; using dense mesh safety network; regular water spraying on the ground; timely removal of slag and soil scattered on the road surface; using hard pavement for major transport routes if possible; forbidding overload of dump truck, garbage truck and other transport vehicles; tire-cleaning before leaving the site; covering exposed materials with blanket; and placing dust-proof cushions at the exit of construction area.

Mechanical exhaust: During the construction period, the use of motor vehicles to transport raw materials, equipment and construction machinery and other equipment will emit certain amount of mechanical exhaust gas, which is small in quantity and discontinuous in time. Considering the good diffusion condition of the project construction site, this kind of mechanical exhaust can meet emission standards.

(2) waste water

During the construction period, wastewater generated in construction will be reused after treatment in temporary sedimentation basin, and will not be discharged; wastewater in pressure test of the pipe network will be reused in construction and will be discharged neither; and sanitary wastewater from constructors will be treated by the existing sewage treatment facilities of the surrounding farmers.

(3) Noise

Construction noise will be controlled by the following measures: making a reasonable construction time arrangement and a construction scheme; prohibiting construction at night; selecting low noise construction technology, equipment and construction machinery; carefully completing the floor plan and following civilized construction; strictly controlling noise in accordance with relevant standards; taking noise elimination and insulation measures when necessary. All above are aimed to

effectively prevent the noise disturbing people.

(4) solid waste

Solid waste generated during construction mainly include earthwork, construction waste and domestic garbage. Part of the earthwork is used for backfilling of the site, and the rest is abandoned. The abandoned part is transported to the designated site. Construction waste and domestic garbage, after centralized collection, are regularly sent to the domestic waste disposal site for centralized processing.

(5) traffic

During the construction period, pipe network construction has a significant impact on road traffic. It should be carefully planned and promptly constructed. Pipe jacking may be adopted. Before construction, temporary driving routes should be worked out in consultation with local traffic management departments, residents in the affected areas should be informed in advance, signs should be erected at the construction site and special personnel should be set up to guide traffic. In addition, to prevent traffic jams, measures to ensure the management of construction and to shorten the construction period and other feasible ones should also be taken into consideration.

(6) safety

Find out the exact location of underground installations, such as water supply and drainage, gas, power cables, telecommunication lines, etc. And the designer, the supervisor and the project leader should recheck them on the site before excavation.

The main construction scope of this project is located in rural area and its surroundings. Thus, the existing facilities can be employed and construction camps are not needed. Constructors for this project are mainly local people; migrant workers are few. Thus, there will be no problems out of population increasing (normally due to immigration of migrant workers' family members), nor pressure on community services. In addition, labor-related laws and various criminal offences (sexual assault for instance) in China are comprehensive in regulations and strict in enforcement.

2. In Operation Period

(1) Wastewater

Wastewater in the project will be treated to meet the standards, and then, part of it will be reused for farmland irrigation and part of it will be discharged into sewage river

(2) exhaust gas

During the operation period, exhaust gas in sewage treatment station mainly refers to stench, such as H_2S , NH_3 and etc. The project temporarily sets a 50-meter-wide sanitary protection zone, and at the same time, all stench-producing units are sealed and covered, deodorizing devices are installed, exhaust fans are installed, and green plants are planted. By taking the above measures, the sewage treatment station will have very limited impact on ambient air.

(3) Noise

After completion, the project will be in operation period, during which, the main blowing machines, pumps for sludge concentrating and dewatering system and other kinds within the station can achieve standard discharge by taking measures as placing sound insulation cover and vibration attenuation cushion, using acoustic materials in walls to fulfill plants sound insulation, and strengthening maintenance during operation. Thus, impact on the surrounding environment will be very limited.

(4) solid waste

During the operation period of the project, grid slag, sediment, sludge and domestic waste are mainly produced. Slag and sediment are transported to the local landfill for landfill treatment; sludge is dewatered and transported to the designated site for unified treatment before being transported to the sludge disposal center for advanced treatment and disposal; domestic waste is regularly cleared and transported by the environmental sanitation department.

III. Major Means for Public Opinions

(1) Inquiry objects and contents: objects are mainly residents and other

stakeholders in the surrounding areas of the project. Welcome comments and suggestions from all walks of life on the environmental protection work of the project.

(2) Inquiry means: the public can submit opinions or consult relevant information to the construction unit by telephone, letter, e-mail or directly visit to the construction unit.

Contact information of the construction unit:

Contact person: Zhou Li

Tel: 0838-2506351

E-mail: dyjyppp@163.com

Address: B107, People's Government of Jingyang District, Deyang City

III. Scope and Main Matters for Public Opinions

1. Scope for public opinions

Area within 100 meters around the construction site of water supply project is sensitive spot, and area within 200 meters around the construction site of drainage project is sensitive spot.

2. Main matters for public opinions

From the point of view of environmental protection, what attitude do you have towards this project? Please briefly explain the reasons (see appendix 1: the questionnaire).

3. Stakeholders analysis

According to the water supply system and drainage system of the project, the environmental stakeholders involved in the project are analyzed. The environmental stakeholders involved in the project are as follows:

Table 1-1 Environmental Stakeholders Analysis Form (Public) of PPP (Water Supply) Project for water environment improvement in Jingyang District, Deyang City

Towns	Villages/communities	Names of stakeholders	Stakeholders (exact people)	Predicted households	Predicted population	Language	Inform methods	Special requirements	Remarks
Xiaoquan	Downtown of xiaoquan town	downtown of xiaoquan town	residents within 200 meters of Xiaoquan water plant	80	320	Mandarin Chinese	Posting and online publicity		Water supply pumping station
	Min'an Village	villagers in Min'an	residents within 200 meters of Min'an water supply station	30	120	Mandarin Chinese	Posting and online publicity		
	Lilang villiage	villagers in Lilang	residents within 200 meters of Liyuan water supply station	40	120	Mandarin Chinese	Posting and online publicity		

Tianyuan	Baijiang Villiage	villagers in Baijiang	residents within 200 meters of Jingfu water supply station	10	40	Mandarin Chinese	Posting and online publicity		
Xiaogan	Downtown of xiaoquan town	Xiaogan Nursing house	all people in the Nursing house	/	80	Mandarin Chinese	Posting and online publicity	<u>Specializ</u> <u>ed persons</u> <u>will be sent to</u> <u>the nursing</u> <u>house and</u> <u>answer</u> <u>questions</u> <u>during the</u> <u>elderly's rest</u> <u>time</u>	
		residents of Xiaogan town	residents within 200 meters of Xiangnan water supply station	20	80	Mandarin Chinese	Posting and online publicity		
Huangxu	Downtown of Huangxu town	residents of Huangxu town	households within 200 meters of Huangxu Waterworks	10	40	Mandarin Chinese	Posting and online publicity		
	Xinhua Village	villagers of Xinhua	households within 200 meters of Hongshan water supply station	15	60	Mandarin Chinese	Posting and online publicity		
	Shuangxuan Village	the Wangs Temple	villagers within 200 meters of Huilong water supply station	15	60	Mandarin Chinese	Posting and online publicity		
	Xinlong Village	villagers of Xinlong	villagers within 200 meters of Xintai water supply station	20	80	Mandarin Chinese	Posting and online publicity		
	Wuquan Village	Villagers of wuquan	villagers within 200 meters of Wuquan water	10	40	Mandarin Chinese	Posting and online publicity		

			supply station						
	Daquan Village	villagers of Daquan	villagers within 200 meters of Daquan water supply station	45	180	Mandarin Chinese	Posting and online publicity		
	Dongtai Village	villagers of Dongtai	villagers within 200 meters of Dongtai water supply station	40	160	Mandarin Chinese	Posting and online publicity		
	Chaoyang Village	villagers of Chaoyang	villagers within 200 meters of Chaoyang water supply station	50	150	Mandarin Chinese	Posting and online publicity		
Donghu	Donghu water supply station	residents of Donghu town	households within 200 meters of Donghu water supply station	30	120	Mandarin Chinese	Posting and online publicity		
	Dadi water supply station	residents of Donghu town	households within 200 meters of Donghu water supply station	15	60	Mandarin Chinese	Posting and online publicity		
Yangjia	Xinlong water supply station	villagers of Xinlong	households within 200 meters of Xinlong water supply station	20	80	Mandarin Chinese	Posting and online publicity		
	Yangjia water supply station	residents of downtown	households within 200 meters of Yangjia water supply station	20	80	Mandarin Chinese	Posting and online publicity		
	Fengcheng water supply station	residents of Fengcheng village	households within 200 meters of Fengcheng water supply station	10	40	Mandarin Chinese	Posting and online publicity		
	Changsheng water supply station	villagers of Changjiang	households within 200 meters of Changsheng water supply station	25	100	Mandarin Chinese	Posting and online publicity		
Dexin	Wuxing water supply station	Wuxing Village	households within 200 meters of Wuxing water	15	60	Mandarin Chinese	Posting and online publicity		

			supply station						
	Fuxing water supply station	Fuxing Village	households within 200 meters of Fuxing water supply station	15	60	Mandarin Chinese	Posting and online publicity		
	Xinyu water supply station	Xinyu Village	households within 200 meters of Xinyu water supply station	20	80	Mandarin Chinese	Posting and online publicity		
	Shengli water supply station	Shengli Village	households within 200 meters of Shengli water supply station	15	60	Mandarin Chinese	Posting and online publicity		
	Bailong Town	residents of Bailong	households within 200 meters of Bailong water supply station	20	80	Mandarin Chinese	Posting and online publicity		
	Guoyuan Village	villagers of Guoyuan	households within 200 meters of Guoyuan water supply station	15	60	Mandarin Chinese	Posting and online publicity		
	Songbai Village	villagers of Songbai	households within 200 meters of Guoyuan water supply station	10	40	Mandarin Chinese	Posting and online publicity		
	Qingjin Village	villagers of Qingjin	households within 200 meters of Qingjin water supply station	15	60	Mandarin Chinese	Posting and online publicity		
	Longxing Bridge Village	villagers of Longxing Bridge	households within 200 meters of Longxing Bridge water supply station	5	20	Mandarin Chinese	Posting and online publicity		
	Qinghe Village	villagers of Qinghe	households within 200 meters of Qinghe water supply station	10	40	Mandarin Chinese	Posting and online publicity		
Shuangdo	Longdong Village	villagers of	Residents within 200	10	40	Mandarin	Posting and online		

ng		ongdong	meters of Longdong water supply station			Chinese	publicity		
	Liangshui Village	Villagers of Liangshui	residents within 200 meters of Liangshui water supply station	20	80	Mandarin Chinese	Posting and online publicity		
	Zhongxin Village	Villagers of Zhongxin	residents within 200 meters of Zhongxin water supply station	15	60	Mandarin Chinese	Posting and online publicity		
Xinzhong	Liuma Village	Villagers of Liuma	residents within 200 meters of Xinliu water supply station	15	60	Mandarin Chinese	Posting and online publicity		
Hexin	Longya Village	Villagers of Longya	residents within 200 meters of Hero Ridge water supply station	20	80	Mandarin Chinese	Posting and online publicity		
	Dezhong Village	Villagers of Changying	residents within 200 meters of Changling water supply station	10	40	Mandarin Chinese	Posting and online publicity		
	Dezhong Village	Villagers of Dezhong	residents within 200 meters of Dezhong water supply station	15	60	Mandarin Chinese	Posting and online publicity		
	Xinmin Village	Villagers of Xinmin	residents within 200 meters of Xinmin water supply station	15	60	Mandarin Chinese	Posting and online publicity		
Bailong	Bailong Town	Surrounding farmers	surrounding farmers of proposed waterworks	1	10	Mandarin Chinese	Posting and online publicity		Proposed waterworks

Table 1-2 Environmental Stakeholders Analysis Form (Public) of PPP (Water Drainage) Project for Water Environment Control in Jingyang District, Deyang City

Category	Towns	Villages/communities	Names of stakeholders	Stakeholders (exact people)	Predicted households	Predicted population	Language	Inform methods	Special requirements	Remarks	
Sewage treatment plant	Hexin	Yongxin Village	villagers of Yongxin	villagers within 200 meters of the sewage treatment plant in Yongxin Village, Hexin Town	20	80	Mandarin Chinese	Posting and online publicity			
		Xiaohe Village	villagers of Xiaohe	villagers within 200 meters of the sewage treatment plant in Xiaohe Village, Hexin Town	22	88	Mandarin Chinese	Posting and online publicity			
		downtown area	the Cais yard	villagers within 200 meters of the sewage treatment plant in Hexin Town	11	44	Mandarin Chinese	Posting and online publicity			
		Changshou village	Dezhong	villager of Dezhong	villagers within 200 meters of the sewage treatment plant in Changshou Village, Hexin Town	60	240	Mandarin Chinese	Posting and online publicity		
				students and the whole faculty of New Changshou Hope Primary School	southeast of the sewage treatment plant in Changshou Village			Mandarin Chinese	Posting and online publicity	Use legend	School
	Shuan	Longdong	villagers of	villagers within 200	60	240	Mandarin	Posting and			

	gdong	Village	Longdong	meters of the sewage treatment plant in Longdong Village, ShuangdongTown			Chinese	online publicity		
		Zuanshi Village	Villagers of Zuanshi	Villagers within 200 meters of the sewage treatment plant in Zuanshi Village, Shuangdong Town	28	112	Mandarin Chinese	Posting and online publicity		
		Downtown area	Residents of downtown	Villagers within 200 meters of the sewage treatment plant in downtown area of Shuangdong	18	72	Mandarin Chinese	Posting and online publicity		
		Zhongxin Village	Villagers of Zhongxin	Villagers within 200 meters of the sewage treatment plant in Zhongxin Village, Shuangdong Town	12	48	Mandarin Chinese	Posting and online publicity		
	Xinzhong Town	Baihe Village	Villagers of Baihe	Villagers within 200 meters of the sewage treatment plant in Baihe Village, Xinzhong Town	22	88	Mandarin Chinese	Posting and online publicity		
		Ma'an Village	Villagers of Ma'an	Villagers within 200 meters of the	31	124	Mandarin Chinese	Posting and online		

				sewage treatment plant in Ma'an Village, Xinzhong Town				publicity		
Donghu	Xinhua Village	Villagers of Xinhua	Villagers within 200 meters of NO. 1 sewage treatment plant in Xinzhong Town	14	48	Mandarin Chinese	Posting and online publicity			
			Villagers within 200 meters of NO. 2 sewage treatment plant in Xinzhong Town	23	92	Mandarin Chinese	Posting and online publicity			
Huangxu	Dongtai (Fuxing) Village	Villagers of Fuxing	Villagers within 200 meters of the sewage treatment plant in Dongtai (Fuxing), Huangxu Town	32	128	Mandarin Chinese	Posting and online publicity			
	Chaoyang Village	Villagers of Chaoyang	Villagers within 200 meters of the sewage treatment plant in Chaoyang, Huangxu Town	5	20	Mandarin Chinese	Posting and online publicity			
		Gas Company		Villagers within 200 meters of the sewage treatment plant in Chaoyang, Huangxu Town			Mandarin Chinese	Posting and online publicity	Interview	Company

	Tianyu an	Huajing Village	Villagers of the Tangs Yard	Villagers within 200 meters of NO. 1 sewage treatment plant in Huajing Village, TianyuanTown	34	136	Mandarin Chinese	Posting and online publicity		
			The Zhous old Yard	Villagers within 200 meters of NO. 2 sewage treatment plant in Huajing Village, TianyuanTown (tentative)	27	108	Mandarin Chinese	Posting and online publicity		
	Xieyue Village	Farm	Sensitive spot within 200 meters of NO. 2 sewage treatment plant in Huajing Village, TianyuanTown (tentative)			Mandarin Chinese	Posting and online publicity	Interview	Company	
		Villagers and businessmen in Xieyue	Sensitive spot within 200 meters of the sewage treatment plant in Xieyue Village, TianyuanTown (tentative)	25	270	Mandarin Chinese	Posting and online publicity			
		Gas station	Sensitive spot within 200 meters of the sewage treatment			Mandarin Chinese	Posting and online publicity	Interview	Company	

				plant in Xieyue Village, TianyuanTown (tentative)						
Xiaogan	Hongfu Village	Fufeng Village	Villagers within 200 meters of the sewage treatment plant in Hongfu, Xiaogan Town	12	48	Mandarin Chinese	Posting and online publicity		Secondary Water Conservation District 200 meters	
		Xingkun Machinery	Sensitive spot within 200 meters of the sewage treatment plant in Hongfu, Xiaogan Town			Mandarin Chinese	Posting and online publicity		Company	
	Gonghe Village	The Yings Yard	Villagers within 200 meters of the sewage treatment plant in Gonghe, Xiaogan Town	25	100	Mandarin Chinese	Posting and online publicity			
		Sihai electromechanical Co.	Sensitive spot within 200 meters of the sewage treatment plant in Gonghe, Xiaogan Town			Mandarin Chinese	Posting and online publicity		Company	
	Lingmiao Village	The Xiaos Yard	Villagers within 200 meters of the sewage treatment plant in Lingmiao, Xiaogan Town	35	140	Mandarin Chinese	Posting and online publicity			
	Lianhe Village	Villagers and	Sensitive spot within	214	700	Mandarin	Posting and		Small	

			businessmen of Lianhe	200 meters of the sewage treatment plant in Lianhe, Xiaogan Town			Chinese	online publicity		business
		Huanghe Village	Villagers of Huanghe	Villagers within 200 meters of the sewage treatment plant in Huanghe, Xiaogan Town	300	900	Mandarin Chinese	Posting and online publicity		
Yangjia		Gaodou Village	Villagers of Gaodou	Villagers within 200 meters of the sewage treatment plant in Gaodou Village, Xiaogan Town	18	72	Mandarin Chinese	Posting and online publicity		
		Nanshu Village	The Yangs Yard	Villagers within 200 meters of the sewage treatment plant in Nanshu Village, Yangjia Town	12	48	Mandarin Chinese	Posting and online publicity		In Water Conservati on District
			Driving School	Sensitive spot within 200 meters of the sewage treatment plant in Nanshu Village, Yangjia Town			Mandarin Chinese	Posting and online publicity	Frequent use of legend	School
		Qinghua Village	the Xies Yard	Villagers within 200 meters of the sewage treatment	28	112	Mandarin Chinese	Posting and online publicity		

				plant in Qinghua Village, Yangjia Town						
Pump Station	Xinzhong	Downtown area	Jiayi Renewable Energy Recycling Station	Sensitive spot within 50 meters of NO. 1 pump station in Xinzhong Town	1	5	Mandarin Chinese	Posting and online publicity	Interview	Company
			Villagers and businessmen in downtown	Sensitive spot within 200 meters of NO. 2 pump station in Xinzhong Town	23	40	Mandarin Chinese	Posting and online publicity	Interview	Small business
	Huangxu	Downtown area	Villagers and businessmen in downtown	Villagers within 200 meters of the pump station in downtown area of Huangxu	32	128	Mandarin Chinese	Posting and online publicity	Interview	Small business

IV. Information Release

Project Stage	Information to be publicized	Approaches to be taken	Time	Location	Target audience	Percentage of accessibility
Project feasibility stage: before the final draft of the EIA outline	Project Summary Stakeholder Participation plan	posting bulletin; online publicizing; written notices.	Feb. 20 th – Mar. 20 th	All administrative village committees involved, Housing and Urban-Rural Construction Bureau of Jingyang District, Deyang City	All the residential areas/hospitals/schools involved under the jurisdiction of administrative villages and surrounding institutions	95% of the affected persons were notified via bulletin and written notice; in writing; the rest via online publicity.
Project feasibility stage: after completion of the preliminary draft of EIA document.	Environmental Social Assessment Report, Environmental Social Management Plan, Environmental Social Management Framework, Environmental Social Commitment Plan, Stakeholder Participation Plan	posting bulletin; online publicizing; written notices.	Mar. 31 st	All the township governments involved, the official websites of the Housing and Urban-Rural Construction Bureau of Jingyang District, Deyang City, and the <i>Deyang Daily</i> .	All the residential areas/hospitals/schools involved under the jurisdiction of administrative villages and surrounding institutions	95% of the affected persons were notified via bulletin and written notice; in writing; the rest via online publicity.

V. Public Consultation

Project Stage	Contents	Methods	Date	Groups (Each person for Environment assessment/Feasibility/Social assessment and three persons in one group)	Villages involved	Target audience	Units in charge
Project feasibility stage: before the final draft of the EIA outline	Potential impacts on environment and society of the project	Symposium and Questionnaire (Project general information and its impacts will be presented on the symposium, and relevant questions will be answered; questionnaire will be given out and requirement for filling will be explained as well.)	Mar. 1 st , 2019.	Group 1	Longxin Bridge Village	All affected residents/hospitals/schools/public institutions in the administrative villages within the project area.	the Project Office
					Songbai Village		
					Xiangyang Village		
					Guoyuan Village		
				Group 2	Honghua Village		
					Qingjin Village		
					Nangui Village		
					residents' committee of Bailong Town		
				Group 3	Qinghe Village		
					Longdong Village		
					Dongmei Village		
					residents' committee of Shuangdong Town		

Project Stage	Contents	Methods	Date	Groups (Each person for Environment assessment/Feasibility/Social assessment and three persons in one group)	Villages involved	Target audience	Units in charge
Project feasibility stage: before the final draft of the Social Assessment outline	Potential impacts on environment and society of the project	Symposium and Questionnaire (Project general information and its impacts will be presented on the symposium, and relevant questions will be answered; questionnaire will be given out and requirement for filling will be explained as well.)	Mar.2 nd , 2019.	Group 1	Guangping Village	All affected residents/hospitals/schools/public institutions in the administrative villages	the Project Office
					Jianglin Village		
					Jinqiao Village		
					Mianhe Village		
				Group 2	Sanhe Village		
					Shuangyuan Village		
					Xinlong Village		
					Xintai Village		
				Group 3	Xinxin Village		
					residents' committee of Huangxu Town		
					Fugui Village		
					Hongyang Village		

Project Stage	Contents	Methods	Date	Groups (Each person for Environment assessment/Feasibility/Social assessment and three persons in one group)	Villages involved	Target audience	Units in charge
Project feasibility stage: before the final draft of the Social Assessment outline	Potential impacts on environment and society of the project	Symposium and Questionnaire (Project general information and its impacts will be presented on the symposium, and relevant questions will be answered; questionnaire will be given out and requirement for filling will be explained as well.)	Mar.3 rd , 2019.	Group 1	Longquan Village	All affected residents/hospitals/schools/public institutions in the administrative villages within the project area.	the Project Office
					Shengli Village		
					Wenquan Village		
					Wuxing Village		
				Group 2	Xinyu Village		
					Xinguang Village		
					Changjiang Village		
					Bayi Village		
				Group 3	Changyuan Village		
					Yuxing Village		
					Gaoqiao Village		
					Jianghe Village		

Project Stage	Contents	Methods	Date	Groups (Each person for Environment assessment/Feasibility/Social assessment and three persons in one group)	Villages involved	Target audience	Units in charge
Project feasibility stage: before the final draft of the Social Assessment outline	Potential impacts on environment and society of the project	Symposium and Questionnaire (Project general information and its impacts will be presented on the symposium, and relevant questions will be answered; questionnaire will be given out and requirement for filling will be explained as well.)	Mar.5 th , 2019.	Group 1	Jinji Village	All affected residents/hospitals/schools/public institutions in the administrative villages within the project area.	the Project Office
					Lilang Village		
					Min'an Village		
					Longli Village		
				Group 2	Wuhui Village		
					Xiaoquan Village		
					Yongquan Village		
					residents' committee of Xiaogan Town		
				Group 3	Gonghe Village		
					Heping Village		
					Hongfu Village		
					Huanghe Village		

Project Stage	Contents	Methods	Date	Groups (Each person for Environment)	Villages involved	Target audience	Units in charge
Project feasibility stage: before the final draft of the Social Assessment outline	Potential impacts on environment and society of the project	Symposium and Questionnaire (Project general information and its impacts will be presented on the symposium, and relevant questions will be answered; questionnaire will be given out and requirement for filling will be explained as well.)	Mar.6 th , 2019.	Group 1	Lingmiao Village	All affected residents/hospitals/schools/public institutions in the administrative villages within the project area.	the Project Office
					Yangliu Village		
					Yinshan Road Village		
					Lianhe Community		
				Group 2	Fengcheng Village		
					Gaodou Village		
					Nanshu Village		
					Qinghua Village		
				Group 3	Xinlong Village		
					Yangjia Village		
					residents' committee of Yangjia Town		
					Antang Village		

Project Stage	Contents	Methods	Date	Groups (Each person for Environment assessment/Feasibility/Social assessment and three persons in one group)	Villages involved	Target audience	Units in charge
Project feasibility stage: before the final draft of the Social Assessment outline	Potential impacts on environment and society of the project	Symposium and Questionnaire (Project general information and its impacts will be presented on the symposium, and relevant questions will be answered; questionnaire will be given out and requirement for filling will be explained as well.)	Mar.7 th , 2019.	Group 1	Bailian Village	All affected residents/hospitals/schools/public institutions in the administrative villages within the project area.	the Project Office
					Chadian Village		
					Jianshan Village		
					Leijing Village		
				Group 2	Longju Village		
					Gaozhi Villiage		
					Baijiang Village		
					Huajing Village		
				Group 3	Wangyi Village		
					Xieyue Village		
					Diaoqiao Village		
					Gaohuai Village		

VI. Complaints Mechanism

On the basis of the existing complaint mechanism, the project offices of cities and counties have set up complaint mechanism on environment for the project to ensure its smooth and effective implementation. The basic channels are as follows:

Phase 1: When the project stakeholders are dissatisfied with the project environment, they can make oral or written complaints to the project panel of village collectives, village committee or street/township street; Oral complaints should be handled and recorded by the project panel of village collectives, village committee or street/township street. And the village committees or streets/township streets should deal with them within one week.

Phase 2: When the decision of Phase 1 is unsatisfactory, the complaint can be appealed to the project owner after the stakeholder receives the decision; the project owner should make a settlement within 2 weeks;

Phase 3: When the decision of Phase 2 is still unsatisfactory, the complaint can be appealed to the Project Office of Jingyang District; the Project Office of Jingyang District should make a settlement within 2 weeks;

If the stakeholders of the project are not satisfied with the existing complaint appeal procedure or the decision at any stage, the affected person may directly bring a suit to the civil court.

The Project Office of Jingyang District, Deyang city and the project owner shall assign persons in charge to collect and serve complaints from people affected by the environment.

In addition, on the basis of the existing complaint mechanism, the project offices of cities and counties have set up migrant complaint mechanism for the project to ensure a smooth and effective implementation of resettlement of affected residents. The basic channels are as follows:

Phase 1: When the migrants are dissatisfied with the resettlement plan, they can make oral or written complaints to the project panel of village collectives, village committee or street/township street; Oral complaints should be handled and recorded by the project panel of village collectives, village committee or street/township street. And the village committees or streets/township streets should deal with them within one week.

Phase 2: When the decision of Phase 1 is unsatisfactory, the migrants can appeal to the project owner after receiving the decision; the project owner should make a settlement within 2 weeks;

Phase 3: When the decision of Phase 2 is still unsatisfactory, the complaint can be appealed to the Project Office of Jingyang District; the Project Office of Jingyang District should make a settlement within 2 weeks;

If the migrants are not satisfied with the existing complaint appeal procedure or the decision at any stage, the affected person may directly bring a suit to the civil court.

Migrants can also report to external monitoring units, and all complaints (oral or written) will be reported to the World Bank in immigration monitoring reports.

Agencies will receive complaints from affected persons for free, and the reasonable costs incurred therefrom will be paid in the unforeseeable cost of the project. All appeal procedures mentioned above are effective throughout the construction of the project to ensure affected persons to use them to deal with relevant issues. The means of appeal mentioned above will be informed to migrants through the participation process of the public assembly and the release of immigration resettlement information pamphlets so they will know their complaint right. At the same time, the complaint process will be published by the media to notify affected persons.

The Project Office of Jingyang District, Deyang City and the project owner shall assign persons in charge to collect and serve complaints from people affected.

Appendix 1

Table 1 Public Participation Questionnaire (Individual)

Name	Water Environment PPP Project in Jingyang District	
Project overview	<p>This project is to reconstruct and newly-build facilities for water supply and drainage, and to evaluate stock assets in 11 villages and towns in Jingyang District of Deyang as well as to improve certain part of water environment in the area. Included in the project are new-built of one water supply plant and reconstruction and expansion of 39 water stations. The water source of the project is the people's canal; the project constructs and operates 31 sewage treatment stations (including 4 upgrading projects, 2 under construction projects and 25 new projects), and 4 sewage pumping stations. Final pollutant-holding water bodies are Mianyuan River, Kaijiang River and Shiting River; and the total investment of construction projects is 911.56 million yuan.</p>	
Environmental Problems related	wastewater	<p>Production wastewater and domestic wastewater: they are collected and treated in the sewage treatment system to meet the standards, and then, some of them are reused for farmland irrigation and some of them are discharged into pollutant-holding water bodies.</p>
	Exhaust gas	<p>Stench generated by sewage treatment structures: starting from stench units such as coarse grille, sewage lifting pump house, fine grille, sand sink, MBR membrane processor, etc., sanitary protection distance will be set 50 m outward in all directions, and all stench-producing units will be sealed and covered. It is also required that new residential buildings, hospitals, schools and other sensitive spots should not be allowed to be built within the protection distance, and no medicine, food and other enterprises should be introduced.</p>
	Solid waste	<p>1. Grid slag, sediment: transported to local landfill for disposal.</p>

		2. Waste sludge: dewatered and transported to designated sites.
		3. Domestic garbage: collected and transported to environmental sanitation department for disposal.
	noise	Equipment noise: selecting low noise equipment, using buildings to insulate sound, installing vibration attenuation cushion on equipment base, installing muffler on blowers and fans, and all kinds of pumps being set in special pump room to attenuate vibration and insulate sound.

In order to give full consideration to public opinions and respect public opinions and choices in EIA, this form is hereby issued to you. Please answer carefully and fully express your opinions and suggestions. We sincerely thank you.

Name		gender		age		nationality	
Education background	College <input type="checkbox"/> Highschool <input type="checkbox"/> Middle school <input type="checkbox"/> Primary school or none <input type="checkbox"/>			Occupation	officer <input type="checkbox"/> worker <input type="checkbox"/> farmer <input type="checkbox"/> self-employed <input type="checkbox"/> others <input type="checkbox"/>		
Address					Tel.		

Opinions on the project (tick the options you agreed)

Survey contents:

I. After the introduction, your understanding of the project is:

clear limited not clear

II. You believe the impact of the project on local social and economic development is:

positive negative no influence

III. The environmental problems you are most concerned during the construction of the project are (you may tick more than one)

noise wastewater exhaust gas solid waste ecological damage

(occupied land)

IV. The problems you are most concerned during the operation period of the project are (you may tick more than one)

noise wastewater exhaust gas solid waste ecological damage (occupied land)

V. Pollutions you believe the construction project bringing to the environment are:

none within a tolerant range serious and intolerant

VI. You believe the influence the construction project bringing to your work and living is

positive none negative but within a tolerant range negative and intolerant

VII. Do you believe the project can improve local people's living standard?

Yes No No idea

VIII. Do you agree with the project site selection?

Yes No no concerned

IX. Your attitude to the project is

approval disapproval not concerned

If you are disapproval, please give reasons; otherwise it will be deemed invalid.

In addition to impacts mentioned above, what other environmental concerns do you have? What are your requirements or suggestions for the construction of the project?

Table 2 Public Participation Questionnaire (group)

Name	Water Environment PPP Project in Jingyang District	
Project overview	<p>This project is to reconstruct and newly-build facilities for water supply and drainage, and to evaluate stock assets in 11 villages and towns in Jingyang District of Deyang as well as to improve certain part of water environment in the area. Included in the project are new-built of one water supply plant and reconstruction and expansion of 39 water stations. The water source of the project is the people's canal; the project constructs and operates 31 sewage treatment stations (including 4 upgrading projects, 2 under construction projects and 25 new projects), and 4 sewage pumping stations. Final pollutant-holding water bodies are Mianyuan River, Kaijiang River and Shiting River; and the total investment of construction projects is 911.56 million yuan.</p>	
Environmental Problems related	wastewater	<p>Production wastewater and domestic wastewater: they are collected and treated in the sewage treatment system to meet the standards, and then, some of them are reused for farmland irrigation and some of them are discharged into pollutant-holding water bodies.</p>
	Exhaust gas	<p>Stench generated by sewage treatment structures: Starting from stench units such as coarse grille, sewage lifting pump house, fine grille, sand sink, MBR membrane processor, etc., sanitary protection distance will be set 50 m outward in all directions, and all stench-producing units will be sealed and covered. It is also required that new residential buildings, hospitals, schools and other sensitive spots should not be allowed to be built within the protection distance, and no medicine, food and other enterprises should be introduced.</p>
	Solid waste	<p>1. Grid slag, sediment: transported to local landfill</p>

		for disposal.
		2. Waste sludge: dewatered and transported to designated sites.
		3. Domestic garbage: collected and transported to environmental sanitation department for disposal.
	noise	Equipment noise: selecting low noise equipment, using buildings to insulate sound, installing vibration attenuation cushion on equipment base, installing muffler on fan, and all kinds of pumps being setting in special pump room to attenuate vibration and insulate sound.

In order to give full consideration to public opinions and respect public opinions and choices in EIA, this form is hereby issued to your unit. Please answer carefully and fully express your unit's opinions and suggestions. We sincerely thank you.

Unit Name		Population of the unit	
Unit Type	Government office <input type="checkbox"/> Public institution <input type="checkbox"/> Company <input type="checkbox"/> social organization <input type="checkbox"/>		
Unit address		Contact Tel.	

Opinions on the project (tick the options you agreed)

Survey contents:

I. After the introduction, your understanding of the project is:

clear limited not clear

II. You believe the impact of the project on local social and economic development is:

positive negative no influence

III. The environmental problems you are most concerned during the construction of the project are (you may tick more than one)

noise wastewater exhaust gas solid waste ecological damage

(occupied land)

IV. The problems you are most concerned during the operation period of the

project are (you may tick more than one)

noise wastewater exhaust gas solid waste ecological damage

(occupied land)

V. Pollutions you believe the construction project bringing to the environment are:

none within a tolerant range serious and intolerant

VI. You believe the influence the construction project bringing to your work and living is

positive none negative but within a tolerant range negative and intolerant

VII. Do you believe the project can improve local people's living standard?

Yes No No idea

VIII. Do you agree with the project site selection?

Yes No no concerned

IX. Your attitude to the project is

approval disapproval not concerned

If you are disapproval, please give reasons; otherwise it will be deemed invalid.

What are your requirements or suggestions for the construction of the project?