World Bank-financed China Plastic Waste Reduction Project (Shaanxi) (P176989)

-Batch 1 Subprojects

Social Audit Report

Foreign Loan Project Management Office of Shaanxi Province

November 2022

Executive Summary

The social audit team conducted a detailed social audit on the Batch 1 subprojects of the China Plastic Waste Reduction Project (Shaanxi) (P176989) according to the Bank ESF and the SIA. Based on the current situation of these subprojects and sector characteristics, the social audit focused on the following 4 social aspects: a) labor and working conditions; b) community health and safety; c) land use; and d) public participation and grievance redress. The methods used include document review, field visit and interview, and interviewees mainly include subproject owners / managers, county / district government agencies concerned (planning and natural resources bureaus, health commissions, etc.), township and village / community officials, direct workers, contracted workers, community workers, nearby residents, among others.

It is found that according to risk classification of the world bank environmental and social framework (ESF), there are substantial risks in the landfill closure subproject in respect of land use (e.g., Yaotou Landfill in Chengcheng County, where the land use does not comply with China's regulations and the competent authority has provided a correction opinion), OHS (e.g., lack of occupational hazard screening and health examinations), community health and safety (e.g., newly-built community within the safety exlusion zone of the Chengcheng Landfill). In addition, there are moderate risks in other facilities in the Batch 1 subprojects in respect of labor and working conditions, community health and safety, etc. The management of direct workers employed or engaged in existing facilities and waste systems according to the applicable Chinese laws and regulations and the Bank ESF is still not satisfactory in terms of labor contract management, working hours, labor remuneration, OHS, etc. The OHS risk management and grievance redress mechanism provided for community workers (e.g., village / community cleaners should be improved. There are sensitive sites (communities, schools) near some WTSs. There is no active communication and grievance redress mechanism for nearby communities.

The social audit team has proposed suggestions for different facilities and districts/counties in respect of improving the LMP, strengthening community health, safety and communication, properly handling outstanding land use issues of landfills, and especially the follow-up arrangements involving the interests of the villagers on the basis of adequate consultation with the PIUs and reaching a consensus with the PIUs in order to comply with the applicable Chinese land laws and regulations, and the Bank ESF, as detailed below.

Part 6 of this report summarizes the findings of the social audit and suggestions for correction. The SIA report for the Batch 1 subprojects proposes a social risk and impact management plan based on the findings of this report. The ESCP also sets out the key correction measures and actions proposed in this report. The Shaanxi PMO, and city / county / district PMOs will monitor and evaluate the implementation of these measures and actions continually, and report to the Bank regularly

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Abbreviations

AAOV	Average Annual Output Value		
АН	Affected Household		
AP	Affected Person		
DMS	Detailed Measurement Survey		
E&S	Environmental and Social		
EIA	Environmental Impact Assessment		
ESC	Environmental Sanitation Center		
ESCP	Environmental and Social Commitment Plan		
ESF	Environmental and Social Framework		
ESMF	Environmental and Social Management Framework		
EHSG	World Bank Group's Environmental, Health and Safety Guidelines		
EMEF	Ethnic Minority Engagement Framework		
EMDP	Ethnic Minority Development Plan		
FGD	Focus Group Discussion		
GRM	Grievance Redress Mechanism		
HD	House Demolition		
LA	Land Acquisition		
LAR	Land Acquisition and Resettlement		
LEFs	Land-expropriated Farmers		
M&E	Monitoring and Evaluation		
Mu	A Chinese unit of area, equivalent to about 666.67 square meters		
OHS	Occupational Health and Safety		
PIU	Project Implementation Unit		
PMO	Project Management Office		
PRC	People's Republic of China		
RAP	Resettlement Action Plan		
RPF	Resettlement Policy Framework		
SEP	Stakeholder Engagement Plan		
SH/SEA	Sexual Harassment, and Sexual Exploitation and Abuse		
SIA	Social Impact Assessment		
SWMC	Solid Waste Management Center		
TA	Technical Assistance		
ToRs	Terms of Reference		
WCS	Waste Compression Station		
WTS	Waste Transfer Station		

1 Part 1: Introduction

1.1 Background

The China Plastic Waste Reduction Project (Shaanxi) (P176989) (hereinafter, the "Project") is the second phase of the World Bank-financed program to support China in tackling plastic waste pollution. The Project will be implemented by Shaanxi Province, and will be submitted to the World Bank Board of Executive Directors for approval in March 2023. The China Plastic Waste Reduction Project (Phase 1) was approved by the World Bank Board of Executive Directors in May 2021, and was implemented by the Department of Resource Conservation and Environmental Protection of the National Development and Reform Commission, Ningbo City and Chongqing City. Based on the 14th Five-year Plan, the Project will support China's plastic pollution reduction, resource utilization, carbon neutrality and circular economy.

The project development objective is to provide information for plastic waste management at the national level, improve plastic waste management at the provincial level, and reduce plastic pollution in city-level solid waste in selected underserved areas. The Project consists of 3 components, as detailed below:

Component 1: technical assistance for institutional strengthening and capacity building in plastic waste management

- o Project activity 1A: urban and rural integrated waste service pattern development
- o Project activity 1B: consultation / knowledge exchange between provinces, the Ministry of Housing and Urban-Rural Development, and the National Development and Reform Commission
- o Project activity 1C: institutional strengthening and capacity building

Component 2: improving municipal solid waste management and agricultural plastic waste management in underserved areas

- o Project activity 2A: urban and rural waste management
- o Project activity 2B: collection and treatment of agricultural plastic waste

Component 3: project management, monitoring and evaluation

The expected gross investment in the Project is about CNY 2.67 billion, including a Bank loan of \$250 million, and the construction period is <u>from July 2023 to 2029</u>. According to the project objective, composition and selection criteria for project counties / districts, the Project will cover 11 counties / districts in the Yellow River and Yangtze River basins in Shaanxi Province (including Baoji City). See Table 1-1.

Table 1-1 Project counties / districts

Region Prefecture-level city County / district		County / district	
Cyan and an a marian (Vallage	Baoji	Jintai, Weibin, Chencang and Fengxiang Districts	
Guangzhong region (Yellow	Xianyang	Jingyang County	
River basin)	Weinan	Linwei District, Chengcheng County, Baishui County,	

Region Prefecture-level city		County / district	
F		Pucheng County	
Southern Shaanxi region	Ankang	Hanbin District	
(Yangtze River basin) Hanzhong		Nanzheng District	

Source: Shaanxi PMO

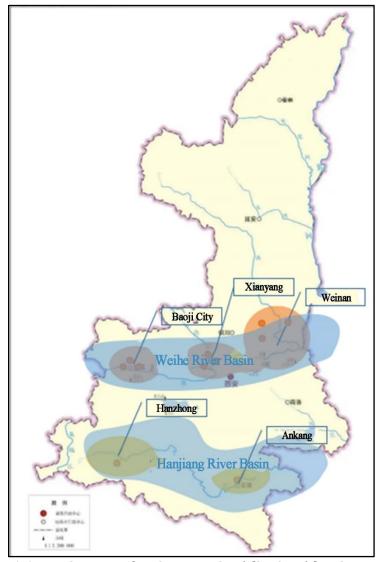


Figure 1-1 Location map of project counties / districts (showing Batch 1)

1.2 Scope of the Batch 1 subprojects

At the preparation stage, since the details (including site, scale, technical solution, etc.) of some subprojects were still unclear, the E&S documents of the Project are prepared and assessed as follows:

- Prepare E&S framework documents for the whole Project, including the ESMF, SEF, ESCP, LMP framework, etc. to define E&S impacts of different types of activities, and the principles, process and scope of stakeholder engagement;
- Prepare detailed E&S management documents for any activity under the Batch 1

subprojects before the project appraisal, including the SEP; for activities under any subsequent batch (including TA activities), detailed E&S documents will be prepared based on implementation arrangements, sites and technical contents according to the ESMF.

According to the above principles and methods, the Shaanxi and county / district PMOs, and PIUs (project implementation units) identified the Batch 1 project counties / districts, including Linwei District and Chengcheng County in Weinan City, Chencang District in Baoji City, and Baoji City. The Batch 1 subprojects mainly include the construction of waste collection and transfer facilities, a sorting center, existing closure (including leachate treatment plant reconstruction), etc. See Table 1-2.

Table 1-2 Scope of construction of the Batch 1 subprojects

County / Activity Scope of construction of the Batch 1 subprojects		
district	110011109	Construction of 510 waste collection points, each provided with 9 waste bins
	Collection facilities	(rural)
		Construction of 500 community waste sorting pavilions, each provided with 2 other waste bins, 2 recyclable waste bins, 2 kitchen waste bins and 1 hazardous waste bins (urban)
Linwei District	TD C C :1:::	Reconstruction of 3 urban WTSs; construction of 5 township WTSs;
District	Transfer facilities (including trucks)	49 3t compression and transfer trucks (village / community to WTS); 21 12t box hook arm trucks (WTS to WTE plant)
	Sorting facility	Reconstruction of 135t/d sorting center
	Disposal facility	Closure of the Majiagou Landfill
	Collection facilities	Purchase of 195 electric door-to-door collection trucks
		Construction of 1 urban WTS and 9 township WTSs
Chengcheng County	Transfer facilities (including trucks)	40 2t hanging bucket trucks (village / community to WTS); 2 14t box hook arm trucks, 9 10t box hook arm trucks (urban WTS to WTE plant); one 8t rear loading compression and transfer truck; 6 2t hanging bucket trucks (village to WTE plant)
	Disposal facility	Closure of the Chengcheng Landfill
		Closure of the Yaotou Landfill
	3	Construction of 170 waste collection points, each provided with a 240L waste bins (rural)
Chencang District		Construction of 500 domestic waste sorting pavilions, each provided with 3 240L other waste bins, 1 240L recyclable waste bin, 1 240L kitchen waste bin and 1 240L hazardous waste bin (urban)
		Construction of 30 central waste collection sites, and reconstruction of 2 central waste collection sites
		Cleaning vehicles, including 5 new energy washing and sweeping vehicles, fallen leaf cleaning vehicles and sprinkling vehicles
	Transfer facilities	Construction of 2 urban WTSs and 3 township WTSs;

County / district	Activity	Scope of construction	
	(including trucks and a truck maintenance center)	Transfer trucks, including 3 20t transfer trucks, 7 12t compression and transfer trucks, 8 8t compression and transfer trucks, 3 12t mobile box hook arm trucks, 14 transfer site washing and sweeping vehicles, etc.	
		Construction of a 11,000 m² waste transfer truck maintenance center, including 15 parking spaces for 8t compression and transfer trucks, 15 parking spaces for 12t compression and transfer trucks, 15 parking spaces for 12t mobile box hook arm trucks, 5 20t box hook arm trucks, 300 for other sanitation vehicles, 30 charging piles, etc.	
Baoji City	Disposal facility	Closure of the Changshougou Landfill	

Source: Feasibility Study Report, August 2022

1.3 PIUs

To ensure successful project construction, the Shaanxi Project Leading Group (Steering Committee) has been established¹ (PLG) at the provincial development and reform commission to solve major issues in project construction. The Shaanxi PMO thereunder is responsible for project planning, guidance, coordination, implementation, management and supervision.

The county / district governments have established county / district project leading groups² to coordinate the implementation of the county / district subprojects. The county / district PMOs thereunder are responsible for subproject planning, guidance, coordination, implementation, management and supervision.

For the Batch 1 subprojects, the county / district governments have established PIUs, and operation and maintenance (O&M) agencies, responsible for facility construction and O&M.

See Figure 1-2.

¹The Provincial Steering Committee consists of the provincial development and reform commission, finance department, ecology and environment department, housing and urban-rural development department, agriculture and rural affairs department, commerce department, rural revitalization bureau, and federation of supply and marketing cooperatives, and the participating prefecture-level cities (Baoji, Xianyang, Weinan, Yulin, Hanzhong and Ankang).

²The leading group of each district usually consists of the deputy district head in charge of environmental sanitation, development and reform bureau, finance bureau, ecology and environment bureau, housing and urban-rural development bureau, agriculture and rural affairs bureau, and urban administration and law enforcement bureau, township governments, etc.

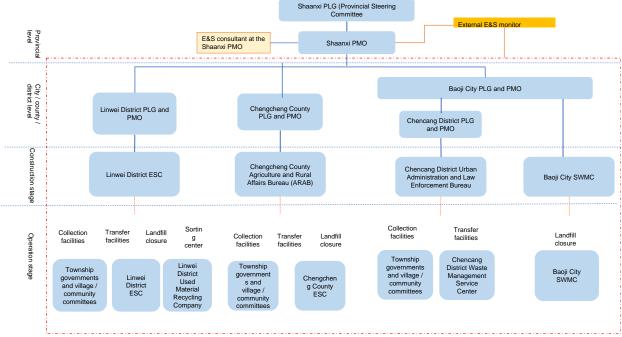


Figure 1-2 Organizational structure for the Batch 1 subprojects

1.4 Scope of the social audit

The social audit aims to analyze the nature and degree of social issues of existing project activities related to the Batch 1 subprojects. According to the preliminary social screening and fieldwork, the scope of the social audit is:

- Existing activities involved in reconstruction or expansion activities financed by the Bank, such as existing landfills, WTSs and sorting centers; in this case, the task force first screens the relevance of ESSs, and performs a systematic analysis and a compliance assessment based on the relevant ESSs and applicable domestic laws;
- New construction activities financed by the Bank, provided that LAR has been completed
 at the project appraisal, or where the use of existing construction land will not lead to
 additional LAR; in this case, the social audit is focused on the land acquisition process
 and the compliance of LAR.
- The Project aims to promote urban and rural integrated waste services, so the social audit also pays attention to existing local urban and rural domestic waste collection and transfer systems, working conditions of different types of workers involved (e.g., community workers)³, and the management measures and level for community health and safety, traffic safety, and other risks involved in waste transfer systems.
- The social audit also covers the project-related facilities involved in the Batch 1

³See the separate social audit chapters below for the labor and working conditions management of existing facilities on the domestic waste service chain.

subprojects⁴, with focus on the system, organization, measures, etc. for social risk management adopted, to see if results materially consistent with the relevant ESSs are available. Since all the 3 WTE plants involve operate in the PPP mode, the social audit also analyzes the social management systems of the relevant operating entities, and the influence of the relevant county / district governments and competent authorities on them. For the social audit findings, the SIA of the Batch 1 subprojects also identifies and analyzes the potential impacts and risks of the project-related facilities on the Project.

See Table 1-3.

Table 1-3 Scope of social audit on the Batch 1 subprojects

No.	County / district	Project activity	Nature	Site status and existing facility	Concerns of social audit
		Existing urban and rural waste collection and transfer systems	Collection and transfer system	Not involved	Community worker management, community traffic safety, driver safety management
		Gushi Town Nanshi WTS	Newly constructed	No existing facility; vacant state-owned land	
		Guandao Town Guandao WTS	Newly constructed	No existing facility; vacant state-owned land	LAR
		Chongning Town Xianwang WTS	Newly constructed	No existing facility; vacant state-owned land	LAK
	Linwei	startup and innovation base WTS	Newly constructed	No existing facility; vacant state-owned land	
1		Weilan WTS	Reconstructed	Existing facility	LAR, labor and working
	Shengli WTS Reconstructed Existing facility (closed down) Chelei WTS Reconstructed Existing facility Closure of the Majiagou Landfill Existing facility	Shengli WTS	Reconstructed	9 ,	conditions, community health and safety,
		stakeholder engagement, etc.			
			/	Existing facility	LAR, labor and working conditions, community health and safety, stakeholder engagement, etc.
		Weinan WTE Plant		expected to be completed in	LAR, community health and safety, stakeholder engagement, etc.
2	Chengcheng County	Existing rural waste collection and transfer systems	Collection and transfer system	/	Community worker management, community traffic safety, driver safety management
		Zhaozhuang Town WTS	Newly constructed	No existing facility; vacant state-owned land	LAR
		Jiaodao Town WTS	Newly constructed	Closed down, state-owned land	LAK
		Closure of the Yaotou Landfill	/	Existing facility	LAR, labor and working conditions, community
		Closure of Chengcheng	/	Existing facility	health and safety,

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⁴ In this report, "project-related facilities" mean facilities that are not financed by the Project, but are directly and significantly related to the Batch 1 subprojects, implemented or planned to be implemented along therewith, and very necessary for the feasibility thereof.

No.	County / district	Project activity	Nature	Site status and existing facility	Concerns of social audit
		Landfill			stakeholder engagement, etc.
		Chengcheng County WTE Plant	Project-related facility	To be constructed (expected to break ground in September 2022, with a construction period of 1 year)	LAR, community health and safety, stakeholder engagement, etc.
	rural waste collection transfer and transfer systems system	01 0110101	/	Community worker management, community traffic safety, driver safety management	
		Qianwei Sub-district WTS	Newly constructed	Vacant state-owned land, with partial vegetation	ed land, tation LAR
	Chencang District Chencang Garden central waste collection site South Ring Road central waste collection site Reconstruct Reconstru	WTS	Newly constructed	Vacant state-owned land, with partial vegetation	LAR
3		central waste	Reconstructed	Closed down waste collection site	LAR
		Reconstructed	Closed down waste collection site	LAR	
		Baoji City WTE Plant	Project-related facility	Under construction, expected to be completed in September 2023	LAR, community health and safety, stakeholder engagement, etc.
4	Baoji City	Management and closure of Changshougou Landfill	/	Existing facility	LAR, labor and working conditions, community health and safety, stakeholder engagement, etc.

Source: compiled by the task force

1.5 Purpose and methods of the social audit

The social audit is carried out on the existing facilities of Batch 1 subprojects (such as the current situation, operation, and social risks management of existing transfer stations) and Project-related facilities⁵, and social risks and impacts (including present management level of facilities, labor and working conditions, land acquisition and resettlement, community safety, and stakeholder engagement, etc.) are idenfied and assessed systematically for the assessment of the status and level of the social management of existing facilities and Project-related facilities and the formulation of corrective measures and actions, which lays foundation for the social impact assessment (SIA) of Batch 1 Subprojects and the formulation of corresponding corrective measures to remedy the identified non-compliance and gaps, consistent with relevant Environmental and Social Standards (ESSs).

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^{5 &}quot;project related facilities" in this report refer to those facilities that are not within the scope of project financing, but are directly and significantly related to Batch 1 subprojects, are constructed or planned to be constructed contemporaneously with the Batch 1 subprojects, and are necessary for the Batch 1 subprojects to be viable. By identification and screening, it is determined that the related facilities of Batch 1 subprojects include Weinan WTE Plant, Chengcheng WTE Plant and Baoji WTE Plant.

1.5.1 Purpose

- Identifying and analyzing potential major social impacts and risks in the existing facilities and activities (e.g., urban and rural waste collection and transfer systems), and project-related facilities, especially in relation to Labor and Working Conditions (ESS2), Community Health and Safety (ESS4), Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (ESS5), and Stakeholder Engagement and Information Disclosure (ESS10);
- Assessing the soundness of the social impacts and risks management systems for existing
 facilities, activities and project-related facilities to see if it can get results materially
 consistent with the relevant ESSs, and also including measures to manage major impacts
 and risks of existing facilities or activities;
- Proposing suggestions to solve social issues based on the social audit results to ensure that the Batch 1 subprojects meet the applicable Bank ESSs and Chinese regulations within a reasonable period;
- Learning local communities' attitudes to and concerns about the proposed subprojects, and providing a basis for identifying potential social impacts and risks, and developing more effective mitigation measures;
- For project-related facilities, in addition to assessing their social impacts and risks management systems, measures and government influence on them, further analyzing their potential impacts on the relevant project activities, especially the realization of the project development objective of urban and rural integrated domestic waste treatment services.

1.5.2 Methods

The following methods were used in the social audit:

1) Literature review

The task force searched for information on project construction and social stability by means of the Shaanxi PMO, county / district PMOs, PIUs, government agencies concerned, and online search engines, such as project approval documents, special reports, social stability documents, relevant management systems, LAR compensation documents, etc.

2) Field visit

The task force conducted field visits to the subproject sites to learn nearby E&S sensitive sites, identify potential social factors, and evaluate on-site management level.

In addition, the task force also interviewed communities and residents around major existing facilities (e.g., WTSs, sorting center and existing landfills) to learn their attitudes, opinions and suggestions.

3) Interview with government agencies concerned

The task force interviewed government agencies concerned (mainly including county / district natural resources bureaus, health commissions, etc.) with great influence on the Project by interview, telephone, etc. to learn their requirements for facility land, OHS, etc.

4) Key informant interview

The task force interviewed key informants (mainly including PIUs, competent authorities, owners of existing facilities, third party managers, feasibility study agency, EIA agency, township governments, village committees, etc.) by fieldwork, online meeting, etc. to learn existing waste collection, transfer and disposal systems, and E&S risks of existing facilities (including LAR, OHS, community health and safety, traffic safety, NIMBY, etc.), existing institutions and management measures, and suggestions on managing E&S risks.

5) FGD

The task force held FGDs with workers of existing facilities, community workers, nearby community residents, etc. to learn their existing working conditions, OHS training, labor protection, physical checkup, and concerns about and suggestions on construction noise, odor and traffic safety risks, etc.

6) Questionnaire survey

With the support of the county / district PMOs, the task force also conducted a questionnaire survey on local residents (where urban residents include officials, teachers, property management staff, cleaners, residents, enterprise workers, etc.; rural residents include officials, cleaners, transfer workers, farmers, etc.) to learn attitudes to and suggestions on waste separation, waste facility site selection, etc. The survey covers 1,008 urban respondents and 1,768 rural residents in 96 villages / communities in 41 townships / sub-districts.

1.6 Regulatory and policy framework

The social audit is based on the applicable domestic laws and standards, and the Bank's relevant ESSs.

1.6.1 Applicable social laws, regulations and policies of China

China has established a sound system of laws and regulations on social security, covering social risk assessment, labor, LAR, stakeholder engagement, etc.

1) Social risk assessment

The Chinese government has social risk management provisions on major investment projects. The Interim Measures for the Social Stability Risk Assessment of Major Fixed Asset Investment Projects stipulates, China requires that a social stability risk assessment be conducted around the legitimacy, rationality, feasibility and controllability of a project to

determine its risk rating, and major decisions and surveys should cover all local stakeholders, fully collect their opinions, and propose risk prevention and mitigation measures, and an emergency plan.

2) Labor and working conditions

ESS2 divides workers into four types, namely direct workers, contracted workers, primary supply workers and community workers, which may be involved in the Project. Direct workers include managers, drives, repairmen, operators, etc. signing labor contracts directly with the owners; contracted workers include staff hired by contractors, subcontractors, brokers, agents or intermediaries to do jobs related to the core functions of the Project, such as construction workers, cleaners, security guards and researchers; primary supply workers refer to workers of suppliers supplying necessary goods or raw materials for the core functions of the Project continually; community workers refer to staff hired to perform or participating in community services, such as rural cleaners.

The Chinese laws and regulations have comprehensive provisions on child labor, discrimination, forced labor, working hours, minimum salary, labor safety and health, etc. For example, employers are prohibited from recruiting minors under 16 years; female and underage workers (16-18 years) are subject to special protection; laborers should not be discriminated against based on ethnic group, race, gender or religion; women enjoy the same employment rights as men; forced labor is prohibited; employers must establish a sound labor safety and health system, and reduce occupational hazards. Shaanxi Province, and the project cities / counties / districts have formulated relevant institutions and measures accordingly.

The Chinese government has also established a system of laws, regulations and industry standards to protect laborers' OHS, including state laws and regulations, local regulations and bylaws, and health and safety standards of different industries. A multi-layer legal system for occupational health protection has been established. There are special laws that protect women's labor rights, including the prohibition of sexual harassment. In particular, the project cities and counties (e.g., Weinan City, Chengcheng County) have developed special action plans to prevent and control occupational diseases. Specific measures include giving comprehensive publicity on the Law on the Prevention and Control of Occupational Diseases, strengthening supervision and inspection, strengthening the "three simultaneities" management of occupational protection facilities, strengthening the M&E of occupational hazards, regulating employment management, and increasing the coverage of work injury insurance.

The Shaanxi Provincial Labor and Social Security Department, and Finance Department have issued the Administrative Measures for the Development of Public Welfare Jobs of Shaanxi

⁶Occupational protection facilities for construction projects must be designed, constructed, and put into operation together with the main part.

Province (effective from March 1, 2019), and the Notice on the Management of the Development of Public Welfare Jobs (effective from April 14, 2020) to regulate the management of public welfare jobs. The policies state that preferential support should be given to vulnerable laborers, and labor contracts for rural public welfare jobs should be signed annually, and also specify wages, social insurance, rest, etc.

Table 1-4 Laws and regulations on labor and working conditions

Level	Policy	Effective date
	Labor Law of the PRC	2018 amendment
	Measures for the Supervision and Administration of Employers' Occupational Health Surveillance	2012
	Labor Contract Law of the PRC	2012 amendment
	Regulations on Labor Security Supervision	2018 amendment
	Emergency Response Law of the PRC	2007
	Measures for the Emergency Management of Work Safety Accidents	2016
	Law of the PRC on the Protection of Women's Rights and Interests	2018 amendment
State	Special Rules on Labor Protection of Female Employees	2017
	Law of the PRC on the Prevention and Control of Environment Pollution Caused by Solid Wastes	2020 amendment
	Law on the Prevention and Control of Occupational Diseases	2018 amendment
	Social Insurance Law of the PRC	2018 amendment
	Law of the PRC on the Protection of Minors	2020 amendment
	Law of the PRC on the Protection of the Disabled	2018 amendment
	Labor Dispute Mediation and Arbitration Law of the PRC	2007
	Trade Union Law of the PRC	2009 amendment
	Regulations on Minimum Wages of Shaanxi Province (Order No.109 of the Shaanxi Provincial Government)	Effective from July 1, 2006
	Regulations on the Work Safety Responsibility of Production and Business Units of Shaanxi Province (Order No.156 of the Shaanxi Provincial Government)	2011
	Notice on the Integrated Regulation and Law Enforcement of Work Safety and Occupational Health (SPSS [2017] No.156)	Effective from 2012
	Administrative Measures for the Safety Management of Work in Confined Spaces of Shaanxi Province (SPSC [2021] No.25)	2017
Shaanxi	Special Rules on Labor Protection of Female Employees of Shaanxi Province (Order	Effective from
Province	No.209 of the Shaanxi Provincial Government)	March 1, 2018
	Regulations on the Prevention and Control of Environment Pollution Caused by Solid Wastes of Shaanxi Province	2019 amendment
	Administrative Measures for the Development of Public Welfare Jobs of Shaanxi Province	Effective from March 1, 2019
	Notice of the Shaanxi Provincial Labor and Social Security Department, and Finance Department on the Management of the Development of Public Welfare Jobs	Effective from April 14, 2020
	Notice on Strengthening the Safety Management of Urban Waste Treatment Facilities	2022
	Rules for the Implementation of "Three Simultaneities" Occupational Health Management of Construction Projects of Weinan City (WMWSAB [2012] No.39)	2012
City /	Opinions on Strengthening Work Safety (WMGO [2014] No.36)	2014
City / county	Notice on Implementing the Work Safety Responsibility System for Enterprises (WMSC [2017] No.14)	2017
	Notice on the Integrated Regulation and Law Enforcement of Work Safety and Occupational Health (WMWSAB [2017] No.93)	2017

Level	Policy	Effective date
	Notice on Implementing the Guidelines of the Plenary Session of the Safety Committee of the State Council Deeply (WMSC [2020] No.24)	2020
	Opinions of the Weinan Municipal Government on Promoting the Healthy Weinan Action (WMG [2021] No.25)	2021
	Implementation Plan for the Healthy Chengcheng Action (2021)	2021

3) Community health and safety

China has established sound institutional requirements on work safety, traffic safety, infectious disease prevention and control, and accident response to protect people's personal and property safety.

Table 1-5 State laws and regulations on community health and safety

Level	Policy	Effective date
	Work Safety Law of the PRC	2021 amendment
	Emergency Response Law of the PRC	2007
	Regulations on Emergency Response to Work Safety Accidents	2019
	Measures for the Administration of Road Transportation Safety of Hazardous Goods	2020
State	Technical guidelines for eco-environmental health risk assessment—General principles	2020
	Technical Code for Municipal Solid Waste Landfills (CJJ17—2004)	2004
	Standard for Pollution Control on Municipal Solid Waste Landfills (GB16889-2008)	2008
	Code for Planning of Urban Environmental Sanitation Facilities (GB50337-2003)	2003

4) LAR

For LAR and compensation, etc., China has established a complete legal framework and policy system. Rural LAR is based mainly on the Land Administration Law of the PRC (2020), provincial implementation measures, and relevant compensation rates. Urban LAR is based mainly on the Regulations on the Expropriation of Houses on State-owned Land and Compensation (2011). The Land Administration Law was amended in August 2019 (effective from January 1, 2020) to unify urban and rural LAR practices to a great extent. The new Land Administration Law defines the scope of LA for public purposes, strengthens pre-LA risk control, and information disclosure and public participation during LAR (including public hearings), and requires that an agreement is signed with the land owner and land use right holder before LA approval, and that compensation be paid in advance. According to the new Land Administration Law, compensation rates should be based on block comprehensive land prices, and adjusted at least every 3 years. It stipulates that fair and reasonable compensation should be paid to persons affected by LA, so that the living standard of land-expropriated farmers is not reduced. Therefore, the new Land Administration Law protects affected persons' rights and sustainable livelihoods more effectively.

5) Rural public facility land

According to the Land Administration Law⁷, collective land to be used for rural pubic facilities and public welfare programs shall be approved according to law, and farmland involved shall be converted into construction land. Therefore, collective construction land to be used for rural pubic facilities and public welfare programs does not have to be converted into state-owned land.

Table 1-6 State laws and regulations on LAR

Level	Policy	Effective date
	Land Administration Law of the PRC	Amended on 2004-8-28
	Notice of the Ministry of Land and Resources on Doing a Better Job in Land Acquisition Management	2010-6-26
	Guidelines on Improving Compensation and Resettlement Systems for Land Acquisition (MLR [2004] No.238)	2004-11-3
	Decision of the State Council on Deepening the Reform and Rigidly Enforcing Land Administration (SC [2004] No.28)	2004-10-21
	Notice of the State Council on Intensifying Land Control (SC [2006] No.31)	2006-8-31
State	Notice of the General Office of the State Council on Doing a Good Job in the Employment Training and Social Security of Land-expropriated Farmers (SCO [2006] No.29)	2006-4-10
	Notice of the Ministry of Labor and Social Security, and the Ministry of Land and Resources on Doing Well in the Social Security of Land-expropriated Farmers Practically (MLSS [2007] No.14)	2007-4-28
	Notice of the Ministry of Finance, the Ministry of Land and Resources, and the People's Bank of China on Adjusting Fees for Using Additional Construction Land (CZ [2006] No.48)	2006-11-7
	Measures of Shaanxi Province for the Implementation of the Land Administration Law of the PRC	2000-1-1
	Uniform Land Acquisition Measures for Construction Projects of Shaanxi Province	2002-1-8
	Uniform Administrative Regulations for Projects Involving Land Acquisition of Shaanxi Province (Interim) (SPLRD [2015] No.5)	2015-3-27
	Block Comprehensive Land Prices for Acquired Farmland of Shaanxi Province	2020-12-31
	Implementation Plan for the Five-year Action of Shaanxi Province for Rural Living Environment Improvement (2021-2025)	2022-5-12
Shaanxi	Compensation for Acquired Collective Land	2015-8-11
Province	Notice of the Shaanxi Provincial Labor and Social Security Department, and the Land Resources Department on forwarding the Notice of the Ministry of Labor and Social Security, and Ministry of Land Resources on Doing a Good Job in the Social Security of Land-expropriated Farmers	2007-9-11
	Notice of the Shaanxi Provincial Natural Resources Department, and Agriculture and Rural Affairs Department on Issues concerning Facility Agriculture Land Management (SPNRD [2020] No.4)	2020-7-2
	Measures of Shaanxi Province for the Transfer of the Right to Use State-owned Land	2016-9-1
	Notice on Further Implementing Policies on Basic Endowment Insurance for Land-expropriated Farmers of Shaanxi Province	2016-5-23
City /	Opinions of the Weinan Municipal Land Resources Bureau on the Acquisition of Urban Land in Weinan City (WMRB [2008] No.202)	2008-12-29
county / district	Block Comprehensive Land Prices for Farmland of Linwei District Government (LDG [2021] No.2)	2021-1-19
	Block Comprehensive Land Prices for Farmland and Unused Land of	2021-1-8

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⁷ Articles 59, 61 and 44 of the 2019 amendment, and Articles 59, 61, 43 and 44 of the 2004 amendment

Level	Policy	Effective date
	Chengcheng County (CCG [2021] No.2)	
	Block Comprehensive Land Prices for Farmland and Unused Land of Chencang District (CDG [2021] No.2)	2021

6) Stakeholder engagement

The Chinese laws and regulations require that adequate information disclosure and public participation be conducted during the EIA, LAR and policy making to protect the participation right of citizens. The local governments also stipulate that if any decision involves the interests of any certain group, such group should be consulted.

Table 1-7 State laws and regulations on stakeholder engagement

Level	Policy	Effective date
	Land Administration Law of the PRC	2020
	Measures for Public Participation in Environmental Impact Assessment	2019
	Regulations on the Implementation of the Land Administration Law of the PRC	2021
State	Guidelines on the Grass-root Government Affairs Disclosure on Rural Collective Land Acquisition	2019
	Opinions on Promoting the Disclosure of Government Affairs Comprehensively	2016
	Opinions of the General Office of the State Council on Promoting Government Information Disclosure in Public Resource Allocation	2016
Shaanxi	Measures of Shaanxi Province for the Implementation of the Land Administration Law of the PRC	2000
Province	Uniform Land Acquisition Measures for Construction Projects of Shaanxi Province	2002

It can be seen that China has established a sound social security system, whose objective is consistent with the Bank's social safeguard policy, i.e., to alleviate social risks and realize sustainable development. However, there are still some differences.

1.6.2 Bank ESF

The Bank's ESF has 10 ESSs. The basis of the social audit on a Bank-financed project is to analyze the relevance of the ESSs. See Table 1-7.

Table 1-8 Applicability of Bank ESSs

No.	ESS	Relevant?	Analysis
1	ESS1: Assessment and Management of Environmental Risks and Impacts		The Batch 1 subprojects mainly include the construction of domestic waste collection, holding and transfer facilities, and a sorting center, landfill closure (including landfill leachate treatment plant reconstruction), etc. The Project will involve social impacts and risks in many aspects during implementation, including LA, OHS, NIMBY risks, traffic safety, community health and safety, etc.; Landfill gas and leachate leakage may lead to soil and groundwater pollution, and cause health hazards to communities.
2	ESS2: Labor and Working Yes Conditions		The Batch 2 subprojects involve direct workers, contracted workers and community workers mainly. Therefore, the requirements on working conditions, worker rights, GRM and OHS in this ESS apply to the Project. OHS risks are from the construction and operation stages mainly, including traffic, mechanical injury, falling and equipment operation risks, and health hazards from exposure to noise, dust, odor, etc.
4	ESS4: Community	Yes	The Project may have health and safety risks, and traffic safety risks to

No.	ESS	Relevant?	Analysis
	Health and Safety		nearby communities. The construction and operation of project-related facilities (WTE plants) may impose noise, dust, traffic safety and odor impacts on nearby communities
5	ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Yes	This standard aims to minimize involuntary resettlement, and alleviate unavoidable and adverse economic and social impacts of land acquisition and restriction on land use through a series of measures. The construction of facilities under the Batch 1 subprojects (especially WTSs) involves the acquisition of 18,259 m² of collective land, including 1,334 m² of cultivated land. The occupation of cultivated land has been minimized through site selection and option comparison, and most of the land to be acquired is unused collective construction land.
10	ESS10: Stakeholder Engagement and Information Disclosure	Yes	Information disclosure and consultation will run through the preparation, construction and operation stages, with attention to the needs of project-affected parties and vulnerable groups, such as workers, community residents, persons affected by LAR, and especially vulnerable groups. In addition, different GRMs should be established for communities and workers.

Source: compiled and analyzed by the task force

1.7 This report

According to the Bank's ESF, the Shaanxi PMO has appointed a specialized agency to conduct a detailed social audit on the existing facilities, clear land and project-related facilities of the Batch 1 subprojects.

This report is the summary report of the social audit on the Batch 1 subprojects and project-related facilities, and mainly consists of the following parts:

- Part 1: introducing the project background, and social audit methods, and comparing China's laws and regulations with the Bank ESSs;
- Part 2: social audit on the Linwei District subproject and project-related facilities
- Part 3: social audit on the Chengcheng County subproject and project-related facilities
- Part 4: social audit on the Chencang District subproject and project-related facilities
- Part 5: social audit on Baoji City
- Part 6: summarizing conclusions and suggestions;
- Appendixes: giving a list of reviewed documents, vouchers on LAR, fieldwork photos, a list of interviewees, etc.

1.8 Limitations

The social audit was conducted within the scope of work approved by the Shaanxi and county / district PMOs, and its results are based on the field visit and the documents provided by the PIUs, county / district PMOs, township governments, village committees, etc., and are subject to change.

In particular, the restrictions encountered during the social audit include:

- 1) This report focuses on relevant social aspects and dimensions that are in connection with the Batch 1 subprojects as required by the ESF.
- 2) The document review (e.g., labor contracts, LAR evidence) was conducted by random sampling. The sampling process was not designed to be a comprehensive document review, but rather to verify the current status by sampling for risk identification and assessment purposes. In addition, since some facilities were constructed 20 years ago. Due to the long time and ownership change⁸, only some available documents (especially on LAR) have been collected and reviewed, aided by key informant interviews.
- 3) The project-related facilities involved in the Batch 1 subprojects are constructed by local governments together with social capital. Since trade secrets are involved, the operators of the project-related facilities are unwilling to provide full texts of some documents for review. Therefore, the task force has only checked relevant catalogues, and key points of some assessment and management documents (e.g., labor and working conditions, OHS, government approvals, assessment conclusions, and measures to be taken);
- 4) Due to COVID-19, and since some subprojects were completed many years ago and have copies of documents only, the task force is unable to review the originals of all permits and approvals. Information provided to the task force was accepted in good faith and was assumed to be accurate unless written documentation or visual observation presented contradictions to this assumption.
- 5) Data collected during stakeholder engagement are deemed accurate to the extent that the information was provided by those consulted, which shall not to be construed as legal advice.

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 $^{^8}$ For example, the title to the Yaotou Landfill was handed over by the township government to the Chengcheng County Environmental Sanitation Bureau in 2018.

2 Part 2: Social audit on the Linwei District subproject

2.1 Overview of the subproject and scope of the social audit

The Linwei District subproject aims to realize integrated urban and rural waste collection, transfer and disposal, and covers 6 sub-districts and 14 towns, with an area of 1,263.76 km², including the construction of 5 new WTSs, the reconstruction of 3 WTSs, the closure of the Majiagou Landfill, the upgrading of a sorting center, truck purchase, etc.

The social audit covers the WTSs, existing facilities and project-related facilities with land acquired, including:

- Existing urban and rural waste collection and transfer systems, labor conditions of different types of workers involved (e.g., community workers, direct workers engaged by township governments)⁹, and management measures for community health and safety, traffic safety risks, etc. involved in waste transfer systems;
- New WTSs with land acquired: including 4 WTSs, which are the Gushi Town Nanshi WTS, Guandao Town WTS, startup and innovation base WTS and Chongning Town Xianwang WTS. The social audit is focused on LA, land use compliance, compensation payment, and any outstanding issue;
- Existing facilities: including 3 urban WTSs (Weilan WTS, Shengli WTS and Chelei WTS), Majiagou Landfill closure and a sorting center. The social audit is focused on LAR, labor and working conditions, community health and safety, stakeholder engagement, etc.;
- Project-related facilities: Weinan WTE Plant. The social audit assesses its social impacts and risks, and social management systems, analyzes its potential impacts on the Project, and proposes management measures.

2.2 Existing urban and rural domestic waste transfer system in Linwei District

The existing domestic waste collection and transfer systems of Linwei District include an urban one and a rural one.

1) Urban domestic waste collection and transfer system

⁹See the separate social audit chapters below for the labor and working conditions management of existing facilities on the domestic waste service chain.

The Linwei District Environmental Sanitation Center (ESC) under the Linwei District Urban Administration and Law Enforcement Bureau is responsible for urban domestic waste collection and transfer mainly.

<u>Waste collection</u>: Cleaners of the ESC are responsible for waste cleanup and collection in urban public areas; property management companies or house owner committees are responsible for waste cleanup and collection in residential communities; domestic waste of government agencies, office buildings, schools, hospitals, etc. is collected by organizations concerned.

<u>Waste transfer</u>: For any community close to a WTS, domestic waste is transferred by the property management company to the WTS; other waste is transferred by workers organized by the ESC (including drivers and attendants) to WTSs.

<u>Waste disposal</u>: The ESC transports domestic waste from WTSs to the <u>Majiagou</u> <u>Landfill</u> for landfilling.

Table 2-1 Existing waste collection and transfer system in the urban center of Linwei District

Stage Facility Area Implementation unit					
	Stage	Facility	Area	Implementation unit	
			Urban stores, public areas, roadsides, streets	ESC	
		Waste bins,	Residential communities	Community property management companies	
C	ollection	collection points, etc.	Office buildings, schools, hospitals	Agencies concerned	
			Branch roads, alleys, urban villages, communites without property management	Sub-district sanitation teams under the ESC	
	From collection facilities to WTSs	facilities to Light-duty	Urban stores, public areas, roadsides, streets	ESC	
			Residential communities	Community property management companies	
Transfe			Office buildings, schools, hospitals	Agencies concerned	
r			Branch roads, alleys, urban villages, communites without property management	Sub-district sanitation teams under the ESC	
	From WTSs to terminals	8t, 12t compression trucks	urban WTS	ESC	
Terminal disposal		Majiagou Landfill		ESC	

Source: Feasibility Study Report and fieldwork

Labor and working conditions: The Linwei District ESC has 140 managers and 1,806 cleaners, including 1,463 forefront cleaners, 293 transfer workers and 50 WTS workers. All of them are the ESC's direct workers. The ESC has signed labor contracts with every direct workers, and provided social insurance for female workers under 55

and male workers under 60, and employer liability insurance for workers exceeding the social insurance covering age¹⁰. The wages of all managers and transfer workers are higher than the prevailing minimum wage level of Shaanxi Province¹¹; but the salary of most cleaners and some WTS workers is 1,650 yuan/monthly, below such standard. PPEs is distributed regularly, and sunstroke prevention articles and subsidies are granted in summer. Cleaners work on two shifts of 8 hours each, and would work for over 8 hours when there is a major event or sanitation inspection. Overtime is 1-2 hours per time, and an overtime allowance of 20-30 yuan per time is granted. Managers are off at weekends, transfer drivers are off 4 days per month, and other cleaners have no day off.

Traffic safety management: The ESC has developed management systems for transfer drivers, such as the driver management system and transfer truck management system. Drivers are subject to traffic safety training at least monthly, trucks are checked and maintained regularly, and compulsory liability insurance and commercial insurance is covered for transfer trucks. Transfer trucks are provided with GPS, and run on a fixed route and a regular schedule, and subject to a speed limit. The ESC has a vehicle administration section, which handles traffic accidents and keeps records. According to the data provided with the Vehicle Administration Section, 11 traffic accidents occurred in 2021, including 9 rubbing ones and two rear-end collision ones, with no casualty.

<u>Conclusion and findings</u>: The Linwei District ESC is a secondary public institution, and its personnel policies comply with the Labor Law and Labor Contract Law according to document review and interview. It has provided social insurance and signed labor contracts for all eligible workers, and pays its workers monthly, consistent with the applicable state requirements and the Bank's ESS2. However, there are some gaps from the Labor Contract Law and ESS2 in labor contract management, wage level and entitlements, working hours and resting time, such as:

¹⁰The state policy stipulates that an employer shall no longer cover insurance for a worker when he/she attains 55 years for females or 60 years for males.

¹¹ According to the Notice of the Shaanxi Provincial Labor and Social Security Department on Adjusting the Minimum Salary Standard (SPLSSD [2021] No.5), from May 1, 2021, the monthly minimum salary standard of Shaanxi Province shall be as follows: 1,950 yuan for Tier-1 areas, 1,850 yuan for Tier-2 areas and 1,750 yuan for Tier-3 areas; the hourly minimum salary standard for part-time workers shall be 19 yuan for Tier-1 areas, 18 yuan for Tier-2 areas and 17 yuan for Tier-3 areas. Among the project cities / counties / districts, Baoji City, Chencang District and Linwei District are Tier-2 areas, and Chengcheng County is a Tier-3 area.

- <u>Labor contract management</u>: The sample labor contract used by the Linwei District ESC lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law;
- <u>Wage level</u>: The wages of some workers are slightly lower than the prevailing local minimum wage level;
- Working hours: <u>Most cleaners</u>, attendants and WTS workers have no day off, and no overtime pay.

Suggestions:

- <u>Strengthening labor contract management</u>: For jobs involving occupational hazards, the labor contract should include clauses on "labor protection, working conditions and occupational hazard protection";
- <u>Increasing the wages of cleaners and WTS workers</u>, at least to the prevailing minimum wage level of Shaanxi Province and the provisions on overtime payment in the Labor Contract Law;
- <u>Days off</u>: Appropriate days off should be arranged for workers by providing sufficient staff and conducting rotation based on actual work arrangements as per the Labor Contract Law¹².

2) Rural domestic waste collection and transfer

A. Town waste collection and transfer:

Linwei District governs 14 townships. In the 13 townships except Fengyuan Town, waste collection and transfer is the responsibility of cleaners and transfer workers of township governments, The 13 townships have 126 cleaners an 48 transfer workers, all being direct workers of the township governments. Fengyuan Town appoints Zhuotengjie Waste Transfer Co., Ltd. for waste collection and transfer, with 12 cleaners and 3 transfer workers, who are contracted workers in Fengyuan Town. Most cleaners do public welfare jobs, all being registered low income residents, dealing with farming mainly, with low agricultural income. Such public welfare jobs (working for about 5 hours per day) can increase their income.

Cleaners are responsible for the cleaning of the main streets of their towns; transfer workers are responsible for the transfer of domestic waste from entities, stores and

 $^{^{12}}$ According to the Decision of the State Council on Working Hours of Workers (Order No.174, 1995), a uniform working schedule shall apply for state organs and public institutions, and any public institution that cannot practice the uniform working schedule may arrange weekly days off flexibly.

households in the whole town to the township waste dump, which has no disposal or protection facility.

Labor and working conditions: Some townships have not signed formal labor contracts with direct workers, and some have signed a simple labor contract with them. Cleaners are divided into public welfare¹³ and non-public welfare ones. The salary of a public welfare cleaner consists of a county / district fiscal subsidy and a township government subsidy. Non-public welfare cleaners are paid by the township government, within the range of 800-1,200 yuan/month, and with about 4 working hours per day. Transfer workers are paid by the township government, within the range of 1,800-2,500 yuan, and with 4-6 working hours per day. PPEs is distributed regularly. The township governments have not provided accident insurance for cleaners and drivers.

All the 15 workers of Zhuotengjie Waste Transfer Co., Ltd. appointed by Fengyuan Town have signed labor contracts. The cleaners are paid 800 yuan per month (including a public welfare subsidy of 500 yuan and a company subsidy of 300 yuan), and work twice for 4 hours per day. The drivers are paid 6,000 yuan per day, and work twice per day. PPEs is distributed regularly. the company has not provided accident insurance for cleaners and drivers.

Traffic safety management: The township governments have driving safety regulations for transfer workers, including a fixed route, a fixed schedule and low speed driving, trucks are checked and maintained regularly, and drivers are trained on safety irregularly.

Findings:

- <u>Direct workers</u>: The township governments pay direct workers (cleaners, transfer workers, etc.) monthly, offer relevant safety training, and distribute PPEs regularly, consistent with the applicable state requirements and the Bank's ESS2, but there are still some gaps from the Labor Contract Law and ESS2 in direct workers' labor contract management, labor safety risk management, etc., such as:
 - <u>Labor contract management</u>: The township governments have not signed formal labor contracts with cleaners and transfer workers;
 - <u>Labor safety risk management</u>: The township governments have not provided accident insurance for cleaners and transfer workers.

¹³ The public welfare subsidy is borne by district public finance, and paid in a unified manner.

For contracted workers: Zhuotengjie Waste Transfer Co., Ltd. has not provided accident insurance for workers. In addition, the Fengyuan Town Government's management of contracted workers of the third party service provider has some gaps from ESS2, and it has not established a procedure to monitor the third party service provider's labor and working conditions, and traffic safety performance, and the service contract with the third party does not have any nonconformity remedy.

Suggestions:

• <u>Direct workers</u>

- Strengthening labor contract management: The township governments should sign formal labor contracts with directly employed cleaners and transfer workers, and at least specify clauses on "working hours, labor remuneration, labor protection, working conditions and occupational hazard protection" in the contracts.
- Strengthening labor safety risk management: The township governments should provide accident insurance for cleaners and transfer workers, and distribute sufficient PPEs regularly.
- Extending the management duties of the Linwei District ESC: Monitor and improve the management performance of different types of workers involved in collection and transfer systems regularly.

Contracted workers

- Insurance: The third party company should provided accident insurance for workers.
- o Define nonconformity remedies, and traffic safety performance monitoring and reporting requirements in a supplementary agreement according to the LMP of the Batch 1 Subprojects.
- Strengthen third party labor management, and establish a procedure to manage and monitor third party performance;
- Extending the management duties of the Linwei District ESC: Monitor and improve the management performance of contracted workers involved in collection and transfer systems regularly.

B Village group waste collection and transfer

The village committees manage domestic waste collection and transfer at the village group level. Village cleaners, and village collectors and drivers are employed and managed by village committees. Linwei District has 2,148 village cleaners and 265

drivers. Villagers dump domestic waste into nearby waste bins, village cleaners are responsible for alley cleaning, and transfer drivers transfer domestic waste in waste bins to the township waste dump, which has no disposal or protection facility.

Table 2-2 Existing rural waste collection and transfer system in Linwei District

Stage	Facility	Area	Implementation unit	Type of workers
Collection		Villages	village committees	Community workers
(domestic waste)	Waste bins	Main town streets	Town government; third party service provider (Fengyuan Town)	Direct and contracted workers
Transfer	Tricycles, light-duty	Villages	village committees	Community workers
(domestic waste)	waste transfer trucks	Main town streets	(Fengyuan Town) village committees Community worker Town government: third	Direct and contracted workers
Terminal treatment	Waste dump		Unattended	

Source: Feasibility Study Report and fieldwork

Labor and working conditions: Linwei District has 2,148 village cleaners and 265 drivers, all being community workers. The village committees have not signed labor contracts with community workers. Most cleaners do public welfare jobs, all being registered low income residents, dealing with farming mainly, with low agricultural income. Such public welfare jobs (working for 2-3 hours per day) can increase their income. Public welfare jobs cleaners are paid 500 yuan per month; transfer workers are usually contracted annually, and paid 18,000-30,000 yuan per annum. The village committees have not provided accident insurance for community workers. They have covered rural medical and endowment insurance themselves. Some village committees provide cleaners with PPEs (gloves, face masks, etc.), and some have not.

Traffic safety management: The village committees have no traffic safety management system, and do not offer safety training.

Conclusions and findings: The village committees pay cleaners, transfer drivers, and other community workers timely, consistent with the applicable state requirements and the Bank's ESS2, but there are still some gaps from the Labor Contract Law and ESS2 in labor contract management, labor safety risk management, GRM, etc., such as:

- <u>Labor contract management</u>: The village committees have not signed formal labor contracts with community workers.
- <u>Labor safety risk management</u>: The village committees have not provided accident insurance for workers, and have not offered safety training; some villages do not provide PPEs;
- <u>GRM</u>: Community workers file grievances to village committees and township governments mainly, and no other grievance redress channel is known.

Suggestions:

- <u>Strengthening labor contract management</u>: The village committees should signe formal labor contracts with community workers, and include clauses on "working hours, scope of work, labor remuneration, labor protection, working conditions and occupational hazard protection".
- <u>Strengthening labor safety risk management</u>: The village committees should provide accident insurance for workers, adopt appropriate traffic safety management systems, offer relevant safety training to community workers, and distribute sufficient PPEs regularly;
- Extending the management duties of the Linwei District ESC: Monitor and improve the management performance of different types of workers involved in collection and transfer systems regularly, improve traffic safety institutions for the collection and transfer system, improve the existing community GRM to define the duties and procedure for accepting and handling grievances, and notify community workers.

2.3 Newly constructed facilities with LA completed—land use compliance audit

The Gushi Town Nanshi WTS, Guandao Town WTS, startup and innovation base WTS, and Chongning Town Xianwang WTS are newly WTSs, for which land has been obtained, all being state-owned construction land. Each WTS has a floor area of 2-3 mu, being vacant land, not involving HD.

The startup and innovation base WTS is located in the startup and innovation base, which has a floor area of 3 hectares, being state-owned land owned by Linwei District Startup and Innovation Base Investment & Development Co., Ltd. ESC has agreed with Linwei District Startup and Innovation Base Investment & Development Co., Ltd. that the property right of such land will remain unchanged. However, such land should be adjusted to public facility land.

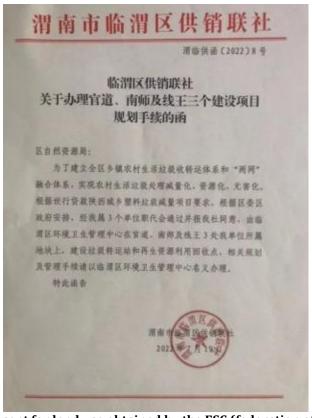


Figure 2-1 Letter of consent for land use obtained by the ESC (federation of supply and marketing cooperatives)

The other 3 WTSs will use land owned by the Linwei District Federation of Supply and Marketing Cooperatives, and the property right of such land will remain unchanged. The ESC will construct the WTSs together with the Linwei District Federation of Supply and Marketing Cooperatives. After completion, the ESC will manage and run the WTSs, and provide temporary waste storage houses to the Federation of Supply and Marketing Cooperatives.

Table 2-3 Land used for the 4 newly constructed transfer stations

Facility	Land area (mu)	land type	Land use mode	Land supplier
		state-owned	Property	Linwei District Federation of
Guandao Town WTS	2.09	construction	right	Supply and Marketing
		land	unchanged	Cooperatives
		state-owned	Property	Linwei District Federation of
Gushi Town Nanshi WTS	2.95	construction	right	Supply and Marketing
		land	unchanged	Cooperatives
Startup and innovation		state-owned	Property	Linwei District Startup and
base WTS	2.57	construction	right	Innovation Base Investment &
base W15		land	unchanged	Development Co., Ltd.
Changning Tour		state-owned	Property	Linwei District Federation of
Chongning Town Xianwang WTS	2.69	construction	right	Supply and Marketing
Mailwallg W13		land	unchanged	Cooperatives

Source: Feasibility Study Report and fieldwork

The task force has reviewed the land certificates supplied by the Linwei District Federation of Supply and Marketing Cooperatives, and confirmed that the property right of such land was obtained in the 1960s-80s. In 2019, the Linwei District Federation of Supply and Marketing Cooperatives had a dispute with a nearly household (Mr. Tian) over the land used for the Guandao Town WTS, and a civil case was filed with the Weinan Intermediate People's Court. In August 2019, the court made a final judgment, where the Linwei District Federation of Supply and Marketing Cooperatives won the case. The Guandao Town WTS has a floor area of 2 mu, and the Linwei District Federation of Supply and Marketing Cooperatives owns about 4 mu of land in Guandao Town. In the project design, the Guandao Town WTS evades the land in dispute.



Figure 2-1 Evasion of the disputed area

<u>Findings</u>: The proposed 4 WTSs are all located on vacant state-owned construction land, not involving resettlement. However, the land use plan does not conform to the requirements for public facility land in the master land use plan of the project county. In addition, the land to be used for the Guandao WTS has an ownership dispute.

Suggestions: The Linwei District Federation of Supply and Marketing Cooperatives obtained the land property right very long ago, and did not comply with the master land use plan. The Linwei District ESC should communicate with the agencies concerned (e.g., natural resources bureau) to ensure that such land complies with the master land use plan. In addition, the design of the Guandao Town WTS should be optimized to utilize existing vacant land and evade the land in dispute.

2.4 Improvement of existing urban transfer stations

In the Linwei District subproject, 3 urban WTSs will be improved, which are the Chelei Street WTS, Shengli Street WTS and Weilan Road WTS, which were put into operation in 2011-2013. The Chelei Street and Weilan Road WTSs are operating, and the Shengli Street WTS has been closed down due to equipment failure and tight maintenance funds. The WTSs and their workers are managed by the Linwei District ESC. The WTSs are similar in labor management, OHS, community health and safety, land use, etc. Therefore, this chapter summarizes the findings of the social audit, mainly including basic information, labor management, community health and safety, land use, etc. See Table 2-4.

Table 2-4 Current situation of reconstructed transfer stations

No.	WTS	Location	# of workers	Female workers	Scale	Service range	Mode
1	Shengli WTS	Northwest of the junction of Shengli Street and Cangcheng Road	0	0	2 mobile bins, treating 60 tons of domestic waste daily	Closed down in May 2022	Compres sion
2	Chelei WTS	Southwest of the junction of Chelei Street and Jinshui Road	8	1	2 mobile bins, treating 100 tons of domestic waste daily	South of G310 and north of Letian Street	Compres sion
3	Weilan Road WTS	North of the Weilan Road gas station	5	3	2 mobile bins, treating 60 tons of domestic waste daily	South of Huashan Street	Compres sion

Source: fieldwork





Figure 2-2 Existing urban transfer stations in Linwei District

2.4.1 Labor and Working Conditions (ESS2)

The Chelei WTS has 8 workers, including a master, 3 equipment operators, 2 cleaners and 3 security guards; the Weilan Road WTS has 5 workers, including a master, 2 equipment operators and 2 security guards. Their workers are all direct workers. The social audit assesses their employment terms and conditions, presence of child and forced labor, OHS, worker GRM, etc.

1) Employment terms and conditions

In the social audit, the relevant management systems, sample contracts, etc. of the Linwei District ESC were reviewed, mainly including:

- Measures for Cleaner Recruitment and Employment of Linwei District (Trial)
- Evaluation Measures for Refined Sanitation Management of Linwei District (Trial)
- Quality Standard and SOP for Environmental Sanitation of Linwei District
- Sample labor contract

According to worker interviews, the Linwei District ESC has signed a uniform labor contract with all WTS workers. The basic terms and conditions of the labor contract include term, scope of work, labor remuneration, social insurance, benefits, labor discipline, termination and change, labor dispute settlement, and other items stipulated in the Labor Law, consistent with the Labor Law of the PRC and the Bank's ESS2.

The Linwei District ESC offers induction training to workers to help them get familiar with its policies and their jobs. The Linwei District ESC covers social insurance for eligible workers, and employer liability insurance for workers exceeding the social insurance covering age. Wages are paid on time, and the minimum salary is 1,650 yuan per month (security guards), lower than the minimum wage level of Linwei District¹⁴.

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¹⁴ In 2022, the minimum salary standard of Linwei District was 1,850 yuan per month.

Workers are entitled to a high temperature allowance, holiday consolation and other benefits. The working hours of the Chelei WTS are 8:00-11:00, 14:00-17:00 and 18:00-22:00, with 3 shifts per day. The working hours of the Weilan WTS are 6:00-12:00 and 15:00-18:00. All WTSs adopt an 8-hour working system, and work beyond 8 hours is regarded as overtime. Overtime occurs during a sanitation inspection or special events only, usually for 1-2 hours, with an overtime allowance of 20-30 yuan per time. WTS workers have no fixed day off, but may apply for leaves (paid) of up to 7 days.

Findings: The Linwei District ESC is a secondary public institution, and its personnel policies comply with the Labor Law and Labor Contract Law. It has provided social insurance and signed labor contracts for all eligible workers, and pays its workers monthly, consistent with the applicable state requirements and the Bank's ESS2.

However, the two WTSs still have some gaps from the Labor Contract Law and ESS2 in labor contract management, wage level, days off and holidays, etc., such as:

- <u>Labor contract management</u>: The sample labor contract used by the Linwei District ESC lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law;
- Wage level: The wages of WTS security guards are lower than the prevailing minimum wage level of Linwei District;
- Days off and leaves: WTS workers have no fixed day off.

Suggestions:

- <u>Strengthening labor contract management</u>: For jobs involving occupational hazards, labor contract should specifically include clauses on "labor protection, working conditions and occupational hazard protection";
- <u>Wage level</u>: Increase workers' wages, at least to the prevailing minimum wage level of Linwei District, and the provisions on overtime payment in the Labor Contract Law;
- <u>Days off and leaves</u>: Provide sufficient worker quotas for the WTSs, and arrange days off and holidays for them flexibly.

2) Labor protection

The minimum worker age of the Chelei WTS is 34 years, and that of the Weilan Road WTS 32 years. Therefore, the two WTSs do not employee any child labor or underage worker aged 16-18 years, and there is no forced labor, recruitment discrimination or sexual harassment, and sexual exploitation and abuse (SH/SEA).

3) OHS

The two WTSs use the same compression process: A waste collection truck enters the compression shop. Waste is poured into the compression facility, then enters the special compression box, and is transported by a transfer truck to the landfill. In this process, the monitoring, compression, dust removal and deodorization systems operate simultaneously, dust and odor are discharged after treatment, and leachate is discharged to the collecting pit for unified transfer. The site is disinfected daily.

According to the above operating process, the potential OHS risks of the two WTSs mainly including dust and noise, odor, pathogens, disinfectant, etc.

- Dust and noise: Waste dust and equipment noise may have some impacts on WTS workers;
- Odor: Odor generated by waste decomposition (especially in summer) may harm the olfactory system of workers;
- Pathogens: Domestic waste contains many pathogens (bacteria, viruses, etc.), which may be harmful to workers' health;
- Disinfectant: The disinfectant is a toxic chemical, and has a certain health hazard to those exposed to it;
- Accidental injury: Workers are exposed to accidental injury risks when operating machinery;
- Infection (including COVID-19): Cleaners are exposed to viruses, thereby affecting their physical health;

The Linwei District ESC has developed safety systems and emergency measures to manage OHS risks during operation, mainly including:

- Evaluation Measures for Refined Sanitation Management of Linwei District (Trial);
- Quality Standard and SOP for Environmental Sanitation of Linwei District;
- Work Safety System;
- Landfill Machinery Management System;
- Landfill Disinfection and Deodorization System;
- Transfer Work Safety Management System;
- Incentive Mechanism for Working Vehicle Drivers;
- Reward and Punishment Measures for Drivers of the Transfer Squadron;

These systems manage the health and safety of on-site workers and transfer workers systematically, such as operating specifications, PPEs wearing, machinery operation and maintenance, environmental monitoring and site disinfection.

The implementation of these systems has been learned by field visit and interview. The key findings are as follows:

- Waste is transferred in a fully enclosed manner;
- Pre-job training has been offered to WTS workers, drivers and attendants, and safety education is conducted weekly;
- During unloading, safety officers and attendants are required to maintain a safe distance from the transfer truck to reduce dust and noise impacts;
- Workers are provided with PPE, including gloves, working clothes, antiskid rain boots, surgical masks, protective clothes, etc.;
- A free systemic health examination is arranged for workers annually;
- For the prevention and control of infectious diseases (including COVID-19), a prevention and control system has been established, and emergency measures and a handling procedure defined for pandemic prevention and control.

<u>Conclusions and findings</u>: The Linwei District ESC has formulated a series of OHS management systems and procedures, including emergency management, which have been well implemented, but needs improvement in occupational protection management.

Occupational protection management: The "three simultaneities" were not
conducted for occupational protection facilities during the expansion of the two
WTSs, no occupational hazard screening was conducted at the operation stage,
no occupational health examination is offered, and the occupational hazard
notification procedure is not followed.

Suggestions:

- The Linwei District ESC should appoint a qualified agency to identify potential occupational hazards in the WTSs, conduct occupational hazard screening as soon as possible, offer pre-job, on-the-job and post-job occupational health examinations to workers exposed to occupational hazards, and provide appropriate PPEs and occupational protection training to workers;
- The Linwei District ESC should specify occupational hazards in the labor contract, and notify relevant workers of potential occupational hazards and their impacts;
- Organize work safety mobilization meetings, offer topical training regularly, and keep records properly.

4) GRM

WTS workers may file grievances to the WTS master or an ESC leader face to face or by telephone, or through the district bureau for letters and visits, labor and social security bureau or court, but the WTSs have not established a formal GRM.

Suggestions: Establish a formal GRM for workers, and appoint dedicated staff to handle grievances. The GRM should be notified to workers. All grievances, written or oral, and their dispositions should be recorded.

2.4.2 Community Health and Safety (ESS4)

According to the Standard for Planning of Urban Environment Sanitation Facilities (GBT50337), a WTS has a design capacity of 50-150t/d, a floor area of 1,000-4,000 m², and a <u>health protection distance of over 10m</u>. See Table 2-5.

Table 2-5 Communities around the transfer stations

WTS	Social sensitive site within 50m	Distance from sensitive site to WTS (m)	Population
Chelei WTS	Xihe Central Park Community	40	600
Weilan Road WTS	Dependent community of the comprehensive geological brigade	40	250
Shengli WTS	Zilan Xinduhui Community	15	300
(closed down)	Weinan Experimental Junior High School	15	4000

Source: fieldwork



Figure 2-3 Social sensitive sites around the Chelei WTS



Figure 2-4 Social sensitive sites around the Weilan Road WTS

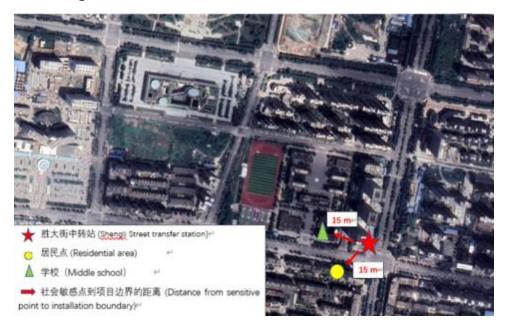


Figure 2-5 Social sensitive sites around the Shengli WTS

For the 3 WTSs, there is no social sensitive site within the health protection distance. Two nearby residents say that the two operating WTSs have some odor and noise imapets on nearby communities.

The WTSs have not established an active community communication mechanism. The respondents say that they usually file grievances with village committees or call "12345".

Suggestions:

- Avoid starting machinery in the regular resting hours to reduce the noise impact on nearby residents;
- Plan transport routes rationally to bypass schools and populated areas, or avoid the traffic peak hours;
- Establish a formal GRM, and a communication and feedback mechanism with nearby communities, and arrange resources and staff to record grievances received and their dispositions.

2.4.3 Land use survey (ESS5)

The 3 WTSs have a total floor area of 9.94 mu, in which the Shengli and Chelei WTSs are located on state-owned land, and the Weilan Road WTS on collective land. See Table 2-6.

Table 2-6 Land used for the 3 transfer stations

WTS	Floor area (mu)	Land type	Land nature	Land use mode
Shengli WTS	1.19	Construction land	State-owned	Allocation
Chelei WTS	5.85	Construction land	State-owned	Allocation
Weilan Road WTS	2.9	Sanitation facility land	Collective	Lease
Subtotal	9.94	/	/	/

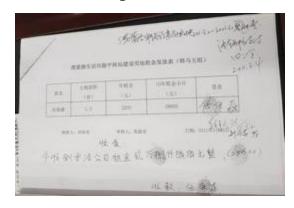
Source: fieldwork

The land used for the Shengli and Chelei WTSs is construction land owned by Weinan Urban Investment Group. In 2011, Weinan Urban Investment Group approved the Linwei District ESC to construct the two WTSs on its land, but the land supply procedure has not been handled yet. Through coordination, Weinan Urban Investment Group issued a letter of consent for land use to the Weinan Municipal Natural Resources Bureau in May 2022 (see Figure 2-7). The land supply procedure is expected to be completed by the end of January 2023.



Figure 2-6 Letter of consent for land use issued by Weinan Urban Investment Group

The land used for the Weilan Road WTS is leased (2.9 mu), affecting two households, including 1.6 mu of collective land in Group 4 of Hanma Village and 1.3 mu of collective land in Group 5. Such land has been adjusted to sanitation facility land. The land lease agreement was signed in February 2011, with a term of 20 years and a rental rate of 2,200 yuan/mu, where the rental would be paid for 10 years at a time. The land rental was paid in March 2011 and March 2021, totaling 127,600 yuan. See **Figure 2-8**. There has been no grievance.







Receipt of rental in 2021

Figure 2-7 Rental payment voucher for the Weilan Road transfer station

Findings: According to the applicable state laws and regulations, a PIU should obtain the approval of the land use right before the project's civil construction (or equipment installation). The land supply procedure for the Shengli and Chelei WTSs is being handled, and is expected to be completed by the end of January 2023¹⁵. The Weilan Road WTS uses leased land, which does not comply with the state policy on land use.

Suggestions: The Linwei District ESC should complete the adjustment of the land use plan to land for utilities in coordination with the competent authorities (natural resources and planning bureaus), and complete land use right approval and LA before WTS reconstruction.

The Majiagou Landfill managed by the Linwei District ESC is located in Xiangyang

2.5 Social audit on the Majiagou Landfill

2.5.1 Basic information

Sub-district. It broke ground in 2004, and was completed, put into operation in 2007, expanded in May 2015, and improved the landfilling process in August 2017. It serves Linwei District, High-tech Zone and Huazhou District, Weinan City, and will be closed after the completion of the Weinan WTE Plant.

¹⁵ Per the confirmation with the Linwei District PMO, committed to obtaining relevant land before starting the bidding for civil works.

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Landfill gas and leachate treatment is performed by the third party company appointed by the Linwei District ESC. The biogas power plant is located in the west, and the leachate treatment plant is located about 1.1km to the north, run by Henan Baichuan Changyin Industry Co., Ltd. and Beijing Yunchuang Tiandi Environmental Protection Technology Service Co., Ltd. respectively.

2.5.2 Labor and Working Conditions (ESS2)

The Majiagou Landfill's workers include direct and contracted workers. Direct workers are responsible for landfill operation and management, and contracted workers for biogas and leachate treatment.

1) Direct workers

The Linwei District ESC is a public institution under the Linwei District Urban Administration and Law Enforcement Bureau, managing the district's appearance and sanitation. The landfill has 19 direct workers. The social audit assesses the landfill's employment terms and conditions, presence of child and forced labor, OHS, worker GRM, etc. according to ESS2.

A. Employment terms and conditions

In the social audit, the relevant management systems, sample contracts, etc. of the Linwei District ESC were reviewed, mainly including:

- Measures for Cleaner Recruitment and Employment of Linwei District (Trial)
- Evaluation Measures for Refined Sanitation Management of Linwei District (Trial)
- Quality Standard and SOP for Environmental Sanitation of Linwei District
- Sample labor contract

According to worker interviews, the Linwei District ESC has signed labor contracts with the 16 workers (including some public welfare jobs), and provided social insurance for them. The basic terms and conditions of the labor contract include term, scope of work, labor remuneration, social insurance, benefits, labor discipline, termination and change, labor dispute settlement, and other items stipulated in the Labor Law, consistent with the Labor Law of the PRC and the Bank's ESS2.

The landfill offers induction training to workers to help them get familiar with its policies and their jobs. It adopts an 8-hour working system. The working hours are 7:30-11:30, 14:00 (15:00 in summer)-18:00 (19:00 in summer), and work beyond 8 hours is regarded as overtime, but overtime occurs during flood control only. Overtime is not more than 2 hours per time, and an overtime allowance of 20-30 yuan per time is

granted. There are two days off per month, and a paid leave of 1-7 days per annum. <u>The salary of security guards is 1,650 yuan per month</u>, lower than Linwei District's prevailing minimum wage level of 1,850 yuan per month.

Findings: The Linwei District ESC is a secondary public institution, and its personnel policies comply with the Labor Law and Labor Contract Law. It has provided social insurance and signed labor contracts for all eligible workers, and pays its workers monthly, consistent with the applicable state requirements and the Bank's ESS2.

However, the Majiagou Landfill still has some gaps from the Labor Contract Law and ESS2 in labor contract management, wage level and entitlements, such as:

- <u>Labor contract management</u>: The sample labor contract used by the Linwei District ESC lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law;
- <u>Wage level</u>: The wages of some workers (security guards) are slightly lower than the prevailing local minimum wage level;

Suggestions:

- <u>Strengthening labor contract management</u>: For jobs involving occupational hazards, the labor contract should include clauses on "labor protection, working conditions and occupational hazard protection";
- <u>Increasing the wage of security guards</u>, at least to the prevailing minimum wage level of Shaanxi Province.

B Labor protection

The minimum worker age is 40 years. The landfill does not employ any child labor or underage worker aged 16-18 years, and there is no forced labor, inequality or discrimination.

C OHS

The operating process of domestic waste landfilling is as follows: A transfer truck dumps waste in the designated area after weighing, and waste is compacted, disinfected and finally covered. See Figure 2-8.

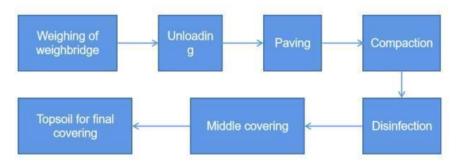


Figure 2-8 Landfilling flowchart

Based on the above operating process, the potential OHS impacts and risks include:

- Dust, odor and noise: Dust and noise during unlading may affect transfer truck drivers, attendants, safety officers and compactor operators; compactors generate high noise during operation, which may affect operators though such equipment is well sealed;
- Disinfectant: The disinfectant is a toxic chemical, and has a certain health hazard to those exposed to it;
- Harmful gases: Ammonia, hydrogen sulfide, etc. generated by domestic waste during microbial decomposition may affect all workers.
- landfill gas: The landfill gas contains methane mainly, and also carbon dioxide and toxic gases, and generates odor, leading to poisoning and explosion risks;
- Pathogenic contamination: Pathogens from domestic waste may pollute the environment and harm workers during landfilling;
- Operating risks of special equipment: risks arising from the operation of compactors, etc.;
- Check dam collapse, leachate leakage, and secondary pollutants arising from waste and landfill gas self-ignition may pollute soil, air and groundwater;
- Heatstroke risk during high temperature operation
- Infection risk (including COVID-19)

The Linwei District ESC has developed safety systems and emergency measures to manage OHS risks during operation, mainly including:

- Evaluation Measures for Refined Sanitation Management of Linwei District (Trial);
- Quality Standard and SOP for Environmental Sanitation of Linwei District;
- Work Safety System;
- Landfill Machinery Management System;
- Landfill Disinfection and Deodorization System;

- Transfer Work Safety Management System;
- Incentive Mechanism for Working Vehicle Drivers;
- Reward and Punishment Measures for Drivers of the Transfer Squadron;
- Contingency Plan for Environmental Emergencies (August 2021)

These systems manage the health and safety of on-site workers and transfer workers systematically, such as operating specifications, PPEs wearing, machinery operation and maintenance, environmental monitoring and site disinfection.

The implementation of these systems has been learned by field visit and interview. The key findings are as follows:

- Waste is transferred in a fully enclosed manner;
- Waste is landfilled daily to minimize the duration of exposure to the air;
- During unloading, safety officers and attendants are required to maintain a safe distance from the transfer truck to reduce dust and noise impacts;
- Workers are provided with PPE, including gloves, working clothes, antiskid rain boots, surgical masks, protective clothes, etc.;
- A deodorant is applied during landfilling to cover, neutralize or eliminate odor;
- During landfilling, film (or soil) covering is conducted daily unit by unit, and water is sprinkled on the working surface, road and borrow area to suppress dust;
- The leachate collecting pit is covered to reduce odor;
- A free systemic health examination is arranged for workers annually;
- For the prevention and control of infectious diseases (including COVID-19), a prevention and control system has been established, and emergency measures and a handling procedure defined for pandemic prevention and control.

The Contingency Plan for Environmental Emergencies for the Majiagou Landfill prepared by the Linwei District ESC specifies environmental risk prevention measures and institutional arrangements. An environmental emergency and fire control drill is organized annually, involving the whole staff of the emergency response organization of the landfill. The last drill was conducted in December 2021.





Figure 2-9 Emergency drill in December 2021

Conclusions and findings:

The Linwei District ESC has formulated a series of OHS management systems and procedures, including emergency management, which have been well implemented, but needs improvement in occupational protection management:

• **Occupational protection management**: The "three simultaneities" were not conducted for occupational protection facilities during the expansion of the landfill¹⁶, no occupational hazard screening was conducted at the operation stage¹⁷, no occupational health examination is offered, and the occupational hazard notification procedure is not performed.

Suggestions from the social audit:

 The Linwei District ESC should appoint a qualified agency to identify potential occupational hazards in the Majiagou Landfill, and conduct occupational hazard screening as soon as possible,

• Offer pre-job, on-the-job and post-job occupational health examinations to workers exposed to occupational hazards, and disclose results to workers;

 Provide appropriate PPEs and occupational protection training to workers, which should be offered at least once annually;

-

¹⁶ According to the Supervision and Administration Measures for the "Three Simultaneities" of Occupational Protection Facilities for Construction Projects issued in 2017, a construction agency should conduct an occupational hazard pre-assessment at the feasibility study stage, design occupational protection facilities along with the project at the design stage, inspect the construction of such facilities at the construction stage, and conduct an occupational hazard control assessment and prepare a report at the acceptance stage.

¹⁷ According to the Regulations on the Administration of Occupational Health at Workplaces effective from 2021 (Order No. 5 of the National Health Commission), an employer shall appoint a qualified occupational health technical service provider to conduct occupational hazard screening at least every 3 years, include the results in its occupational health records, and disclose them to the health authority and workers.

 The Linwei District ESC should specify occupational hazards in the labor contract, and notify relevant workers of potential occupational hazards and their impacts.

2) Contracted workers

The biogas power plant and the associated leachate treatment plant are run by Henan Baichuan Changyin Industry Co., Ltd. and Beijing Yunchuang Tiandi Environmental Protection Technology Service Co., Ltd. respectively. The biogas power plant has 5 workers, including a manager, an operations officer, 3 operators and a collector, with a minimum age of 22 years; the leachate treatment plant has 8 workers, including a manager and 7 operators, with a minimum age of 25 years.

Both companies have signed labor contracts with workers, covering term, scope of work, workplace, working hours, days off, labor remuneration, social insurance, benefits, labor protection, working conditions, occupational hazard protection, financial compensation, etc. The Administrative Measures for Third Party Dispatched Workers specify labor remuneration, entitlements, overtime allowance, etc.

Workers of the leachate treatment plant have two days off every 24 hours of work; workers of the biogas power plant work 12 hours per day, and have 4 days off per month. Wages of contracted workers are much higher than the prevailing minimum wage level of Shaanxi Province, and are paid monthly, and overtime wages are paid according to the Labor Law and Labor Contract Law; an appropriate GRM is in place to handle labor disputes. Therefore, the management of contracted workers complies with the applicable state requirements and the Bank's ESS2.

Findings: According to the review of the existing labor management procedures of the Linwei District ESC, its labor management of third party companies is consistent with the current state laws and regulations, but its labor management policies and procedures do not contain requirements for third party labor management and monitoring.

Suggestions: The Linwei District ESC should improve its management procedure for contracted workers according to ESS2.

3) **GRM**

According to interviews, workers usually file grievances to the manager (direct workers) or the third party company (for contracted workers) face to face or by telephone, which are usually handled timely. If this fails, workers may file grievances to the office director of the ESC. In addition, workers may file grievances to the Linwei

District Bureau for Letters and Visits, or file a civil suit in the court. Workers think that filing grievances face to face and telephone is feasible. No grievance has been filed to date, because workers think that the working conditions are fairly good, and they can resort to the manager directly for leaves, etc.

Findings: The landfill has grievance redress channels for workers, but has not established a formal written GRM, and does not have institutional requirements for grievance recording.

Suggestions: The Linwei District ESC should establish a formal GRM for the Majiagou Landfill based on the existing grievance redress channels, notify it to workers, and arrange resources and staff to record grievances received and their dispositions.

2.5.3 Community Health and Safety (ESS4)

According to the Technical Code for Landfills (GB50869-2013), the safe distance for landfills is 500m. There is a settlement in Shangmeng Group of Mengjia Village (86 households with 322 persons) 520m northwest of the landfill, a settlement in Majia Village (442 households with 1,361 persons) 550m to the west, the Mount Longshou cemetery 70m to the west, and a settlement in Chengjia Village (189 households with 623 persons) about 1km to the north. Therefore, the nearby villages are out of the 500m safe distance.

Shangmeng Group of Mengjia Village and Majia Village are affected slightly by odor, and Chengjia Village that is farther away from the landfill has almost no odor impact. Transfer trucks run through Mengjia Village, and have some traffic safety, noise and odor impacts. Based on online search, a villager in Mengjia Village once called the *Chinese Business View* to report the landfill's odor in summer.

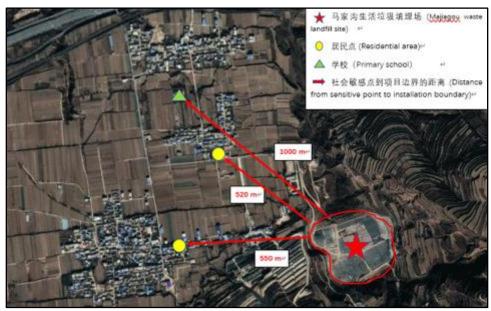


Figure 2-10 Social sensitive sites around the Majiagou Landfill

The landfill has special drainage facilities for leachate and landfill gas, and a specialized third party company is appointed to treat leachate and landfill gas, both discharged up to the standard. The landfill also appoints a third party monitoring agency to perform environmental monitoring regularly. Based on recent wastewater, groundwater, waste gas, noise and soil environmental monitoring reports, environmental monitoring results are conforming, but only one report (Q3 2020) has been disclosed on the official website of the Linwei District Government¹⁸.

Transfer trucks are 8t waste transfer trucks. They drive on county and provincial highways, away from settlements, hospitals, schools and other sensitive sites, but may affect local traffic and personal safety. The ESC has established a uniform management system for transfer trucks:

- Trucks should drive along a fixed route in an enclosed manner, and be monitored via the GPS; wastewater in the sewage tank should be drained before driving;
- When a waste collection site is close to a settlement, loading and transfer times should be arranged rationally avoid the traffic peak hours; trucks should be cleaned timely after driving;
- Drivers should observe the traffic rules strictly, and keep trucks in good conditions. There is an established reward and punishment system for drivers, and the ESC offers operational and safety training monthly.

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¹⁸ http://www.linwei.gov.cn/xxgk/zfjg/gzfgzjg/ghwj/gzdt/132184.htm.

Transfer trucks operate as required, <u>but there is occasional waste spillage</u>. Two villagers in Shangmeng Group of Mengjia Village close to the landfill say that the landfill is about 500m away, and sometimes emits odor, especially in summer. Since their houses are not close to the road, truck noise has little impact on them. However, they think that those close to the road would be affected by noise, and suggest that transfer trucks should not drive after 22:00. Both of them think that landfill closure will improve the local environment.

The landfill has not established an active community communication mechanism. Grievances are usually field with the village committee or directly to the town government, which will then discuss a solution with the Linwei District ESC.

Findings: The landfill has slight impacts on nearby communities, and has taken some measures to mitigate E&S impacts. However, it has not established an active community communication mechanism or GRM.

Suggestions: Establish a formal GRM, and a communication and feedback mechanism with nearby communities, and arrange resources and staff to record grievances received and their dispositions.

2.5.4 Land use (ESS5)

The Majiagou Landfill has a gross floor area of 357.9 mu, and is constructed in two phases. Phase 1 was constructed in 2004, with a land area of 224.1 mu; Phase 2 was constructed in 2016, with a land area of 133.8 mu. The land used for the landfill has not been converted into state-owned land, but is leased collective land. The Linwei District Government issued a certificate of the right to use collective land for Phase 1 in July 2005, which expired in July 2007, and no government approval has been obtained for Phase 2.

According to the Linwei District ESC, in 2003, the Weinan Municipal Development and Reform Commission approved the Majiagou Landfill project. In March 2004, the Weinan Municipal Government issued a reply on site fixation for the landfill (see Figure 2-11), where the site is located in Majiagou Village, Xiangyang Sub-district, with a floor area of 350 mu. The reply also requires the PIU applies for a construction land planning permit with the Weinan Municipal Planning Bureau, and handles the land approval procedure.

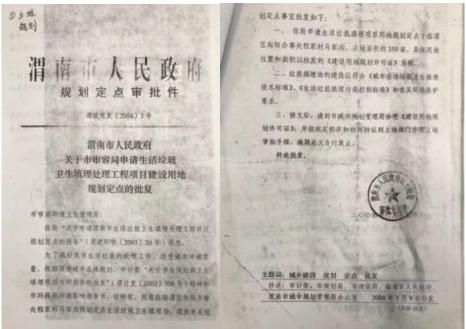


Figure 2-11 Reply of the Weinan Municipal Government on landfill site fixation

In September 2005, the Weinan Municipal Planning Bureau issued the construction land planning permit for Phase 1, stating that the land used for the landfill met the urban planning requirements, and the land allocation procedure was to be handled. See Figure 2-13.

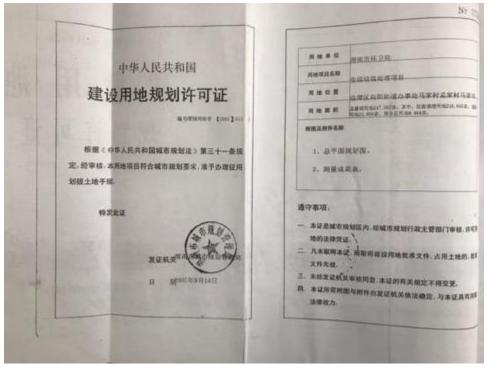


Figure 2-12 Land planning permit for the Majiagou Landfill

The land used for the landfill was unused land in 2004, owned by Mengjia, Majia and Majiagou Villages. The Linwei Municipal Natural Resources Bureau adjusted this plot to collective construction land in 2009.

1) Phase 1

224.1 mu of collective land is leased for Phase 1 (including road and administrative land), affecting 118 households, including 180.4 mu in Majia Village (Magou Village¹⁹), Xiangyang Sub-district, affecting 62 households, including 43.0 mu of road and administrative land, and 137.4 mu of ditch land; 43.69 mu in Mengjia Village, affecting 56 households, including 38.1 mu of road and administrative land, 0.6 mu of ditch land and 5 mu of village road. In July 2005, the Linwei District Government issued a certificate of the right to use collective land for Phase 1, specifying that the land use is public facility land, and the land use right will expire in July 2007. This certificate was not renewed after expiry.

The land lease agreement was signed in August 2004, with a lease term of 30 years, from September 1, 2004 to August 31, 2034. According to the agreement, rental for road and administrative land, and ditch land is paid every 10 years, and rental for village road is paid for 10 years at a time and not paid for the subsequent 20 years. The leased land will be returned to villagers unconditionally after expiry.

The land lease agreement is signed by Weinan Yujie Environmental Protection Co., Ltd. under the Linwei District ESC, village committee, and Xiangyang Sub-district Office. The task force has reviewed the land lease agreement and payment voucher, and confirmed that rental has been paid as agreed.

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¹⁹ Magou Village has been merged into Majia Village.

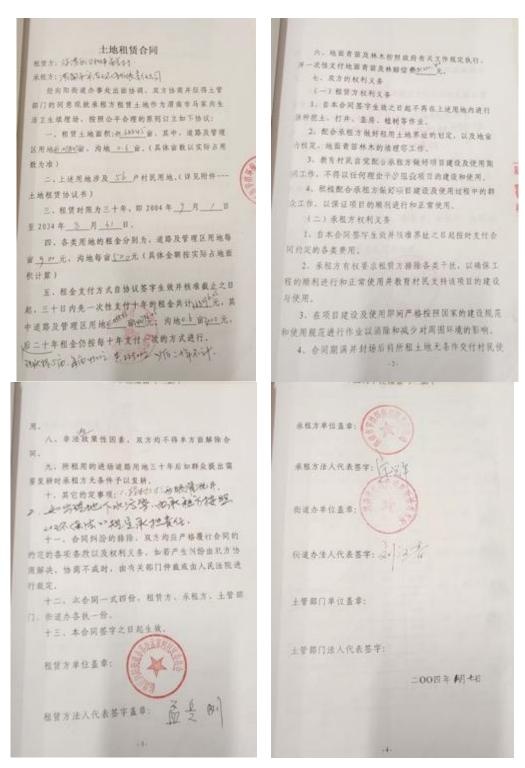


Figure 2-13 Land lease agreement

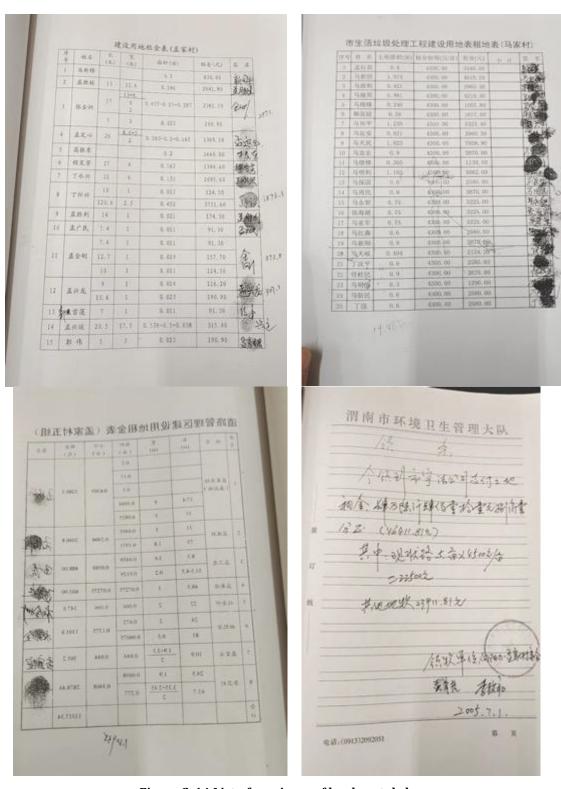


Figure 2-14 List of receivers of land rental charges

2) Phase 2

Phase 2 was constructed in 2016, with a land area of 133.8 mu, including 131.2 mu in Majia Village, 27.6 mu of cultivated land and 103.6 mu of ditch land, affecting 30 households; 2.6 mu of cultivated land in Mengjia Village, affecting 2 households.

In August 2016, the Linwei District Environmental Sanitation Administration Bureau signed a land lease agreement with the village committees of Mengjia and Majia Villages, specifying that the rental rates are 1,100 yuan/mu for cultivated land and 700 yuan/mu for ditch land, the lease term is 20 years (until June 2036), and rental is paid every 10 years. No payment voucher is available, which may have been lost. However, rental has been paid as agreed, with no relevant grievance.

In September 2022, the Linwei District Natural Resources issued the note on the Land Use of the Majiagou Landfill. According to the note, this plot is collective construction land and will be included in the overall land utilization plan as construction land, and no lawsuit has occurred to date.



Figure 2-2 Note on the Land Use of the Majiagou Landfill issued by the Linwei District Natural Resources

Findings: The land used for both phases is leased collective land, and will be returned to villagers unconditionally after expiry of land lease contract. Article 43 of the previously applicable China's Land Management Law (2004) (LML) ²⁰ regulates that the land for landfill should be state-owned construction land rather than leased collective land that should be acquired. The amended LML (effective as of January 1, 2020) removed the privisons for supplying project land use only through the government. Per the amended LML (2020), the landfill land use shall at least (a) align with the land zoning plan as set out by the land spatial planning (Articles 59 and 64); (b) convert the farmland into construction land (Article 44) and reflect it in the up-to-date land spatial planning; and (c) seek land pre-examination with the Natural Resources Bureau (Article 52); and (d) obtain the land use certificate (Article 12).

In addition, the land use approval and construction land planning permit were requested according to the approval comment of Weinan Municipal Government, while Linwei District ESC did not provide its land use approval for Majiagou Landfill. As a result, the landfill is not comforming with official land use zoning and planning, and has not obtained the land certificate.

Suggestions:

To rectify the non-compliance of land use, it is suggested:

• The Shaanxi PMO should assist the county PMO to find a feasible solution to the land use nonconformity in coordination with the county government and natural resources bureau, identify the restraints of such outstanding issue on landfill closure and the prerequisites to land use, and notify the progress to the Bank timely. It is sugguested that Linwei District Government should include land use planning for the landfill in the updated land spatial plan which is expected to be approved in June 2023 by the Shaanxi Provincial Government. Before starting the bidding for landfill closure, the Linwei PMO should receive the necessary approvals for land use (i.e., aligning with land zoning plan in the up-to-date land spatial planning, obtaining land use certificate) and seek consent from the district Natural Resources Bureau about the landfill closure plan.

For compensation with villages/villagers subject to the likely potential scenario after the landfill closure, it is suggested:

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²⁰ Article 43 of the Land Management Law (LML) (2004) regulates "Any organization or individual that needs land for construction purposes shall apply for the use of state-owned land according to law.....". In the amended LML (effective as of January 1, 2020), the previous Article 43 in the 2004 LML was removed.

- If the leased land is to be returned to the villages/farmers after landfill closure, the PMO will support preparation of a technical assessment to confirm the feasibility of return (including any risks/mitigation measures needed).
- If the leased land is to be reused for other purposes after the landfill closure, the PMO and local government will support "good faith negotiations" to seek consent from the villages/villagers and adjust the provisions for compensation 21.
- If the land continues to be leased after the land closure, the prorated land rental will be paid per schedule outlined in the land leasing agreements.

2.6 Sorting center

The sorting center is located on Huashan Street Central in Linwei District, completed and put into operation in 1982, with a floor area of 11.5 mu. It has 4 warehouses, and its machinery mainly includes forklifts, packing machines, etc. It is run and managed by Linwei District Used Material Recovery Company.

2.6.1 Labor and Working Conditions (ESS2)

Linwei District Used Material Recovery Company has 22 workers, in which 11 are responsible for administrative work (including general manager's office staff, waste plastic officer, scrap paper officer and scrap metal officer), and the other 11 are operators (including sorters, drivers, equipment operators, etc.), all being direct workers. The social audit assesses the landfill's employment terms and conditions, presence of child and forced labor, OHS, worker GRM, etc. according to ESS2.

1) Employment terms and conditions

Through interviews with managers and workers, the company's personnel management, remuneration, working schedule, etc. are learned.

There are 11 managers, recruited and allocated to the company by the district labor and social security bureau. The managers are registered at the labor and social security bureau, but have not signed labor contracts with the company. They work 8 hours per day (8:00-12:00 and 14:00-18:00), and are entitled to social insurance and statutory holidays, and their wages are higher than the minimum wage level of Linwei District. There are 11 operators, dealing with sorting, driving and machinery operation mainly.

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²¹ Per the interview, Linwei is considering cooperating with an enterprise to re-use the land after landfill closure. This would require changes to the land lease agreements, which currently reflect agreement to return the land to the village/villagers after the landfill closure. "Good faith negotiations" in such a case would include discussion of measures to compensate/share benefits of such arrangement with communities.

The operators have not signed labor contracts with the company, work 8 hours per day (7:30-11:30 and 14:00-18:00), and are not entitled to social insurance. Their wages are 4,000-5,000 yuan per month, higher than the minimum wage level of Linwei District. They have no fixed day off, and may ask for leaves (paid), usually not more than 7 days.

Work beyond 8 hours is regarded as overtime. All workers are entitled to an overtime allowance (50-100 yuan per time), free accommodation and meals, cooling foods and drugs in summer, a high temperature allowance (300 yuan per capita per annum), etc.

Conclusion and findings: Although the managers do not have a labor contract, they are entitled to a contract without a fixed term and other statutory rights, and are paid monthly, consistent with the applicable state requirements and the Bank's ESS2. However, there are still deficiencies in personnel management, labor contract management, working hours, etc., including:

- The company does not have a formal personnel management system, and has not signed labor contracts with workers;
- The operators (sorters, drivers, equipment operators, etc.) are not entitled to social insurance, and have no fixed day off.

Suggestions:

- Establish a personnel management system for the sorting center, covering recruitment, scope of work, wages and benefits, OHS, working hours, training, etc.
- Signe formal labor contracts with all direct workers, and ensure that such contract complies with the Labor Law, Labor Contract Law and ESS2, and includes provisions on "labor protection, working conditions and occupational hazard protection".
- Arrange days off for workers flexibly by rotation.

2) Labor protection

Child labor and minimum age: The company recruits workers who have attained 20 years. The minimum worker age of the company is 35 years. Therefore, the company does not employ any child labor or underage worker aged 16-18 years. All workers work for the company voluntarily, and there is no forced labor, recruitment discrimination or sexual harassment, and SH/SEA.

Conclusion: The company does not employ any child labor or underage worker (16-18 years), and there is no forced labor or recruitment discrimination.

3) OHS

The operating process of the sorting center is as follows: When a truck enters the center, it is weighed, and the cargo is stored. Sorters sort 3 types of waste manually, and pack it using a packing machine. Metallic waste is sorted and dismantled before packing. Sorted and packed waste is carried away by a forklift.

Based on the above operating process, the potential OHS impacts and risks include:

- Accidental injury: Workers may be exposed to scratch and falling risks when sorting and dismantling metallic waste, and operating packing machines; on-site workers may be hit by forklifts;
- Pathogen and infection (including COVID-19) risks: risks of viruses (including COVID-19) and exposure to pathogens during waste sorting;
- Disinfectant: The disinfectant is a toxic chemical, and has a certain health hazard to those exposed to it;
- Noise and dust: Noise is main from packing machines, cutting machines and grabbing machines; persistent noise may harm the hearing of workers; dust is from used materials, and may affect workers' physical health;
- Fire: Waste plastics and paper are flammable, and may cause a fire if not stored and managed properly.

The company has taken safety measures to manage OHS risks during operation, mainly including:

- Offer pre-job work safety training to workers, covering operating regulations,
 PPEs wearing, etc.;
- Establish disinfection and pandemic prevention systems, ask workers to clean and disinfect the site every day, and keep records;
- Provide workers with PPE, including working clothes, gloves, face masks, etc., and ask workers to wear PPEs before working; appoint a safety officer to instruct packing machine operators;
- Establish a fire safety system, provide fire-fighting apparatus near storage sites, store flammables properly, and conduct a fire drill annually;
- Establish a pandemic prevention and control leading group, and establish emergency measures and a handling procedure for pandemic prevention and control.

<u>Conclusion and findings</u>: The company has taken a series of safety measures to manage OHS risks, which have been well implemented in practice. However, further improvement is needed in the following aspects:

- The company's existing OHS systems only include the disinfection and pandemic prevention system, sorting and transfer management system, and fire safety system, and there are no formal systems on work safety and emergency management;
- No occupational hazard screening was conducted at the operation stage, no occupational health examination is offered, and the occupational hazard notification procedure is not performed.

Suggestions:

- The company should improve its OHS management systems before sorting center construction, including the OHS management, work safety responsibility system, worker training system (including OHS), comprehensive contingency plans (safety emergencies, fire control, etc.), driving safety management system, safe operation regulations, machinery management system, etc.;
- Appoint a qualified agency to identify potential occupational hazards at the workplace;
- Offer pre-job, on-the-job and post-job occupational health examinations to workers exposed to occupational hazards, and disclose results to workers;
- Provide appropriate PPEs and occupational protection training to workers, which should be offered at least once annually;
- Specify occupational hazards in the labor contract, and notify relevant workers of potential occupational hazards and their impacts.

4) **GRM**

Workers may file grievances directly to supervisors face to face or by telephone; or failing this, to the office director; or failing this, to a corporate leader (e.g., secretary, general manager). Workers may also file grievances to the Federation of Supply and Marketing Cooperatives, district bureau for letters and visits, district labor and social security bureau, court, etc. In general, grievance redress relies on informal internal channels and conventional external channels, and there is no formal written GRM at the company level.

Suggestions: The company should establish a formal GRM for workers based on the existing grievance redress channels and practices, notify it to workers, and arrange resources and staff to record grievances received and their dispositions (written or oral).

2.6.2 Community Health and Safety (ESS4)

The sorting center is located on Huashan Street central in the downtown area of Linwei District, next to Yuxin Logistics Company on the east, next to Buildings 4 and 5 of Xinli Community on the west (about 65 households), with People's Home Community at about 110m, next to Buildings 2 and 3 of Xinli Community on the south (about 65 households); with a used car market at about 100m, and Shengshi Community at 150m to the north.

The sorting center's main impacts on nearby communities and residents are dust, noise and personal safety. Shengshi Community is two blocks away from the sorting center, and is almost unaffected; Xinli Community next to the sorting center is affected by noise and dust. For such impacts, machinery is not operated during the noon break and after 20:00. For traffic safety risks, the company offers traffic safety awareness training to drivers monthly.



Figure 2-15 Communities around the sorting center

According to the interviews with two residents, residents may file grievances to the community committee, sub-district office, or district bureau for letters and visits. They may also call the citizen hotline "12345" or environmental protection hotline "12369". The two interviewees are aware of the hotlines and online network, but have not filed any grievance.

Findings: The company has no formal active community communication mechanism.

Suggestions: The company should establish a formal community communication mechanism before construction, notify it to nearby communities and residents, and arrange resources and staff to record grievances received and their dispositions.

2.6.3 Land use survey (ESS5)

6,533 m² of state-owned construction land owned by Linwei District Used Material Recovery Company will be used for the sorting center. The land use right was obtained in the 1980s; in July 2007, the Weinan Municipal Government issued a certificate of land use right to the company. See Figure 2-16.



Figure 2-16 Certificate of land use right of Linwei District Used Material Recovery Company

Findings: The land used for the sorting center is owned by Linwei District Used Material Recovery Company, which has operated on it since the 1980s, and received a certificate of land use right in 2007. Therefore, such land can be used directly without any outstanding issue.

2.7 Summary of the construction environment and social impacts of the WTE plants, and relevant requirements

According to the project design, domestic waste in the project area will be collected and transferred to the WTE plants for final disposal. 3 WTE plants are involved, which are the Weinan Urban WTE Plant, Chengcheng County WTE Plant and Baoji City WTE Plant. As discussed above, these WTE plants are defined as "project-related facilities". China and Shaanxi Province have strict E&S management requirements for WTE plants. The refore, this section analyzes the E&S management requirements for WTE plants. The consistency of the E&S management measures and systems of the WTE plants with the relevant ESSs will be analyzed later based on the state laws and regulations, and the Bank's ESSs, and relevant social monitoring and management suggestions proposed to promote the realization of the project development objective.

• Basic information

In December 2019, the provincial development and reform commission, housing and urban-rural development department, ecology and environment department, and natural resources department jointly issued the Medium- to Long-term Special Plan for Power Generation by Waste Incineration of Shaanxi Province (2020-2030), which includes the above 3 WTE plants.

Key E&S risks

E&S impacts and risks include (without limitation):

- Comprehensive social impacts, such as NIMBY, social fairness, social conflicts, etc.;
- LAR impacts and risks;
- OHS impacts and risks;
- Community health and safety impacts and risks at the construction and operation stages;
- Environmental impacts at the construction and operation stages, including dust,
 noise, waste gases (especially dioxins), wastewater, solid waste, etc.;
- Information disclosure and stakeholder engagement at the construction and operation stages

Construction approvals

In China, stringent controls are imposed on the lifecycle E&S risk management of WTE plants. A WTE plant can be constructed subject to a series of environmental, social, health and safety approvals. See Table 2-7.

Table 2-7 E&S approvals required for WTE plants

Type	Before construction	Before operation	During operation
Environmental protection	EIA report and approval	Water taking permit	Online environmental monitoring and disclosure of monitoring data;
	Land and soil conservation demonstration report	Pollutant discharge permit	Routine regulation by the government
		Final environmental inspection	
Safety	Fire-fighting facility design registration form Safety facility design report	Final inspection and registration of fire- fighting facility	Routine regulation by the industry authority and emergency management authority; Safety training and drills organized by the company
	Safety pre-assessment report	Final inspection of safety facility	
OHS	occupational hazard pre-assessment report	Occupational hazard control assessment report	Occupational hazard screening conducted at least annually, and an occupational hazard assessment conducted at least every 3 years; OHS training organized by the company; Occupational health examination organized by the company, and results notified to workers; Routine regulation by the health authority
Land use	Land pre-examination Construction land planning permit LA approval Certificate of land use right		/
Other	Social stability risk assessment report and approval	/	Publicity and education, and public open days organized by the company

Source: interviews and compiled information

In addition, the Medium- to Long-term Special Plan for Power Generation by Waste Incineration of Shaanxi Province (2020-2030) specifies:

• <u>Conduct site selection for WTE projects according to law</u>. All cities shall strengthen early-stage risk assessment for WTE projects. In the Guanzhong region, new projects shall be constructed as urban heating sources. The space

control measures for the "3 types of areas and 3 types of lines"²² shall be implemented strictly. Along the Qinling Mountains, site selection shall be conducted in strict conformity with the Ecological Protection Regulations for the Qinling Mountains of Shaanxi Province, and protection distances set properly.

• Disclose planning and site selection information comprehensively. Site selection for WTE project shall be open and transparent, and subject to public supervision. E&S risks shall be prevented and mitigated properly. EIA information shall be conducted in strict conformity with the Measures for Public Participation in Environmental Impact Assessment (Order No.4 of the Ministry of Ecology and Environment in 2019) to reduce project risks. All types of media shall be used to improve the public awareness of WTE projects. The information disclosure and sharing mechanisms for WTE project planning and site selection shall be improved to promote public participation.

The social audit analyzes the state laws and regulations on social management (see Part 1). In general, China has established a sound array of laws and regulations on social management (e.g., social stability risk assessment, land use management system, OHS, public participation), covering early-stage impact screening, impact assessment, measure formulation, public participation, supervision, etc., consistent with the Bank's ESSs. In view of the PIU's influence on the project-related facilities, the social audit reviews the compliance of the social management of the WTE plant, and proposes an action plan for subsequent social monitoring.

LA for the Weinan Urban Center and Baoji City WTE Plants has been completed, and that for the Chengcheng County WTE Plant has not. <u>Therefore</u>, the LAR plan for the <u>Chengcheng County WTE Plant was reviewed in the social audit</u>.

2.8 Weinan Urban WTE Plant

2.8.1 Introduction

The Weinan Urban WTE Plant has an overall disposal capacity of 1,750t/d (1,000t/d in Phase 1 and 750t/d in Phase 2), and serves the urban center (including Linwei District), towns and rural areas of Weinan City. The WTE plant is funded by Weinan Industry Investment New Energy Development Co., Ltd. and Chongqing Sanfeng Environment Group Co., Ltd., and constructed and run by the project company Weinan

²² The "3 types of areas" refer to urban, agricultural and ecological spaces. The "3 types of lines" refer to urban development boundaries, permanent basic farmland control lines and ecological protection redlines.

Sanfeng Company. The Weinan Municipal Housing and Urban-Rural Development Bureau is the main regulator, and the ecology and environment bureau is the environmental regulator.

Weinan Sanfeng Company has established an EHS department, and appointed dedicated staff to manage E&S affairs.

2.8.2 Construction progress

The Weinan Urban WTE Plant broke ground in March 2022, and is expected to be completed in May 2023. Its progress is as follows:

- The Social Stability Risk Analysis Report was registered in July 2020;
- The Site Selection Opinion was approved in February 2021;
- The EIA Report was approved in June 2021;
- The LA approval (SPGLP [2021] No.778) was obtained in December 2021, and LAR has been completed;
- Transfer time of land use right: May 2022;
- The transfer contract of the right to use state-owned construction land was signed in June 2022.

According to Table 2-7 and current project progress, Weinan Sanfeng Company will conduct the following environmental, health and safety assessments, get registered with the regulators concerned, and implement relevant measures during project implementation. The competent authorities (e.g., ecology and environment bureau, safety supervision bureau, health commission) will supervise the implementation of these measures irregularly.

Table 2-8 E&S approval progress for the Weinan Urban WTE Plant

Stage	Document	Regulator	Time	Remarks
Feasibility study	Land pre-examination	Natural resources bureau	2022.2.22	Completed
	Social stability risk assessment	Political and legislative affairs committee	2020.7.31	Completed
	Safety pre-assessment	Safety supervision bureau	/	Included in the feasibility study
	Occupational hazard pre-assessment	Health commission	2021.6	Completed
Design	Safety facility design	Safety supervision bureau	2021.10	Completed
	OHS design	Health commission	2021.10	Completed
	Environmental design	Ecology and	2021.10	Completed

Stage	Document	Regulator	Time	Remarks
		environment bureau		
Before implementation	Land approval and resettlement	Natural resources bureau	2021.12	Completed
	Certificate of land use right	Natural resources bureau	2022.9	In process
	Environmental approval	Ecology and environment bureau	2021.6.16	Completed
Implementation and inspection	Safety inspection	Safety supervision bureau	One month before operation	
	Environmental inspection	Ecology and environment bureau	One month before operation	
	OHS inspection	Health commission	One month before operation	
Operation	occupational hazard screening	Health commission	Annually	By a specialized agency
	Occupational hazard	Health commission	Once every 3	By a specialized
	assessment		years	agency
	Government supervision and inspection	Competent authority	Annually, irregular	

Source: compiled by the task force

The Shaanxi PMO will supervise the work to be done by Weinan Sanfeng Company in coordination with the Linwei District Government (and Linwei District PMO), and appoint an external M&E agency to conduct M&E, which will submit external social M&E reports to the Bank semiannually.

2.8.3 Labor and working conditions

The WTE plant is constructed and run by Weinan Sanfeng Environmental Protection & Energy Co., Ltd. (Weinan Sanfeng Company) jointly established by Weinan Industry Investment New Energy Development Co., Ltd. and Chongqing Sanfeng Environment Group Co., Ltd. (a specialized WTE solution provider, website: www.cseg.cn, which has invested in 32 BOT projects).

The WTE plant will have 5 types of occupational hazards:

- Pathogen, odor and biogas risks during waste discharging and storage;
- Scald and electric shock risks during production;
- Leachate spillage risks;
- Dust and harmful gas risks during waste incineration;
- Noise pollution during equipment operation

Although the Weinan Urban WTE Plant is under construction, Weinan Sanfeng Company has established internal E&S management system based on its experience, including:

• "Three Simultaneities" Management Measures

- Safety and Environmental Inspection System (Trial)
- Safety and Environmental Responsibility System (Trial)
- Management System for Safety and Environmental Accidents
- Screening and Correction Measures for Safety and Environmental Accidents (Trial)
- Reward and Punishment Management System for Civilized Construction
- Safety Training and Education System
- Worker Safety Commitment Letter
- Work Safety Meeting and Document Management System (Trial)
- Safety Investment Guarantee System (Trial)
- Vehicle Traffic Safety Management Measures (Trial)
- Safety and Environmental Management Measures for Outsourcees and Contractors (Trial)
- Implementation Measures for the Fire Safety Responsibility System (Trial)
- OHS Management System
- Safety Management System for Key Periods and Holidays (Trial)
- Special Contingency Plan for Safety Accidents (Construction Stage)
- Contingency Plan for Flood Control
- Special Contingency Plan for Environmental Pollution (Construction Stage)
- Special Contingency Plan for Fire Accidents (Construction Stage)
- Special Contingency Plan for Public Health Emergencies (Construction Stage)
- Special Contingency Plan for Mass Emergencies (Construction Stage)

As a specialized WTE construction and operation company, Weinan Sanfeng Company has rich experience in environmental, social and safety management, and its E&S management systems and practices are expected to largely comply with the Bank's ESF.

Since trade secrets are involved, the task force has only checked relevant catalogues. The Shaanxi PMO will strengthen the WTE plant's E&S performance in coordination with the Weinan Municipal Government, and appoint an external M&E agency to conduct M&E, which will submit external social M&E reports to the Bank semiannually.

2.8.4 Community Health and Safety (ESS4)

According to the EIA Report (June 2021), the protection distance of the Weinan Urban WTE Plant is determined at 300m. There should be no settlement, school, hospital, or any other sensitive site within the protection distance.

The Weinan Urban WTE Plant is located in Gaotang Town, with Zhongqin Group of Xuedi Village at 800m to the north, Hongbei Group of Xuedi Village at 810m to the southeast and Group 6 of Laonian Village at 650m to the southwest.

Zhongqin Group of Xuedi Village has 133 households with 421 persons, Hongbei Group has 83 households with 226 persons, and Group 6 of Laonian Village has 56 households with 178 persons. None of the 3 groups is downwind the prevailing wind direction. In addition, the biogas power plant is beyond the statutory safe distance of 300m from the 3 groups, and has little odor, dust and noise impact on them.



Figure 2-17 Social sensitive sites around the Weinan WTE Plant

2.8.5 LAR

1) Government approval

The Shaanxi Provincial Government December approved the construction land for the Weinan Urban WTE Plant in 2021 (SPGLA [2021] No.778). The Weinan Municipal Natural Resources Bureau has disclosed the approval on its website (http://zrzyghj.weinan.gov.cn/Index/read/id/27570.html).



Figure 2-18 Land approval for the Weinan Urban WTE Plant

2) LAR impacts

121.75 mu in Laonian and Xuedi Villages, Gaotang Town has been acquired for the WTE plant, including 117.57 mu of cultivated land and 4.18 mu of garden land. LAR was completed in late 2021, affecting 53 households with 244 persons. It does not involve HD.

3) Public participation

Before LA, the Weinan Municipal Housing and Urban-Rural Development Bureau, Weinan Sanfeng Company and the Gaotang Town Government conducted public consultation in the two affected villages, covering land use, DMS, compensation rates, payment mode, ec.





3) **Compensation rates**

The LA compensation rates for the WTE plant are based on the Uniform Administrative Regulations for Projects Involving Land Acquisition of Shaanxi Province (Interim) (SPLRD [2015] No.5)²³, where that for cultivated land and garden land is 41,000 yuan/mu.

Compensation agreement and payment 4)

LA is conducted by the Huazhou District Natural Resources Bureau, but the LA compensation is borne by Weinan Sanfeng Company. Weinan Sanfeng Company has disbursed the LA compensation to the Huazhou District Natural Resources Bureau in full (see Figure 2-20). Huazhou District and Linwei District are two administrative divisions. The social audit did not receive support from the competent authorities of Huazhou District, and the task force did not review the LA compensation agreements with the affected villages and payment vouchers. The task force interviewed the Gaotang Town Government, and searched for online information. It is reported that the compensation has been fully paid to the AHs, which can be evidenced by the fact that no villager has impeded construction.



²³ http://zwgk.hzqu.gov.cn/info/36124



Figure 2-20 Payment Vouchers

5) Land approval

The land used for the Weinan WTE Plant was approved by the Shaanxi Provincial Government in December 2021, and LAR has been completed. In May 2022, the Huazhou District Natural Resources Bureau completed the state-owned land transfer procedure; in June 2022, Weinan Sanfeng Company signed a state-owned land transfer contract with the Huazhou District Natural Resources Bureau. It is expected that the Huazhou District Natural Resources Bureau will issue a real property ownership certificate to Weinan Sanfeng Company in September 2022.

Conclusions and findings: The land used has been approved by the Shaanxi Provincial Government, and LAR has been completed according to the approved LA compensation and resettlement program. Information disclosure and public participation were conducted during LA. Due to administrative coordination, COVID-19 and the pressing schedule, the task force has not reviewed the LA compensation agreements and payment vouchers, but concludes based on field visit and interviews that the LA compensation has been paid to the AHs according to the policy.

Suggestions: To ensure the compliance of LA and compensation payment, and protect the interests of the APs, the Shaanxi PMO should conduct a final LAR assessment in coordination with the competent authorities (especially Huazhou District Natural Resources Bureau), including the list of APs, losses and compensation received, livelihood restoration measures, information disclosure, grievance redress, satisfaction with LAR, and include relevant inclusions in external social M&E reports for submission to the Bank.

3 Part 3: Social audit on the Chengcheng County subproject

3.1 Overview of the subproject and scope of the social audit

The Chengcheng County subproject aims to realize integrated urban and rural waste collection and transfer throughout hengcheng County, and covers one sub-district and 9 towns, with a gross area of 1,121 km². The subproject includes the construction of an urban WTS and 8 rural WTSs, the closure of the Yaotou and Chengcheng Landfills, vehicle purchase, etc.

The social audit covers the WTSs, existing facilities and project-related facilities with land acquired, including:

- Existing urban and rural waste collection and transfer systems, labor conditions of different types of workers involved (e.g., community workers)²⁴, and management measures for community health and safety, traffic safety risks, etc. involved in waste transfer systems;
- New WTSs with land acquired: Among the 9 new WTSs, state-owned construction land has been obtained for the Jiaodao Town and Zhaozhuang Town WTSs. The social audit is focused on the land used for these two WTSs; collective land will be acquired for the other 7 WTSs, for which a separate RAP has been prepared;
- Existing facilities: including the Yaotou and Chengcheng Landfills. The social audit is focused on LAR, labor and working conditions, community health and safety, stakeholder engagement, etc.;
- Project-related facilities: Chengcheng County WTE Plant. The social audit assesses its social impacts and risks, and social management systems, analyzes its potential impacts on the Project, and proposes management measures.

3.2 Existing domestic waste transfer system in Chengcheng County

Chengcheng County's existing collection and transfer systems include an urban one and a rural one.

1) Urban domestic waste collection and transfer

The Chengcheng County ESC under the Chengcheng County Urban Administration and Law Enforcement Bureau is responsible for urban domestic waste collection and transfer mainly. For the 5 dependent communities and two office buildings of the

²⁴See the separate social audit chapters below for the labor and working conditions management of existing facilities on the domestic waste service chain.

Chengcheng County Mining Bureau, the bureau is responsible for waste collection and transfer.

<u>Waste collection</u>: Cleaners of the ESC are responsible for waste cleanup and collection in urban public areas; property management companies or house owner committees are responsible for waste cleanup and collection in residential communities; domestic waste of government agencies, office buildings, schools, hospitals, etc. is collected by organizations concerned.

<u>Waste transfer</u>: For any community close to a WTS, domestic waste is transferred by the property management company to the WTS; other waste is transferred by workers organized by the ESC (including drivers and attendants) to WTSs. For the 5 dependent communities and two office buildings of the Chengcheng County Mining Bureau, the bureau is responsible for waste collection and transfer.

<u>Waste disposal</u>: The ESC transports domestic waste from WTSs to the Yaotou Landfill for landfilling. The Chengcheng County Mining Bureau transports its domestic waste to the Yaotou Landfill itself.

A. Labor and working conditions

Workers involved in the urban waste collection and transfer system mainly include the ESC's direct workers and the Chengcheng County Mining Bureau's community workers.

ESC direct workers

The ESC has 61 managers, 256 cleaners, 88 transfer workers and 27 sanitation facility workers (including landfill workers). The ESC has signed labor contracts with 123 cleaners, and the other workers only have an employment form. The basic terms and conditions of the ESC's formal labor contract include term, workplace, labor remuneration, overtime pay, social insurance, benefits, labor discipline, contract change, termination and renewal, labor dispute settlement, and other items stipulated in the Labor Law, consistent with the Labor Law of the PRC and the Bank's ESS2. However, the cleaner employment form has job and employment time information except the worker's basic information, and lacks the basic terms and conditions stipulated by the Labor Law and Labor Contract Law.

The ESC has provided social insurance for female workers under 55 and male workers under 60, and accident insurance for workers exceeding the social insurance covering age. The wages of all managers and transfer workers are higher than the prevailing minimum wage level of Shaanxi Province; but the salary of most cleaners and

some WTS workers is 1,600 yuan/monthly, below such standard. PPEs is distributed regularly, and sunstroke prevention articles and subsidies are granted in summer. Cleaners work on two shifts of 8 hours each, and would work for over 8 hours when there is a major event or sanitation inspection. Overtime is 1-2 hours per time, and an overtime allowance of 15 yuan per time is granted. Managers are off at weekends, transfer drivers are off no rotation, and other cleaners have no day off.

Mining bureau's community workers

Domestic waste within the jurisdiction of the Chengcheng County Mining Bureau is managed by Shaanmei Chenghe Mining Co., Ltd. under the mining bureau. The company employs 103 cleaners and 3 transfer workers, all having signed labor contracts. The salary of cleaners is 1,950 yuan per month, and that of transfer workers 2,000-3,000 yuan per month, all higher than the prevailing minimum wage level of Shaanxi Province, and all workers are insured. Cleaners and transfer workers work on an 8-hour working system, and are off by rotation. PPEs is distributed regularly.

The mining bureau and ESC are discussing the possibility of handing over the mining bureau's waste transfer system to the ESC for unified management. The ESC will employ existing transfer workers on a voluntary basis without laying off any worker, and its wage level will apply.

B. Traffic safety management

The ESC has established uniform transfer truck management systems, including the fleet management system, fleet safety management system, fire safety management system, driver management system, etc. Trucks run through a fixed route in an enclosed manner, and are monitored by GPS. Drivers inspect trucks before and after each run. Pre-job training has been offered to drivers and attendants, and safety education is conducted weekly. Safety education is usually conducted on Monday morning, 10-20 minutes per time, covering all drivers on duty.

Conclusions and findings:

The Chengcheng County Mining Bureau manages community workers properly in accordance with the applicable state requirements and ESS2, including labor remuneration, salary payment, working hours and GRM.

The Chengcheng County ESC is a secondary public institution, and its personnel policies comply with the Labor Law and Labor Contract Law. It has provided social insurance and signed labor contracts with eligible workers, and pays them monthly, consistent with the applicable state requirements and the Bank's ESS2. However, there

are some gaps from the Labor Contract Law and ESS2 in labor contract management, wage level and entitlements, working hours and resting time, such as:

- <u>Labor contract management</u>: The Chengcheng County ESC has not signed formal labor contracts with some cleaners; the sample labor contract used lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law;
- <u>Wage level</u>: The wages of most cleaners, security guards and file clerks are slightly lower than the prevailing local minimum wage level;
- Working schedule: Workers almost have no day off.

Suggestions:

- Strengthening labor contract management: The Chengcheng County ESC should sign labor contracts with all direct workers (including irregular workers), and its clauses (e.g., scope of work, workplace, remuneration, labor protection, working conditions, occupational hazard protection) should match the position, and be consistent with the Labor Law, Labor Contract Law and ESS2; for jobs involving occupational hazards, the labor contract should include clauses on "labor protection, working conditions and occupational hazard protection";
- <u>Increasing the wages of cleaners, security guards and file clerks</u>, at least to the prevailing minimum wage level of Shaanxi Province and the provisions on overtime payment in the Labor Contract Law;
- <u>Days off</u>: Appropriate days off should be arranged for workers by providing sufficient staff and conducting rotation based on actual work arrangements as per the Labor Contract Law.

2) Rural domestic waste collection and transfer

In rural areas, domestic waste collection and transfer is managed by townships and villages.

A. Townships

In all townships, waste collection and transfer is the responsibility of the township governments, with about 200 cleaners and transfer workers employed, all being direct workers. Cleaners are responsible for waste collection on main streets, and transfer workers for waste transfer. Transfer trucks transport domestic waste to non-sanitary waste dumps. The township governments collect a waste collection and transfer fee of 36-40 yuan per capita per annum.

The ESC has set up environmental sanitation stations in two towns (Zhaozhuang and Weizhuang), and assigned one staff member to instruct the two towns' waste collection and transfer workers. The environmental sanitation work of the two towns is much more effective than the other townships.

Labor and working conditions

Some townships have signed a simple labor contract with direct workers, and some townships do not have a formal labor contract. Cleaners are divided into public welfare and non-public welfare ones. The salary of a public welfare cleaner consists of a county / district fiscal subsidy and a township government subsidy. Non-public welfare cleaners are paid by the township government, within the range of 800-1,200 yuan/month, and with about 4 working hours per day. Transfer workers are paid by the township government, within the range of 1,200-2,500 yuan, and with 4-6 working hours per day. PPEs is distributed regularly. No insurance has been covered for cleaners and drivers.

• <u>Traffic safety management:</u>

Transfer trucks are responsible for waste transfer according to a fixed route and a fixed schedule, and maintain low speeds. Trucks are checked and maintained regularly, and drivers are offered safety awareness training irregularly.

Findings: The township governments pay direct workers (cleaners, transfer workers, etc.) monthly, offer relevant safety training, and distribute PPEs regularly, consistent with the applicable state requirements and the Bank's ESS2, but there are still some gaps from the Labor Contract Law and ESS2 in direct workers' labor contract management, labor safety risk management, etc., such as:

- <u>Labor contract management</u>: Some township governments have not signed formal labor contracts with cleaners and transfer workers:
- <u>Labor safety risk management</u>: township governments not provided accident insurance for cleaners and transfer workers.

Suggestions:

• <u>Strengthening labor contract management</u>: The township governments that have not signed labor contracts with direct workers should signe formal labor contracts, and at least include clauses on "working hours, scope of work, labor remuneration, labor protection, working conditions and occupational hazard protection".

- <u>Strengthening labor safety risk management</u>: township governments should provide accident insurance for cleaners and transfer workers, adopt appropriate traffic safety management systems, offer relevant safety training to community workers, distribute sufficient PPEs regularly.
- Extending the management duties of the Linwei District ESC: Monitor and improve the management performance of different types of workers involved in collection and transfer systems regularly. The public welfare subsidy should be borne by county / district public finance, and paid in a unified manner.

B. Villages

Village committees employ cleaners and drivers to collect and transfer domestic waste at the village level. Chengcheng County has 1,108 village cleaners and 160 village drivers. Villagers dump domestic waste into a nearby waste bin; village cleaners clean streets, and put waste into a nearby waste bin; drivers transfer waste in waste bins to the village waste dump every 2-3 days. A waste dump has no disposal or protection facility.

Labor and working conditions

Village cleaners and drivers are all community workers. The village committees have not signed labor contracts with community workers. Most cleaners do public welfare jobs, all being registered low income residents, dealing with farming mainly, with low agricultural income. Such public welfare jobs (working for 2-3 hours per day) can increase their income. Public welfare jobs cleaners are paid 500 yuan per month; transfer workers are usually contracted annually, and paid 15,000-25,000 yuan per annum. Drivers prepare transfer trucks, and bear maintenance and fuel costs themselves. Village committees have not provided accident insurance for community workers. They have covered rural medical and endowment insurance themselves. Some village committees provide cleaners with PPEs (gloves, face masks, etc.), and some have not.

• Traffic safety management

Village committees have no traffic safety management system, and do not offer safety training.

Findings: The villages pay cleaners and transfer workers timely, consistent with the applicable state requirements and the Bank's ESS2, but there are still some gaps from the Labor Contract Law and ESS2 in labor contract management, labor safety risk management, GRM, etc., such as:

- <u>Labor contract management</u>: The village committees have not signed formal labor contracts with community workers.
- <u>Labor safety risk management</u>: The village committees have not provided accident insurance for workers, and have not offered safety training; some villages do not provide PPEs;
- <u>GRM</u>: Community workers file grievances to village committees and township governments mainly, and no other grievance redress channel is known.

Suggestions:

- <u>Strengthening labor contract management</u>: For community workers, village committees should signe formal labor contracts, and include clauses on "working hours, scope of work, labor remuneration, labor protection, working conditions and occupational hazard protection".
- <u>Strengthening labor safety risk management</u>: Village committees should provide accident insurance for workers, offer safety training, and distribute sufficient PPEs regularly;
- Extending the management duties of the Chengcheng County ESC: Monitor and improve labor management performance regularly, improve the existing community GRM to define the duties and procedure for accepting and handling grievances, and notify community workers.

3.3 Newly constructed facilities with LA completed—land use compliance audit

Among the 9 WTSs in the Chengcheng County subproject, two use state-owned land, namely the Jiaodao Town and Zhaozhuang Town WTSs.

3.3.1 Jiaodao Town WTS

The Jiaodao Town WTS is located in the southwest of Zhongshe Village, Jiaodao Town, and was formerly the town waste disposal facility administrative station, which has been closed down due to the lack of funding. The land type is <u>public facility land</u>, with a floor area of 2.3 mu, owned by the Jiaodao Town Government. At the preparation stage, the Chengcheng County ESC reached an agreement with the Jiaodao Town Government preliminarily, where the Jiaodao Town Government would hand over the land to the Chengcheng County ESC for WTS construction. The Chengcheng County ESC will complete the land handover procedure by the end of December 2022, and apply for a certificate of the right to use state-owned land in accordance with the applicable state laws and regulations.





Figure 3-1 Proposed site for the Jiaodao Town WTS and current situation

The Zhaozhuang Town WTS is located at the Zhaozhuang Town grain distribution station, which has been abandoned for many years, and is located on state-owned construction land, with a floor area of 3 mu, owned by the Zhaozhuang Town Government. At the preparation stage, the Chengcheng County ESC reached an agreement with the Zhaozhuang Town Government preliminarily, where the Zhaozhuang Town Government would hand over the land to the Chengcheng County ESC for WTS construction. The Chengcheng County ESC will complete the land handover procedure by the end of December 2022, and apply for a certificate of the right to use state-owned land in accordance with the applicable state laws and regulations.





Figure 3-2 Proposed site for the Zhaozhuang Town WTS and current situation

<u>Conclusions and findings</u>: The proposed WTSs are located on state-owned construction land owned by township governments. According to the land use plan, such land is vacant public facility land. The <u>ESC</u> has reached an agreement on WTS site selection and handover with the township governments preliminarily.

<u>Suggestions</u>: The ESC should handle the land handover procedure with the township governments as soon as possible, and obtain certificates of the right to use state-owned land before construction in accordance with the applicable state laws and regulations.

3.4 Social audit on the Yaotou Landfill

3.4.1 Introduction

The Chengcheng County subproject includes Yaotou Landfill closure. The Yaotou Landfill is located 1.5km southeast of Yaotou Town, with a floor area of 58.8 mu. The Yaotou Landfill was constructed by the Yaotou Town Government, and was accepted in August 2019. Since the Chengcheng Landfill is close to saturation, the Chengcheng County Government has decided to use the landfill to dispose of urban domestic waste. In September 2020, the Yaotou Town Government handed over the Yaotou Landfill to the Chengcheng County ESC for operation.

The Yaotou Landfill has a design capacity of 200,000 m³, used to dispose of all domestic waste from the urban area of Chengcheng County. Leachate, rainwater and wastewater is discharged to the conditioning tank, and then transferred to the Chengcheng Landfill for automatic treatment, and landfill gas is discharged directly via the gas well. The landfill is closed to the outside and is monitored in real time.

The Yaotou Landfill is managed by the Chengcheng County ESC, and has 7 O&M workers, all employed by the Chengcheng County ESC.



Figure 3-3 Yaotou Landfill

3.4.2 Labor and Working Conditions (ESS2)

The Chengcheng County ESC is a public institution under the Urban Administration and Law Enforcement Bureau, managing the county town's appearance and sanitation. The landfill has 8 workers (including one female), all being direct workers. The social audit assesses the landfill's employment terms and conditions, presence of child and forced labor, OHS, worker GRM, etc. according to ESS2.

1) Employment terms and conditions

Public institutions usually conduct personnel management according to the relevant state policies properly. In the social audit, the relevant management systems, sample contracts, etc. of the Chengcheng County ESC were reviewed, mainly including:

- Implementation Rules for Bonuses for Urban Environmental Sanitation Management;
- Pre-job Training System for Cleaners;
- Sample labor contract;
- Sample cleaner employment form.

Among the 8 workers:

- The Chengcheng County ESC has signed labor contracts with 3 eligible workers (principal and file clerks) (see Figure 3-4);
- No labor contract is signed with two ineligible workers who have attained the retiring age, and only a cleaner employment form is filled out (see Figure 3-4);
- No labor contract is signed with 3 workers who have covered new-type rural
 cooperative medical insurance and rural social endowment insurance, and are
 unwilling to change to social insurance for urban workers, and only a cleaner
 employment form is filled out.

The basic terms and conditions of the ESC's formal labor contract include term, workplace, labor remuneration, overtime pay, social insurance, benefits, labor discipline, contract change, termination and renewal, labor dispute settlement, and other items stipulated in the Labor Law, consistent with the Labor Law of the PRC and the Bank's ESS2. However, the cleaner employment form has job and employment time information except the worker's basic information, and lacks the basic terms and conditions stipulated by the Labor Law and Labor Contract Law.

According to worker interviews, the Chengcheng County ESC has provided social insurance (endowment, medical and work injury insurance) for the 3 workers having signed labor contracts, and provided accident insurance for the other 5 workers who have not signed labor contracts. The Chengcheng County ESC offers induction training to workers to help them get familiar with its policies and their jobs. The landfill adopts an 8-hour working system, the working hours 7:30-11:30 and 14:00 (15:00 in summer)-18:00 (19:00 in summer), and work beyond 8 hours is regarded as overtime, but overtime occurs during flood control only, with an overtime allowance of 30 yuan per time. There is almost no day off. The salary of disinfectors, safety officers and file clerks is the lowest at 1,600 yuan per month, lower than the prevailing minimum wage level of

Chengcheng County of 1,750 yuan per month²⁵. Due to the low wage level, it is unable to recruit sufficient manpower, and its staff is highly liquid.

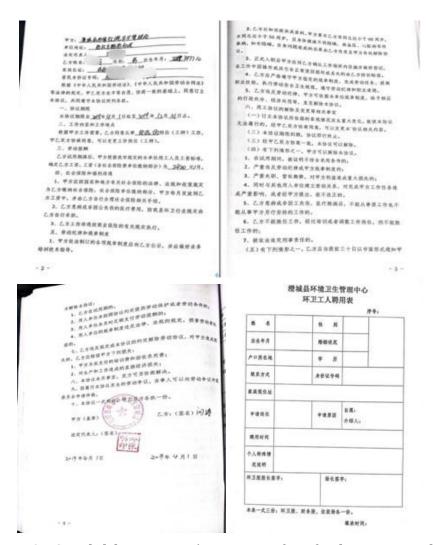


Figure 3-4 Sample labor contract / engagement form for the Yaotou Landfill

Findings: The Chengcheng County ESC is a secondary public institution, and its personnel policies comply with the Labor Law and Labor Contract Law. It has provided social insurance and signed labor contracts for all eligible workers, and pays its workers monthly, consistent with the applicable state requirements and the Bank's ESS2.

However, for temporary workers or workers who have not signed formal labor contracts, the Yaotou Landfill still has some gaps from the Labor Contract Law and ESS2 in labor contract management, wage level and entitlements, working hours and resting time, such as:

²⁵ The minimum salary standard of Chengcheng County is 1,750 yuan per month.

- <u>Labor contract management</u>: The Chengcheng County ESC has not signed formal labor contracts with some irregular workers of the Yaotou Landfill; the sample labor contract used lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law;
- <u>Wage level</u>: The wages of some workers are slightly lower than the prevailing local minimum wage level;
- Working schedule: Workers almost have no day off.

Suggestions:

- <u>Strengthening labor contract management</u>: The Chengcheng County ESC should sign labor contracts with all direct workers (including irregular workers), and its clauses (e.g., scope of work, workplace, remuneration, labor protection, working conditions, occupational hazard protection) should match the position, and be consistent with the Labor Law, Labor Contract Law and ESS2; for jobs involving occupational hazards, the labor contract should include clauses on "labor protection, working conditions and occupational hazard protection";
- Increasing the wages of workers, at least to the prevailing minimum wage level of Shaanxi Province and the provisions on overtime payment in the Labor Contract Law;
- <u>Days off</u>: Appropriate days off should be arranged for workers by providing sufficient staff and conducting rotation based on actual work arrangements as per the Labor Contract Law.

2) Labor protection

Forced and child labor: The minimum working age stipulated in the Labor Law is 16 years (higher than 14 years in ESS2), and special protection should be granted to underage workers aged 16-18 years. The Chengcheng County ESC states that it will not recruit underage workers (under 18 years). The average age of landfill workers is 58 years, and the minimum age is 45 years. Accordingly, the landfill does not employ any child labor or underage worker aged 16-18 years. The ESC's management systems and labor contract do not have any provision on separation penalty. According to worker interviews, landfill workers can apply for separation freely in the contract term, subject to a one-month prior notice to the ESC, so there is no forced labor.

Recruitment discrimination: According to the review of the Chengcheng County ESC's personnel management system and job duties, its recruitment and service requirements comply with the applicable state laws, without any restrictive or discriminatory provision.

SH/SEA: The ESC complies strictly with the Law of the PRC on the Protection of Women's Rights and Interests, pays particular attention to women's special needs and vulnerabilities, and makes better jobs first available to women, such as finance, HR and office work. Men and women enjoy equal rights in training, development and promotion. According to the interview with the female file clerk, the ESC has not offered training on sexual harassment prevention, but workers can file grievances face to face or by telephone. It was reported that there have not been any complaints lodged to date. In addition, the county women's federation would provide external supervision and assistance for SH/SEA. The interviewee says that she has not been subject to SH/SEA at the workplace, and accepts the ESC's prevailing systems.

Conclusion: The ESC does not employ any child labor or underage worker aged 16-18 years, and there is no forced labor, recruitment discrimination or sexual harassment, and SH/SEA.

3) OHS

The operating process of the Yaotou Landfill mainly includes landfilling, landfill gas treatment and leachate treatment. As shown in Figure 3-6. A transfer truck discharges waste after weighing, and waste is compacted, disinfected, covered with loess and lime, and disinfected again.

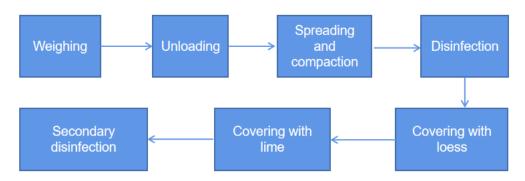


Figure 3-5 Landfilling flowchart

Landfill gas is discharged directly via the gas well. According to the Technical Code for Landfill Gas Collection, Treatment and Utilization (CJJ-2009)²⁶, at the early operation stage of the landfill, the amount of waste filled is small, and the methane content in the generated gas is not stable yet, when potential risks can be eliminated by direct

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²⁶ Section 3.0.5 states, "Due to the anaerobic reaction of waste in the landfill, the stable stage of methane generation is about 1 year; at the early operation stage of the landfill, the amount of waste filled is small, and the methane content in the generated gas is not stable yet, when potential risks can be eliminated by natural discharge. A large landfill usually generates increasing landfill gas year by year after 3 years of operation, when active drainage is required."

discharge. After leachate and domestic wastewater are collected to the conditioning tank, they are transferred to the leachate treatment plant in the Chengcheng Landfill for treatment daily.

Based on the above operating process, the potential OHS impacts and risks include:

- Dust, odor and noise: Dust and noise during unlading may affect transfer truck drivers, attendants, safety officers and compactor operators; compactors generate high noise during operation, which may affect operators though such equipment is well sealed;
- Disinfectant: The disinfectant is a toxic chemical, and has a certain health hazard to those exposed to it;
- Harmful gases: Ammonia, hydrogen sulfide, etc. generated by domestic waste during microbial decomposition may affect all workers.
- landfill gas: The landfill gas contains methane mainly, and also carbon dioxide and toxic gases, and generates odor, leading to poisoning and explosion risks;
- Pathogenic contamination: Pathogens from domestic waste may pollute the environment and harm workers during landfilling;
- Operating risks of special equipment: risks arising from the operation of compactors, etc.;
- Heatstroke risk during high temperature operation
- COVID-19 infection risk

The Chengcheng County ESC has developed safety systems and emergency measures to manage OHS risks during operation, mainly including:

- Health and Safety Management System;
- Fire Protection System;
- Disinfection System;
- Working Discipline;
- Job Duties of Drivers;
- Machinery Management System;
- Transfer driver management, traffic safety management, etc.

These systems manage the health and safety of on-site workers systematically. For example, it is stipulated that workers must wear PPEs (working clothes, face masks, goggles, rubber gloves, etc.) properly at work, the landfill should be disinfected daily, fire protection inspection should be conducted often, and workers should conduct self-protection properly. Transfer drivers are prevented from drunken driving and smoking, and a reward and punishment is established for drivers.

The implementation of these systems has been learned by field visit and interview. The key findings are as follows:

- During unloading, safety officers and attendants are required to maintain a safe distance from the transfer truck to reduce dust and noise impacts; when special equipment is used for compaction, there should be no one nearby;
- Workers are provided with PPE, including gloves, working clothes, antiskid rain boots, surgical masks, protective clothes, etc.;
- Disinfectors are provided with disinfectants, soaps, water and other cleaning items for cleaning after work;
- Pre-job and safety training is offered; flood control and rescue training is offered before the rainy season;
- Safety education is usually conducted on Monday morning, 10-20 minutes per time;
- A free systemic health examination is arranged for workers annually;
- Cooling foods and drugs are distributed, and work is postponed by one hour in the afternoon in summer;
- A flood control contingency plan has been developed; workers are asked to pay
 attention to weather forecast and rainstorm warning information in the rainy
 season, check sewers and drain ditches in advance, and observe the level of the
 leachate conditioning tank for timely treatment; raincoats, rain boots, pumps,
 interphones, lamps, etc. are provided to prevent flood risks;
- For the prevention and control of infectious diseases (including COVID-19), an internal pandemic prevention and control system has been established, and emergency measures and a handling procedure defined for pandemic prevention and control; dedicated staff is designated to take temperatures, conduct ventilation and disinfection, distribute PPE, conduct publicity and education, and collect and report pandemic prevention and control information. By the time of this report, no worker had been infected (including COVID-19).

Conclusions and findings:

The Chengcheng County ESC has formulated a series of OHS management systems and procedures, which have been well implemented, but needs improvement in the following aspects:

• **Occupational protection management**: The "three simultaneities" were not conducted for occupational protection facilities during the expansion of the landfill, no occupational hazard screening was conducted at the operation stage,

no occupational health examination is offered, and the occupational hazard notification procedure is not performed.

• **Emergency management**: Emergency management focuses on floods and potential environmental emergencies, but there is no contingency plan for safety and other emergencies.

Suggestions:

- The Chengcheng County ESC should appoint a qualified agency to identify
 potential occupational hazards in the Yaotou Landfill, conduct occupational
 hazard screening as soon as possible, offer pre-job, on-the-job and post-job
 occupational health examinations to workers exposed to occupational hazards,
 and provide appropriate PPEs and occupational protection training to workers;
- The Chengcheng County ESC should specify occupational hazards in the labor contract, and notify relevant workers of potential occupational hazards and their impacts;
- Develop a comprehensive contingency plan for environmental and safety emergencies, and conduct drills regularly.

4) **GRM**

According to interviews, workers usually file grievances to the manager face to face or by telephone, which are usually handled timely. If this fails, workers may file grievances to the manager of the Chengcheng Landfill²⁷ or office director of the ESC. In addition, workers may file grievances to the county bureau for letters and visits, or file a civil suit in the court. Workers think that filing grievances face to face and telephone is feasible. No grievance has been filed to date.

Findings: The landfill has grievance redress channels for workers, but has not established a formal written GRM, and does not have institutional requirements for grievance recording.

Suggestions: The Chengcheng County ESC should establish a formal GRM for the Yaotou Landfill based on the existing grievance redress channels, notify it to workers, and arrange resources and staff to record grievances received and their dispositions.

3.4.3 Community Health and Safety (ESS4)

1) Nearby communities and residents

 $^{^{27}}$ In charge of the two existing landfills of the Chengcheng County ESC, namely the Yaotou and Chengcheng Landfills

According to the EIA Report of the Yaotou Landfill and the approval of the Chengcheng County Environmental Protection Bureau in March 2018, the landfill's health protection distance is 400m, and there is no village within this range; the site is far away from surface water and urban drinking water sources, and environmental sensitivity of groundwater is "insensitive". The EIA conclusion is that the environmental impact degree and range are small. The landfill is closed to the outside and is monitored in real time.

Nearby residents are beyond 500m away from the landfill boundary. There is a settlement in Huijiahe Group of Yangjia Village (registered population 230, resident population 32) at 800m to the south of the landfill, a settlement in Diaozhuang Group of Yaotou Village (registered population 106, resident population 19) at 1,100m to the west, a settlement in Nancheng Group of Yaotou Village (registered population 398, resident population 73) at 580m to the northwest, Yaotouyao Resort (national AAAA scenic zone, suspended) at 1,000m to the northwest, and a settlement in Shangduan Group of Yangjia Village (registered population 210, resident population 45) at 1,300m to the southwest. There is farmland on both sides of the access road. The west of the landfill is upwind, and the east is downwind. Therefore, the nearby villages and scenic zone are beyond the health protection distance of 400m, and upwind. Transfer trucks do not run through the nearby villages and scenic zone, and have little odor and noise impact on nearby communities.



Figure 3-6 Social sensitive sites around the Yaotou Landfill

The landfill has taken a series of measures to mitigate E&S impacts, including collecting leachate using horizontal and vertical drainage systems to reduce

groundwater impacts. Leachate collected daily is transferred to the Chengcheng County Leachate Treatment Plant for harmless treatment. The landfill is landscaped for noise reduction and air purification.

According to interviews in 3 villages in Nancheng Group of Yaotou Village (the group closest to the landfill), the interviewees say their houses are over 1km away from the landfill, they are not affected by noise or odor, and tap water quality is good; odor can be smelled near the landfill in summer, when farmers working nearby need to wear face masks while working, but no crop death has occurred. All interviewees support landfill closure.

The landfill appoints a qualified third party testing agency to conduct environmental monitoring, and discloses monitoring reports on the official website of the Chengcheng County Government²⁸. Based on the groundwater, unorganized waste gas and noise monitoring reports of Q1 and Q2 2022, and the soil monitoring reports of 2021 and 2022, the monitoring results comply with the applicable national standards. Since specific disclosure to nearby communities is not required, such disclosure has not been conducted in the nearby villages.

2) Communities and residents along the transfer truck driving route

The transfer truck driving route evades settlements, hospitals, schools and other sensitive sites, mostly along county and provincial highways, but trucks may have traffic safety impacts. The Chengcheng County ESC has established traffic safety, fire safety and driver management systems, etc. Trucks run through a fixed route in an enclosed manner, and are monitored by GPS; drivers should observe the traffic rules strictly, keep trucks in good conditions, and attend operational and safety training offered by the Chengcheng County ESC monthly. Transfer trucks are 8t waste transfer trucks, and operate as required.

The landfill has not established an active community communication mechanism. The interviewees say that they know how to file grievances. A nearby villager may file a grievance to the village committee, township government or county bureau for letters and visits. They may also call the citizen hotline "12345" or environmental protection hotline "12369". Any competent authority receiving a grievance must give a reply within 15 days. Some villagers are unaware of such hotlines. Villagers prefer the face to face mode, followed by telephone, because they think that these modes are more

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²⁸ http://www.chengcheng.gov.cn/gk/fdzdxxgk/hzzf/zhgk/82422.htm, http://www.chengcheng.gov.cn/gk/fdzdxxgk/hzzf/zhgk/80555.htm

straightforward and efficient than WeChat and the online platform. No grievance about the landfill has been received.

Findings: The landfill has slight impacts on nearby communities, but has an odor impact on nearby farmers. The landfill has taken some measures to mitigate such E&S impacts. However, it has not established an active communication and grievance redress mechanism.

Suggestions: The Chengcheng County ESC should establish a formal GRM based on the existing community grievance redress channels, notify it to nearby communities, and arrange resources and staff to record grievances received and their dispositions (written or oral).

3.4.4 Land use survey (ESS5)

The Yaotou Landfill has a floor area of 58.8 mu, formerly owned by Yaotou Village, Yaotou Town; the storage zone has a floor area of 27.4 mu, and the other land is used for the access road and auxiliary facilities mainly.

The land acquisition / lease agreement for the Yaotou Landfill was signed in 2018. According to the agreement, the LA area is 10.9 mu, affecting 21 households, used for the access road mainly, with a compensation rate of 18,000 yuan/mu; the leased land area is 47.9 mu, with a term of 20 years (August 1, 2018-July 31, 2038), including 38.5 mu of collective land and 9.4 mu of contracted land, affecting 14 households.

In addition, the landfill leases 16 mu of land for the spoil ground for a term of 5 years (August 1, 2018-July 31, 2023), affecting 3 households.



Figure 3-7 LA (land lease) agreement for the Yaotou Landfill

According to the agreement, the compensation for land acquisition / lease is 540,000 yuan, and was fully paid to the affected village and households in October 2018, as confirmed by the interview with the Yaotou Village Committee. See Table 3-1 and Figure 3-8.

Compensation rate Compensation (yuan) Land type Remarks 27 yuan/m² LA for road 18000 yuan/mu 196938 With a lease term of 20 years; 230 yuan/mu per Land lease for landfill 223576 annum paid at a time Land lease for spoil 230 yuan/mu per 63756 Paid for 5 years at a time ground annum Attachments As incurred 56641 Paid at a time

540902

Total

Table 3-1 LA and land lease rates for the Yaotou Landfill



Figure 3-8 Disbursement form for the Yaotou Landfill

The Chengcheng County Natural Resources Bureau found that the land use for the Yaotou Landfill does not comply with the applicable state laws and regulations, and issued a correction opinion.

Findings: The Yaotou Landfill (especially the storage zone) is located on leased collective land. Article 43 of the previously applicable China's Land Management Law (2004) (LML) ²⁹ regulates that the land for landfill should be state-owned construction land rather than leased collective land that should be acquired. The amended LML (effective as of January 1, 2020) removed the privisons for supplying project land use only through the government. Per the amended LML (2020), the landfill land use shall at least (a) align with the land zoning plan as set out by the land spatial planning (Articles 59 and 64); (b) convert the farmland into construction land (Article 44) and reflect it in the up-to-date land spatial planning; and (c) seek land pre-examination with the Natural Resources Bureau (Article 52); and (d) obtain the land use certificate (Article 12). The Yaotou landfill is not comforming with official land use zoning and planning, and has not obtained the land certificate. Therefore, the land use for the Yaotou Landfill does not comply with the applicable state laws and regulations.

Suggestions:

To rectify the non-compliance of land use, it is suggested:

• The Shaanxi PMO should assist the county PMO to find a feasible solution to the land use nonconformity in coordination with the county government and natural resources bureau, identify the restraints of such outstanding issue on landfill closure and the prerequisites to land use, and notify the Bank timely. It is sugguested that Chengcheng County Government should include land use planning for the landfill in the updated land spatial plan which is expected to be approved in June 2023 by the Shaanxi Provincial Government. Before starting the bidding for landfill closure, the county PMO should obtain the necessary approvals for land use (i.e., aligning with land zoning plan in the up-to-date land spatial planning, converting the farmland into construction land, obtaining land use certificate) and seek consent from the district Natural Resources Bureau about the landfill closure plan.

For the ompensation with villages/villagers subject to the potential scenario after the landfill closure, it is suggested:

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²⁹ Article 43 of the Land Management Law (LML) (2004) regulates "Any organization or individual that needs land for construction purposes shall apply for the use of state-owned land according to law.....". In the amended LML (effective as of January 1, 2020), the previous Article 43 in the 2004 LML was removed.

- If the leased land is to be returned to the villages/farmers after landfill closure, appropriate technical assessment with project support shall be carried out to confirm the feasibility of return.
- If the landfill continue to lease land after closure, the prorated land rental will be paid in time per the land leasing agreements.

3.5 Social audit on the Chengcheng Landfill

3.5.1 Introduction

The Chengcheng Landfill is located in Nanguan Village, Chengguan Town, with a floor area of 38 mu. It was completed and put into operation in 2008, and closed down due to saturation in December 2020. After closedown, the site was disinfected and covered with loess. Leachate is delivered to the treatment plant via a pipeline for harmless treatment, and landfill gas is burned.



Figure 3-9 Chengcheng Landfill

3.5.2 Labor and Working Conditions (ESS2)

The Chengcheng Landfill has 8 workers, all being direct workers, in which two are responsible for security, disinfection, landfill gas treatment and routine monitoring, and 6 for leachate treatment plant operation, including a driver, an attendants, 3 operators and one clerk (female). Both the Chengcheng (including leachate treatment plant) and Yaotou Landfills are managed by Chengcheng County ESC. Both landfills have the same personnel management and OHS systems, so only the implementation of these systems is evaluated here.

1) Employment terms and conditions

Among the 8 workers, only one has signed labor contracts with the Chengcheng County ESC, and the other 7 have just filled out a cleaner employment form, like the Yaotou Landfill.

According to worker interviews, the Chengcheng County ESC has provided social insurance for two workers, and only accident insurance for the other 6. The Chengcheng County ESC offers induction training to workers to help them get familiar with its policies and their jobs. The landfill adopts an 8-hour working system, and the working hours are 7:30-11:30 and 14:00 (15:00 in summer)-18:00 (19:00 in summer). Leachate treatment operators work on a 3-shift system, and work beyond 8 hours is regarded as overtime, but overtime occurs during flood control only, with an overtime allowance of 30 yuan per time. There is almost no day off, but there is a paid leave of 1-7 days per annum. The minimum salary is 1,600 yuan per month (one worker), lower than the prevailing minimum wage level of Chengcheng County.

Findings: The Chengcheng County ESC and Chengcheng Landfill still have some gaps from the Labor Contract Law and ESS2 in contract management, wage level and entitlements, working hours and resting time, such as:

- <u>Labor contract management</u>: The Chengcheng Landfill has not signed formal labor contracts with some workers, but has just signed a employment form. The sample labor contract lacks the clauses on "labor protection, working conditions and OHS" stipulated in the Labor Contract Law;
- <u>Wage level</u>: The wages of some workers are slightly lower than the prevailing local minimum wage level;
- Working schedule: Workers almost have no day off.

Suggestions:

- **Strengthening labor contract management**: The Chengcheng County ESC should signe formal labor contracts with all direct workers, and its clauses should be consistent with the Labor Law, Labor Contract Law and ESS2; for jobs involving occupational hazards, the labor contract should include clauses on "labor protection, working conditions and occupational hazard protection";
- Wage level: Increase the wages of workers, at least to the prevailing minimum wage level of Shaanxi Province and the provisions on overtime payment in the Labor Contract Law;
- **Days off**: Appropriate days off are arranged for workers by providing sufficient staff and conducting rotation based on actual work arrangements as per the Labor Contract Law.

2) Labor protection

The minimum worker age is 45 years, and there is no child labor, forced labor, recruitment discrimination or sexual harassment, and SH/SEA.

Conclusion: The Chengcheng Landfill does not employ any child labor or underage worker (16-18 years), and there is no forced labor, recruitment discrimination or sexual harassment, and SH/SEA.

3) OHS

The landfill has been closed down, and its current operations mainly include landfill maintenance, landfill gas treatment and leachate treatment. After closedown, the landfill still has such hazards as landfill gas, pathogens, leachate, disinfectant, noise and unstable stacking.

- Landfill gas: Waste would generate toxic odor and methane under anaerobic conditions, which may lead to poisoning and self-ignition if not controlled properly;
- Disinfectant: The disinfectant is a toxic chemical, and has a certain health hazard to those exposed to it;
- Pathogens: Domestic waste and leachate contain pathogens, which may affect the health of workers;
- Noise: The leachate treatment plant and pumps operate around the clock, and their noise may affect operators, drivers and attendants to some extent;
- Unstable stacking: Disinfectors are exposed to personal safety risks when working in unstable stacking areas;
- Heatstroke risk during high temperature operation;
- Infection risk (including COVID-19).

The Chengcheng County ESC has developed safety systems and emergency measures to manage OHS risks during operation, which have been discussed in the section on the Yaotou Landfill.

The key findings on the implementation of these systems and measures are:

- Workers are provided with PPE, including gloves, working clothes, antiskid rain boots, surgical masks, protective clothes, etc.;
- Disinfectors are provided with disinfectants, soaps, water and other cleaning items for cleaning after work;
- Pre-job and safety training is offered;

- A free systemic health examination is arranged for workers annually;
- Cooling foods and drugs are distributed, and work is postponed by one hour in the afternoon in summer.

However, for the noise impact, the Chengcheng County ESC has not provided special earplugs to relevant workers.

Conclusions and findings: The Chengcheng County ESC has formulated a series of OHS management systems and procedures, which have been well implemented, but needs improvement in occupational protection management: No occupational health examination is offered, the occupational hazard notification procedure is not performed, and no sufficient PPEs is provided to workers.

Suggestions: The Chengcheng County ESC should specify occupational hazards in the labor contract, notify relevant workers of potential occupational hazards and their impacts, and offer pre-job, on-the-job and post-job occupational health examinations to workers exposed to occupational hazards.

4) **GRM**

Similar to the Yaotou Landfill, the Chengcheng Landfill has grievance redress channels for workers, but does not have a formal written GRM, and does not have institutional requirements for grievance recording.

Suggestions: The Chengcheng County ESC should establish a formal GRM for the Chengcheng Landfill based on the existing grievance redress channels, notify it to workers, and arrange resources and staff to record grievances received and their dispositions.

3.5.3 Community Health and Safety (ESS4)

The Chengcheng Landfill was closed down in 2020, and nearby communities and residents are no longer disbursed by waste transfer trucks, but there is no mechanism for the M&E of health impacts on nearby communities and residents (especially those within the health protection distance).

There are settlements to the west, northwest and southwest of the Chengcheng Landfill. Xincheng Garden (about 300 households) is 150m away on the west, and the settlement of Nanguan Village (about 100 households) is 150m away on the south, both within the health protection distance of 500m. The landfill is located at the gully bottom, and the nearby houses are on the upper edge, with a minimum height difference of 50m.

According to the Technical Code for Municipal Solid Waste Landfills (CJJ17—2004), Standard for Pollution Control on Municipal Solid Waste Landfills (GB16889-2008), and Code for Planning of Urban Environmental Sanitation Facilities (GB50337-2003), there should be no settlement or drinking water work within 500m around a landfill or WWTP. Based on literature review, the Weinan Municipal Environmental Protection Bureau's reply on the Chengcheng Landfill's EIA change in 2005 specifies that relocation within 500m should be completed by the specified deadline. There was no settlement within 500m when the landfill was constructed, and all existing settlements were built after the completion of the landfill.

The landfill appoints a qualified third party testing agency to conduct environmental monitoring. Based on the monitoring reports of 2021 and 2022, the monitoring results comply with the applicable national standards.

For Chengcheng Landfill closure, the EIA report for the Batch 1 subprojects states, "The soil and groundwater monitoring data shows that the soil and groundwater around the landfill is not polluted. Fire and explosion risks arising from landfill gas leakage have been evaluated and found to be low. After the strict implementation of environmental impact mitigation measures, the leachate treatment plant will have minor impacts on groundwater. Construction will comply strictly with the design, and worker management and training will be conducted, so safety risks are low. The nearby communities do not rely on ecosystem services, so there is no community health or safety impact. The ambient air monitoring results of the landfill comply with the standard."

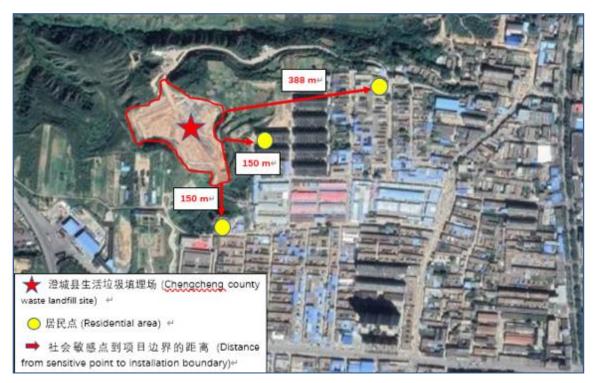


Figure 3-10 Social sensitive sites around the Chengcheng Landfill

After landfill closedown, waste is covered by loess, the site is disinfected daily, landfill gas is burned, and leachate is delivered to the treatment plant via a pipeline for harmless treatment. There is vegetation around, which plays a certain role in noise reduction and air purification. There is no significant odor or noise in the landfill, but there is slight odor. According to the interviews of two nearby residents, its noise and odor impacts have been reduced greatly after closedown, and they support landfill closure.

Landfill closure should comply with the Requirements for Safety and Health in the Production Process—General Principles (GB12801), and a qualified third party should be appointed to conduct a closure safety assessment. There is no standard or requirement for community health and safety in landfill closure.

Findings: After the landfill was put into operation, nearby residents have built many new houses within the health protection distance, and the landfill has taken measures according to the EIA to mitigate E&S impacts. The environmental monitoring results in the past two years comply with the national standard. There is no assessment on if the operation of the landfill has health impacts on residents in the health protection distance, and the landfill has not established an active communication and grievance redress mechanism for nearby communities.

Suggestions:

- Since many houses have been built within the health protection distance, the design of the Chengcheng Landfill should include engineering and non-engineering measures to minimize community health and safety impacts during closure and O&M. The Chengcheng County ESC and design agency should include appropriate measures to respond to community health and safety risks based on the applicable state laws and standards, EIA, and good domestic and international practices in consultation with the competent authorities and nearby communities, and conduct follow-up monitoring.
- The Chengcheng County ESC should establish a formal GRM based on the
 existing community grievance redress channels, notify it to nearby communities,
 and arrange resources and staff to record grievances received and their
 dispositions.
- Strengthen contractor management during landfill closure, and comply with design code and take necessary measures to reduce health and safety impacts on nearby communities.
- The Chengcheng County ESC should disclose E&S monitoring results to residents in nearby sensitive sites (especially those within the health protection distance) timely, provide necessary clarification, and take necessary improvement measures.
- The PMO should appoint a specialized external social M&E agency to conduct external social M&E as soon as possible to ensure that appropriate measures are taken to avoid, reduce and management community health and safety, and other social impacts during design, closure and O&M.

3.5.4 Land use survey (ESS5)

The Chengcheng Landfill is located in Group 4 of Nanguan Village, Chengguan Town, with a floor area of 38 mu. LA was completed in 2006, affecting no household, because the land was collective construction land.

In September 2006, the Chengcheng County Government approved the acquisition of the collective construction land as state-owned land, and allocated it to the Chengcheng County ESC. See Figure 3-11.

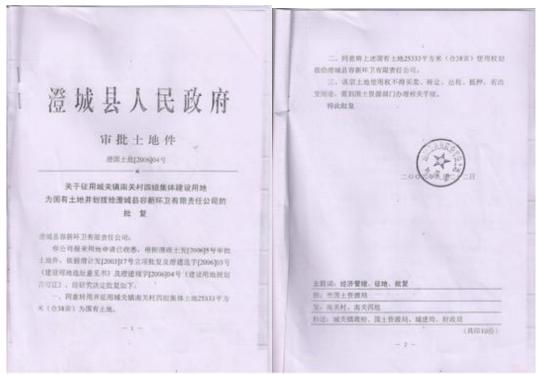


Figure 3-11 LA agreement for the Chengcheng Landfill

The land use for the Chengcheng Landfill complies with the applicable state laws and regulations, and no grievance related to LA has been received.

Findings: The land use for the Chengcheng Landfill complies with the applicable state laws and regulations, and there is no outstanding issue.

3.6 Chengcheng County WTE Plant

3.6.1 Introduction

The Chengcheng County WTE Plant is located east of the Yuanjiaping Village settlement in Zhuangtou Town, next to Duyi Road (X303), with farmland on the west and south, a loess plateau on the east, and Duyi Road on the north. It has an actual floor area of 58.06 mu, and a design treatment capacity of 500t/d, serving Chengcheng and Heyang Counties. The Chengcheng County Urban Administration and Law Enforcement Bureau will supervise its construction and operation as the owner, and the ecology and environment bureau is the environmental regulator.

3.6.2 Construction progress

The plant had not broken ground by the date of this report, and is expected to break ground in September 2022 and be completed in September 2023. The relevant approvals have been obtained:

- Preliminary site selection opinion (June 2022);
- Social Stability Risk Assessment Report (March 2022)
- EIA Report (August 2022)

In sum, the WTE plant is still at the preparation stage.

According to Table 2-7 and current project progress, the Chengcheng County WTE Plant will conduct the following environmental, health and safety assessments, get registered with the regulators concerned, and implement relevant measures during project implementation. The competent authorities (e.g., ecology and environment bureau, safety supervision bureau, health commission) will supervise the implementation of these measures irregularly.

Table 3-2 Progress of E&S approvals for the Chengcheng County WTE Plant

Stage	Document	Regulator	Time	Remarks
Feasibility study	Land pre-examination	Natural resources bureau	2022.6	
	Social stability risk assessment	Political and legislative affairs committee	2022.3	
	Safety pre-assessment	Safety supervision bureau	/	Included in the feasibility study
	Occupational hazard pre- assessment	Health commission	2023.1	
Design	Safety facility design	Safety supervision bureau	2022.9	
	OHS design	Health commission	2022.9	
	Environmental design	Ecology and environment bureau	2022.9	
Before implementation	Land approval and resettlement	Natural resources bureau	2022.9	
	Certificate of land use right	Natural resources bureau	2023.5	
	Environmental approval	Ecology and environment bureau	2022.9	
Implementation and inspection	Safety inspection	Safety supervision bureau	One month before operation	
	Environmental inspection	Ecology and environment bureau	One month before operation	
	OHS inspection	Health commission	One month before operation	
Operation	occupational hazard screening	Health commission	Annually	
	Occupational hazard assessment	Health commission	Once every 3 years	
	Government supervision and inspection	Competent authority	Annually, irregular	

Source: compiled by the task force

According to the Chengcheng County Urban Administration Bureau, the county government plans to construct the plant in cooperation with a specialized agency. It can be expected that the PIU's internal E&S management systems, and institutional arrangements will be consistent with the Weinan Urban WTE Plant.

3.6.3 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (ESS5)

58.06 mu of land in Yuanjiaping Village, Zhuangtou Town will be acquired for the plant. LA has not begun. According to the feedback from the project headquarters³⁰, 18 households with 66 persons will be affected, and the acquired land is cultivated land and other farmland. It will involve the demolition of residential houses of 1,120 m² in masonry concrete structure within the environmental protection distance of 300m, affecting 7 households with 24 persons.

1) China's LA process

China has established a complete legal framework on LA, HD, resettlement and compensation. Rural LAR is based mainly on the Land Administration Law of the PRC (2020), and the measures and compensation rates formulated by Shaanxi Province and Chengcheng County. Urban LAR is based mainly on the Regulations on the Expropriation of Houses on State-owned Land and Compensation (2011). The 2919 amendment of the Land Administration Law specifies the scope of LA for public interests, strengthens pre-LA risk management, and in-process information disclosure and public participation (including public hearings), and requires that contracts be signed with land owners and land use right holders, and compensation fees arranged before LA approval. The Land Administration Law stipulates that LA compensation rates be based on "block comprehensive land prices", and adjusted or reissued at least every three years, and that fair and reasonable compensation be granted to the affected persons so that their living standard is not reduced.

A standard LA procedure has been established in the project area, and been widely accepted, as detailed below:

The natural resources bureau issues a preliminary site selection opinion;

³⁰ The agency responsible for the preparation of the Chengcheng County WTE Plant is composed of staff from departments of the county government, including the finance, housing construction, natural resources, ecology and environment, and urban administration bureau.

- It shall issue an LA pre-announcement, and conduct a current status survey³¹ and a social stability risk assessment. The LA pre-announcement shall specify the range and purpose of LA, and the arrangements of the current status survey. From the date of issue, no organization or entity shall conduct rush cultivation or construction within the LA range, and anything rush cultivated or constructed shall not be compensated for. The period of pre-announcement shall be not less than 10 working days.
- Conduct land approval level by level, including request for instructions, one note and 4 programs, delimitation drawings, etc.
- After approval by the provincial government, an LA announcement is issued, including the range and purpose of LA, current status, compensation rates, subjects and modes of resettlement, social security, mode and period of compensation registration, grievance redress mechanism, etc., and disclosed for not less than 30 days;
- The county government conduct LA and HD in coordination with the affected sub-district offices or township governments, including consultation with the affected villages, land compensation registration, LA agreement signing, compensation payment and land handover.

2) Public participation and grievance redress

Public participation runs through the whole project lifecycle, and is a key guarantee of successful LAR. The Ministry of Natural Resources issued the Guidelines on the Grassroot Government Affairs Disclosure on Rural Collective Land Acquisition in June 2019, making comprehensive provisions on the scope, procedure and modes of disclosure to protect the information, participation, expression and supervision rights of the public.

According to Article 47 of the Land Administration Law of the PRC, if a government at or above the county level is to apply for land acquisition, it shall conduct a current status survey and a social stability risk assessment. At this stage, agencies concerned will conduct public participation with affected persons.

During LA announcement disclosure, the affected rural collective economic organization and its members, village committee and other stakeholders may give comments for consultation.

 $^{^{31}}$ To survey the ownership, type and area of the land to be acquired, and the ownership, types and quantities of the attachments thereon

If most members of the affected rural collective economic organization think that the LA compensation and resettlement program is nonconforming, the local government at or above the county level shall organize a public hearing.

During resettlement implementation, the Chengcheng County Government will issue an LA pre-announcement, an LA announcement, and an announcement of the LA compensation and resettlement program in the affected communities to collect comments, and incorporate such comments into the final LA compensation and resettlement program. Participation activities of the affected persons include production resettlement, livelihood restoration, compensation allocation and use, agreement signing, etc.

Findings: The LA compensation policies and procedures local municipal projects (e.g., waste disposal, water supply) are consistent with ESS5. The main gaps are: 1) No separate RAP is prepared, and only "one note and 4 programs³²" were prepared at the time of submission for land approval, and an LA compensation and resettlement program was prepared after land approval; 2) M&E on resettlement and livelihood restoration is not required.

Suggestions: According to the management requirements for "project-related facilities" in the ESS, external social M&E should cover project-related facilities. According to the ToRs, the external M&E agency should conduct M&E on the plant's LAR process, livelihood restoration measures, living standard and satisfaction with resettlement, and submit M&E reports to the Bank semiannually.

3) Compensation policies and rates for WTE plant

LA compensation policies and rates

LA compensation includes land compensation, a resettlement subsidy, and ground attachment and young crop compensation. In Chengcheng County, LA compensation rate are based on the Block Comprehensive Land Prices for Farmland and Unused Land of Chengcheng County (CCG [2021] No.2). See Table 3-3.

Table 3-3 LA compensation rates for the Chengcheng County WTE Plant

Town	Land type	Block comprehensive land price (yuan/mu)
Zhuangtou	Cultivated and garden land	40000

-

³² The "one note and 4 programs" refer to the land use note, farmland conversion program, cultivated land replenishment program, LA program, and land supply program for a construction project, prepared by the municipal or county natural reosurces bureau, and submitted to the competent government for approval.

The LA resettlement modes include monetary compensation, employment training and employment information supply. The Chengcheng County Labor and Social Security Bureau will offer training to land-expropriated farmers to promote their nonagricultural employment, and restore their income and livelihoods.

- HD compensation and resettlement policies and rates
- HD compensation rate

HD compensation includes compensation for the demolished house and its ground attachment, a moving subsidy, a transition subsidy, etc. See Table 3-4. In practice, HD compensation is usually appraised by a specialized third party agency.

Table 3-4 HD compensation rates for the Chengcheng County WTE Plant

Town Village		Structure	compensation rate (yuan/m²)	
Zhuangtou	Yuanjiaping	Masonry concrete	850	

HD resettlement policy

According to the local HD resettlement policy, there are two HD resettlement modes: monetary compensation and property swap.

4) Resettlement budget

The resettlement budget of the Chengcheng County WTE Plant is 9.15 million yuan, which will be updated based on the final resettlement impacts.

Table 3-5 Resettlement budget of the Chengcheng County WTE Plant

No	Itam	Unit	Chengche	Plant	
No.	Item	UIII	Rate	Qty.	Amount
1	Basic resettlement costs	yuan	/	/	3332460
1.1	LA compensation	yuan	/	/	2380460
1.1.1	Cultivated / garden land	yuan/mu	40000	58.06	2322400
1.1.2	Young crops	yuan/mu	1000	58.06	58060
1.2	HD compensation				952000
1.2.1	Masonry concrete structure	yuan/m²	850	1120	952000
2	Social security costs				580600
2.1	Social security costs	yuan/mu	10000	58.06	580600
3	Resettlement M&E costs	Yuan per time	50000	6	300000
4	LA taxes				3406206
4.1	Farmland occupation tax	yuan/mu	20000	58.06	1161200
4.2	Land reclamation fees	yuan/mu	20000	58.06	1161200
4.3	Compensation for additional construction land	yuan/mu	18667	58.06	1083806
5	Contingencies	yuan	20%	/	1523853
6	Total	yuan	/	/	9143119

Source: estimated by the task force based on the government information

5) PIU

The PIU is Zhuangtou Town Government, which is responsible for implementing the LA resettlement and compensation program, including information disclosure, public participation, agreement signing, etc. The Chengcheng County Natural Resources Bureau is responsible for operational guidance, policy consulting, supervision, management, etc.

6) Monitoring program

According to the management requirements for "project-related facilities" in the ESS, the external M&E agency should conduct M&E on the plant's LAR process, livelihood restoration measures, living standard and satisfaction with resettlement, and submit M&E reports to the Bank semiannually.

3.6.4 Labor and working conditions

The plant is at the preparation stage, and its construction and operation agency is unknown. A specialized WTE company will be selected. Therefore, labor management (especially OHS) will be similar to that of the Linwei Urban WTE Plant. See *Section 2.8.3*.

3.6.5 Community health and safety

The social stability risk assessment report for the Chengcheng County WTE Plant was completed in March 2022, identifying its social risks, including LAR, environmental impacts, safety, health, etc., and proposing risk control measures. The report thinks that the social stability risk rating is "low".

The plant is located in the east of Yuanjiaping Village, Zhuangtou Town. The Standard for Planning of Urban Environment Sanitation Facilities (GBT50337-2018) stipulates that the environmental protection distance for WTE plants is 300m. There are 7 households (24 persons) within the protection distance, 170m away from the plant boundary, which will be relocated before operation.

There are 33 households in Yuanjiaping Village at 550m to the northwest, and are upwind. The access road does not pass through this settlement, so its odor, dust and traffic safety impacts are minor.

Villagers may file grievances to the village committee, township government (handled within $1\sim7$ days) or county bureau for letters and visits (handled within 15 days).

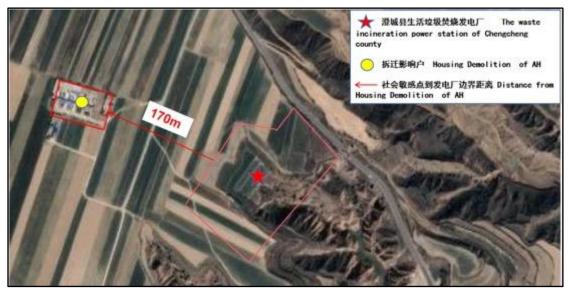


Figure 3-12 Sensitive communities around the Chengcheng County WTE Plant

Findings: By the time of this report, the Chengcheng County WTE Plant was still at the preparation stage, the relevant government approvals were pending, and LAR had not begun.

Suggestions:

- The Shaanxi PMO should coordinate with the Chengcheng County government (and the Chengcheng County PMO) to supervise and manage the proposed work for the Chengcheng County WTE Plant (see Table 3-2), and appoint a specialized third party external M&E agency to collect relevant information and conduct M&E, and report its implementation of, and performance in terms of environmental and social impact management of related facilities in the semi-annual monitoring report it submitted to the Bank.
- The land use for the Chengcheng County WTE Plant should comply with the state laws and regulations, and construction will begin after land approval. The Shaanxi PMO will appoint the third party external M&E agency to conduct M&E on LAR, livelihood restoration, information disclosure, public participation, grievance redress, etc., and submit external social M&E reports to the Bank semiannually.
- After the construction and operation agency is determined, the Chengcheng County PMO will ask it to establish and implement a labor management procedure complying with the state laws and regulations, and the Bank's ESF.
- After the construction and operation agency is determined, the Chengcheng County
 PMO will ask it to establish a community health and safety management system, and

a formal community communication mechanism, and report E&S risk management performance regularly.

4 Part 4: Social audit on the Chencang District subproject

The Chencang District subproject mainly includes the construction of two 2 urban WTSs, 3 township WTSs, 30 central waste collection sites and a truck maintenance center, reconstruction of two central waste collection sites, and purchase of trucks.

The social audit covers the following:

- Existing urban and rural waste collection and transfer systems, labor conditions of different types of workers involved (e.g., community workers)³³, and management measures for community health and safety, traffic safety risks, etc. involved in waste transfer systems;
- For the new facilities with LA completed, namely the Dongguan and Qianwei WCSs, and truck maintenance center, the social audit is focused on land use compliance;
- Existing facilities: including 2 reconstructed central waste collection sites. Since they have been closed down, the social audit is focused on land use compliance;
- Project-related facilities: Baoji WTE Plant. The social audit assesses its social impacts and risks, and social management systems, analyzes its potential impacts on the Project, and proposes management measures.

4.1 Existing domestic waste transfer system in Baoji City and Chencang District

Baoji City governs Jintai, Weibin, Chencang and Fengxiang Districts. The district urban administration and law enforcement bureaus are responsible for district-wide waste collection and transfer. The Baoji City SWMC under the Baoji City Urban Administration and Law Enforcement Bureau is responsible for harmless domestic waste disposal. Since the waste collection, transfer and disposal systems of the 4 districts are similar, that of Chencang District included in the Batch 1 subprojects is taken as an example.

The existing domestic waste collection and transfer systems of Chencang District include an urban one and a rural one.

1) Urban:

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The Chencang District Environmental Sanitation Station, and Chencang District Waste Management Service Center under the Chencang District Urban Administration

³³See the separate social audit chapters below for the labor and working conditions management of existing facilities on the domestic waste service chain.

and Law Enforcement Bureau are responsible for urban cleaning and waste transfer respectively.

Cleaning and collection: Public areas in the urban area are cleaned by the Environmental Sanitation Station, and communities, public institutions and enterprises are responsible for their own cleaning.

Transfer: Urban domestic waste transfer and sanitation facilities are managed by the Service Center. Domestic waste in public areas is transferred by cleaners of the Environmental Sanitation Station to nearby WTSs, and domestic waste of communities, public institutions and enterprises is transferred from fixed locations to WTSs.

Terminal: Domestic waste at WTSs is transferred to the Changshougou Landfill by the Service Center for landfilling.

Labor and working conditions: The Environmental Sanitation Station has 298 cleaners, and the Service Center has 52 transfer workers and WTS 0&M workers. The Environmental Sanitation Station and Service Center have signed a uniform labor contract with workers, and provided social insurance for eligible workers and accident insurance for workers exceeding the social insurance covering age; the minimum salary of some cleaners is 1,800 yuan per month, slightly lower than the prevailing minimum wage level of Chencang District; workers have two days off on average. Cleaners work on an 8-hour working system, and work beyond 8 hours is regarded as overtime. Overtime occurs during a sanitation inspection or special events only, usually for 1-2 hours, with an overtime allowance of 17 yuan per time. PPEs is distributed regularly, and cooling foods and a cooling allowance are distributed in summer.

Traffic safety management: The Service Center has established driver and truck management systems. Trucks run through a fixed route in an enclosed manner, and are monitored by GPS. Drivers inspect trucks before and after each run. Pre-job training has been offered to drivers and attendants, and safety education is conducted weekly.

Findings: The Environmental Sanitation Station and Service Center are both public institutions under the Chencang District Urban Administration and Law Enforcement Bureau. Their personnel policies comply with the Labor Law and Labor Contract Law; they have provided social insurance for and signed labor contracts with eligible workers, and pay workers monthly, consistent with the applicable state requirements and the Bank's ESS2. However, there are some gaps from the Labor Contract Law and ESS2 in labor contract management, wage level and entitlements, working hours and resting time, such as:

- <u>Labor contract management</u>: The sample labor contract used by the Chencang District Environmental Sanitation Station and Service Center lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law;
- <u>Wage level</u>: The wages of some workers are slightly lower than the prevailing minimum wage level of Chencang District;

Suggestions:

- <u>Strengthening labor contract management</u>: For jobs involving occupational hazards, the labor contract should include clauses on "labor protection, working conditions and occupational hazard protection";
- <u>Increasing the wages of workers</u>, at least to the prevailing minimum wage level of Chencang District.

2) Rural areas

In the 11 townships of Chencang District³⁴, domestic waste management is the responsibility of townships and villages.

A. Town waste collection and transfer

In the 11 townships, waste collection and transfer is the responsibility of cleaners and transfer workers of township governments. The 11 townships have 173 cleaners and 43 transfer workers in total, all being direct workers of the township governments. Most cleaners do public welfare jobs, all being registered low income residents, dealing with farming mainly, with low agricultural income. Such public welfare jobs (working for about 5 hours per day) can increase their income.

Cleaners are responsible for the cleaning of the main streets of their towns; transfer workers are responsible for the transfer of domestic waste from entities, stores and households in the whole town to the township waste dump, which has no disposal or protection facility.

<u>Labor and working conditions</u>: Township direct workers have signed a simple labor contract. Cleaners are divided into public welfare and non-public welfare ones. The salary of a public welfare cleaner consists of a county / district fiscal subsidy and a township government subsidy. Non-public welfare cleaners are paid by the township government, within the range of 800-1,200 yuan/month, and with about 4 working

⁻

³⁴ Chencang District governs 15 townships, in which 4 townships have been transferred to the direct jurisdiction of High-tech Zone, where waste is transferred to the Changshougou Landfill. The Batch 1 subprojects do not include High-tech Zone.

hours per day. Transfer workers are paid by the township government, within the range of 1,500-2,500 yuan, and with 4-6 working hours per day. PPEs is distributed regularly. The township governments have provided accident insurance for cleaners and drivers.

Traffic safety management: The township governments have driving safety regulations for transfer workers, including a fixed route, a fixed schedule and low speed driving, trucks are checked and maintained regularly, and drivers are trained on safety irregularly.

Findings on direct workers: The township governments pay direct workers (cleaners, transfer workers, etc.) monthly, offer relevant safety training, and distribute PPEs regularly, consistent with the applicable state requirements and the Bank's ESS2, but there are still some gaps from the Labor Contract Law and ESS2 in direct workers' labor contract management, where all townships have not signed formal labor contracts with cleaners and transfer workers;

Suggestions for direct workers:

- <u>Strengthening labor contract management</u>: The township governments should signe formal labor contracts with direct workers, and at least include clauses on "working hours, labor protection, working conditions and occupational hazard protection".
- <u>Strengthening labor safety risk management</u>: The township governments should provide accident insurance for cleaners and transfer workers, and distribute sufficient PPEs regularly.
- Extending the management duties of the Linwei District ESC: Monitor and improve labor management performance regularly.

B.Villages:

Cleaners and drivers hired by village committees are responsible for domestic waste collection and transfer at the village level. There are 1,454 village cleaners and 213 drivers in Chengcheng County. Villagers dump domestic waste into nearby waste bins; village cleaners are responsible for cleaning streets and transferring waste into nearby waste bins twice a day. Drivers transfer domestic waste from waste bins to village waste dumps every 2-3 days, which have no disposal or protection facility.

<u>Labor and working conditions</u>: Village cleaners and drivers are all community workers. <u>Village committees have signed a simple labor contract with community workers.</u> Most cleaners do public welfare jobs, all being registered low income residents, dealing with farming mainly, with low agricultural income. Such public welfare jobs

(working for about 2-3 hours per day) can increase their income. Public welfare jobs cleaners are paid 400-600 yuan per month; transfer workers are usually contracted annually, and paid 10,000-20,000 yuan per annum, transfer trucks, and maintenance and fuel costs are borne by village committees. Most of the village committees surveyed have provided accident insurance for community workers, few village committees have not provided accident insurance for workers. They have covered rural medical and endowment insurance themselves. Some village committees provide cleaners with PPEs (gloves, face masks, etc.), and some have not.

Traffic safety management: Village committees' traffic safety management systems and safety training are unsound. In the Xishan area, electric trucks can hardly drive due to insufficient power, so fuel-powered trucks are used in most villages, but such trucks are not insured. Village committees and transfer workers expect to select suitable truck models and get trucks insured.

Findings and suggestions:

Findings: The township governments pay direct workers monthly, and provide them with PPEs. The villages pay cleaners and transfer workers timely, consistent with the applicable state requirements and the Bank's ESS2, but there are still some gaps from the Labor Contract Law and ESS2 in labor contract management, labor safety risk management, GRM, etc., such as:

- <u>Labor contract management</u>: The village committees have signed simple labor contracts with community workers.
- <u>Labor safety risk management</u>: 1) Village committees do not offer safety training, few village committees have not provided accident insurance for workers, and some village committees do not provide PPEs; 2) Electric trucks are unsuitable for the Xishan area, but fuel-powered trucks are not insured.
- <u>GRM</u>: Community workers file grievances to village committees and township governments mainly, and no other grievance redress channel is known.

Suggestions:

- <u>Strengthening labor contract management</u>: For community workers, village committees should signe formal labor contracts, and include clauses on "working hours, labor protection, working conditions and occupational hazard protection".
- <u>Strengthening labor safety risk management</u>: 1. Village committees should provide accident insurance for workers, offer safety training, and distribute

- sufficient PPEs regularly. 2. For the Xishan area, **select suitable truck models** and **get trucks insured**.
- Extending the management duties of the Baoji City Solid Waste Management Center (SWMC): Monitor and improve labor management performance regularly, improve the existing community GRM to define the duties and procedure for accepting and handling grievances, and notify community workers.

4.2 Newly constructed or reconstructed facilities with LA completed—land use compliance audit

(1) <u>WCS</u>

Among the 5 WCSs to be constructed in the Chencang District subproject, two 2 WCSs (Dongguan and Qianwei WCSs) are located on state-owned land, with a floor area of 500 m² each. See Table 4-1, Figure 4-1 and Figure 4-2. The WTSs are over 100m away from the closest sensitive sites (e.g., schools, communities).

Table 4-1 Basic information of the waste compression stations with LA completed

wcs	Township / village	- ' Land tyne		Current status	Land use mode
Dongguan WCS	Xiqin Village, Dongguan Sub- district	500	State-owned public facility land	Edge of green belt	Direct use
Qianwei WCS	Lijiaya Village, Qianwei Sub- district	500	State-owned public facility land	Edge of green belt, with a usable area of 1 mu	Direct use



Figure 4-1 Location of the Dongguan waste compression station

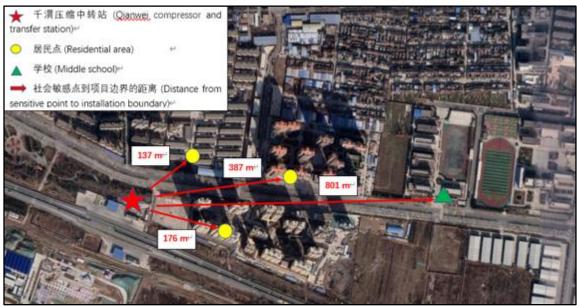


Figure 4-2 Location of the Qianwei waste compression station

The land used for the Dongguan and Qianwei WCSs is public facility land managed by the Chencang District Urban Administration and Law Enforcement Bureau, <u>and can be used directly for construction without any outstanding issue</u>.

(2) Transfer truck maintenance center

A transfer truck maintenance center with a floor area 16.5 mu will be constructed, including a 200 m² administrative house with 350 parking spaces.



Figure 4-3 Location of the transfer truck maintenance center

The maintenance center is located west of the Baoji City Shooting Center, and its land is part of a green belt and is public facility land managed by the Chencang District

Urban Administration and Law Enforcement Bureau. <u>Such land can be used directly without any outstanding issue</u>.

4.3 Reconstruction of waste collection sites—land use compliance audit

The Chencang District subproject includes the reconstruction of the Chencang Garden and South Ring Road central waste collection sites, which are managed by the Service Center, and were closed down in 2007 due to the inconvenience of leachate treatment. This section analyzes their land use only.

The two central waste collection sites have a floor area of 300 m² each, and their land and aboveground structures are owned by the Chencang District Urban Administration and Law Enforcement Bureau, and can be used directly without any outstanding issue.





Chencang Garden central waste collection site

South Ring Road central waste collection site

Figure 4-4 Current situation of waste collection sites

4.4 Social audit on the Baoji City WTE Plant

4.4.1 Introduction

The Baoji City WTE Plant (Baoji City Domestic Waste Disposal Project) is located south of the Changshougou Landfill and east of the Majia Plateau in Jintai District, Baoji City, with a land area of 120 mu, with a design daily disposal capacity of 1,500t, and two 750t/d mechanical incinerators. It will serve Weibin, Jintai and Chencang Districts.

The plant is constructed in the PPP mode, and Shaanxi Hengyuancheng Environment & Power Co., Ltd. (Hengyuancheng Company) is responsible for its construction and operation. Hengyuancheng Company is jointly founded by Baoji Urban Investment Group and Shanghai SUS Environment Co., Ltd. The Baoji Municipal Housing and Urban-Rural Development Bureau is the main regulator, and the ecology and environment bureau is the environmental regulator.

Hengyuancheng Company has established an EHS department, and appointed dedicated staff to manage E&S affairs.

4.4.2 Construction progress

The Baoji City WTE Plant broke ground in &&&, and is expected to be completed in &&&&. Its approvals have been obtained:

- Preliminary Examination Opinion on the Land Used for the Baoji City Domestic Waste Disposal Project of the Baoji Municipal Natural Resources Bureau (June 2019);
- Social Stability Risk Assessment Report (April 2018);
- EIA Report, and its approval by the Shaanxi Provincial Ecology and Environment Department (August 2019);
- Approval of the preliminary design (August 2021);
- Occupational hazard pre-assessment opinion (September 2021);
- Review opinion on occupational protection facilities (December 2021);
- Land approval of the Shaanxi Provincial Government (March 2020);
- Real property ownership certificate (certificate of the right to use state-owned construction land—public facility land).

According to Table 2-8 and current project progress, Hengyuancheng Company will conduct the following environmental, health and safety assessments, get registered with the regulators concerned, and implement relevant measures during project implementation. The competent authorities (e.g., ecology and environment bureau, safety supervision bureau, health commission) will supervise the implementation of these measures irregularly.

Table 4-2 Progress of E&S approvals for the Baoji City WTE Plant

Stage	Document	Regulator	Time	Remarks
	Land pre-examination	Natural resources bureau	2019.8	Completed
Feasibility	Social stability risk assessment	Political and legislative affairs committee	2018.4	Completed
study	Safety pre-assessment	Safety supervision bureau	/	
	Occupational hazard pre- assessment	Health commission	2021.9	Completed
	Safety facility design	Safety supervision bureau	2021.8	Completed
Design	OHS design	Health commission	2021.8	Completed
	Environmental design	Ecology and environment bureau	2021.8	Completed

Stage	Document	Regulator	Time	Remarks
	Land approval and resettlement	Natural resources bureau	2020.3	Approved
Before implementation	Certificate of land use right	Natural resources bureau	2021.9	Obtained
	Environmental approval	Ecology and environment bureau	2019.8	Approved
	Safety inspection	Safety supervision bureau	One month before operation	
Implementation and inspection	Environmental inspection	Ecology and environment bureau	One month before operation	
	OHS inspection	Health commission	One month before operation	
	occupational hazard screening	Health commission	Annually	
Operation	Occupational hazard assessment	Health commission	Once every 3 years	
	Government supervision and inspection	Competent authority	Annually, irregular	

Source: compiled by the task force

Suggestions: The Shaanxi PMO shall supervise the work to be done by Hengyuancheng Company in coordination with the Baoji Municipal Government (and Baoji City PMO), and appoint an external M&E agency to conduct M&E, which will submit external social M&E reports to the Bank semiannually.

4.4.3 Community health and safety

Groups 1 and 2 of Baoling Village are located at 780m east of the Baoji City WTE Plant, and Baoji Clean Environment Technology Co., Ltd. is at 450m to the southwest.

Groups 1 and 2 of Baoling Village have 169 households with 512 persons, including a resident population of 245. They are located upwind, and their distance from the plant is beyond the safe distance specified in the national standard (300m). Construction vehicles will enter the plant via the access road, while villagers in the two groups will pass through County Highway Y204, so its noise, dust and traffic safety impacts are minor, but there are traffic safety risks at the entrance.



Figure 4-5Social sensitive sites around the Baoji City WTE Plant

Suggestions: Take feasible measures for the traffic safety design at the entrance, such as warning signs.

4.4.4 LA

120 mu of collective land in Groups 1 and 2 of Baoling Village has been acquired for the Baoji City WTE Plant, affecting 36 households with 132 persons.

In September 2019, the Jintai District Natural Resources Bureau issued a preliminary LA announcement to the Baoling Village Committee according to the Land Administration Law and the Measures for the Implementation of the Land Administration Law (Figure 4-6). Before LA, the Jintai Town Government conducted public consultation in Baoling Village, including discussion of LA compensation and payment, and confirmation of DMS results. Through public consultation, the Jintai Town Government agreed on the LA compensation rate and payment mode with the APs.

宝鸡市国土资源局金台分局 征收土地预告知书

金河镇宝陵村村民委员会:

根据《土地管理法》、《宝鸡市金台区土地利用总体规 划》、《宝鸡市城市建设规划》,经区政府研究、拟征收体 集体土地8公顷,具体用地面积、范围以现场勘测定界,图 表为准。

征收土地的土地补偿费、安置补助费按照《中华人民共和国土地管理法》第四十七条和《陕西省实施〈中华人民共和国土地管理法〉办法》第二十九条的规定办理,青苗补偿费、地上附着物补偿按照《宝鸡市征收土地拆迁补偿标准》补偿。安置方式以货币安置方式为主。

特此告知 。



Figure 4-6 Preliminary LA announcement for the Baoji City WTE Plant

In March 2020, the Shaanxi Provincial Government approved LA. See Figure 4-7.



Figure 4-7 Land approval for the Baoji City WTE Plant

In May 2020, the Jintai District Government posted the LA announcement at the Jinhe Town Government and in Baoling Village, and conducted public consultation. See Figures 4-8 and 4-9.



LA announcement in Baoling Village



LA announcement at the Jinhe Town Government



Public consultation before LA in Baoling Village



Confirmation of DMS results

Figure 4-8 LA information disclosure and public participation

宝鸡市金台区人民政府征地公告 根据《中华人民共和国土地管理法》、《国务院关于深化改革严格土地管理的决定》(国发 [2004] 28号)等有关规定。现将土地征收有关事项公告如下: 一、征她的位置和范围:全合区长寿沟生活垃圾填埋场以南、马家塬边以东,原全合区全 河镇同心村 (現萬全台区全河镇宣陵村) 一二组范围内。详见宝鸡市自然资源和规划局关于宝 鸡市生活垃圾处理项目(PPP 模式)用地规划意见的面(宝市自然资函(2019)137号)和宝鸡 市 2019 年度第十二批次农用地特用和土地征收地块二宝鸡市生活垃圾处理工程勘测定界项目勘 测定界技术报告书 (编号:陕地三(验测) 201825号)。 二、征地用途;公共管理与公共服务用地。 三、征地面积及批准文号: 本次征收土地总面积 8 公顷 (120 亩)。省政府批准文号为陕政土 批 (2020) 159 号,市政府批准文号为宝市政土税 [2020] 2 号。 四、征地的补偿标准和被征地农民安置途径 (一) 补偿标准: 按照陕西省人民政府办公厅《关于印发全省征地统一年产值标准及区片 综合地价的通知》(陕政办发 [2018] 60 号)、宝鸡市会台区人民政府办公室《关于印发会台区 征地统一年产值标准及区外综合地价的通知》(宝金政办发 (2018) 49 号), 宝鸡市全台区人民 政府办公室《关于印发全合区集体土地征收地上附着物歷记规则和补偿标准的通知》("宝金政 办发 (2016) 41号)等规定执行。 (二) 被征地衣民会置途径: 本次征收安置补助费以货币方式支付。依据宝鸡市人民政府 《关于印发宣鸡市被征地居民就业和社会保障试行办法的通知》(宣政发〔2009〕51 号)。征收 土地按照 1 万元/亩的标准缴纳坡征地居民社会保障费。 五、自本公告发布之日起。特组织有关征地机构和测量单位,对土地的权属、地类、面积。 以及地上附着物的权属、种类、数量、结构等现状进行调查核实。各相关单位和个人应相互知 照并予以配合。调查结果特与被征地农村集体经济组织、农户和地上附着物产权人共同确认。 六、自本公告发布之目起,除正常农业生产外,被征地农村集体经济组织、农户和地上附 着物产权人在征收土地上抢救、抢拜、抢建的附着物和青苗、征地时一律不予补偿。 特此公告。

Figure 4-9 LA announcement for the Baoji City WTE plant

In May and June 2020, an LA agreement was signed with the affected village, specifying that the LA compensation rate would be 75,000 yuan/mu based on the local policies. See Figure 4-10.

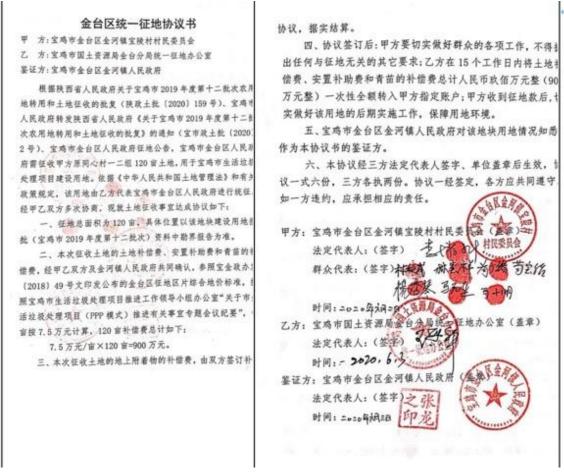


Figure 4-10 LA compensation agreement for the Baoji City WTE Plant

In June 2020, the LA and ground attachment compensation was paid to the affected villages and persons at a time. See Figure 4-11. No grievance has been received in this aspect.





Figure 4-11 LA compensation voucher for the Baoji City WTE plant

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After LA, the Baoji Municipal Urban Administration and Law Enforcement Bureau applied for a certificate of the right to use state-owned construction land (Shaanxi (2021) Baoji No.0243768) and a construction land planning permit. See Figure 4-12.

<u> </u>	021) 宝鸡市 不动产权第 0243768 号
权利人	宝鸡市城市管理执法局
共有情况	单独所有
坐 落	金台区金河镇宝陵村
不动产单元号	610303 102220 GB00001 W00000000
权利类型	国有建设用地使用权
权利性质	划拨
用 途	公用设施用地
面 积	共有宗地面积80000平方米
使用期限	无期限

Figure 4-12 Real property ownership certificate of the Baoji City WTE Plant

<u>Conclusion</u>: The LA procedure for the Baoji City WTE Plant complies with the applicable state laws and regulations. Public consultation, LA announcement disclosure, etc. were conducted before LA, and the compensation has been fully paid. A certificate of the right to use state-owned construction land and other necessary documents were obtained before construction, consistent with the state and provincial laws and regulations on land use. By the date of this report, no grievance about LAR had been received.

5 Part 5: Social audit on the Baoji City subproject

The Baoji City subproject involves Changshougou Landfill closure. The social audit covers LAR, Labor and working conditions, community health and safety, stakeholder engagement, etc.

5.1 Overview of the Changshougou Landfill

The Changshougou Landfill is run by the Baoji City SWMC, located in Baoling Village, Jinhe Town (formerly Tongxin Village), with a floor area of 600 mu. It broke ground in 2001, and was put into operation in 2004, serving an urban population of about 1 million in Jintai District, Weibin District, High-tech Zone and Chencang District. It will be closed when it is full.

Leachate is drained downstream to the leachate treatment plant for harmless treatment, and treated leachate will be discharged into the urban sewer network, and treated at the Shilipu Wastewater Treatment Plant.

Landfill gas is discharged directly via the gas well, and delivered to the downstream biogas power plant for safe treatment. The biogas power plant is run by a third party company as entrusted by the Baoji City SWMC.

5.2 Labor and Working Conditions (ESS2)

The Baoji City SWMC is a public institution under the Baoji Municipal Urban Administration and Law Enforcement Bureau, managing the city's appearance and sanitation. The Changshougou Landfill (including leachate treatment plant) has 41 workers, all being direct workers, in which 28 are responsible for landfilling and administration, including 3 managers, 4 measurers, one file clerk, 3 security guards, two safety officers and 6 machinery operators, one disinfector, 1 disinfection vehicle driver and 7 truck drivers; and 13 are responsible for leachate treatment. The social audit assesses the landfill's employment terms and conditions, presence of child and forced labor, OHS, worker GRM, etc. according to ESS2.

5.2.1 Direct workers

1) Employment terms and conditions

Public institutions usually conduct personnel management according to the relevant state policies properly. In the social audit, the relevant management systems of the SWMC were reviewed, mainly including:

Work Attendance and Leave System

Sample labor contract

The SWMC has signed labor contracts with all workers. The basic terms and conditions of the labor contract include term, scope of work, working conditions, labor protection, labor remuneration, labor discipline, rules and regulations, termination and change, labor dispute settlement, and other items stipulated in the Labor Law, but do not include social insurance.

The SWMC has provided social insurance (including work injury, medical and endowment insurance) for female workers under 55 and male workers under 60, and employer liability insurance for workers exceeding the social insurance covering age. The SWMC offers induction training to workers to help them get familiar with its policies and their jobs. The working hours of the landfill are 7:30-12:00 and 14:00-18:00, and work beyond 8 hours is regarded as overtime, but overtime occurs during flood control only, and an overtime allowance of 17 yuan per time is granted. There are 4 days off per month, and a paid leave of up to 7 days. The minimum salary of direct workers is 1,850 yuan per month, higher than Baoji City's prevailing minimum wage level. A high temperature allowance is granted, and cooling foods and drugs are distributed in summer.

Findings: The Baoji City SWMC is a secondary public institution, and its personnel policies comply with the Labor Law and Labor Contract Law. It has provided social insurance and signed labor contracts for all eligible workers, and pays its workers monthly, consistent with the applicable state requirements and the Bank's ESS2.

However, the Changshougou Landfill still has some gaps from the Labor Contract Law and ESS2 in labor contract management, inicluding:

 The sample labor contract used lacks clauses on "social insurance", and "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law;

Suggestions:

 Strengthening labor contract management, For jobs involving occupational hazards, the labor contract should specifically include clauses on "social insurance", and "labor protection, working conditions and occupational hazard protection";

2) Labor protection

The maximum age is 64 years and the minimum age is 32 years, so the landfill does not employ any child labor or underage worker aged 16-18 years. According to worker

interviews, landfill workers can apply for separation freely in the contract term, so there is no forced labor; its recruitment and service requirements comply with the applicable state laws, without any restrictive or discriminatory provision.

3) OHS

The operating process of the landfill is as follows: A transfer truck dumps waste in the designated area after weighing, and waste is compacted, disinfected and finally covered.

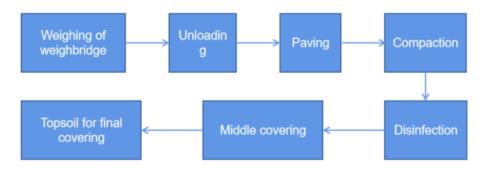


Figure 5-1 Landfilling flowchart

Based on the above operating process, the potential OHS impacts and risks include:

- Dust, odor and noise: Dust and noise during unlading may affect transfer truck drivers, attendants, safety officers and compactor operators; compactors generate high noise during operation, which may affect operators though such equipment is well sealed;
- Disinfectant: The disinfectant is a toxic chemical, and has a certain health hazard to those exposed to it;
- Harmful gases: Ammonia, hydrogen sulfide, etc. generated by domestic waste during microbial decomposition may affect all workers.
- landfill gas: The landfill gas contains methane mainly, and also carbon dioxide and toxic gases, and generates odor, leading to poisoning and explosion risks;
- Pathogenic contamination: Pathogens from domestic waste may pollute the environment and harm workers during landfilling;
- Operating risks of special equipment: risks arising from the operation of compactors, etc.;
- Unstable stacking: The waste dump on the east is steep and unstable;
- Heatstroke risk during high temperature operation
- COVID-19 infection risk

The Baoji City SWMC has developed safety systems and emergency measures to manage OHS risks during operation, These systems manage the health and safety of onsite workers and transfer workers systematically, such as operating specifications, PPEs wearing, machinery operation and maintenance, environmental monitoring and site disinfection, mainly including:

- Work Safety Responsibility System
- Machinery Management System
- Landfill Operating Standard Management System
- Contingency Plan for Flood Control
- Environmental Protection and Monitoring Management System
- Machinery and Vehicle Management System
- Regulations on the Annual Review of Driving and Operating Licenses
- Reward and Punishment Regulations
- Regulations on Machinery and Vehicle Accident Handling
- Pandemic Prevention and Control Measures
- Contingency Plan for Environmental Emergencies
- 2022 Flood Control Contingency Plan and Implementation Rules

The implementation of these systems has been learned by field visit and interview. The key findings are as follows:

- Waste is transferred in a fully enclosed manner;
- Waste is landfilled daily to minimize the duration of exposure to the air;
- During unloading, safety officers and attendants are required to maintain a safe distance from the transfer truck to reduce dust and noise impacts;
- Workers are provided with PPE, including gloves, working clothes, antiskid rain boots, surgical masks, protective clothes, etc.;
- A deodorant is applied during landfilling to cover, neutralize or eliminate odor;
- During landfilling, film (or soil) covering is conducted daily unit by unit, and water is sprinkled on the working surface, road and borrow area to suppress dust;
- The leachate collecting pit is covered to reduce odor;
- A free systemic health examination is arranged for workers biannually;
- For the prevention and control of infectious diseases (including COVID-19), a prevention and control system has been established;
- An emergency rescue headquarters is established to organize emergency response to environmental pollution events.

Conclusions and findings:

The Baoji City SWMC has formulated a series of OHS management systems and procedures, including emergency management, which have been well implemented, but needs improvement in occupational protection management:

Occupational protection management: The "three simultaneities" were not conducted for occupational protection facilities during the expansion of the landfill, no occupational hazard screening was conducted at the operation stage, no occupational health examination is offered, and the occupational hazard notification procedure is not performed.

Suggestions:

- Baoji City SWMC should appoint a qualified agency to identify potential occupational hazards in the Changshougou Landfill, conduct occupational hazard screening as soon as possible, offer pre-job, on-the-job and post-job occupational health examinations to workers exposed to occupational hazards, and provide appropriate PPEs and occupational protection training to workers;
- The Baoji City SWMC should specify occupational hazards in the labor contract, and notify relevant workers of potential occupational hazards and their impacts;
- Organize work safety mobilization meetings, offer topical training regularly, and keep records properly.

5.2.2 Contracted workers

The biogas power plant is run by Xi'an Yifeimingdake Regeneration Resource Utilization Co., Ltd., and has 10 workers, with a minimum age of 30 years.

Both companies have signed labor contracts with workers, covering term, scope of work, workplace, working hours, days off, labor remuneration, social insurance, benefits, labor protection, working conditions, occupational hazard protection, financial compensation, etc. The Administrative Measures for Third Party Dispatched Workers specify labor remuneration, entitlements, overtime allowance, etc.

Workers work 12 hours a day, and have 4 days off per month. They are paid monthly, with a minimum salary of 3,000 yuan per month, Wages of contracted workers are much higher than the prevailing minimum wage level of Shaanxi Province, and are paid monthly, and overtime wages are paid according to the Labor Law and Labor Contract Law; an appropriate GRM is in place to handle labor disputes. Therefore, the management of contracted workers complies with the applicable state requirements and the Bank's ESS2.

For the OHS of contracted workers, Xi'an Yifeimingdake Regeneration Resource Utilization Co., Ltd. has established sound management systems, including the safety management system, equipment safety inspection system, patrol system, regular testing system, data recording system, and work attendance system. These systems make provisions on PPEs wearing, equipment maintenance, operating procedures, etc., and are well implemented.

Findings: The labor service agreement with the third party (signed between the Baoji Municipal Environmental Sanitation Bureau and Xi'an Yifeimingdake Regeneration Resource Utilization Co., Ltd. in April 2008, with a term of 20 years) does not include labor nonconformity remedies. The Baoji City SWMC's labor management of third party companies is consistent with the current state laws and regulations, but its labor management policies and procedures do not contain requirements for third party labor management and monitoring.

Suggestions: The Baoji City SWMC should improve its LMP, strengthen third party labor management, establish a third party performance management procedure, and include labor nonconformity remedies in the labor service agreement.

5.2.3 Community Health and Safety (ESS4)

The landfill is about 1km away from the closest settlement, and these houses have been preferably built after its completion.

Groups 11 and 12 of Baoling Village are located at 300m to the west of the landfill, and a settlement in Dongyuan Village is at 400m to the east. Groups 11 and 12 of Baoling Village have 72 households with 247 persons, including a resident population of 44. They are located downwind, and have noise and odor impacts, especially in summer. Dongyuan Village has 163 households with 549 persons, including a resident population of 110. It is located upwind, and has minor noise and odor impacts. The access road does not pass through the two villages.



Figure 5-2 Social sensitive sites around the Changshougou Landfill

There is a sloped bend at the entrance, where there is no warning sign, and traffic accidents are likely to occur. For traffic safety risks, the SWMC stipulates that transfer trucks must drive along the specified route, GPS is installed, and traffic safety education is conducted monthly (see Figure 5-3).



Figure 5-3 Landfill driver safety training

Since sludge with high moisture content is disposed of here, the landfill has slope instability risks to Groups 11 and 12 of Baoling Village.

According to the environmental monitoring reports of May and November 2021, and January and May 2022, groundwater, unorganized waste gas, noise and noise

monitoring results comply with the national standards. These reports have been disclosed online. According to interviews with 4 villagers, the village is located downwind, and is affected greatly by the landfill, especially in summer. Villagers have reported this issue to the town government, which has granted a fly killing fee and distributed disinfection supplies to villagers, and the landfill conducts disinfection for the village regularly. However, villagers think that disinfection is not effective enough, and expect the landfill to be closed as soon as possible.

The landfill has not established an active community communication mechanism. Grievances are usually field with the village committee or town government.

Conclusions and findings

The landfill has some health and safety impacts and risks to nearby communities, and further improvement is needed though some mitigation measures have been taken.

- There are slope instability risks on the north.
- There are traffic safety risks at the entrance.
- There are many flies and mosquitoes, and strong odor in summer, and the measures taken by the SWMC are not effective enough.
- No active communication and grievance redress mechanism has been established for nearby communities.

Suggestions:

- The Baoji City SWMC should take measures to eliminate slope instability and traffic safety risks.
- Safety impacts on nearby communities should be assessed, and mitigation measures and a contingency plan prepared.
- Improve the closure design to reduce disturbances, and strengthen disinfection in summer.
- The company should establish a formal GRM for workers based on the existing grievance redress channels, notify it to nearby communities, and arrange resources and staff to record grievances received and their dispositions.

5.2.4 Land use survey (ESS5)

The landfill has a floor area of 815 mu, and its land is state-owned construction land and road land. See Figure 5-4.

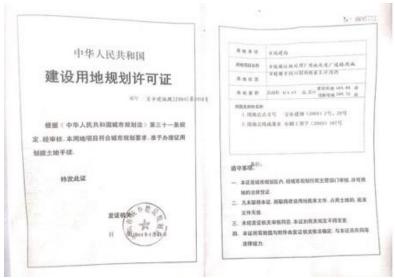


Figure 5-4 Land planning permit for the Changshougou Landfill

The Shaanxi Provincial Government issued the land approval in December 1999 (see Figure 5-5). Before LA, the land belonged to Baoling Village, Jinhe Town. LA occurred in 1999, and relevant original documents are missing.

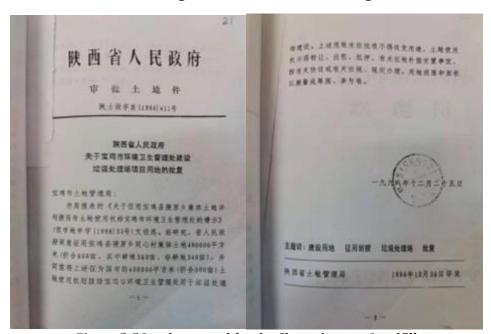


Figure 5-5 Land approval for the Changshougou Landfill

Findings: The land used for the landfill has been approved, which complies with the applicable state and provincial laws and regulations. The compensation has been fully paid, and there is no outstanding issue.

6 Part 6: Summary of social audit conclusions and suggestions

6.1 Findings and suggestions

The table below summarizes the key issues identified in the social audit and the proposed suggestions. These issues have been included in the SIA; the suggested measures have been incorporated in the social management plan in the SIA Report, and will be implemented according to the schedule promised by the PIUs. The key measures proposed in the social audit, such as improving the LMP and OHS management, have been included in the ESCP.

The PIUs and external M&E agency will track the implementation of these measures, and report to the Bank regularly.

As part of the regular social external monitoring, the social consultants shall follow up, verify, and report that the gaps identified through the E&S audit (for instance, in terms of labor, land, community health and safety, stakeholder engagement, among others) have been appropriately remedied per the timelines specified in the corrective action plan.

Table 6-1 Summary of issues identified in this social audit and suggestions for correction

F	acility	Relevant ESSs	Concerns	Findings and issues	Risk rating	Suggestions	Agencies responsible	Planned completion time
				1.	Linwei	District		
	Urban areas	ESS2	Employment terms and conditions	 Stipulated in the Labor Contract Law; The wages of some cleaners are slightly lower than the prevailing local minimum wage level; Most sanitation worker have no day off, and no overtime pay. 	M	Establish and implement a sound LMP as per the Labor Law, Labor Contract Law and ESS2, and strengthen the management of workers' labor contracts, wages, rest and leaves, overtime pay, etc.	Linwei District ESC	
Existing collection facilities		ESS2	Employment terms and conditions	 The township governments have not signed formal labor contracts with cleaners and transfer workers. 	M	Strengthen labor contract management as per the Labor Law, Labor Contract Law and ESS2.	Township	ASAP, not later than one month
llection fac		ESS2	OHS	 The township governments have not provided accident insurance for cleaners and transfer workers. 	M	 The township governments should provide accident insurance, suitable PPE, and regular safety training for workers. 	governments	after the effective date of the Project
ilities	ships	ESS2	Contracted workers (Fengyuan Town)	 The third party service provider has not provided accident insurance for contracted workers. The Fengyuan Town Government has not provided a procedure to manage and monitor the third party service provider's performance, and the service contract with the third party does not have any provision on nonconformity remedy. 	M	 The third party service provider should provide accident insurance, suitable PPE, and regular safety training for contracted workers; The Fengyuan Town Government should establish and implement a sound LMP as per ESS2. 	Fengyuan Town Government and third party service provider (Zhuotengjie)	
	/illag S	ESS2	Community workers		M	The relevant village committees should establish and implement a sound LMP as	Village committees,	

Fac	ility	Relevant ESSs	Concerns		Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
				•	community workers; The village committees have not provided accident insurance and safety training for workers; some villages do not provide PPEs; Community workers may file informal/oral grievances to village committees and township governments, but there is no formal GRM.		•	per ESS2, covering labor contract management, OHS and worker GRM; Linwei District ESC should monitor and improve the management performance of different types of workers involved in collection and transfer systems regularly, and improve the existing community GRM.	Linwei District ESC	
Trans	1	ESS2	Employment terms and conditions	•	Labor contract management: The sample labor contract used by the Linwei District ESC lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law; Wage level: the salary of WTS security guards is lower than Linwei District's prevailing minimum wage level. Rest and leaves: WTS workers have no fixed day off.		•	Establish and implement a sound LMP as per the Labor Law, Labor Contract Law and ESS2, and strengthen the management of labor contract, wages, rest and leaves, etc.		
Transfer facilities	, ,	ESS2	онѕ	•	The "three simultaneities" were not conducted for occupational protection facilities during the expansion of the three WTSs, no occupational hazard screening was conducted at the operation stage, no occupational health examination was offered, and the occupational hazard notification procedure was not performed.	М	•	Appoint a qualified agency to identify potential occupational hazards in the WTSs according to OHS standards/specifications and ESS2, and provide appropriate PPEs and occupational health examination for workers according to the identification results; Specify OHS hazards in the labor contract, and notify relevant workers.	Linwei District ESC	ASAP, not later than one month after the effective date of the Project, and maintain
		ESS2	Worker GRM	•	Workers may file informal / oral grievances through relevant channels, but there is no formal GRM.	М	•	Establish a formal GRM for workers as per ESS2, and notify workers.		throughout project lifecycle
		ESS4	Community	•	Nearby residents may express	L	•	Establish a formal community GRM, and		

Facility	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
		health and safety	their concerns through relevant channels, but the WTSs have not established an active community communication mechanism. The WTSs have some odor and noise impacts on nearby communities during operation.		•	provide sufficient resources (manpower and funds) to ensure its normal operation. For such impacts, the ESC should notify environmental monitoring and evaluation results to nearby residents, and take appropriate measures to mitigate such impacts.		At least semiannually
	ESS5	Land approval	• According to the applicable Chinese laws and regulations, a PIU should obtain the approval of the land use right before the project's civil construction (or equipment installation). The land supply procedure for the Shengli and Chelei WTSs is being handled, and is expected to be completed by the end of December 2022.		•	Complete land use right approval and LA before WTS reconstruction.		December 31, 2022
	ESS5	Land use	The Weilan Road WTS uses leased rural collective land, which does not comply with the Chinese policy on land use.	М	•	The Linwei District ESC should complete the adjustment of the land use plan to land for utilities in coordination with the competent authorities (natural resources and planning bureaus), and complete land use right approval and LA before WTS reconstruction.		Before bidding
Disposal facilities	ESS2	Employment terms and conditions	stipulated in the Labor Contract Law; The salary of some workers (security guards) is slightly lower than the prevailing local minimum wage level.		•	as per the Labor Law, Labor Contract Law and ESS2, and increase relevant workers' wages.	Linwei District ESC	effective date of the Project
	ESS2	OHS	• The "three simultaneities" were	M	•	The Linwei District ESC should appoint a		Before project

Facility	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
			not conducted for occupational protection facilities during the expansion of the Majiagou Landfill, no occupational hazard screening was conducted at the operation stage, no occupational health examination was offered, and the occupational hazard notification procedure was not performed.		•	qualified agency to identify potential occupational hazards in the WTSs according to OHS standards/specifications and ESS2, and provide appropriate PPEs and occupational health examination for workers according to the detection resutls; Specify OHS hazards in the labor contract, and notify relevant workers.		implementation
	ESS2	Worker GRM	 Workers may file informal / oral grievances through relevant channels, but there is no formal GRM. 	М	•	Establish a formal GRM for workers as per ESS2, and notify workers.		
	ESS2	Contracted workers	The Linwei District ESC has not established a procedure to manage and monitor the third party's performance, and the service contract with the third party does not have any provision on nonconformity remedy.	М	•	The Linwei District ESC should establish and implement a sound LMP as per ESS2.		ASAP, not later than one month after the effective date of the Project, and
	ESS4	Community health and safety	The Majiagou Landfill has a small E&S impact on surrounding communities with the mitigation measures taken. However, it has not established an active community communication mechanism and a GRM; residents may file informal / oral grievances through relevant channels.	М	•	Establish a formal community GRM, and provide sufficient resources (manpower and funds) to ensure its normal operation.		the Project, and maintain throughout project lifecycle
	ESS5	Land use and land approval	 The land used for both phases of Majiagou Landfill is leased collective land, and will be returned to villagers unconditionally after expiry. The landfill is not comforming 	S	•	The Shaanxi PMO should assist the county PMO to find a feasible solution to the land use nonconformity in coordination with the county government and natural resources bureau, identify the restraints of such	Linwei District Government, ESC, and Natural Resources Bureau	Based on the government coordination schedule

Facility	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
			with official land use zoning and planning, and has not obtained the land certificate.			outstanding issue on landfill closure and the prerequisites to land use, and notify the progress to the Bank timely. It is sugguested that Linwei District Government should include land use planning for the landfill in the updated land spatial plan which is expected to be approved in June 2023 by the Shaanxi Provincial Government. Before starting the bidding for landfill closure, the Linwei PMO should receive the necessary approvals for land use (i.e., aligning with land zoning plan in the upto-date land spatial planning, obtaining land use certificate) and seek consent from the district Natural Resources Bureau about the landfill closure plan.		
					•	For compensation with villages/villagers subject to the likely potential scenario after the landfill closure, it is suggested: If the leased land is to be returned to the villages/farmers after landfill closure, the PMO will support preparation of a technical assessment to confirm the feasibility of return (including any risks/mitigation measures needed. If the leased land is to be reused for other purposes after the landfill closure, the PMO and local government will support "good faith negotiations" to seek consent from the villages/villagers and adjust the provisions for compensation. If the land continues to be leased	Linwei District ESC	

Facility	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
					•	after the land closure, the prorated land rental will be paid per schedule outlined in the land leasing agreements.		
	ESS2	Employment terms and conditions	deviates from the Labor Law and ESS2 in social insurance, and rest and leaves.	d M	•	Strengthen the management of worker's labor contract, social security, rest and leaves, etc.) as per the Labor Law, Labor Contract Law and ESS2.		
Sorting facilities	ESS2	OHS	 The "three simultaneities" were not conducted for occupational protection facilities during the expansion of the sorting center, no occupational hazard screening was conducted at the operation stage, no occupational health examination was offered, and the occupational hazard notification procedure was not performed. The sorting center has taken some measures to manage employees' work safety, but there are no formal systems and arrangements on work safety and emergency management. 	M	•	Appoint a qualified agency to identify potential occupational hazards in the WTSs according to OHS standards/specifications and ESS2, and provide appropriate PPEs and occupational health examination for workers according to the identification results; Improve the OHS management systems as per ESS2.	Linwei District Used Material Recovery Company	ASAP, not later than one month after the effective date of the Project
	ESS2	Worker GRM	 Workers may file informal / oral grievances through relevant channels, but there is no formal GRM. 	М	•	per ESS2, and notify workers.		
	ESS4	Community health and safety	 The sorting center has some noise impact on surrounding communities. Residents may file informal / oral grievances through relevant channels, but there is no formal community communication 	l M	•	operating machinery during normal rest time) to mitigate the noise impact on nearby residents;		ASAP, not later than one month after the effective date of the Project, and maintain throughout

Fac	ility	Relevant ESSs	Concerns	Findings and issues	Risk rating	Suggestions	Agencies responsible	Planned completion time
				mechanism.		operation.		project lifecycle
r i oje cr. i e i dren i de i i tres				 The Weinan Urban WTE Plant broke ground in March 2022, and the project company is Weinan Sanfeng Company. E&S approval is underway. 	l M	The Shaanxi PMO will supervise and manage the work (as detailed in Table 3-2) to be done by Weinan Sanfeng Company in coordination with the Weinan Municipal Government (and Linwei District PMO), and appoint a specialized third party external M&E agency to collect relevant information and conduct M&E, and report its implementation of, and performance in terms of, E&S impact management of related facilities in the semi-annual monitoring report it submitted to the Bank.	Shaanxi PMO, Weinan Municipal Government	External monitoring period
				2. Ch	engche	eng County		
Existing collection facilities	Urban areas	ESS2	Employment terms and conditions	The sample labor contract used by the Chengcheng County ESC lacks clauses on "labor protection, working conditions and occupational hazard."	М	Establish and implement a sound LMP as per the Labor Law, Labor Contract Law and ESS2, and strengthen the management of workers' labor contracts, wages, rest and leaves, overtime pay, etc.	Chengcheng County ESC	ASAP, not later than one month after the effective date of
n facilities	Townships	ESS2	Employment terms and conditions	 Some township governments have not signed formal labor contracts with cleaners and transfer workers. 	М	Strengthen labor contract management as per the Labor Law, Labor Contract Law and ESS2.	Township	the Project
		ESS2	OHS	 The relevant township governments have not provided accident insurance for cleaners and transfer workers. 	М	The relevant township governments should provide accident insurance, suitable PPE, and regular safety training for workers.	governments	
	Vil. age	ESS2	Community	• The village committees have not	M	The relevant village committees should	Village	

Fac	cility	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
			workers	signed labor contracts with community workers; Village committees have not provided accident insurance and provided safety training for community workers, and some village committees have not provided PPEs; Community workers may file informal / oral grievances through village committees and township governments, but there is no formal GRM.		•	establish and implement a sound LMP as per ESS2, covering labor contract management, OHS and worker GRM; The Chengcheng County ESC should direct and monitor the management performance of different types of workers involved in collection and transfer systems regularly, and improve the existing community GRM.	committees, Chengcheng County ESC	
Transfer facilities		ESS5	Land approval	The proposed WTSs (Zhaozhuang and Jiaodao) are located on state-owned construction land (leaved unused) of township governments. The ESC has reached an agreement on WTS site selection and handover with the township governments preliminarily.		•	The ESC should handle the land handover procedure with the township governments as soon as possible, and obtain certificates of the right to use state-owned land before construction in accordance with the applicable Chinese laws and regulations.	Chengcheng County ESC	Before bidding
Disposal facilities	Yaotou Landfill	ESS2	Employment terms and conditions	 The landfill has not signed formal labor contracts with some direct workers of the Yaotou Landfill; the sample labor contract used lacks clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract Law; The wages of some workers (security guards) are slightly lower than the prevailing local minimum wage level; Workers basically have no day off. 	M	•	Strengthen labor contract management as per the Labor Law, Labor Contract Law and ESS2; increase the wages of relevant workers; arrange appropriate days off for workers.	Chengcheng County ESC	ASAP, not later than one month after the effective date of the Project
		ESS2	OHS	The tasks related to the "three"	M	•	Entrust a qualified agency to identify		ASAP; no later

Faci	ility	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
				simultaneities" were not conducted for occupational protection facilities of the landfill at the construction stage, no occupational hazard screening was conducted at the operation stage, no occupational health examination was offered for employees concerned, and the occupational hazard notification procedure was not performed; There is no complete contingency plan for sudden accidents and environment events.		•	occupational hazards in the work place according to OHS standards/specifications, and provide appropriate PPEs and occupational health examinations to workers according to the identification results; Specify OHS hazards in the labor contract, and notify relevant workers; Improve the emergency management procedures, and conduct drills regularly.		than one month after the effective date of the Project; continue throughout the project lifecycle
		ESS2	Worker GRM	 Workers may file informal / oral grievances through relevant channels, but there is no formal GRM. 	M	•	Establish a formal GRM for workers as per ESS2, and notify workers.		ASAP; no later than one month after the effective date of the Project
		ESS4	Community health and safety	 The landfill has a minor E&S impacts, with the mitigation measures taken, but has an odor impact on farmers working nearby; However, it has not established an active community communication mechanism and a GRM; residents may file informal grievances through relevant channels. 	М	•	Conduct regular environmental monitoring, and notify monitoring results to nearby residents; Establish a formal community GRM, and provide sufficient resources (manpower and funds) to ensure its normal operation.		ASAP; no later than one month after the effective date of the Project; continue throughout the project lifecycle
		ESS5	Land use	 The Yaotou Landfill (especially the storage zone) is located on leased collective land, is not comforming with official land use zoning and planning, and has not obtained the land certificate. Therefore, the land use for the Yaotou Landfill does not comply 		•	The Shaanxi PMO should assist the county PMO to find a feasible solution to the land use nonconformity in coordination with the county government and natural resources bureau, identify the restraints of such outstanding issue on landfill closure and the prerequisites to land use, and notify		Based on the government coordination schedule

Facili	ity R	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
				with the applicable state laws and regulations.		•	the Bank timely. It is sugguested that Chengcheng County Government should include land use planning for the landfill in the updated land spatial plan which is expected to be approved in June 2023 by the Shaanxi Provincial Government. Before starting the bidding for landfill closure, the county PMO should obtain the necessary approvals for land use (i.e., aligning with land zoning plan in the up-to-date land spatial planning, converting the farmland into construction land, obtaining land use certificate) and seek consent from the district Natural Resources Bureau about the landfill closure plan. For the compensation with villages/villagers subject to the potential scenario after the landfill closure, it is suggested: - If the leased land is to be returned to the villages/farmers after landfill closure, appropriate technical assessment with project support shall be carried out to confirm the feasibility of return. - If the landfill continue to lease land after closure, the prorated land rental will be paid in time per the land leasing agreements.		
State of the state	Chengcheng Landfill	ESS2	Employment terms and conditions	 The Landfill has not signed formal labor contracts with some direct workers, and the sample labor contract it used lacks the clauses on "labor protection, working conditions and occupational hazard protection" stipulated in the Labor Contract 	М	•	Strengthen labor contract management as per the Labor Law, Labor Contract Law and ESS2; increase the wages of workers to the local minimum wage level; arrange days off for workers.	PMO, Chengcheng County ESC	ASAP; no later than one month after the effective date of the Project

Faci	ility	Relevant ESSs	Concerns	Findings and issues	Risk rating	Suggestions	Agencies responsible	Planned completion time
				Law; The wages of some workers (security guards) are slightly lower than the current local minimum wage level; Workers basically have no day off.				
		ESS2	OHS	 The landfill has been closed down. No occupational health examination was offered for employees, and the occupational hazard notification procedure was not performed; No sufficient PPEs is provided to workers at the leachate treatment station. 	М	 Provide appropriate PPEs and occupational health examinations for workers; Specify occupational hazards in the labor contract, and notify relevant workers. 		ASAP; no; later than one month after the effective date of the Project; continue throughout the project lifecycle
		ESS2	Worker GRM	Workers may file informal / oral grievances through relevant channels, but there is no formal GRM.	М	Establish a formal GRM for workers as per ESS2, and notify workers.		ASAP; no later than one month after the effective date of the Project
		ESS4	Community health and safety	 The landfill regularly entrusts a qualified company to monitor the environment (water, waste gas and noise) of the landfill, and the monitoring results all meet the national standards. After the landfill was put into operation, nearby residents have built many new houses within the health protection distance, and the landfill has a certain odor impact on the surrounding residents; The landfill has not established an active community communication mechanism and a GRM; residents may file informal / oral grievances through 	Н	 Engineering and non-engineering measures should be developed to minimize community health impacts during closure and later maintenance. Fully consult the design agency, the competent departments of ecological environment and safety, and the surrounding communities, make clear appropriate plans and measures in the landfill closure construction plan and post-decommissioning maintenance plan to deal with the potential health risks of the surrounding communities, and conduct follow-up monitoring. A formal GRM should be established according to the current community grievance processing channels and 		ASAP; no later than one month after the effective date of the Project; continue throughout the project lifecycle

Fac	ility	Relevant ESSs	Concerns	Findings and issues	Risk rating	Suggestions Agencies responsib	Planned completion time
				relevant channels.		notified to nearby communities, and resources and staff shall be arranged to record and handle grievances timely, and make records for the results. Strengthen construction management to ensure that the design standard is complied with, and necessary measures are taken to reduce health impacts on surrounding communities. Disclose E&S monitoring results to residents in nearby sensitive sites (especially those within the health protection distance) timely, provide necessary clarifications, and take necessary improvement measures. The PMO should appoint a specialized external social M&E agency to conduct external social M&E as soon as possible to ensure that appropriate measures are taken to avoid, reduce other social impacts and manage community health during design, closure and maintenance in later stage.	
Project-related facilities			Progress of E&S approvals	• The Chengcheng County WTE Plant is still at the preparation stage. At present, the project department has gone through the following relevant examination and approval procedures: the site selection of the project has been completed, and the pre-site selection opinions have been issued by the Natural Resources Administration. The social stability risk assessment report has been completed. The environmental impact report has been completed, and on August		The Shaanxi PMO should coordinate with the Chengcheng County government (and the Chengcheng County PMO) to supervise and manage the proposed work for the Chengcheng County WTE Plant (see Table 3-2), and appoint a specialized third party external M&E agency to collect relevant information and conduct M&E, and report its implementation of, and performance in terms of environmental and social impact management of related facilities in the semi-annual monitoring report it submitted to the Bank.	During external monitoring

Facility	Relevant ESSs	Concerns	Findings and issues	Risk rating	Suggestions	Agencies responsible	Planned completion time
			11, 2022, Shaanxi Provincial Department of Ecology and Environment accepted the EIA document.				
	ESS2	Labor and working conditions	The Chengcheng County WTE Plant has not been commenced, and its construction and operation agency has not been determined.	М	After the construction and operation agency is determined, the Chengcheng County Government (and the Chengcheng County PMO) will coordinate with relevant departments to ask it to establish and implement a labor management procedure complying with Chinese laws and regulations, and the Bank's ESF.	Chengcheng County Government, Chengcheng County PMO	During external monitoring
	ESS4	Community health and safety	The Chengcheng County WTE Plant has not been commenced, and the land expropriation and house demolition have not started yet. According to the nature and features of the Project, the community impacts at the construction and operation stages include dust, noise, waste gases (especially dioxins), wastewater, solid waste, etc. Information disclosure and stakeholder participation shall be ensured.		After the construction and operation agency is determined, the Chengcheng County Government (and the Chengcheng County PMO) will coordinate with relevant departments to ask it to establish a community healt and safety management system and a formal community communication mechanism, and report E&S risk management performance regularly to the community, and respond to questions from the public.	Chengcheng County Government, Chengcheng County PMO	During external monitoring
	ESS5	Land approval	The Chengcheng County WTE Plant is still at the preparation stage, and the relevant government approvals/permits are in progress. District municipal projects generally do not require a separate resettlement plan; M&E on resettlement and livelihood restoration is not required during project implementation.	М	 According to the Bank's environmental and social standards, the external social monitoring of the Project should cover the management of "related facilities". The land use for the Chengcheng Count WTE Plant should comply with Chinese laws and regulations, and construction will only begin after land approval. The Shaanxi PMO will appoint a third party external M&E agency to conduct M&E on LAR, livelihood restoration, 	Shaanxi PMO, Chengcheng	During external monitoring

]	Facil	lity	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
								information disclosure, public participation, grievance redress, etc., and include the results into the external social M&E reports submitted to the Bank semiannually.		
					• The sample labor contract used	<u>hencar</u>	ıg I	District		I
Simplify	Evicting	Urban areas	ESS2	Employment terms and conditions	by the Chencang District Environmental Sanitation Station and Service Center lacks clauses on "labor protection, working conditions and occupational	M	•	Strengthen labor contract management as per the Labor Law, Labor Contract Law and ESS2; increase the wages of workers to the local minimum wage level	Chencang District Environmental Sanitation Station and Service Center	ASAP; no later
Exisuing collection racilities	ollection faciliti	Main streets of	ESS2	Employment terms and conditions	The township governments have not signed formal labor contracts with cleaners and transfer workers.		•	Strengthen labor contract management as per the Labor Law, Labor Contract Law and ESS2.	Township governments concerned	than one month after the effective date of the Project
es ·		Villages	ESS2	Community workers	 The village committees have only signed a simple labor contract with community workers, instead of a formal labor contract; The village committees do not offer OHS safety training for community workers; few village committees have not provided accident insurance for community workers; some 	M	•	The village committees should improve and implement a LMP as per ESS2, including labor contract management, OHS and worker GRM; for the Xishan area, select suitable truck models and get trucks insured. The Chengcheng County ESC should direct and monitor the performance of management of workers involved in collection and transfer systems regularly, and improve the existing	Village committees, Chencang District Waste Management Service Center	

F	acility	Relevant ESSs	Concerns	Findings and issues	Risk rating	Suggestions	Agencies responsible	Planned completion time
				village committees do not provide PPEs; in the Xishan area, fuel-powered trucks are used because electric trucks are not suitable, but such fuel-powered trucks are not insured; Workers may file informal / oral grievances through village committees and township governments, but there is no formal GRM.		community GRM.		
	Project-related facilities		Progress of E&S approvals	The Baoji City WTE Plant is under construction, built and operated by Shaanxi Hengyuancheng Environment Power Co., Ltd.; E&S approvals are in progress.	М	• The Shaanxi PMO shall coordinate with the Baoji Municipal Government (and the Baoji PMO) to supervise and manage the work to be done (see table 3-2), and appoint a specialized third party external M&E agency to collect relevant information and conduct M&E, and report its implementation of, and performance in terms of environmental and social management of related facilities in the semi-annual social monitoring report it submitted to the Bank.	Shaanxi PMO, Baoji Municipal Government, Baoji PMO	During external monitoring
	es	ESS4	Community health and safety	 Construction vehicles enter the plant via the access road for the Changshougou landfill, posing traffic safety risks. 	М	Take feasible measures for the traffic safety design at the entrance of the access road, such as warning signs.	Baoji PMO, Shaanxi Hengyuancheng Environment Power Co., Ltd.	
					4. Bao	i City		
	Changshougou Landfill	ESS2	Employment terms and conditions	conditions and occupational hazard protection" stipulated in the Labor Contract Law.	М	The ESC should strengthen labor contract management as per the Labor Law, Labor Contract Law and ESS2.	Baoji PMO, Baoji City SWMC	ASAP; no later than one month after the effective date of the Project
		ESS2	OHS	 The tasks related to the "three simultaneities" were not 	M	 Entrust a qualified agency to identify occupational hazards in the work place 		ASAP; no later than one month

Facility	Relevant ESSs	Concerns	Findings and issues	Risk rating		Suggestions	Agencies responsible	Planned completion time
			conducted for occupational protection facilities for the landfill at the construction stage, no occupational hazard screening was conducted at the operation stage, no occupational health examination was offered for employees concerned, and the occupational hazard notification procedure was not performed;		•	according to OHS standards/specifications, and provide appropriate PPEs and occupational health examinations to workers according to the identification results; Specify occupational hazards in the labor contract, and notify relevant workers.		after the effective date of the Project; continue throughout the project lifecycle
	ESS2	Contracted workers	The Baoji City SWMC has not established a procedure to manage and monitor the third party service provider's performance, and the service contract with the third party does not have any nonconformity remedy.	М	•	The Baoji City SWMC should improve and implement a LMP as per ESS2.		ASAP; no later than one month after the effective date of the Project
	ESS4	Community health and safety	 The north slope is unstable, posing safety risks to nearby communities; There are traffic safety risks at the entrance of the access road; The landfill's operation has odor impacts on downwind communities, especially in summer; There is no active community communication mechanism and a GRM; residents may file informal / oral grievances through relevant channels. 	Н	•	Contact the design agency as soon as possible to take measures to eliminate slope instability and traffic safety risks at the entrance from a technical point of view, and design corresponding technical solutions/feasible measures to eliminate such hazards as soon as possible; Assess safety impacts on nearby communities from the Changshougou landfill in the project SIA, and prepare mitigation measures and a contingency plan; Establish a formal community GRM, and provide sufficient resources (manpower and funds) ensure its normal operation.		ASAP; no later than one month after the effective date of the Project; continue throughout the project lifecycle

Appendix 1 Interviews

Date	May 7, 2022
Venue	Majiagou Landfill in Linwei District
Interviewee	Manager, file clerk
Topic	Operating process, safety policies, labor protection, etc.
Key points and results	The operating process of domestic waste landfilling is as follows: A transfer truck dumps waste in the designated area after weighing, and waste is compacted, disinfected and finally covered. The safety officer wears special working clothes, a face mask, rubber gloves and antiskid boots when commanding trucks, and is disinfected after operation. On hot days, trucks should complete dumping by 12:00. Drivers wear a face mask, yarn gloves and working clothes at work. Cooling foods and drugs are distributed in summer, and PPEs is available for free. There are 7 security guards, who work in 3 shifts around the clock. They have signed labor contracts with the ESC, and are insured.
Filoto	
Date	June 21, 2022
Venue	Guandao Village, Guandao Town, Linwei District
Venue Interviewee	Guandao Village, Guandao Town, Linwei District
Interviewee Topic	Guandao Village, Guandao Town, Linwei District 10 persons, including township and village officials, and villagers Learning domestic waste collection and transfer, and mulch film use in rural areas, and collecting suggestions
Interviewee Topic Key points and results	Guandao Village, Guandao Town, Linwei District 10 persons, including township and village officials, and villagers Learning domestic waste collection and transfer, and mulch film use in rural areas, and
Interviewee Topic Key points	Guandao Village, Guandao Town, Linwei District 10 persons, including township and village officials, and villagers Learning domestic waste collection and transfer, and mulch film use in rural areas, and collecting suggestions Village roads are cleaned by 3 cleaners, who do public welfare jobs and are paid 500 yuan/month. Each household pays a sanitation fee of 60 yuan/year. Town roads are cleaned by township cleaners. Each household is given a waste bin, and waste is collected by cleaners and transferred to the landfill 100m away from the village. Village cleaners work 2-3 hours a day. Mulch film is used in a small amount, and is usually burned or put aside. Suggestions: Waste should be sorted by cleaners centrally. The government should provide each household with a waste bin with sorting, and increase the remuneration of cleaners. Farmers are willing to clean up mulch film as long as there is a collection site, and publicity and
Interviewee Topic Key points and results	Guandao Village, Guandao Town, Linwei District 10 persons, including township and village officials, and villagers Learning domestic waste collection and transfer, and mulch film use in rural areas, and collecting suggestions Village roads are cleaned by 3 cleaners, who do public welfare jobs and are paid 500 yuan/month. Each household pays a sanitation fee of 60 yuan/year. Town roads are cleaned by township cleaners. Each household is given a waste bin, and waste is collected by cleaners and transferred to the landfill 100m away from the village. Village cleaners work 2-3 hours a day. Mulch film is used in a small amount, and is usually burned or put aside. Suggestions: Waste should be sorted by cleaners centrally. The government should provide each household with a waste bin with sorting, and increase the remuneration of cleaners. Farmers are willing to clean up mulch film as long as there is a collection site, and publicity and
Interviewee Topic Key points and results Photo	Guandao Village, Guandao Town, Linwei District 10 persons, including township and village officials, and villagers Learning domestic waste collection and transfer, and mulch film use in rural areas, and collecting suggestions Village roads are cleaned by 3 cleaners, who do public welfare jobs and are paid 500 yuan/month. Each household pays a sanitation fee of 60 yuan/year. Town roads are cleaned by township cleaners. Each household is given a waste bin, and waste is collected by cleaners and transferred to the landfill 100m away from the village. Village cleaners work 2-3 hours a day. Mulch film is used in a small amount, and is usually burned or put aside. Suggestions: Waste should be sorted by cleaners centrally. The government should provide each household with a waste bin with sorting, and increase the remuneration of cleaners. Farmers are willing to clean up mulch film as long as there is a collection site, and publicity and reward are strengthened.

Topic	Learning the WTS's routine work, working conditions, etc.
Key points	WTS master: This WTS was built in 2012 and put into operation in April 2013, with over 80
and results	truck runs per day, with a load of 10t each. It has one manager (female) and 6 operators,
and results	including one female, all contracted workers, aged between 34-58 years. They work on 3 shifts
	from 6:00 to 24:00.
	The operators work 8 hours per day. Waste odor is controllable, with no impact on nearby
	communities. PPEs is distributed regularly. High temperature allowances, annual health
	examinations and social insurance are provided. Their monthly salary is 1,900 yuan.
Photo	examinations and social insurance are provided. Their monthly saidly is 1,900 years.
rnoto	世行项目 施濟区车亩中电站 2022.06.22 10:09 渭南市·车亩市
Date	April 7, 2022
Venue	Yaotou Village, Yaotou Town
Interviewee	Township and village officials, and villagers
Topic	Learning domestic waste collection and transfer, and mulch film use in rural areas, and
	collecting suggestions
Key points	There is only one cleaner in the town, and there is no WTS. Most villager cleaners are on public
and results	welfare jobs, mostly male. A small amount of mulch film is subject to harmless disposal due to
	low recovery value and difficult picking.
	Group 4 of Yaotou Village has one male cleaner, and waste is collected every 2 days. All
	respondents support the Project.
Photo	
Date	April 7, 2022
Venue	Chengcheng Landfill
Interviewee	Landfill head and worker on duty
Topic	Landfill operation, working conditions, etc.
Key points	The Chengcheng Landfill was closed down due to saturation in 2020, and has almost no impact
and results	on nearby communities. The automatic leachate treatment vehicle is still running, with a
	capacity of 30t/d. The treatment process includes sedimentation and automatic harmless
	treatment. Treated water is used for cleaning. It has one head, 3 operators, two security guards
	and one recorder. The workers have signed labor contracts with the ESC. Social and liability
	insurance is covered for those aged below 60, and only liability insurance is covered for those
	aged 60 years or above. PPEs is available, and cooling foods and drugs are distributed in
	summer.

Photo	AND TO DEFENDE
Date	July 19, 2022
Venue	Chencang District
Organizer	SIA staff, officials of the Chencang District Urban Administration and Law Enforcement Bureau
Interviewee	Two cleaners of the WTS
Topic	Learning working conditions of urban cleaners
Key points and results	The cleaners work 7 hours a day, and have two days off per month. Both of them have signed labor contracts, and endowment, medical and accident insurance has been covered for them.
	Their base salary is 1,800 yuan/month. They may also receive subsidies for overtime work, and work on hot days and holidays.
	Resting rooms have been set up on some streets, but are rarely used by them due to busy work.
	Suggestions: The cleaners expect the resting rooms to provide a changing space and drinking
	water. The subsidy for electricity charges of electric waste transfer vehicles should be
	increased.
	世行郑目 陈仓区生活垃圾分。改集运 时 m: 2022.06.15 12:30 拘 n: 运销市 : 1988 万位和: 北 34.2* 经纬度: 北市 34.2*17. 东25.107.225
Date	July 20, 2022
Venue	Wangjiazhuang Village, Xiangquan Town, Chencang District
Organizer	SIA staff, officials of the Chencang District Urban Administration and Law Enforcement Bureau
Interviewee	6 persons, including village head, village cleaners and farmers
Topic	Learning domestic waste collection and transfer, and mulch film use in rural areas, and collecting suggestions
Key points	The village has 7 cleaners, including one transfer worker, including no female. A simple labor
and results	contract has been signed, but there is no insurance due to frequent staff changes. The cleaners
	have attended pre-job training to learn working requirements and policies. There are two
	small waste transfer vehicles in the village, and no cleaning charge is collected. Waste is
	transferred to the irregular landfill.
	The respondents think that the WTS will promote waste transfer greatly, and have no objection
	to its location. They support the Project to improve the rural environment. Existing issues: This village is located in a hilly area, and the electric waste transfer vehicles are
	inconvenient, but there is no more economical solution.
Photo	世行語言 新古医音原编工家在特古统 野 账 2022.07.20 1647 地 点: 宝角市 - 最石窗

Date	June 16, 2022
Venue	Changshougou Landfill
Interviewee	Official of the Baoji City SWMC, landfill workers
Topic	Learning worker management and working conditions
Key points	The official is responsible for truck management, and works 8 hours a day. He has worked for
and results	19 years. He earns over 4,000 yuan per month), and would receive a target fulfillment reward
and results	at the year end. A health examination is offered every two years. The landfill has 8 regular
	workers and 20 temporary workers, including two females responsible for logistics. All
	workers have signed labor contracts.
Photo	世行项目 金台区全河镇长寿沟生活垃圾堆埋场 时。2022.06.16 16.46 地。坐里南市-同心村 方位由: 北 20 经纬度: 34.4427892'N,107.105555'E
Date	June 16, 2022
Venue	Changshougou WWTP
Interviewee	2 workers
Topic	Learning working conditions
Key points	The WWTP has 12 workers, including two females responsible for administration. They work
and results	on 3 shifts a day. Their monthly salary is 3,000 yuan, and overtime work is paid. Endowment,
	medical and work-related injury insurance is covered for them. A health examination is offered
	every two years. They may file any grievance or suggestion to the plant manager, and are
Photo	satisfied with the working environment.
	世行项目长寿沟污水处理厂 財 剛 : 2022/06-16 15-46 地 点 实现市 四心村 经纬度: 34.426157 N.107.104106 E
Date	July 20, 2022
Venue	Baoling Village, Jinhe Town, Jintai District
Interviewee	6 persons, including village head, village cleaners and farmers
Topic	Learning the Changshougou Landfill's impacts on nearby village, and villagers' comments and
Vouncinto	suggestions The landfill affects the village greatly, but the surrounding environment has been improved.
Key points and results	The landfill affects the village greatly, but the surrounding environment has been improved greatly in recent years. The village is located downwind, and suffers strong odor and many flies
anu results	in summer. Disinfectants are distributed to villagers, but the landfill is not disinfected
	sufficiently.
	Comments and Suggestions: Villagers have filed grievances many times, and the government
	has made efforts to improve the surrounding environment, but villagers think that the best
	way is to close down the landfill as soon as possible.
	They expect the landfill to be disinfected more frequently in summer, and waste to be disposed
	of as soon as possible, and strongly support landfill closure.

Photo	世行项目 金台区宝版村访谈 时 则: 2022.07.22 11:12 地 点:宝苑市:宝陵村 方位角:东 69*
Date	July 20, 2022
Venue	Baoji City WTE Plant
Interviewee	WTE plant managers and construction workers
Topic	Learning the construction and management of the WTE plant
Key points	The plant is constructed by Northwest Third Electric Power Construction Co., Ltd., which
and results	assigns 86 workers and 15 managers. The workers have different wages, up to 10,000 yuan per month. All workers have signed labor contracts, and work on two shifts (6:00-14:00 and 14:00-2:00). Workers may file grievances to the project management department, and their grievances are usually handled by communication, mediation or consultation. The WTE plant uses 120 mu of land, which has been acquired and converted into state-owned construction land. Its treatment capacity is 750t/d in Phase 1 and 500t/d in Phase 2. Phase 1 will be put into operation by the year end.
Photo	世行项目长寿沟边吸发为厂 (2) 词(2022/06.16 16 16 16 并成 第四年 2449年 务组成:34-415156 N.107-103177 E

Appendix 2 References

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- Block Comprehensive Land Prices for Farmland and Unused Land of Linwei District;
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- Feasibility Study Report of the Majiagou Landfill;
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- Environmental monitoring reports of the Majiagou Landfill (2021 and 2022);
- Contingency Plan for Environmental Emergencies of the Majiagou Landfill;
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- Collection of management policies of the Majiagou Landfill (Landfill Machinery Management Policy, Landfill Disinfection and Deodorization Policy, etc.);
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- Reply of the Shaanxi Provincial Ecology and Environment Department on the EIA Report of the Weinan Urban WTE Plant;
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- SSRA Report of the Chengcheng County WTE Plant;
- Notes on land lease, LA and ownership of the Chengcheng County Subproject;
- Survey data of agencies concerned, townships / sub-districts and villages / communities in Chengcheng County

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